NOTICE OF INTENT FOR DISCHARGE UNDER MASSACHUSETTS DEWATERING GENERAL PERMIT MAG070000

1971-1977 DORCHESTER AVENUE

DORCHESTER, MASSACHUSETTS

FEBRUARY 9, 2016

Prepared For:

U.S. Environmental Protection Agency
Dewatering GP Processing
Industrial Permit Unit (OEP 06-4)
5 Post Office Square – Suite 100
Boston, MA 02109-3912

On Behalf Of:

Trinity Ashmont Two Mixed Use Limited Partnership and Trinity Ashmont Two Homeownership Limited Partnership
75 Federal Street, 4th Floor
Boston MA, 02110

PROJECT NO. 5750

2269 Massachusetts Avenue
Cambridge, MA 02140
www.mcphailgeo.com
(617) 868-1420

February 9, 2016

U.S. Environmental Protection Agency
Dewatering GP Processing
Industrial Permit Unit (OEP 06-4)
5 Post Office Square – Suite 100
Boston, MA 02109-3912

Attention: To Whom It May Concern

Reference: 1971-1977 Dorchester Avenue; Dorchester, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under
Massachusetts Dewatering General Permit MAG070000

Ladies and Gentlemen:

On behalf of the Trinity Ashmont Two Mixed Use Limited Partnership, McPhail Associates, LLC (McPhail) has prepared the attached Notice of Intent (NOI) for coverage under the Massachusetts Dewatering General Permit MAG070000 (DGP) for the discharge of construction dewatering effluent into the Davenport Brook via the City of Boston storm drainage system. The temporary construction dewatering discharge will occur during construction of the proposed residential development to be located at 1971-1977 Dorchester Avenue in Boston, Massachusetts (the "subject site"). Refer to **Figure 1** entitled Project Location Plan for the general site locus.

These services were performed and this permit application was prepared in accordance with our proposal dated November 9, 2016, and the subsequent authorization of Trinity Ashmont Two Limited Partnership. These services are subject to the limitations contained in **Appendix A**.

The required Notice of Intent Form contained in the DGP permit and Boston Water & Sewer Dewatering Discharge Permit Application are included in **Appendix B**.

Applicant/Operator

The applicant for the Notice of Intent-Dewatering General Permit is:

Cranshaw Construction
2310 Washington Street
Newton Lower Falls, MA 02462

Attention: Jeff Fishbone

Office: 617-559-5214
Cellphone: 781-760-7802
Email: jfishbone@cranshaw.com

Site Location and Current Conditions

Fronting onto Dorchester Avenue to the east, the subject site is bounded by Fuller Street to the north, Mercier Street to the south and residential properties to the west. The subject site is comprised of three (3) contiguous parcels of land totaling a plan area of 26,749 square feet. The subject site address of 1961 Dorchester Avenue is currently occupied by a 1 to 2-story concrete/masonry building which is actively used as a tire sales and automobile service business (Ashmont Tire). The subject site address of 1981 Dorchester Avenue is occupied by an asphalt paved parking lot, and the subject site address of 4 Fuller Street is occupied by a two-family residential structure. The limits of the subject site are shown on **Figure 2,** which is based on a plan entitled Site Plan.

The ground surface at the site ranges from about Elevation +155 near the southeast corner to about Elevation +162 adjacent to Fuller Street near the northwest portion of the subject site. Elevations as referenced herein refer to the Boston City Base.

Proposed Scope of Site Development

We understand that the proposed redevelopment of the subject site will involve the demolition of the existing site structures followed by the construction of a 6-story, steel-framed mixed-use building. The footprint of proposed building will occupy a total area of approximately 13,960 square feet. It is understood that the proposed building will be constructed with a one-level of below grade parking, the floor slab of which will be located at approximately Elevation +143.7.

Site Environmental Setting, Nearby DEP-listed Disposal Sites and Surrounding Historical Places

Based on an on-line edition of the Massachusetts Geographic Information Systems DEP Priority Resources Map (GIS Map) viewed on November 3, 2015, the subject site is not located within the boundaries of a Sole Source Aquifer, Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. Further, there are no public drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats, no habitats of Species of Special Concern or Threatened or Endangered Species within specified distances of the subject site.

The GIS Map indicates that there are no water bodies or wetland areas on or within 500 feet of the subject site. The map indicates that the closest Protected Open Space to the subject site is located approximately 1,500 feet to the south-southwest. The closest water body and associated wetlands are located approximately 3,500 feet to the southeast of the subject site. There are no areas designated as solid waste sites (landfill) noted as being located within 3,000 feet of the subject site. A copy of the Massachusetts GIS Priority Resources Map is included in **Appendix C**. In addition, a report prepared by Environmental

Database Resource, Inc. (EDR) was reviewed for this study. Based on EDR's search of FEMA Flood Plain Maps, the subject site is not located within a 100 year or 500 year flood plain.

The subject site is listed with Massachusetts Department of Environmental Protection (DEP) under Release Tracking Number (RTN) 3-32584 due to a release of extractable petroleum hydrocarbons (EPH) fractions C9-C18 Aliphatics and C11-C22 Aromatics that was identified in soil. Groundwater at the subject site has not been impacted by a release of EPH or other petroleum related compounds. Based upon results of subsurface assessment activities that were performed to define the nature and extent of the RTN 3-32584 site, the release of EPH is considered to be localized to fill material at the southeastern portion of the subject site at a depth of 7 to 9 feet below ground surface. The source of the soil contamination is considered to be attributable to an aboveground storage tank (AST) that was present within a former building.

The RTN 3-32584 site is currently being managed in accordance with the provisions of 310 CMR 40.0000, the Massachusetts Contingency Plan. A Release Abatement Measure Plan will be filed prior to redevelopment of the subject site for the excavation and off-site disposal of the fill material impacted by the release of EPH. It is not anticipated that groundwater will be encountered during remedial excavation activities.

A review of information provided by the U.S. Fish and Wildlife Service in an Information for Planning and Conservation (IPaC) Trust Resource Report for the subject site did not identify the presence of endangered species at or in the vicinity of the discharge location and/or discharge outfall. Further, the Trust Resource Report did not identify the presence of a critical habitat in the vicinity of the discharge outfall and/or discharge location. However, the report indicated that the Red Knot bird, which is classified as a "threatened" species, should be considered with regard to this project. Based on correspondence with Ms. Susi von Oettingen of the New England Field Office for the U.S. Fish and Wildlife Service, groundwater discharge from the subject site to the Davenport Brook is not considered likely to adversely affect the Red Knot bird. Based upon the above, the site is considered a criterion B pursuant to Appendix IV of the DGP. A copy of the IPaC Trust Resource Report and correspondence with Ms. Von Oettingen are included in **Appendix C**.

A review of the most recent National Register of Historical Places for Suffolk County in Boston, Massachusetts did not identify records or addresses of historic places that exist in the immediate vicinity of the subject site and/or outfall location.

Temporary Construction Dewatering

Subsurface explorations performed at the subject site encountered the surface of groundwater at depth of about 8.6 to 11 feet below the existing ground surface corresponding to Elevation +153.4 and Elevation +143.2.

In order to perform the building excavations at the subject site, which are anticipated to extend below the groundwater level for construction of the foundations, and also to provide for management of water which may become trapped within the excavation areas following periods of precipitation, the construction dewatering discharge into the city's storm drain is necessary.

It is estimated that continuous groundwater discharge during the construction will be on the order of 20 to 45 gallons per minute (gpm). The maximum daily flow is estimated to be 64,800 GPD and the average monthly flow is estimated to be 46,080 GPD.

Given that the footprint of the proposed construction occupies a majority of the subject site, temporary on-site collection and recharge of groundwater is not feasible. As a result, construction dewatering will require the discharge of collected groundwater and stormwater into the storm drain system under the requested DGP.

A review of available subgrade utility plans provided by the Boston Water and Sewer Commission indicates the presence of a dedicated storm drains located at the subject site, beneath Dorchester Avenue and Fuller Street flows south-southeast where it eventually discharges into the Davenport Brook. The location of the relevant stormwater drain in relation to the subject site is indicated on **Figure 2**. The flow path of the discharge is shown in plans provided by the Boston Water and Sewer Commission which are included in **Figure 3A, 3B and 3C**.

Summary of Groundwater Analysis

From June 2014 through January 2016, a series of groundwater samples were obtained from monitoring wells that were installed at the subject site. Initially, in June 2014, laboratory analysis of groundwater samples were performed as part of an environmental due diligence assessment of the subject site. Subsequently, in December 2015 and January 2016, laboratory analysis was performed to characterize the groundwater for off-site discharge in anticipation of construction dewatering activities. The following is a summary of the laboratory analysis that was performed on groundwater at the subject site.

Groundwater Analysis June 10, 2014

On June 10, 2014, groundwater samples were obtained from monitoring wells B-1(OW), and B-6(OW). The samples were submitted for chemical testing for the presence of MCP Dissolved RCRA-8 Metals, VOCs, VPH and EPH. A summary of the chemical test results is provided on **Table 1** and chemical test data is included in **Appendix D**.

MCP Dissolved RCRA-8 Metals: Groundwater samples obtained from monitoring wells B-1(OW) and B-6(OW) were analyzed for the presence of dissolved RCRA-8 metals, which include arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. With the exception of barium, the tested metals were not detected at concentrations in excess of the laboratory method detected. The groundwater samples obtained from B-1(OW) and B-

6(OW) exhibited concentrations of barium at 104 micrograms per liter (ug/l) and 379 ug/l, respectively. As further discussed below, the detected concentrations of barium are not considered to exceed the dilution limits established for the discharge.

VOCs: Groundwater samples obtained from monitoring wells B-1(OW) and B-6(OW) were submitted to the laboratory for chemical analysis for the presence of VOCs. The results did not indicate concentrations of VOCs above the laboratory method detection limits.

EPH: Groundwater samples obtained from monitoring wells B-1(OW) and B-6(OW) were analyzed for the presence of EPH. EPH fractions were not detected above the laboratory method detection limits.

VPH: Groundwater samples obtained from monitoring wells B-1(OW) and B-6(OW) were analyzed for the presence of VPH. The VPH fractions, C5-C8 Aliphatics, C9-C12 Aliphatics and C9-C10 Aromatics were not detected above the laboratory method detection limits.

Groundwater Analysis December 15, 2015

On December 15, 2015, a sample of groundwater was obtained from monitoring well B-6 (OW) and submitted for laboratory analysis for the presence of total suspended solids (TSS), chloride, pH and total Priority Pollutants (PP-13) metals. The results of the laboratory analysis are summarized in **Table 2** and laboratory data is included in **Appendix D**. The results of laboratory analysis indicate the following:

pH: The tested sample exhibited a pH level of 5.7 Standard Units (S.U.) which is slightly below the minimum limit of 6.5 S.U. for discharge into fresh waters.

TSS: The total suspended solids of the groundwater were tested to be 25,000 ug/l.

Total Metals: Of the 13 metals that were tested, the laboratory analytical results did not identify detectable levels of beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver thallium, and zinc in the submitted sample of groundwater. However, antimony and arsenic were reported at levels of 72 µg/L and 5 µg/L, respectively. The detected level of arsenic is below the EPA effluent limits of 10 µg/L for discharge to a fresh water body. The reported concentrations of antimony (72 µg/L) exceed the EPA effluent limits for discharge into a fresh water body. Therefore, antimony was re-tested for total and dissolved metals on January 14, 2016 in order to determine if the above referenced concentrations of total metal were due to presence of suspended solids in the sample.

Groundwater Analysis January 14, 2016

In order to further characterize groundwater in accordance with the provisions of the DGP MAG070000, a supplemental sample of groundwater was obtained from monitoring well B-6 (OW) on January 14, 2016. The groundwater sample was submitted for laboratory analysis under NPDES RGP methods for the following parameters: total suspended solids (TSS), total

metals (antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc and iron), chromium hexavalent and hardness.

TSS: The total suspended solids of the groundwater were tested to be 440,000 ug/l.

Total Metals: The laboratory analytical results did not identify the presence of detectable levels of antimony, mercury, chromium hexavalent and selenium in the submitted sample of groundwater. Levels of arsenic, cadmium, chromium total, copper, iron, lead, nickel, silver and zinc were reported at levels of 1.77 µg/L, 1.96 µg/L, 3.73 µg/L, 14.13 µg/L, 1500 µg/L, 6.26 µg/L, 10.69 µg/L, 1.37 µg/L, and 28.91 µg/L, respectively. The reported concentrations of cadmium (1.96 µg/L), copper (14.13 µg/L), iron (1500 µg/L), lead (6.26 µg/L), and silver (1.37 µg/L) exceed the EPA effluent limits for discharge into a fresh water body.

Dissolved Metals: Based upon the relatively high level of TSS, the groundwater sample was submitted for dissolved antimony, cadmium, copper, iron, lead and silver in order to determine if the above referenced concentrations of total metals were due to presence of suspended solids in the sample. The results of the analysis did not indicate concentrations of antimony, iron and lead above the laboratory detection limits. Dissolved cadmium, copper and silver were detected at levels of 1.04 µg/L, 2.24 (µg/L) and 0.76 µg/L. The reported concentrations of copper and silver are below the EPA effluent limit of 5.2 µg/L and 1.2 µg/L, respectively. However, the reported concentration of cadmium was detected slightly above the EPA effluent limit of 0.2 µg/L. As further discussed below, a Dilution Factor was calculated for the discharge, the results of which indicate that the detected concentration of cadmium is below the allowable discharge concentration.

Hardness: The hardness of the groundwater was tested to be 630,000 ug/l.

The results of the laboratory analysis are summarized in **Table 3** and laboratory data is included in **Appendix D.**

Dilution Factor Application for Total Copper and Total Cadmium

As mentioned above, due to the elevated total suspended solids, total cadmium (1.96 µg/L), copper (14.13 µg/L), iron (1500 µg/L), lead (6.26 µg/L), and silver (1.37 µg/L) were detected at a concentrations that exceed the EPA freshwater effluent limits for discharge into a fresh water body. As a result, a Dilution Factor (DF) was calculated for the detected level of total cadmium, copper, iron, lead and silver, thus, the laboratory reporting limit is pursuant to the procedure contained in DGP MAG070000, Appendix VII. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the Davenport Brook. The calculated DF was then used to find the appropriate Dilution Range Concentration (DRC) contained in MAG910000, Appendix IV. The drainage area of 0.0355 square miles and bank full flow (bfflow) of 2.41 cubic feet per second was calculated by the USGS Streamstats GIS database at the location of discharge into the Davenport Brook. The storm drain from the point of discharge location at the subject site to the Davenport Brook is estimated to be 1.5

miles long, and conservatively it was estimated that the watershed surrounding the storm drain pipe is about 80 feet or 0.015 miles wide, therefore, the calculated watershed area along the dedicated storm drain is about 0.02272 square miles. The seven consecutive days with a recurrence interval of 10 years (7Q10 flow) was calculated:

7Q10 (Qs) =(bfflow x estimated drainage area)/ (drainage area at the outfall)
= (2.41 x 0.02272)/(0.0355)
= 1.54 cfs
Treatment system design (Qd) = 45 gmp = 0.1 cfs

Thus: DF = ((Qd + Qs)/ Qd) = ((0.1 + 1.54)/0.1)=16.4

Therefore, based on the calculation of the applicable dilution factor, the detected level of cadmium, copper, iron, lead, and silver are less than the dilution concentration for discharge into a freshwater body. In summary, the results of laboratory analysis did not identify the presence of total metals above the dilution concentrations.

The supporting document for USGS Streamstats GIS database at the location of discharge into the Davenport Brook is included in **Appendix E**.

Groundwater Treatment

Based on the results of the above referenced groundwater analyses, it is our opinion that a 5,000-gallon capacity settling tank and bag filter in series will be required to settle out suspended particulates in the discharge during construction dewatering to meet applicable effluent limits established by the US EPA prior to off-site discharge. A schematic of the treatment system is shown on **Figure 4**.

Summary and Conclusions

The purpose of this report is to assess site environmental conditions and groundwater data to support an application for a Massachusetts Dewatering General Permit for off-site discharge of dewatered groundwater which will be encountered during the residential and commercial redevelopment located at 1981 Dorchester Avenue in Boston, Massachusetts.

Based on the results of the above referenced groundwater analyses, treatment of construction dewatering will be necessary to meet allowable effluent limits for cadmium, copper, iron, lead and silver established by the US EPA prior to off-site discharge. The proposed construction dewatering effluent treatment system will consist of one settling tank 5,000-gallons in capacity and bag filter in series to meet the applicable discharge limits of TSS. However, should the effluent monitoring results indicate levels of TSS in excess of the limits established in the Massachusetts DGP, additional mitigative measures will be implemented to meet the allowable discharge limits.

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

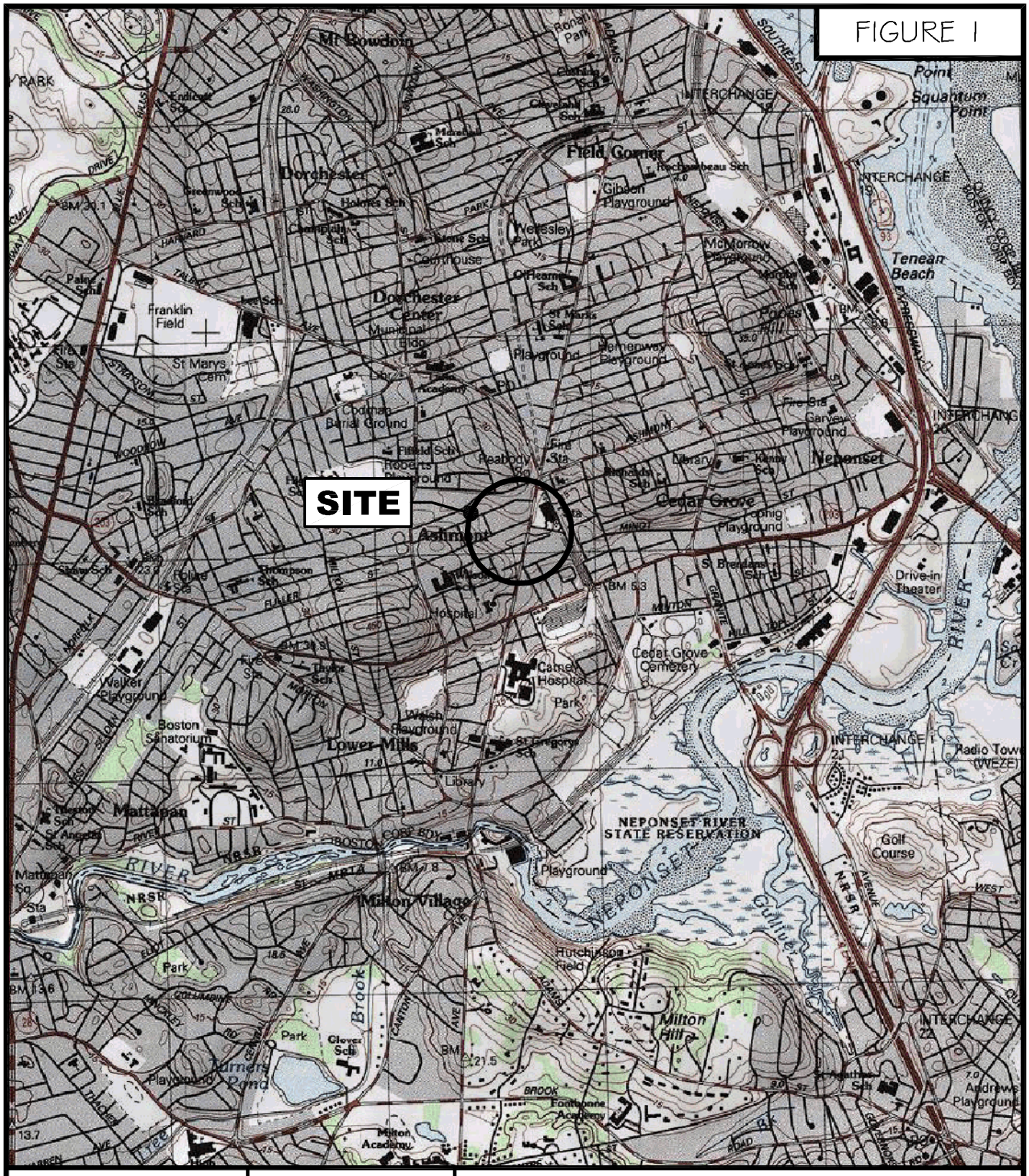
Fatima Babic-Konjic, P.E.

William J. Burns, L.S.P.

F:\WP5\REPORTS\5750 DGP 020916.docx

FBK/wjb

FIGURE 1



McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

N

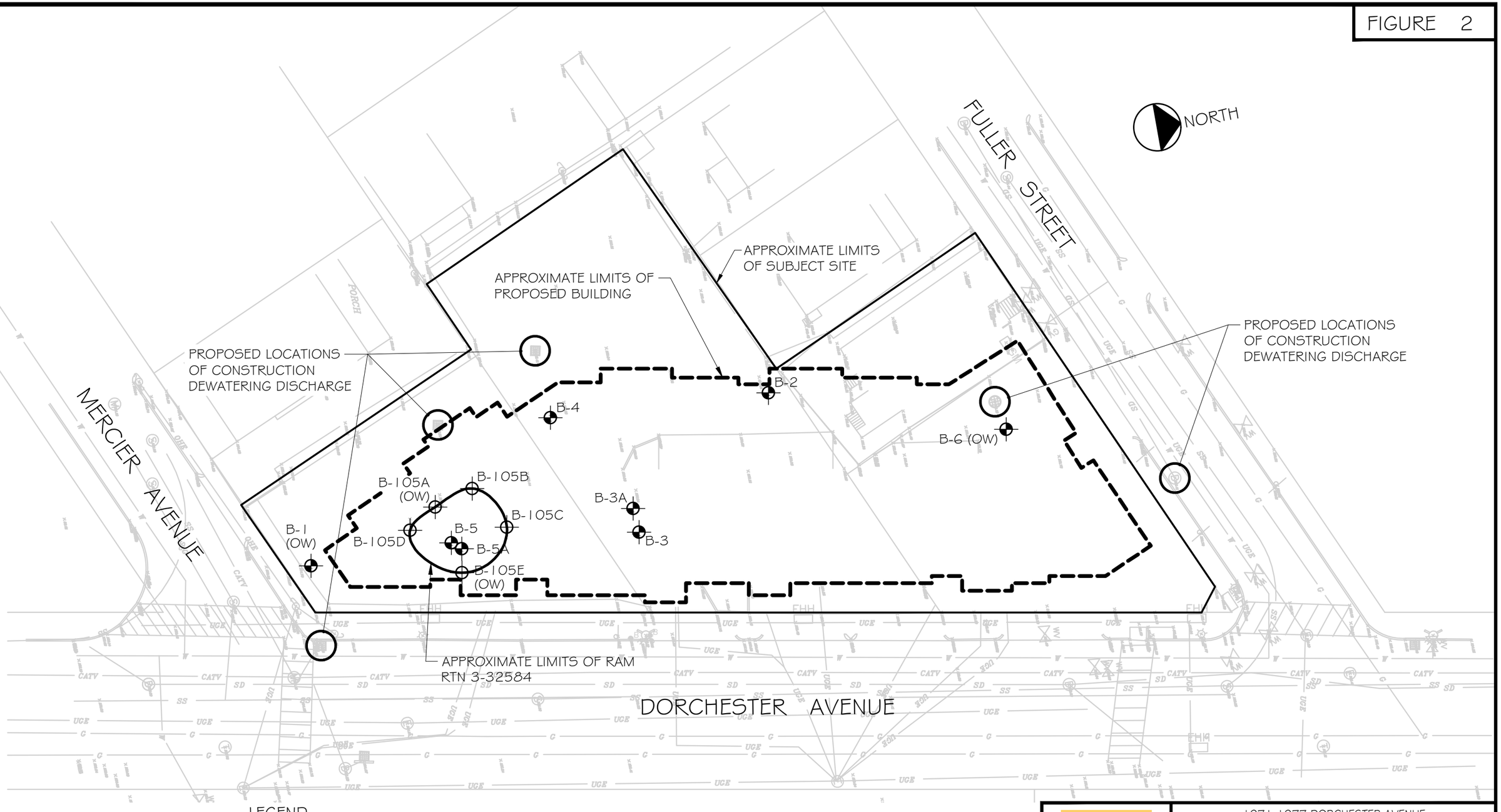
SCALE 1:25,000

PROJECT LOCATION PLAN

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

FIGURE 2



LEGEND

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE.

REFERENCE: THIS PLAN WAS PREPARED FROM A DRAWING ENTITLED "SITE PLAN" DATED MAY 27, 2014 BY KELLY ENGINEERING GROUP, INC.

GRAPHIC SCALE

30 0 30 60

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

DEWATERING GENERAL PERMIT MAG070000

FOR

TRINITY ASHMONT TWO MIXED USE LIMITED PARTNERSHIP

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2016	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 30'
Project No: 5750			

FILE NAME: H:\Acad\JOBS\5750\GPS\5750-F02.dwg

FIGURE 3A

NORTH

FULLER ST

MERCIER AV

BEALE ST

PROPOSED LOCATIONS OF CONSTRUCTION DEWATERING DISCHARGE

APPROXIMATE LIMITS OF SUBJECT SITE

REFERENCE: THIS PLAN WAS PREPARED FROM A 100-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON JANUARY 5, 2016 BY BOSTON WATER AND SEWER COMMISSION.

GRAPHIC SCALE

60 0 60 120

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

TRINITY ASHMONT TWO MIXED USE LIMITED PARTNERSHIP

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2016	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 60'
Project No: 5750			

FILE NAME: H:\Acad\JOBS\5750\RGP\5750-F03A.dwg

FIGURE 3B

NORTH

APPROXIMATE LOCATION OF CONSTRUCTION DEWATERING DISCHARGE

LOCATION OF DISCHARGE INTO DAVENPORT BROOK

OUTFALL SDO 094

REFERENCE: THIS PLAN WAS PREPARED FROM A 600-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON JANUARY 5, 2016 BY BOSTON WATER AND SEWER COMMISSION.

GRAPHIC SCALE

400 0 400 800

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

TRINITY ASHMONT TWO MIXED USE LIMITED PARTNERSHIP

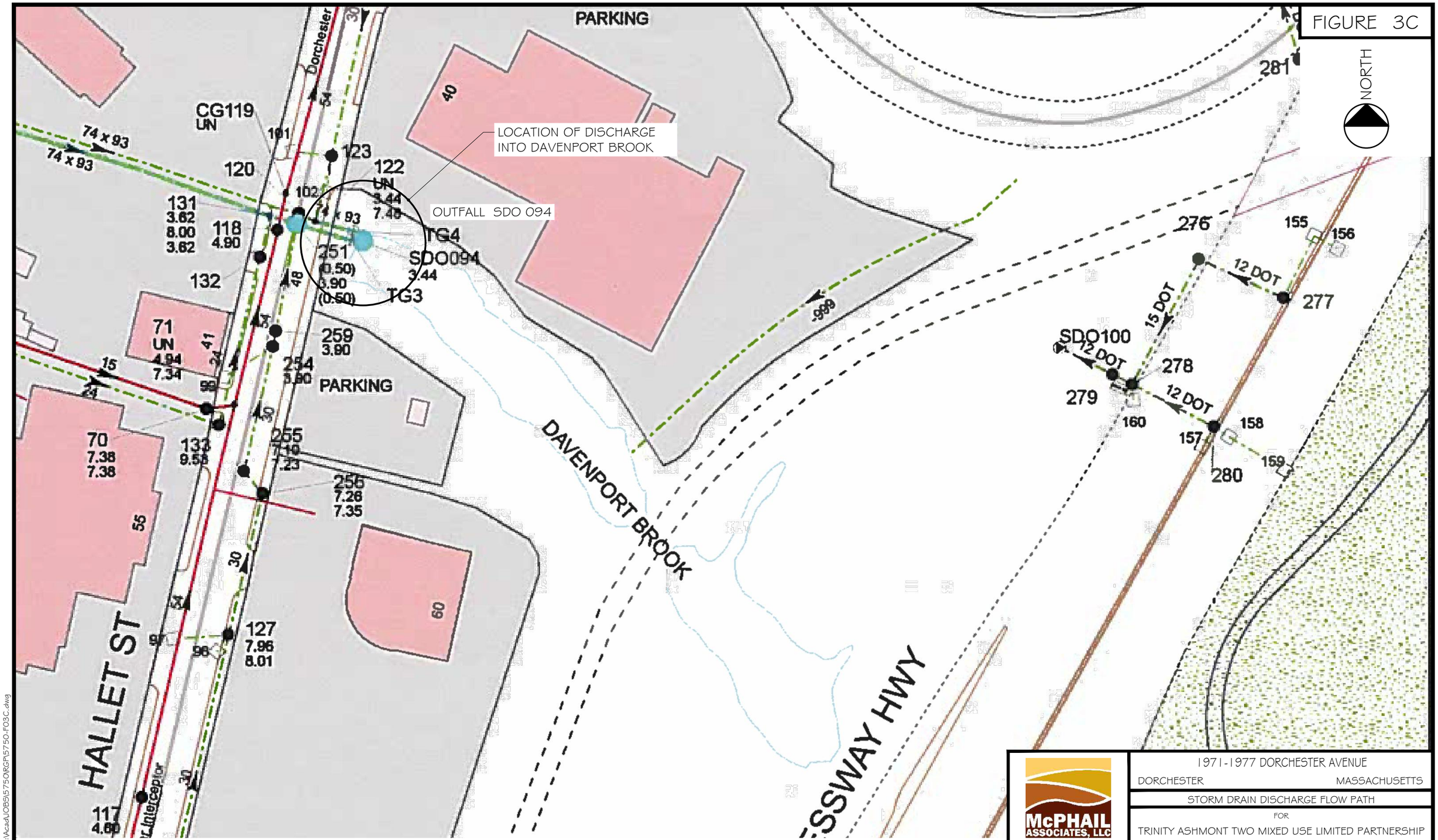
BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2016	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 400'
Project No: 5750			

FILE NAME: H:\Acad\JOBS\5750\RGP\5750-F03B.dwg

FIGURE 3C



REFERENCE: THIS PLAN WAS PREPARED FROM A 97-SCALE DRAWING ENTITLED "BOSTON WATER AND SEWER" PRINTED ON JANUARY 5, 2016 BY BOSTON WATER AND SEWER COMMISSION.

GRAPHIC SCALE

60 0 60 120

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

STORM DRAIN DISCHARGE FLOW PATH

FOR

TRINITY ASHMONT TWO MIXED USE LIMITED PARTNERSHIP

BY

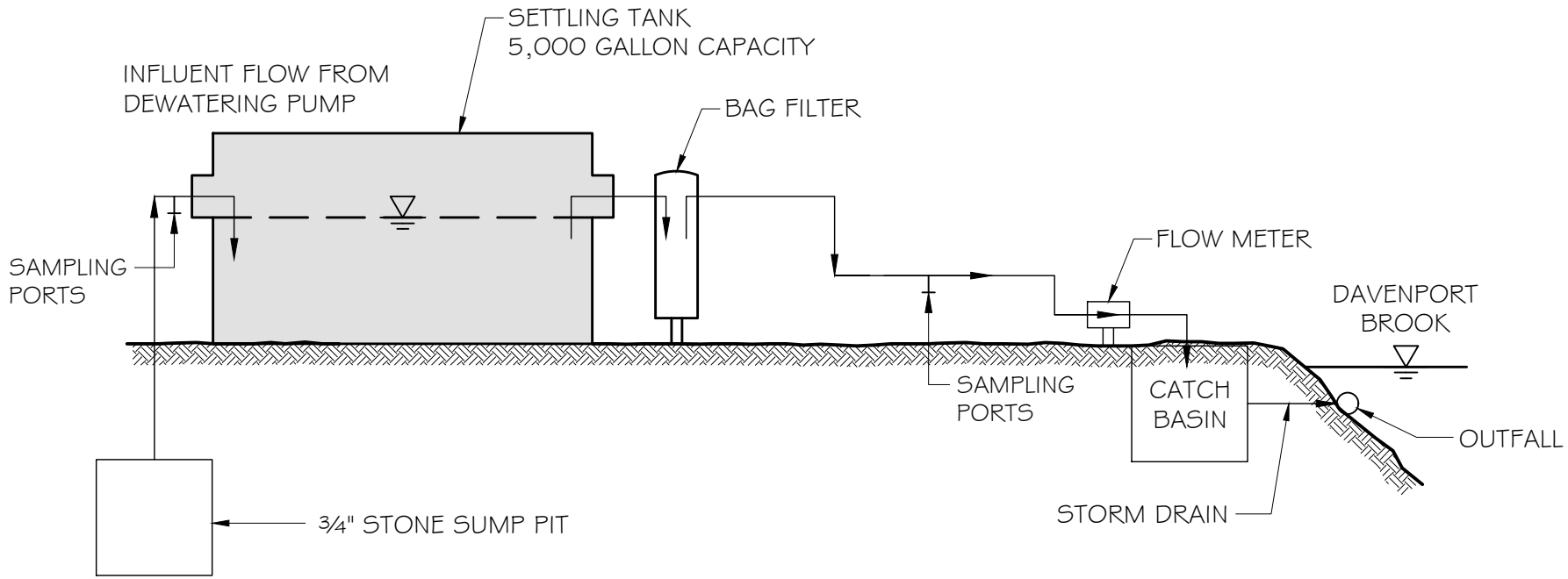
McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2016	Dwn: F.G.P.	Chkd: F.B.K.	Scale: 1" = 60'
Project No: 5750			

FILE NAME: H:\Acad\JOBS\5750\RGPI\5750-FO3C.dwg

FILE NAME: H:\Acad\JOBS\5750\RGP\5750-F04.dwg

FIGURE 4



McPHAIL ASSOCIATES, LLC
Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

1971-1977 DORCHESTER AVENUE

DORCHESTER MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR

TRINITY ASHMONT TWO MIXED USE LIMITED PARTNERSHIP

BY

McPHAIL ASSOCIATES, LLC

Date: FEBRUARY 2016	Dwn: F.G.P.	Chkd: F.B.K.	Scale: N.T.S.
Project No: 5750			

Table 1

Summary of Chemical Test Results - Groundwater

1971-1977 Dorchester Avenue, Dorchester, MA

Project No. 5750

LOCATION	RCGW-2-14	B-1 (OW)	B-6 (OW)
SAMPLING DATE		10-JUN-14	10-JUN-14
LAB SAMPLE ID		L1412709-01	L1412709-02
Dissolved Metals (ug/l)			
Arsenic, Dissolved	900	ND	ND
Barium, Dissolved	50,000	104	379
Cadmium, Dissolved	4	ND	ND
Chromium, Dissolved	300	ND	ND
Lead, Dissolved	10	ND	ND
Mercury, Dissolved	20	ND	ND
Selenium, Dissolved	100	ND	ND
Silver, Dissolved	7	ND	ND
Volatile Organic Compounds (ug/l)		ND	ND
Volatile Petroleum Hydrocarbons (ug/l)			
C5-C8 Aliphatics	3000	ND	ND
C9-C10 Aromatics	4000	ND	ND
C9-C12 Aliphatics	5000	ND	ND
Extractable Petroleum Hydrocarbons (ug/l)		ND	ND

ND-Denotes Not Detected Above Laboratory Detection Limits

McPhail Associates LLC

Table 2
Summary of Chemical Test Results - Groundwater
1971 -1977 Dorchester Avenue, Dorchester, MA
Project No. 5750

LOCATION	RGP Limits	B-6 (OW)
SAMPLING DATE		12/15/2015
LAB SAMPLE ID		L1533139-01
General Chemistry		
Solids, Total Suspended (ug/l)		25000
Chloride (ug/l)	Monitor Only	5400000
pH (H) (SU)	6.5-8.3	5.7
MCP Total Metals (ug/l)		
Antimony, Total	5.6	72
Arsenic, Total	10	5
Beryllium, Total		ND(5)
Cadmium, Total	0.2	ND(4)
Chromium, Total		ND(10)
Copper, Total	5.2	ND(10)
Lead, Total	1.3	ND(10)
Mercury, Total	0.9	ND(0.2)
Nickel, Total	29	ND(25)
Selenium, Total	5	ND(10)
Silver, Total	1.2	ND(7)
Thallium, Total		ND(20)
Zinc, Total	66.6	ND(50)

ND - Denotes Not Detected
Above Laboratory Limits

McPhail Associates, LLC

Table 3

Summary of Chemical Test Results - Groundwater

1971-1977 Dorchester Avenue, Dorchester, MA

Project No. 5750

LOCATION	RGP Limits	RGP Limits with DF	B-6 (OW)
SAMPLING DATE			1/14/2016
LAB SAMPLE ID			L1601178-01
LAB SAMPLE ID			L1601385-01
Dissolved Metals (ug/l)			
Antimony, Dissolved	5.6	60	ND
Cadmium, Dissolved	0.2	2	1.04
Copper, Dissolved	5.2	52	2.24
Iron, Dissolved	1000	5000	ND
Lead, Dissolved	1.3	13	ND
Silver, Dissolved	1.2	12	0.76
General Chemistry			
Solids, Total Suspended (ug/l)			440000
Chromium, Hexavalent (ug/l)	11.4		ND
Total Hardness by SM 2340B			
Hardness (ug/l)			630000
Total Metals (ug/l)			
Antimony, Total	5.6	60	ND
Arsenic, Total	10	100	1.77
Cadmium, Total	0.2	2	1.96
Chromium, Total			3.73
Copper, Total	5.2	52	14.13
Iron, Total	1000	5000	1500
Lead, Total	1.3	13	6.26
Mercury, Total	0.9	2.3	ND
Nickel, Total	29	290	10.69
Selenium, Total	5	50	ND
Silver, Total	1.2	12	1.37
Zinc, Total	66.6	666	28.91

ND - Denotes Not Detected Above Laboratory Detection Limits

McPhail Associates, LLC

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present a summary of environmental conditions, including the results of testing of groundwater samples obtained from a groundwater monitoring well on the property located at 1971-1977 Dorchester Avenue in Dorchester, Massachusetts in support of an application for approval of temporary construction dewatering discharge of groundwater into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Dewatering General Permit MAG070000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon analytical data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Laboratory analyses have been performed for specific constituents during the course of this assessment, as described in the text. However, it should be noted that additional constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of the Trinity Ashmont Limited Partnership. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than the submission to relevant governmental agencies, nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.

APPENDIX B:

NOTICE OF INTENT - NPDES DEWATERING GENERAL PERMIT
BOSTON WATER & SEWER DEWATERING DISCHARGE PERMIT APPLICATION

II. Suggested Notice of Intent (NOI) Format

1. General facility information. Please provide the following information about the facility.

a) Name of facility:
Trinity Ashmont Two

Mailing Address for the Facility:
Trinity Ashmont Two Mixed Use Limited Partnership/Trinity Ashmont Two Homeowner Limited Partnership;
75 Federal Street, 4th Floor
Boston MA, 02110

b) Location Address of the Facility (if different from mailing address):
1971-1977 Dorchester Avenue

Facility Location
longitude: -71.062102
latitude: 42.282658

Type of Business:
Construction Site

Facility SIC codes:

c) Name of facility owner: Trinity Ashmont Two Mixed Use Limited Partnership
Trinity Ashmont Two Homeowner Limited Partnership
Owner's email: dnunes@trinityfinancial.com
Owner's Tel #: (617) 720-8400 **Owner's Fax #:** (617) 720-8401

Address of owner (if different from facility address)

Owner is (check one): 1. Federal____2. State _____ 3. Private__✓___ 4. Other _____(Describe)_____

Legal name of Operator, if not owner: Cranshaw Construction
Operator Contact Name: Jeff Fishbone
Operator Tel Number: (617) 559-5214 **Fax Number:** _____
Operator's email: jfishbone@cranshaw.com
Operator Address (if different from owner)

2310 Washington Street; Newton Lower Falls, MA 02462

d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? __✓__

e) Check Yes or No for the following:
1. **Has a prior NPDES permit been granted for the discharge? Yes ____ No_✓_ If Yes, Permit Number: _____**
2. **Is the discharge a "new discharger" as defined by 40 CFR Section 122.2? Yes_____ No__✓___**
3. **Is the facility covered by an individual NPDES permit? Yes_____ No__✓___ If Yes, Permit Number ____**
4. **Is there a pending application on file with EPA for this discharge? Yes _____ No __✓____ If Yes, date of submittal:**

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

a) Name of receiving water into which discharge will occur: Davenport Brook

State Water Quality Classification: B **Freshwater:** Yes **Marine Water:** No

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

1. **Construction dewatering of groundwater intrusion and/or storm water accumulation.**
2. ✓ **Short-term or long-term dewatering of foundation sumps.**
3. **Other.**

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 68,800 **GPD**
Average Monthly Flow 46,080 **GPD**

e.) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 **Min pH** 6.5

f.) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. Groundwater

g.) What treatment does the wastewater receive prior to discharge?

h.) Is the discharge continuous? Yes _____ **No** ✓ **If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)** B
If (P), number of days or months per year of the discharge _____ **and the specific months of discharge** _____;
If (I), number of days/year there is a discharge Between 3 to 5 days/week
Is the discharge temporary? Yes ✓ **No** _____
If yes, approximate start date of dewatering February 15, 2016 **approximate end date of dewatering** September 15, 2016

i.) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. -71.046810 **lat.** 42.282845 **; Outfall 2: long.**_____ **lat.**_____**; Outfall 3: long.**_____ **lat.**_____.

j.) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations See Letter Report **cfs**
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

k.) Does the discharge occur in an ACEC? Yes __✓___ No _____
If yes, provide the name of the ACEC: Naponset River Estuary ACEC

3. Contaminant Information

a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for aquatic organism(s)).

b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge. See Letter Report

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix IV. In addition, respond to the following questions.

a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? B

b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation See Letter Report

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes __✓__ No ____ ; Question 2: No _____ Yes _____ See Letter Report

b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No __✓__ If yes, attach the results of the consultation(s).

c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? A

d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No __✓__ If yes, provide that name of the Indian Tribe associated with the property. _____

6. 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

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) 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 Name: 1981 Dorchester Avenue

Operator signature: 

Print Full Name and Title: Jeffrey A. Fishbone, Vice President

Date: February 9, 2016

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Cranshaw Construction Address: 2310 Washington Street

Phone Number: 617-559-5214 Fax number: _____

Contact person name: Jeff Fishbone Title: Vice President

Cell number: 781-760-7802 Email address: jfishbone@cranshaw.com

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify): _____

Owner's Information (if different from above):

Owner of property being dewatered: Trinity Ashmont Two Mixed Use Limited Partnership and Trinity Ashmont Two Homeownership Limited Partnership

Owner's mailing address: 75 Federal Street, 4th Floor Phone number: 617-720-8400

Location of Discharge & Proposed Treatment System(s):

Street number and name: 1971-1977 Dorchester Avenue Neighborhood Dorchester

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer ☒ Storm Drain ☐ Other (specify): _____

Describe Proposed Pre-Treatment System(s): 5,000 gallon sediment tank and bag filters in series

BWSC Outfall No. SDO 094 Receiving Waters Freshwater

Temporary Discharges (Provide Anticipated Dates of Discharge): From February 15, 2016 To September 15, 2016

☐ Groundwater Remediation	☐ Tank Removal/Installation	☒ Foundation Excavation
☐ Utility/Manhole Pumping	☐ Test Pipe	☐ Trench Excavation
☐ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

---

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Matthew Tuttle, Engineering Customer Service
E-mail: tuttlemp@bwsc.org
Phone: 617-989-7204 Fax: 617-989-7716

Signature of Authorized Representative for Property Owner: Rebecca M Vice President of Gebbead Partners Date: 2/9/2016

APPENDIX C:

MASSACHUSETTS PHASE I SITE ASSESSMENT MAP

MASSACHUSETTS AREAS OF ENVIRONMENTAL CONCERN

IPAC TRUST RESOURCE REPORT AND CORRESPONDENCE WITH U.S. FISH AND WILDFLIFE SERVICE

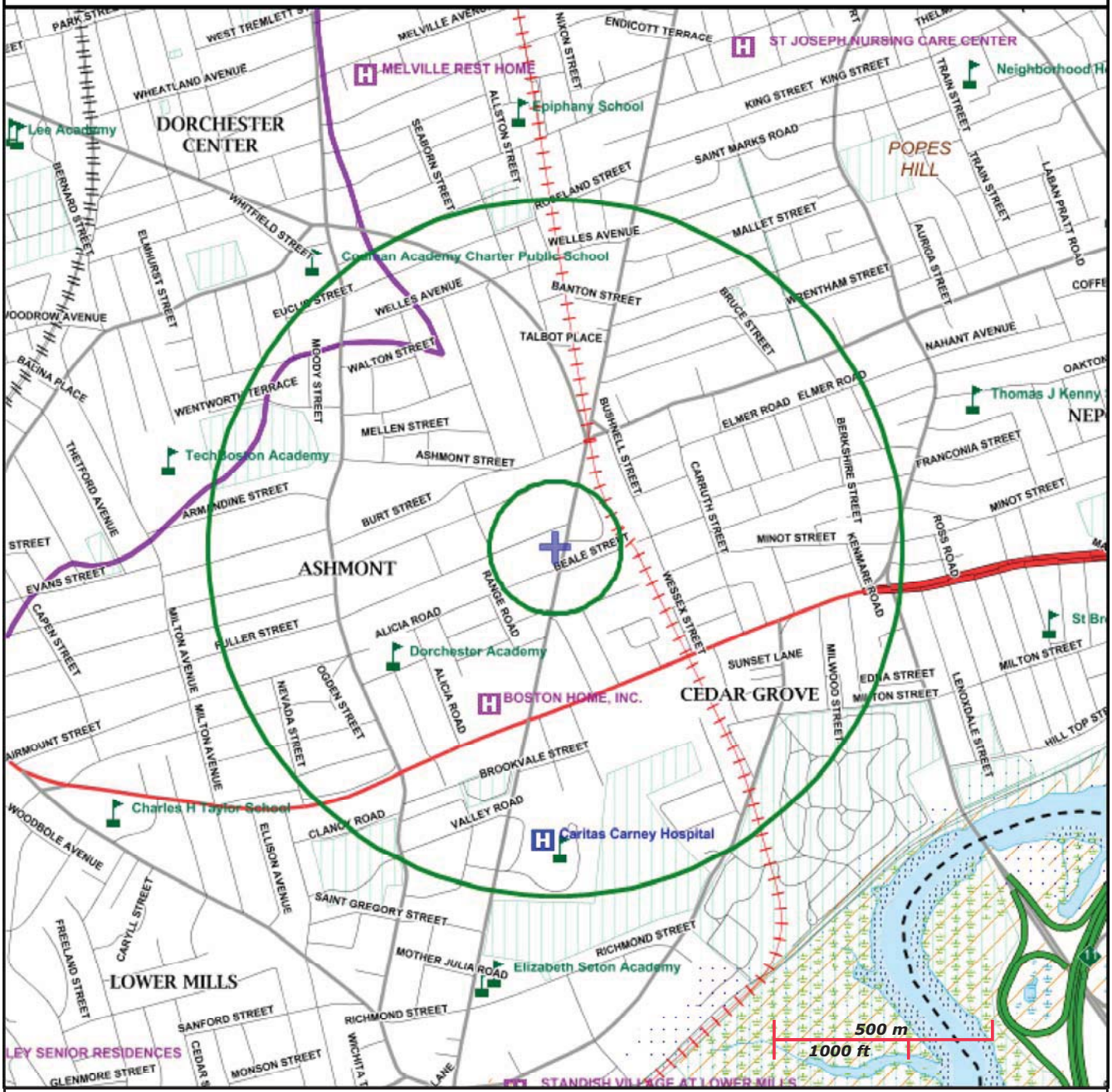
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
ASHMONT TOD 2
1981 DORCHESTER AVE BOSTON, MA
NAD83 UTM Meters:
4683320mN , 329726mE (Zone: 19)
November 3, 2015

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible 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.

Massachusetts Areas of Critical Environmental Concern (ACECs)
N
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
0 10 20
Miles

Fatima Babic-Konjic

From: vonOettingen, Susi <susi_vonoettingen@fws.gov>
Sent: Wednesday, January 20, 2016 2:27 PM
To: Fatima Babic-Konjic
Subject: Re: Endangered Species_1981 Dorchester Avenue

Hi Fatima,

I do not believe there is red knot habitat in Dorcester, therefore, no T/E species present. You are always welcome to look at a project and the species that shows up in IPaC and determine whether suitable habitat is present. From that you may determine no effect without needing to contact us. Red knots overlap this area because they may be migrating through the area and be affected by wind turbines (should they ever be built there). They clearly do not roost or forage in this area.

Does this help?

Susi

****
Susi von Oettingen
Endangered Species Biologist
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301
(W) 603-223-2541 ext. 6418
Please note my new extension.

www.fws.gov/newengland

On Mon, Jan 11, 2016 at 2:38 PM, Fatima Babic-Konjic <FBK@mcphailgeo.com> wrote:

Hi Susi,

I am preparing the Notice of Intent for Discharge under Dewatering General Permit for the discharge of construction effluent into the Davenport Brook via the City of Boston storm drain during the proposed construction to be located at 1981 Dorchester Avenue in Dorchester, Massachusetts. As part of the application process, I have searched the Information for Planning and Conservation (IPaC) website regarding the endangered and threatened species or critical habit within the area of the proposed construction site. Based on the report obtained from the IPaC website, the Red Knot bird is the endangered species in the vicinity of the project site. Can you please let me if the project has the potential to impact the endangered species. Attached please find the IPaC Report.

Let me know if you have any questions.

Regards,

Fatima Babic-Konjic

McPHAIL ASSOCIATES, LLC

2269 Massachusetts Avenue

Cambridge, MA 02140

Tel: 617-868-1420 Ext. 321

www.mcphailgeo.com

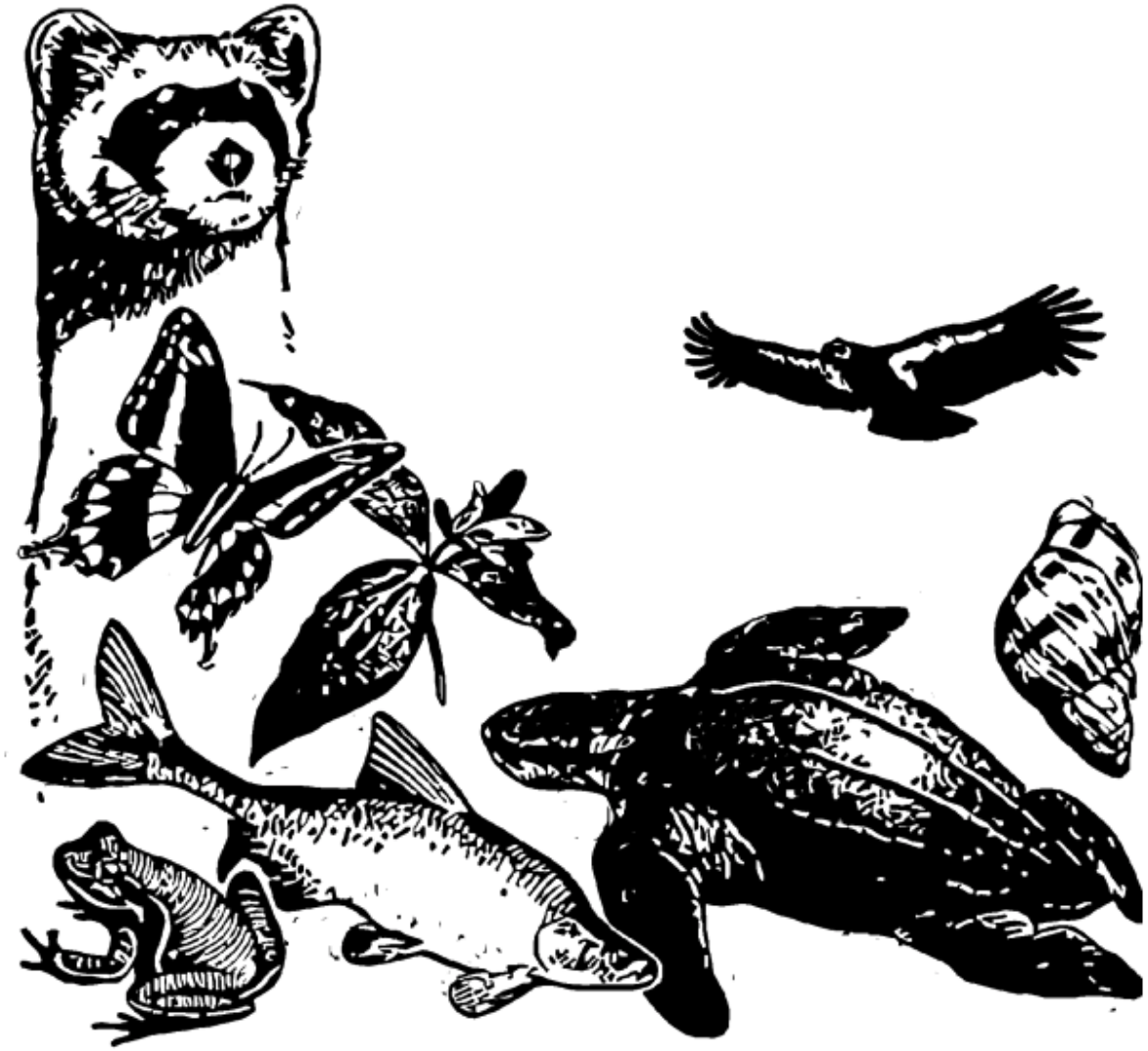
U.S. Fish & Wildlife Service

1981 Dorchester Avenue, Dorchester, MA

IPaC Trust Resource Report

Generated January 11, 2016 10:44 AM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

US Fish & Wildlife Service

IPaC Trust Resource Report

NAME

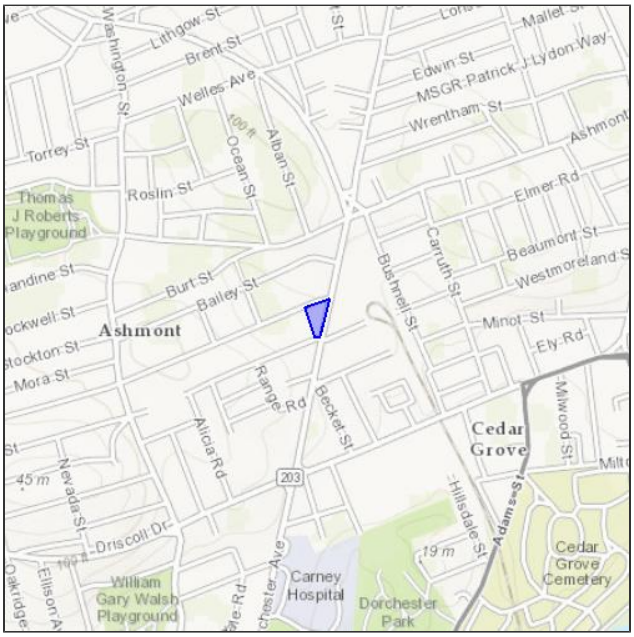
1981 Dorchester Avenue, Dorchester, MA

LOCATION

Suffolk County, Massachusetts

IPAC LINK

https://ecos.fws.gov/ipac/project/6YEZN-6ZD5F-FW5IO-55HUD-SBGYV4



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Red Knot Calidris canutus rufa — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php

The following species of migratory birds could potentially be affected by activities in this location:

American Oystercatcher Haematopus palliatus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G8

American Bittern Botaurus lentiginosus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Year-round
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Black Skimmer Rynchops niger — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EO

Black-billed Cuckoo Coccyzus erythropthalmus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HI

Blue-winged Warbler Vermivora pinus — Bird of conservation concern
Season: Breeding

Canada Warbler Wilsonia canadensis — Bird of conservation concern
Season: Breeding

Hudsonian Godwit Limosa haemastica — Bird of conservation concern
Season: Migrating

Least Bittern Ixobrychus exilis — Bird of conservation concern
Season: Breeding

Olive-sided Flycatcher Contopus cooperi — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Pied-billed Grebe Podilymbus podiceps — Bird of conservation concern
Season: Breeding

Prairie Warbler Dendroica discolor — Bird of conservation concern
Season: Breeding

Purple Sandpiper Calidris maritima — Bird of conservation concern
Season: Wintering

Saltmarsh Sparrow Ammodramus caudacutus — Bird of conservation concern
Season: Breeding

Seaside Sparrow Ammodramus maritimus — Bird of conservation concern
Season: Breeding

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Egret Egretta thula — Bird of conservation concern
Season: Breeding

Upland Sandpiper Bartramia longicauda — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HC

Willow Flycatcher Empidonax traillii — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6

Wood Thrush Hylocichla mustelina — Bird of conservation concern
Season: Breeding

Worm Eating Warbler Helmitheros vermivorum — Bird of conservation concern
Season: Breeding

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location

APPENDIX D:

LABORATORY ANALYTIC DATA

ANALYTICAL REPORT

Lab Number:	L1412709
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	ASHMONT TIRE
Project Number:	5750.9.00
Report Date:	06/17/14

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: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1412709-01	B-1 (OW)	1961 DORCHESTER AVE	06/10/14 15:40
L1412709-02	B-6 (OW)	1961 DORCHESTER AVE	06/10/14 16:40

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

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

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

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: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

In reference to question A:

The samples were received at the laboratory requiring filtration for Dissolved Metals; however, the samples were filtered beyond the method required 24 hour holding time. The samples were filtered and preserved appropriately.

Volatile Organics

In reference to question H:

The initial calibration, associated with L1412709-01 and -02, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00302), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1412709-01 and -02, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

VPH

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

EPH

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

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: Lisa Westerlind

Title: Technical Director/Representative Date: 06/17/14

ORGANICS

VOLATILES

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-01
Client ID: B-1 (OW)
Sample Location: 1961 DORCHESTER AVE
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/14/14 17:08
Analyst: MM

Date Collected: 06/10/14 15:40
Date Received: 06/11/14
Field Prep: Not Specified

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

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-01 Date Collected: 06/10/14 15:40

Client ID: B-1 (OW) Date Received: 06/11/14

Sample Location: 1961 DORCHESTER AVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-01 Date Collected: 06/10/14 15:40

Client ID: B-1 (OW) Date Received: 06/11/14

Sample Location: 1961 DORCHESTER AVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-02
Client ID: B-6 (OW)
Sample Location: 1961 DORCHESTER AVE
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/14/14 17:39
Analyst: MM

Date Collected: 06/10/14 16:40
Date Received: 06/11/14
Field Prep: Not Specified

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

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-02 Date Collected: 06/10/14 16:40

Client ID: B-6 (OW) Date Received: 06/11/14

Sample Location: 1961 DORCHESTER AVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1

Project Name: ASHMONT TIRE **Lab Number:** L1412709

Project Number: 5750.9.00 **Report Date:** 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-02 Date Collected: 06/10/14 16:40

Client ID: B-6 (OW) Date Received: 06/11/14

Sample Location: 1961 DORCHESTER AVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/14/14 11:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG698014-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
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	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/14/14 11:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG698014-3					
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/14/14 11:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG698014-3					
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG698014-1 WG698014-2								
Methylene chloride	93		95		70-130	2		20
1,1-Dichloroethane	97		99		70-130	2		20
Chloroform	97		99		70-130	2		20
Carbon tetrachloride	87		90		70-130	3		20
1,2-Dichloropropane	93		95		70-130	2		20
Dibromochloromethane	83		86		70-130	4		20
1,1,2-Trichloroethane	92		94		70-130	2		20
Tetrachloroethene	100		101		70-130	1		20
Chlorobenzene	96		97		70-130	1		20
Trichlorofluoromethane	110		114		70-130	4		20
1,2-Dichloroethane	96		98		70-130	2		20
1,1,1-Trichloroethane	94		95		70-130	1		20
Bromodichloromethane	90		92		70-130	2		20
trans-1,3-Dichloropropene	76		78		70-130	3		20
cis-1,3-Dichloropropene	82		85		70-130	4		20
1,1-Dichloropropene	102		103		70-130	1		20
Bromoform	72		74		70-130	3		20
1,1,2,2-Tetrachloroethane	92		94		70-130	2		20
Benzene	102		104		70-130	2		20
Toluene	98		99		70-130	1		20
Ethylbenzene	101		102		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG698014-1 WG698014-2								
Chloromethane	100		102		70-130	2		20
Bromomethane	90		93		70-130	3		20
Vinyl chloride	117		120		70-130	3		20
Chloroethane	107		107		70-130	0		20
1,1-Dichloroethene	101		103		70-130	2		20
trans-1,2-Dichloroethene	93		95		70-130	2		20
Trichloroethene	97		98		70-130	1		20
1,2-Dichlorobenzene	94		96		70-130	2		20
1,3-Dichlorobenzene	95		96		70-130	1		20
1,4-Dichlorobenzene	93		94		70-130	1		20
Methyl tert butyl ether	87		90		70-130	3		20
p/m-Xylene	99		100		70-130	1		20
o-Xylene	98		98		70-130	0		20
cis-1,2-Dichloroethene	93		95		70-130	2		20
Dibromomethane	92		94		70-130	2		20
1,2,3-Trichloropropane	93		94		70-130	1		20
Styrene	104		105		70-130	1		20
Dichlorodifluoromethane	103		108		70-130	5		20
Acetone	96		94		70-130	2		20
Carbon disulfide	96		98		70-130	2		20
2-Butanone	91		92		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG698014-1 WG698014-2								
4-Methyl-2-pentanone	88		91		70-130	3		20
2-Hexanone	89		93		70-130	4		20
Bromochloromethane	93		96		70-130	3		20
Tetrahydrofuran	93		95		70-130	2		20
2,2-Dichloropropane	82		84		70-130	2		20
1,2-Dibromoethane	90		93		70-130	3		20
1,3-Dichloropropane	92		95		70-130	3		20
1,1,1,2-Tetrachloroethane	82		85		70-130	4		20
Bromobenzene	93		94		70-130	1		20
n-Butylbenzene	95		94		70-130	1		20
sec-Butylbenzene	104		102		70-130	2		20
tert-Butylbenzene	102		101		70-130	1		20
o-Chlorotoluene	97		98		70-130	1		20
p-Chlorotoluene	96		97		70-130	1		20
1,2-Dibromo-3-chloropropane	76		80		70-130	5		20
Hexachlorobutadiene	91		91		70-130	0		20
Isopropylbenzene	112		111		70-130	1		20
p-Isopropyltoluene	103		101		70-130	2		20
Naphthalene	81		81		70-130	0		20
n-Propylbenzene	102		102		70-130	0		20
1,2,3-Trichlorobenzene	80		79		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG698014-1 WG698014-2								
1,2,4-Trichlorobenzene	80		80		70-130	0		20
1,3,5-Trimethylbenzene	98		98		70-130	0		20
1,2,4-Trimethylbenzene	96		95		70-130	1		20
Ethyl ether	94		96		70-130	2		20
Isopropyl Ether	97		99		70-130	2		20
Ethyl-Tert-Butyl-Ether	82		84		70-130	2		20
Tertiary-Amyl Methyl Ether	81		83		70-130	2		20
1,4-Dioxane	95		100		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		103		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	99		100		70-130

PETROLEUM HYDROCARBONS

Project Name: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-01	Date Collected:	06/10/14 15:40
Client ID:	B-1 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	100,VPH-04-1.1		
Analytical Date:	06/13/14 14:36		
Analyst:	GT		

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

Volatile Petroleum Hydrocarbons - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	89		70-130
2,5-Dibromotoluene-FID	86		70-130

Project Name: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-01	Date Collected:	06/10/14 15:40
Client ID:	B-1 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	06/12/14 23:49
Analytical Date:	06/13/14 16:29	Cleanup Method1:	EPH-04-1
Analyst:	AR	Cleanup Date1:	06/13/14

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: ASHMONT TIRE
Lab Number: L1412709
Project Number: 5750.9.00
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-01	Date Collected:	06/10/14 15:40
Client ID:	B-1 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	52		40-140
2-Fluorobiphenyl	52		40-140
2-Bromonaphthalene	46		40-140

Project Name: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-02	Date Collected:	06/10/14 16:40
Client ID:	B-6 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	100,VPH-04-1.1		
Analytical Date:	06/13/14 15:16		
Analyst:	GT		

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Petroleum Hydrocarbons - Westborough Lab						
C5-C8 Aliphatics	ND		ug/l	50.0	--	1
C9-C12 Aliphatics	ND		ug/l	50.0	--	1
C9-C10 Aromatics	ND		ug/l	50.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	93		70-130
2,5-Dibromotoluene-FID	90		70-130

Project Name: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-02	Date Collected:	06/10/14 16:40
Client ID:	B-6 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1	Extraction Date:	06/12/14 23:49
Analytical Date:	06/13/14 17:00	Cleanup Method1:	EPH-04-1
Analyst:	AR	Cleanup Date1:	06/13/14

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: ASHMONT TIRE
Lab Number: L1412709
Project Number: 5750.9.00
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID:	L1412709-02	Date Collected:	06/10/14 16:40
Client ID:	B-6 (OW)	Date Received:	06/11/14
Sample Location:	1961 DORCHESTER AVE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	69		40-140
2-Bromonaphthalene	65		40-140

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 06/13/14 14:22
Analyst: AR

Extraction Method: EPA 3510C
Extraction Date: 06/12/14 23:49
Cleanup Method1: EPH-04-1
Cleanup Date1: 06/13/14

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02 Batch: WG697545-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	72		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	75		40-140

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 100,VPH-04-1.1
Analytical Date: 06/13/14 12:01
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02 Batch: WG698083-3					
C5-C8 Aliphatics	ND		ug/l	50.0	--
C9-C12 Aliphatics	ND		ug/l	50.0	--
C9-C10 Aromatics	ND		ug/l	50.0	--
C5-C8 Aliphatics, Adjusted	ND		ug/l	50.0	--
C9-C12 Aliphatics, Adjusted	ND		ug/l	50.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	109		70-130
2,5-Dibromotoluene-FID	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG697545-2 WG697545-3								
C9-C18 Aliphatics	66		52		40-140	24		25
C19-C36 Aliphatics	86		72		40-140	18		25
C11-C22 Aromatics	68		66		40-140	3		25
Naphthalene	55		49		40-140	12		25
2-Methylnaphthalene	62		55		40-140	12		25
Acenaphthylene	61		54		40-140	12		25
Acenaphthene	64		58		40-140	10		25
Fluorene	66		59		40-140	11		25
Phenanthrene	68		62		40-140	9		25
Anthracene	71		69		40-140	3		25
Fluoranthene	70		66		40-140	6		25
Pyrene	71		67		40-140	6		25
Benzo(a)anthracene	67		64		40-140	5		25
Chrysene	69		66		40-140	4		25
Benzo(b)fluoranthene	71		71		40-140	0		25
Benzo(k)fluoranthene	69		66		40-140	4		25
Benzo(a)pyrene	68		66		40-140	3		25
Indeno(1,2,3-cd)Pyrene	68		64		40-140	6		25
Dibenzo(a,h)anthracene	68		65		40-140	5		25
Benzo(ghi)perylene	68		65		40-140	5		25
Nonane (C9)	50		36		30-140	**33**	Q	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG697545-2 WG697545-3								
Decane (C10)	60		46		40-140	**26**	Q	25
Dodecane (C12)	71		55		40-140	25		25
Tetradecane (C14)	78		60		40-140	**26**	Q	25
Hexadecane (C16)	82		65		40-140	23		25
Octadecane (C18)	86		70		40-140	21		25
Nonadecane (C19)	86		71		40-140	19		25
Eicosane (C20)	86		71		40-140	19		25
Docosane (C22)	87		72		40-140	19		25
Tetracosane (C24)	88		73		40-140	19		25
Hexacosane (C26)	88		73		40-140	19		25
Octacosane (C28)	86		71		40-140	19		25
Triacontane (C30)	88		73		40-140	19		25
Hexatriacontane (C36)	85		70		40-140	19		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	85		54		40-140
o-Terphenyl	74		80		40-140
2-Fluorobiphenyl	63		66		40-140
2-Bromonaphthalene	61		64		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG698083-1 WG698083-2								
C5-C8 Aliphatics	108		103		70-130	5		25
C9-C12 Aliphatics	93		85		70-130	10		25
C9-C10 Aromatics	98		92		70-130	6		25
Benzene	101		92		70-130	9		25
Toluene	101		93		70-130	8		25
Ethylbenzene	102		94		70-130	8		25
p/m-Xylene	102		95		70-130	8		25
o-Xylene	100		94		70-130	7		25
Methyl tert butyl ether	101		96		70-130	5		25
Naphthalene	97		100		70-130	4		25
1,2,4-Trimethylbenzene	98		92		70-130	6		25
Pentane	109		104		70-130	5		25
2-Methylpentane	107		103		70-130	4		25
2,2,4-Trimethylpentane	111		105		70-130	6		25
n-Nonane	97		88		30-130	9		25
n-Decane	90		80		70-130	12		25
n-Butylcyclohexane	97		90		70-130	8		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02 Batch: WG698083-1 WG698083-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	105		104		70-130
2,5-Dibromotoluene-FID	97		100		70-130

METALS

Project Name: ASHMONT TIRE
Lab Number: L1412709
Project Number: 5750.9.00
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-01
Client ID: B-1 (OW)
Sample Location: 1961 DORCHESTER AVE
Matrix: Water

Date Collected: 06/10/14 15:40
Date Received: 06/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Barium, Dissolved	0.104		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Cadmium, Dissolved	ND		mg/l	0.004	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Chromium, Dissolved	ND		mg/l	0.01	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Lead, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Mercury, Dissolved	ND		mg/l	0.0002	--	1	06/12/14 12:04	06/12/14 16:14	EPA 7470A	97,7470A	AK
Selenium, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT
Silver, Dissolved	ND		mg/l	0.007	--	1	06/11/14 19:28	06/16/14 12:09	NA	97,6010C	TT

Project Name: ASHMONT TIRE
Lab Number: L1412709
Project Number: 5750.9.00
Report Date: 06/17/14

SAMPLE RESULTS

Lab ID: L1412709-02
Client ID: B-6 (OW)
Sample Location: 1961 DORCHESTER AVE
Matrix: Water

Date Collected: 06/10/14 16:40
Date Received: 06/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Barium, Dissolved	0.379		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Cadmium, Dissolved	ND		mg/l	0.004	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Chromium, Dissolved	ND		mg/l	0.01	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Lead, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Mercury, Dissolved	ND		mg/l	0.0002	--	1	06/12/14 12:04	06/12/14 16:20	EPA 7470A	97,7470A	AK
Selenium, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT
Silver, Dissolved	ND		mg/l	0.007	--	1	06/11/14 19:28	06/16/14 12:13	NA	97,6010C	TT

Project Name: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-02 Batch: WG697355-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	06/12/14 12:04	06/12/14 15:49	97,7470A	AK

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-02 Batch: WG698078-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Barium, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Cadmium, Dissolved	ND		mg/l	0.004	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Chromium, Dissolved	ND		mg/l	0.01	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Lead, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Selenium, Dissolved	ND		mg/l	0.010	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT
Silver, Dissolved	ND		mg/l	0.007	--	1	06/11/14 19:28	06/16/14 11:58	97,6010C	TT

Prep Information

Digestion Method: NA

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TIRE

Project Number: 5750.9.00

Lab Number: L1412709

Report Date: 06/17/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG697355-2 WG697355-3								
Mercury, Dissolved	104		102		80-120	2		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG698078-2 WG698078-3								
Arsenic, Dissolved	102		102		80-120	0		20
Barium, Dissolved	98		98		80-120	0		20
Cadmium, Dissolved	105		104		80-120	1		20
Chromium, Dissolved	100		100		80-120	0		20
Lead, Dissolved	104		104		80-120	0		20
Selenium, Dissolved	106		106		80-120	0		20
Silver, Dissolved	98		97		80-120	1		20

Project Name: ASHMONT TIRE
Project Number: 5750.9.00

Lab Number: L1412709
Report Date: 06/17/14

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

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1412709-01A	Vial HCl preserved	A	N/A	2.6	Y	Absent	MCP-8260-10(14)
L1412709-01B	Vial HCl preserved	A	N/A	2.6	Y	Absent	MCP-8260-10(14)
L1412709-01C	Vial HCl preserved	A	N/A	2.6	Y	Absent	VPH-10(14)
L1412709-01D	Vial HCl preserved	A	N/A	2.6	Y	Absent	VPH-10(14)
L1412709-01E	Plastic 500ml unpreserved	A	7	2.6	Y	Absent	FILTER-MET(1)
L1412709-01F	Amber 1000ml HCl preserved	A	<2	2.6	Y	Absent	EPH-DELUX-10(14)
L1412709-01G	Amber 1000ml HCl preserved	A	<2	2.6	Y	Absent	EPH-DELUX-10(14)
L1412709-01X	Plastic 250ml HNO3 preserved spl	A	<2	2.6	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)
L1412709-02A	Vial HCl preserved	A	N/A	2.6	Y	Absent	MCP-8260-10(14)
L1412709-02B	Vial HCl preserved	A	N/A	2.6	Y	Absent	MCP-8260-10(14)
L1412709-02C	Vial HCl preserved	A	N/A	2.6	Y	Absent	VPH-10(14)
L1412709-02D	Vial HCl preserved	A	N/A	2.6	Y	Absent	VPH-10(14)
L1412709-02E	Plastic 500ml unpreserved	A	7	2.6	Y	Absent	FILTER-MET(1)
L1412709-02F	Amber 1000ml HCl preserved	A	<2	2.6	Y	Absent	EPH-DELUX-10(14)
L1412709-02G	Amber 1000ml HCl preserved	A	<2	2.6	Y	Absent	EPH-DELUX-10(14)
L1412709-02X	Plastic 250ml HNO3 preserved spl	A	<2	2.6	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days

Project Name:	ASHMONT TIRE	**Lab Number:**	L1412709
Project Number:	5750.9.00	**Report Date:**	06/17/14

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:	ASHMONT TIRE	**Lab Number:**	L1412709
Project Number:	5750.9.00	**Report Date:**	06/17/14

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: ASHMONT TIRE
Project Number: 5750.9.00
Lab Number: L1412709
Report Date: 06/17/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

100 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, July 2010.

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 6/11/14

ALPHA Job #: L1412709

ALPHA ANALYTICAL
World Class Chemistry
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: McPhail Assoc
Address: 2269 Mass Ave, Cambridge, MA
Phone: 617-868-1420
Email:

Additional Project Information:

Project Information

Project Name: Ashmont Tire
Project Location: 1961 Dorchester Ave
Project #: 5750.9.00
Project Manager: Amy Falconeiri
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/17/14

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☒ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13	METALS: ☐ RCRA5 ☐ MCP 14 ☐ RCP 15 ☒ RCRA8 Dissolved ☐ PP13	EPH: ☒ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☒ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
12709-01	B-1(OW)	6/10/14	1540	GW	JPK	X			X	X	X				4-vials 2-Amber 1-plastic	7
02	B-6(OW)	6/10/14	1640	GW	JPK	X			X	X	X				4-vials 2-Amber 1-plastic	7
Container Type						V			P	A	V					
Preservative						B			A	B	B					

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	6/10/14 1800		6/10/14 1620
	6/11/14 1037		6/11/14 1737

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1412709

Instrument ID: Quimby.i Calibration Date: 14-JUN-2014 Time: 09:45

Lab File ID: 0614A03 Init. Calib. Date(s): 12-JUN-2 12-JUN-2

Sample No: 8260 CCAL Init. Calib. Times : 08:51 16:15

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.44452	.45738	.1	3	20	
chloromethane	.73556	.73846	.1	0	20	
vinyl chloride	.54314	.63529	.1	17	20	
bromomethane	.36208	.32774	.1	-9	20	
chloroethane	.40701	.4339	.1	7	20	
trichlorofluoromethane	.79213	.8754	.1	11	20	
ethyl ether	.2293	.21649	.05	-6	20	
acrolein	.06739	.05708	.05	-15	20	
freon-113	.48885	.50633	.1	4	20	
acetone	.10348	.09931	.1	-4	20	
1,1,-dichloroethene	.45467	.45842	.1	1	20	
tert-butyl alcohol	.02508	.01958	.05	-22	20	F
iodomethane	.49399	.40058	.05	-19	20	
methyl acetate	.25303	.23319	.01	-8	20	
methylene chloride	.56599	.52453	.1	-7	20	
carbon disulfide	1.3212	1.2653	.1	-4	20	
acrylonitrile	.15363	.14015	.05	-9	20	
methyl tert butyl ether	1.0277	.89607	.1	-13	20	
Halothane	.36971	.37143	.05	0	20	
trans-1,2-dichloroethene	.53743	.50138	.1	-7	20	
Diisopropyl Ether	1.9277	1.8719	.05	-3	20	
vinyl acetate	.85427	.73088	.05	-14	20	
1,1-dichloroethane	1.0247	.99618	.2	-3	20	
Ethyl-Tert-Butyl-Ether	1.4308	1.1683	.05	-18	20	
2-butanone	.16755	.15242	.1	-9	20	
2,2-dichloropropane	.54442	.44819	.05	-18	20	
ethyl acetate	.14332	.12452	.05	-13	20	
cis-1,2-dichloroethene	.58934	.54948	.1	-7	20	
chloroform	.91243	.88658	.2	-3	20	
bromochloromethane	.24868	.23029	.05	-7	20	
tetrahydrofuran	.10858	.10097	.05	-7	20	
1,1,1-trichloroethane	.72573	.68261	.1	-6	20	
cyclohexane	1.1329	1.2027	.01	6	30	
1,1-dichloropropene	.75677	.77269	.05	2	20	
carbontetrachloride	.56653	.49344	.1	-13	20	
Tertiary-Amyl Methyl Ether	1.1081	.89506	.05	-19	20	
1,2-dichloroethane	.68324	.65421	.1	-4	20	
benzene	2.1047	2.1408	.5	2	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1412709

Instrument ID: Quimby.i Calibration Date: 14-JUN-2014 Time: 09:45

Lab File ID: 0614A03 Init. Calib. Date(s): 12-JUN-2 12-JUN-2

Sample No: 8260 CCAL Init. Calib. Times : 08:51 16:15

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
trichloroethene	.55473	.53717	.2	-3	20	
methyl cyclohexane	.84077	.94085	.01	12	30	
1,2-dichloropropane	.60488	.56202	.1	-7	20	
bromodichloromethane	.66268	.59421	.2	-10	20	
1,4-dioxane	.00342	.00324	.05	-5	20	F
dibromomethane	.27393	.251	.05	-8	20	
2-chloroethylvinyl ether	.28002	.25378	.05	-9	20	
4-methyl-2-pentanone	.15406	.13557	.1	-12	20	
cis-1,3-dichloropropene	.75881	.62414	.2	-18	20	
toluene	1.6512	1.6164	.4	-2	20	
ethyl-methacrylate	.61692	.5406	.01	-12	30	
trans-1,3-dichloropropene	.72182	.54773	.1	-24	20	F
2-hexanone	.3065	.27389	.1	-11	20	
1,1,2-trichloroethane	.39915	.36732	.1	-8	20	
1,3-dichloropropane	.83745	.77338	.05	-8	20	
tetrachloroethene	.72244	.72273	.2	0	20	
chlorodibromomethane	.49762	.41273	.1	-17	20	
1,2-dibromoethane	.46218	.41654	.1	-10	20	
chlorobenzene	1.8734	1.8008	.5	-4	20	
1,1,1,2-tetrachloroethane	.6038	.4942	.05	-18	20	
ethyl benzene	3.2441	3.2833	.1	1	20	
p/m xylene	1.3689	1.3499	.1	-1	20	
o xylene	1.3394	1.3156	.3	-2	20	
styrene	2.1061	2.2019	.31	5	20	
isopropylbenzene	3.0653	3.4350	.1	12	20	
bromoform	.53157	.3822	.1	-28	20	F
1,4-dichlorobutane	1.8475	1.6956	.01	-8	20	
1,1,2,2,-tetrachloroethane	1.0046	.92712	.3	-8	20	
1,2,3-trichloropropane	.77538	.71767	.05	-7	20	
trans-1,4-dichloro-2-butene	.32157	.21961	.05	-32	20	F
n-propylbenzene	6.4350	6.5995	.05	3	20	
bromobenzene	1.5711	1.4558	.05	-7	20	
4-ethyltoluene	2.7561	2.8432	.05	3	20	
1,3,5-trimethybenzene	4.7985	4.6887	.05	-2	20	
2-chlorotoluene	4.8206	4.6596	.05	-3	20	
4-chorotoluene	4.3788	4.2048	.05	-4	20	
tert-butylbenzene	3.8813	3.9519	.05	2	20	
1,2,4-trimethylbenzene	4.4563	4.2947	.05	-4	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1412709

Instrument ID: Quimby.i Calibration Date: 14-JUN-2014 Time: 09:45

Lab File ID: 0614A03 Init. Calib. Date(s): 12-JUN-2 12-JUN-2

Sample No: 8260 CCAL Init. Calib. Times : 08:51 16:15

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
sec-butylbenzene	5.4794	5.7307	.05	5	20	
p-isopropyltoluene	4.2754	4.3919	.05	3	20	
1,3-dichlorobenzene	2.9981	2.8385	.6	-5	20	
1,4-dichlorobenzene	2.9684	2.7721	.5	-7	20	
n-butylbenzene	4.1308	3.9395	.05	-5	20	
1,2,4,5-tetramethylbenezene	1.2336	1.1434	.05	-7	20	
1,2-dichlorobenzene	2.7002	2.5264	.4	-6	20	
p-diethylbenzene	1.6364	1.5801	.05	-3	20	
1,2-dibromo-3-chloropropane	.13075	.09977	.05	-24	20	F
1,3,5-trichlorobenzene	1.5686	1.3504	.01	-14	30	
1,2,4-trichlorobenzene	1.2711	1.0234	.2	-19	20	
hexachlorobutadiene	.55088	.50301	.05	-9	20	
naphthalene	1.9582	1.5819	.05	-19	20	
1,2,3-trichlorobenzene	.99057	.78916	.05	-20	20	F
dibromofluoromethane	.24024	.23757	.05	-1	20	
1,2-dichloroethane-d4	.26338	.26631	.05	1	20	
toluene-d8	1.1728	1.1798	.05	1	20	
4-bromofluorobenzene	.88618	.88584	.05	0	20	

FORM VII MCP-8260-10

ANALYTICAL REPORT

Lab Number:	L1533139
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	ASHMONT TOD TWO
Project Number:	5750.9.03
Report Date:	12/20/15

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03

Lab Number: L1533139
Report Date: 12/20/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1533139-01	B-6 (OW)	WATER	DORCHESTER, MA	12/15/15 13:30	12/15/15

Project Name: ASHMONT TOD TWO **Lab Number:** L1533139

Project Number: 5750.9.03 **Report Date:** 12/20/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

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

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03

Lab Number: L1533139
Report Date: 12/20/15

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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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:	ASHMONT TOD TWO	**Lab Number:**	L1533139
Project Number:	5750.9.03	**Report Date:**	12/20/15

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Metals

In reference to question I:

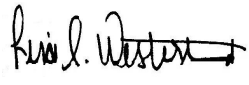
All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

Non-MCP Related Narratives

Chloride

The WG850800-4 MS recovery (1000%), performed on L1533139-01, does not apply because the sample concentration is greater than four times the spike amount added.

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:  Lisa Westerlind

Title: Technical Director/Representative Date: 12/20/15

METALS

Project Name: ASHMONT TOD TWO
Lab Number: L1533139
Project Number: 5750.9.03
Report Date: 12/20/15

SAMPLE RESULTS

Lab ID: L1533139-01
Client ID: B-6 (OW)
Sample Location: DORCHESTER, MA
Matrix: Water

Date Collected: 12/15/15 13:30
Date Received: 12/15/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Antimony, Total	0.072		mg/l	0.050	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Arsenic, Total	0.005		mg/l	0.005	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Beryllium, Total	ND		mg/l	0.005	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Cadmium, Total	ND		mg/l	0.004	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Chromium, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Copper, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Lead, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Mercury, Total	ND		mg/l	0.0002	--	1	12/16/15 14:50	12/17/15 18:42	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Selenium, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Silver, Total	ND		mg/l	0.007	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Thallium, Total	ND		mg/l	0.020	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS
Zinc, Total	ND		mg/l	0.050	--	1	12/16/15 04:35	12/16/15 14:29	EPA 3005A	97,6010C	PS

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03
Lab Number: L1533139
Report Date: 12/20/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG850085-1										
Antimony, Total	ND		mg/l	0.050	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Arsenic, Total	ND		mg/l	0.005	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Beryllium, Total	ND		mg/l	0.005	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Cadmium, Total	ND		mg/l	0.004	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Chromium, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Lead, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Nickel, Total	ND		mg/l	0.025	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Selenium, Total	ND		mg/l	0.010	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Silver, Total	ND		mg/l	0.007	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Thallium, Total	ND		mg/l	0.020	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS
Zinc, Total	ND		mg/l	0.050	--	1	12/16/15 04:35	12/16/15 14:14	97,6010C	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG850306-1										
Mercury, Total	ND		mg/l	0.0002	--	1	12/16/15 14:50	12/17/15 18:37	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD TWO

Project Number: 5750.9.03

Lab Number: L1533139

Report Date: 12/20/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG850085-2 WG850085-3								
Antimony, Total	80		81		80-120	1		20
Arsenic, Total	112		110		80-120	2		20
Beryllium, Total	98		97		80-120	1		20
Cadmium, Total	112		107		80-120	5		20
Chromium, Total	100		95		80-120	5		20
Lead, Total	105		102		80-120	3		20
Nickel, Total	98		97		80-120	1		20
Selenium, Total	108		105		80-120	3		20
Silver, Total	93		99		80-120	6		20
Thallium, Total	106		100		80-120	6		20
Zinc, Total	101		98		80-120	3		20
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG850306-2 WG850306-3								
Mercury, Total	114		109		80-120	4		20

INORGANICS
&
MISCELLANEOUS

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03
Lab Number: L1533139
Report Date: 12/20/15

SAMPLE RESULTS

Lab ID: L1533139-01
Client ID: B-6 (OW)
Sample Location: DORCHESTER, MA
Matrix: Water
Date Collected: 12/15/15 13:30
Date Received: 12/15/15
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	25.		mg/l	10	NA	2	-	12/17/15 00:42	30,2540D	RT
Chloride	5400		mg/l	100	--	100	-	12/17/15 23:00	1,9251	ML
pH (H)	5.7		SU	-	NA	1	-	12/15/15 21:06	1,9040C	AS

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03
Lab Number: L1533139
Report Date: 12/20/15

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 Batch: WG850441-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	12/17/15 00:42	30,2540D	RT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG850800-1										
Chloride	ND		mg/l	1.0	--	1	-	12/17/15 20:57	1,9251	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD TWO

Project Number: 5750.9.03

Lab Number: L1533139

Report Date: 12/20/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG850040-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG850800-2								
Chloride	100		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03

Lab Number: L1533139
Report Date: 12/20/15

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 QC Batch ID: WG850800-4 QC Sample: L1533139-01 Client ID: B-6 (OW)												
Chloride	5400	20	5600	**1000**	Q	-	-		58-140	-		7

Lab Duplicate Analysis
Batch Quality Control

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03

Lab Number: L1533139
Report Date: 12/20/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG850800-3 QC Sample: L1533139-01 Client ID: B-6 (OW)						
Chloride	5400	5500	mg/l	2		7

Project Name: ASHMONT TOD TWO
Project Number: 5750.9.03

Lab Number: L1533139
Report Date: 12/20/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1533139-01A	Plastic 500ml HNO3 preserved	A	<2	3.3	Y	Absent	MCP-CR-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CD-6010T-10(180),MCP-TL-6010T-10(180),MCP-AG-6010T-10(180),MCP-CU-6010T-10(180),MCP-SB-6010T-10(180),MCP-ZN-6010T-10(180),MCP-BE-6010T-10(180),MCP-SE-6010T-10(180),MCP-NI-6010T-10(180),MCP-PB-6010T-10(180)
L1533139-01B	Plastic 500ml unpreserved	A	7	3.3	Y	Absent	TSS-2540(7)
L1533139-01C	Plastic 500ml unpreserved	A	7	3.3	Y	Absent	PH-9040(1)
L1533139-01D	Plastic 500ml unpreserved	A	7	3.3	Y	Absent	CL-9251(28)

*Values in parentheses indicate holding time in days

Project Name:	ASHMONT TOD TWO	**Lab Number:**	L1533139
Project Number:	5750.9.03	**Report Date:**	12/20/15

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.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

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.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ASHMONT TOD TWO	**Lab Number:**	L1533139
Project Number:	5750.9.03	**Report Date:**	12/20/15

Data Qualifiers

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.

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:	ASHMONT TOD TWO	**Lab Number:**	L1533139
Project Number:	5750.9.03	**Report Date:**	12/20/15

REFERENCES

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

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

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

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

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

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: 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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 12/15/15

ALPHA Job #: L1533139

Client Information

Client: McPhail Associates, LLC

Address: Cambridge, MA

Phone:

Email:

Project Information

Project Name: Ashmont TOD Two

Project Location: Dorchester, MA

Project #: 5750.9.03

Project Manager: Amy Falconeiri

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due:

Additional Project Information:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods

☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)

☐ Yes ☒ No NPDES RGP

☐ Other State /Fed Program _____ Criteria _____

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2	SVOC: ☐ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☐ PCB ☐ PEST	TPH: ☐ Quant Only ☐ Fingerprint	total PP-13 metals	TSS	Ph	chloride	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
33139-01	B-6 (OW)	12/15/15	13:30	S	MES									X	X	X	X			4

Container Type	Preservative
P= Plastic	A= None
A= Amber glass	B= HCl
V= Vial	C= HNO_3
G= Glass	D= H_2SO_4
B= Bacteria cup	E= NaOH
C= Cube	F= MeOH
O= Other	G= $NaHSO_4$
E= Encore	H = $Na_2S_2O_3$
D= BOD Bottle	I= Ascorbic Acid
	J = NH_4Cl
	K= Zn Acetate
	O= Other

	Container Type																			
	Preservative																			

Relinquished By:	Date/Time	Received By:	Date/Time
	12/15/15 14:30	DAL	12-15-15 16:15
DAL	12-15-15 17:45		12-15-15 1745

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L1601178
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	ASHMONT TOD
Project Number:	5750
Report Date:	01/15/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1601178-01	B-6 (OW)	WATER	1981 DORCHESTER AVE., DORCHESTER, MA	01/14/16 11:00	01/14/16

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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: ASHMONT TOD
Project Number: 5750
Lab Number: L1601178
Report Date: 01/15/16

Case Narrative (continued)

Metals

The WG857527-3 Laboratory Duplicate RPD, performed on L1601178-01, is outside the acceptance criteria for iron (42%). The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG857529-3 Laboratory Duplicate RPD, performed on L1601178-01, is above the acceptance criteria for chromium (25%); 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: 01/15/16

METALS

Project Name: ASHMONT TOD
Lab Number: L1601178
Project Number: 5750
Report Date: 01/15/16

SAMPLE RESULTS

Lab ID: L1601178-01
Client ID: B-6 (OW)
Sample Location: 1981 DORCHESTER AVE., DORCHEST
Matrix: Water

Date Collected: 01/14/16 11:00
Date Received: 01/14/16
Field Prep: Not Specified

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	0.00300	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Arsenic, Total	0.00177		mg/l	0.00050	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Cadmium, Total	0.00196		mg/l	0.00020	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Chromium, Total	0.00373		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Copper, Total	0.01413		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Iron, Total	1.5		mg/l	0.05	--	1	01/15/16 03:55	01/15/16 13:00	EPA 3005A	19,200.7	PS
Lead, Total	0.00626		mg/l	0.00050	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Mercury, Total	ND		mg/l	0.00020	--	1	01/15/16 09:04	01/15/16 12:26	EPA 245.1	3,245.1	DB
Nickel, Total	0.01069		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Silver, Total	0.00137		mg/l	0.00040	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Zinc, Total	0.02891		mg/l	0.01000	--	1	01/15/16 03:55	01/15/16 12:16	EPA 3005A	1,6020A	KL
Total Hardness by SM 2340B - Westborough Lab											
Hardness	630		mg/l	0.66	NA	1	01/15/16 03:55	01/15/16 13:00	EPA 3005A	19,200.7	PS
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	ND		mg/l	0.00300	--	1	01/15/16 04:01	01/15/16 11:42	EPA 3005A	1,6020A	KL

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601178
Report Date: 01/15/16

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 Batch: WG857527-1										
Iron, Total	ND		mg/l	0.05	--	1	01/15/16 03:55	01/15/16 12:48	19,200.7	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab for sample(s): 01 Batch: WG857527-1										
Hardness	ND		mg/l	0.66	NA	1	01/15/16 03:55	01/15/16 12:48	19,200.7	PS

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 Batch: WG857529-1										
Antimony, Total	ND		mg/l	0.00300	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Arsenic, Total	ND		mg/l	0.00050	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Copper, Total	ND		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Lead, Total	ND		mg/l	0.00050	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Nickel, Total	ND		mg/l	0.00100	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL
Zinc, Total	ND		mg/l	0.01000	--	1	01/15/16 03:55	01/15/16 12:05	1,6020A	KL

Prep Information

Digestion Method: EPA 3005A

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601178
Report Date: 01/15/16

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 Batch: WG857530-1										
Antimony, Dissolved	ND		mg/l	0.00300	--	1	01/15/16 04:01	01/15/16 11:20	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 Batch: WG857603-1										
Mercury, Total	ND		mg/l	0.00020	--	1	01/15/16 09:04	01/15/16 12:22	3,245.1	DB

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD

Project Number: 5750

Lab Number: L1601178

Report Date: 01/15/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG857527-2								
Iron, Total	91		-		85-115	-		
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 Batch: WG857527-2								
Hardness	101		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG857529-2								
Antimony, Total	88		-		80-120	-		
Arsenic, Total	105		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Chromium, Total	101		-		80-120	-		
Copper, Total	105		-		80-120	-		
Lead, Total	107		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Selenium, Total	117		-		80-120	-		
Silver, Total	102		-		80-120	-		
Zinc, Total	102		-		80-120	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG857530-2								
Antimony, Dissolved	90		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD

Project Number: 5750

Lab Number: L1601178

Report Date: 01/15/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG857603-2					
Mercury, Total	115	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

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 QC Batch ID: WG857527-4 QC Sample: L1601178-01 Client ID: B-6 (OW)												
Iron, Total	1.5	1	2.5	100		-	-		75-125	-		20
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857527-4 QC Sample: L1601178-01 Client ID: B-6 (OW)												
Hardness	630	66.2	700	106		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857529-4 QC Sample: L1601178-01 Client ID: B-6 (OW)												
Antimony, Total	ND	0.5	0.5932	119		-	-		75-125	-		20
Arsenic, Total	0.00177	0.12	0.1354	111		-	-		75-125	-		20
Cadmium, Total	0.00196	0.051	0.05905	112		-	-		75-125	-		20
Chromium, Total	0.00373	0.2	0.2001	98		-	-		75-125	-		20
Copper, Total	0.01413	0.25	0.2681	102		-	-		75-125	-		20
Lead, Total	0.00626	0.51	0.5761	112		-	-		75-125	-		20
Nickel, Total	0.01069	0.5	0.4967	97		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.134	112		-	-		75-125	-		20
Silver, Total	0.00137	0.05	0.05156	100		-	-		75-125	-		20
Zinc, Total	0.02891	0.5	0.5156	97		-	-		75-125	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857530-4 QC Sample: L1601178-01 Client ID: B-6 (OW)												
Antimony, Dissolved	ND	0.5	0.3872	77		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857527-3 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Iron, Total	1.5	2.3	mg/l	**42**	Q	20
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857527-3 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Hardness	630	650	mg/l	3		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857529-3 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00177	0.00180	mg/l	2		20
Cadmium, Total	0.00196	0.00222	mg/l	12		20
Chromium, Total	0.00373	0.00478	mg/l	**25**	Q	20
Copper, Total	0.01413	0.01645	mg/l	15		20
Lead, Total	0.00626	0.00692	mg/l	10		20
Nickel, Total	0.01069	0.01229	mg/l	14		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	0.00137	0.00143	mg/l	4		20
Zinc, Total	0.02891	0.03177	mg/l	9		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857530-3 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Antimony, Dissolved	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601178
Report Date: 01/15/16

SAMPLE RESULTS

Lab ID: L1601178-01
Client ID: B-6 (OW)
Sample Location: 1981 DORCHESTER AVE., DORCHEST
Matrix: Water
Date Collected: 01/14/16 11:00
Date Received: 01/14/16
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	440		mg/l	10	NA	2	-	01/15/16 07:10	30,2540D	DW
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/14/16 23:25	01/14/16 23:36	119,3500CR-B	LH

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601178
Report Date: 01/15/16

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 Batch: WG857473-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/14/16 23:25	01/14/16 23:36	119,3500CR-B	LH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG857557-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	01/15/16 07:10	30,2540D	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD

Project Number: 5750

Lab Number: L1601178

Report Date: 01/15/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG857473-2								
Chromium, Hexavalent	100		-		85-115	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

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 QC Batch ID: WG857473-4 QC Sample: L1601178-01 Client ID: B-6 (OW)												
Chromium, Hexavalent	ND	0.1	0.104	104		-	-		85-115	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857473-3 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG857557-2 QC Sample: L1601178-01 Client ID: B-6 (OW)						
Solids, Total Suspended	440	460	mg/l	4		29

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601178
Report Date: 01/15/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1601178-01A	Plastic 500ml HNO3 preserved	A	<2	3.8	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),HARDU(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1601178-01B	Plastic 500ml unpreserved	A	7	3.8	Y	Absent	HEXCR-3500(1)
L1601178-01C	Plastic 500ml unpreserved	A	7	3.8	Y	Absent	-
L1601178-01D	Plastic 950ml unpreserved	A	7	3.8	Y	Absent	TSS-2540(7)
L1601178-01E	Plastic 500ml HNO3 preserved	A	<2	3.8	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),HARDU(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1601178-01X	Plastic 120ml HNO3 preserved spl	A	<2	3.8	Y	Absent	SB-6020S(180)

*Values in parentheses indicate holding time in days

Project Name:	ASHMONT TOD	**Lab Number:**	L1601178
Project Number:	5750	**Report Date:**	01/15/16

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.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

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.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ASHMONT TOD	**Lab Number:**	L1601178
Project Number:	5750	**Report Date:**	01/15/16

Data Qualifiers

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.

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:	ASHMONT TOD	**Lab Number:**	L1601178
Project Number:	5750	**Report Date:**	01/15/16

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.

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.

119 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 21st 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

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

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: 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.

Serial_No:01151615:54

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1/14/16

ALPHA Job #: L1601178

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: MCPHAIL ASSOCIATES, LLC

Address: 2269 MASSACHUSETTS AVE
CAMBRIDGE, MA 02140

Phone: 617-868-1420

Email: FBK@MCPHAILGEO.COM

Project Information

Project Name: ASHMONT TOD

Project Location: 1981 DORCHESTER AVE DORCHESTER, MA

Project #: 5750

Project Manager: AMY FALCONEIRI

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: 24 TAT

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

RUN TOTAL ANTIMONY + ANTIMONY → (FILTRATION IN THE LAB)

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO
Filtration
☐ Field
☐ Lab to do
Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Sample Comments	TOTAL # BOTTLES
01178(6)	B-6 (OW)	1/14/16	11:00	W	MGS	ANTIMONY (FILTRATION IN THE LAB), TSS, Hardness	4

Container Type	P	P	P	P	P
Preservative	C	A	C	A	C

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	1/14/16 12:15		1/14/16 1600
	1/14/16 1715		1/14/16 17:15

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO. 01-01 (rev. 12-Mar-2012)

ANALYTICAL REPORT

Lab Number:	L1601385
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	ASHMONT TOD
Project Number:	5750
Report Date:	01/18/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601385
Report Date: 01/18/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1601385-01	B-6 (OW)	WATER	1981 DORCHESTER AVE, DORCHESTER, MA	01/14/16 11:00	01/14/16

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601385
Report Date: 01/18/16

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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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:  Cristin Walker

Title: Technical Director/Representative Date: 01/18/16

METALS

Project Name: ASHMONT TOD
Lab Number: L1601385
Project Number: 5750
Report Date: 01/18/16

SAMPLE RESULTS

Lab ID: L1601385-01
Client ID: B-6 (OW)
Sample Location: 1981 DORCHESTER AVE, DORCHESTE
Matrix: Water

Date Collected: 01/14/16 11:00
Date Received: 01/14/16
Field Prep: Field Filtered (Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Westborough Lab											
Cadmium, Dissolved	0.00104		mg/l	0.00020	--	1	01/15/16 04:01	01/15/16 11:42	EPA 3005A	1,6020A	KL
Copper, Dissolved	0.00224		mg/l	0.00100	--	1	01/15/16 04:01	01/15/16 11:42	EPA 3005A	1,6020A	KL
Iron, Dissolved	ND		mg/l	0.05	--	1	01/15/16 04:10	01/18/16 11:27	EPA 3005A	19,200.7	JH
Lead, Dissolved	ND		mg/l	0.00050	--	1	01/15/16 04:01	01/15/16 11:42	EPA 3005A	1,6020A	KL
Silver, Dissolved	0.00076		mg/l	0.00040	--	1	01/15/16 04:01	01/15/16 11:42	EPA 3005A	1,6020A	KL

Project Name: ASHMONT TOD
Project Number: 5750
Lab Number: L1601385
Report Date: 01/18/16

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 Batch: WG857530-1										
Cadmium, Dissolved	ND		mg/l	0.00020	--	1	01/15/16 04:01	01/15/16 11:20	1,6020A	KL
Copper, Dissolved	ND		mg/l	0.00100	--	1	01/15/16 04:01	01/15/16 11:20	1,6020A	KL
Lead, Dissolved	ND		mg/l	0.00050	--	1	01/15/16 04:01	01/15/16 11:20	1,6020A	KL
Silver, Dissolved	ND		mg/l	0.00040	--	1	01/15/16 04:01	01/15/16 11:20	1,6020A	KL

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG858110-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	01/15/16 04:10	01/18/16 11:19	19,200.7	JH

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ASHMONT TOD

Project Number: 5750

Lab Number: L1601385

Report Date: 01/18/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG857530-2								
Cadmium, Dissolved	106		-		80-120	-		
Copper, Dissolved	114		-		80-120	-		
Lead, Dissolved	100		-		80-120	-		
Silver, Dissolved	110		-		80-120	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG858110-2								
Iron, Dissolved	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601385
Report Date: 01/18/16

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 QC Batch ID: WG857530-4 QC Sample: L1601178-01 Client ID: MS Sample												
Cadmium, Dissolved	0.0010	0.051	0.06196	119		-	-		75-125	-		20
Copper, Dissolved	0.0022	0.25	0.2687	106		-	-		75-125	-		20
Lead, Dissolved	ND	0.51	0.6709	**132**	Q	-	-		75-125	-		20
Silver, Dissolved	0.0008	0.05	0.05522	109		-	-		75-125	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG858110-4 QC Sample: L1601385-01 Client ID: B-6 (OW)												
Iron, Dissolved	ND	1	1.2	120		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601385
Report Date: 01/18/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG858110-3 QC Sample: L1601385-01 Client ID: B-6 (OW)						
Iron, Dissolved	ND	ND	mg/l	NC		20

Project Name: ASHMONT TOD
Project Number: 5750

Lab Number: L1601385
Report Date: 01/18/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1601385-01A	Plastic 250ml HNO3 preserved spl	A	<2	3.8	Y	Absent	CU-6020S(180),FE-RI(180),PB-6020S(180),AG-6020S(180),CD-6020S(180)

*Values in parentheses indicate holding time in days

Project Name:	ASHMONT TOD	**Lab Number:**	L1601385
Project Number:	5750	**Report Date:**	01/18/16

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.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ASHMONT TOD	**Lab Number:**	L1601385
Project Number:	5750	**Report Date:**	01/18/16

Data Qualifiers

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.

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:	ASHMONT TOD	**Lab Number:**	L1601385
Project Number:	5750	**Report Date:**	01/18/16

REFERENCES

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

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

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

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: 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.

L1601385 LT 1/15/16

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1/14/16

ALPHA Job #: L1601178

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: MCPHAIL ASSOCIATES, LLC

Address: 2269 MASSACHUSETTS AVE
CAMBRIDGE, MA 02140

Phone: 617-868-1420

Email: FBK@MCPHAILGEO.COM

Project Information

Project Name: ASHMONT TOD

Project Location: 1981 DORCHESTER AVE DORCHESTER, MA

Project #: 5750

Project Manager: AMY FALCONEIRI

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: 24 TAT

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods

☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)

☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)

☒ Yes ☐ No NPDES RGP

☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

RUN TOTAL ANTIMONY + ANTIMONY→(FILTRATION IN THE LAB)

FE-RI, CD-6020S, CU-6020S, PB-6020S, AG-6020S

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS	SAMPLE INFO	TOTAL #
01385	B-6 (low)	1/14/16	11:00	W	MGS	X		4

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint

ANTIMONY (FILTRATION IN THE LAB)

SAMPLE INFO: Filtration ☐ Field ☐ Lab to do

Container Type	P	P	P	P	P	
Preservative	C	A	C	A	C	

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	1/14/16 12:15		1/14/16 1200
	1/14/16 1715		1/14/16 17:15

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO. 01-01 (rev. 12-Mar-2012)

APPENDIX E:

USGS STREAMSTATS DATA

StreamStats Version 3.0

Flow Statistics Ungaged Site Report

Date: Tues Jan 12, 2016 2:10:00 PM GMT-5
Study Area: Massachusetts
NAD 1983 Latitude: 42.2804 (42 16 49)
NAD 1983 Longitude: -71.0428 (-71 02 34)
Drainage Area: 0.0355 mi2

Low Flows Basin Characteristics			
100% Statewide Low Flow WRIR00 4135 (0.0355 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	0.0355 (below min value 1.61)	1.61	149
Mean Basin Slope from 250K DEM (percent)	1.695	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.16	0	1.29
Massachusetts Region (dimensionless)	0	0	1

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

Probability of Perennial Flow Basin Characteristics			
100% Perennial Flow Probability (0.0355 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	0.0355	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	77.26	0	100
Percent Forest (percent)	0.00	0	100
Massachusetts Region (dimensionless)	0	0	1

Bankfull Flows Basin Characteristics			
100% Bankfull Statewide SIR2013 5155 (0.0355 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	0.0355 (below min value 0.6)	0.6	329
Mean Basin Slope from 10m DEM (percent)	5.365	2.2	23.9

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

Low Flows Statistics						
Statistic	Value	Unit	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
D50	0.0317	ft3/s				
D60	0.0194	ft3/s				
D70	0.0105	ft3/s				

D75	0.00773	ft3/s				
D80	0.00641	ft3/s				
D85	0.00415	ft3/s				
D90	0.00292	ft3/s				
D95	0.00135	ft3/s				
D98	0.000828	ft3/s				
D99	0.00052	ft3/s				
M7D2Y	0.00145	ft3/s				
AUGD50	0.00457	ft3/s				
M7D10Y	0.000431	ft3/s				

http://pubs.usgs.gov/wri/wri004135/ (http://pubs.usgs.gov/wri/wri004135/)
Ries_ K.G._ III_ 2000_ Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135_ 81 p.

Probability of Perennial Flow Statistics						
Statistic	Value	Unit	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
PROBPEREN	0.59	dim	0.6		0.36	0.85

http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf (http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf)
Bent_ G.C._ and Steeves_ P.A._ 2006_ A revised logistic regression equation and an automated procedure for mapping the probability of a stream flowing perennially in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2006-5031_ 107 p.

Bankfull Flows Statistics						
Statistic	Value	Unit	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
BFWDTH	3.85	ft				
BFDPTH	0.35	ft				
BFAREA	1.32	ft2				
BFFLOW	2.41	ft3/s				

http://pubs.usgs.gov/sir/2013/5155/ (http://pubs.usgs.gov/sir/2013/5155/)
Bent_ G.C._ and Waite_ A.M._ 2013_ Equations for estimating bankfull channel geometry and discharge for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2013-5155_ 62 p._