6 CRR-NY Part 182 Incidental Take Permit Application



DEC # 4-0122-00322/00002 USACE # NAN-2021-00948-UDA

Port of Albany Expansion Project

December 2021





Office of General Services

Department of State



JOINT APPLICATION FORM

For Permits for activities activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. Applications To: >NYS Department of Environmental Conservation ✓	Check here to confirm you sent this form to NYSDEC.
Check all permits that apply: Stream Disturbance Dams and Impoundment Structures Excavation and Fill in 401 Water Quality	✓ Tidal Wetlands
Navigable Waters Certification	☐ Coastal Erosion ☐ Coastal Frosion ☐ Coastal Frosion ☐ Coastal Frosion ☐ Coastal Take of
✓ Docks, Moorings or ✓ Freshwater Wetlands Platforms	Management Threatened Species
>US Army Corps of Engineers ✓	Check here to confirm you sent this form to USACE.
Check all permits that apply: Section 404 Clean Wat	ter Act Section 10 Rivers and Harbors Act
Is the project Federally funded? Yes No	
If yes, name of Federal Agency: N/A	
General Permit Type(s), if known: N/A	
Preconstruction Notification:	
>NYS Office of General Services	Check here to confirm you sent this form to NYSOGS.
Check all permits that apply: State Owned Lands Under Water Utility Easement (pipelines, conduits, cat	oles, etc.) ✓ Docks, Moorings or Platforms
>NYS Department of State Check if this applies: ✓ Coastal Consistency Concurr	Check here to confirm you sent this form to NYSDOS.
2. Name of Applicant	Taxpayer ID (if applicant is NOT an individual)
Richard Hendrick - Albany Port District Commission Mailing Address	Post Office / City State Zip
106 Smith Boulevard	Albany NY 12202
	ck@portofalbany.us
Applicant Must be (check all that apply): 🗹 Owner	Operator Lessee
To the state of the state of	
3. Name of Property Owner (if different than Applicant) Same	
Mailing Address	Post Office / City State Zip
Telephone Email	
For Agency Use Only Agency Application Number:	

JOINT APPLICATION FORM – Continued. Submit this completed page as part of your Application.

4. Name of Contact / Agent Steve Boisvert - McFarland-Johnson, Inc.		
Mailing Address	Post Office / City	State Zip
60 Railroad Place, Suite 402	,	
oo Namoad Flace, Odite 402	Saratoga Springs	NY 12866
Telephone 518-580-9380 Email sboisve	ert@mjinc.com	
5. Project / Facility Name	Property Tax Map Section	n / Block / Lot Number:
Port of Albany Expansion Project	98.00-2-10.23	01.1.7
Project Street Address, if applicable Beacon Harbor Parcel	Post Office / City	State Zip
Beacon Harbor Parcei	Town of Bethlehem	
Provide directions and distances to roads, intersections, brid	ges and bodies of water	
East of River Road (NYS Rd. 144), south of Normans Kill and north	n of of PSEG property; Town of Bethleh	nem, Albany County, NY
✓ Town ☐ Village ☐ City County	Stream/Waterbody Name	
Bethlehem Albany	Normans Kill and Hudson	n River
Project Location Coordinates: Enter Latitude and Longitude		
Latitude: 46 ° 36 ' 16.59 "	Longitude: 73 ° 45	<u>'</u> 54.60 "
Project Description: Provide the following information al any additional information on other pages. <u>Attach plans on</u>		esponse and provide
a. Purpose of the proposed project:		
See Section 2.2 of Joint Application Package. This Project wou	ld transform an undeveloped industrial	ly zoned property into an
active marine terminal with specialized infrastructure capable of		
the tower components for offshore wind developments. Project		ort and export of
materials and manufactured components to be used in the deve	elopment of OSVV.	
b. Description of current site conditions:	consists of provious disturbed land (la	andfill) used for the
See Section 3.0 of Joint Application Package. The Project Site disposal of coal ashes, transmission lines corridor ("power corri		
area that had various industrial uses such a "rail yard" and meta		
cProposed site changes:		
See Section 4.0 of Joint Application Package. Proposed change	·	
(previously disturbed), and build a manufacturing and marine te construction of associated site utilities and infrastructure includi	· · · · · · · · · · · · · · · · · · ·	-
management systems and wharf. Dredging of 4.4 acre is propo	-	arking area, storriwater
d. Type of structures and fill materials to be installed, and q	uantity of materials to be used (e.g	g., square feet of
coverage, cubic yards of fill material, structures below or See Section 4.0 of Joint Application Package.	dinary/mean high water, etc.):	
See Section 4.0 of Joint Application Fackage.		
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIER	kTniwBHt-6pB-FTQxZNQ-8nKEwqA?	e=4jg3Sf
e. Area of excavation or dredging, volume of material to be	removed. location of dredged mat	erial placement:
See Section 4.3 of Joint Application Package.		
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIER	₽kTniwRHt-6nR-FT∩v7N∩-ՋnKFwa∆?	e=4ig3Sf
		C-+jg001
	es, explain below.	1
Timing of the proposed cutting or clearing (month/year):		
Number of trees to be cut: Acre	age of trees to be cleared: 87 (ap	oprox.)

JOINT APPLICATION FORM – Continued. Submit this completed page as part of your Application.

g. Work methods and type of equipment to be used:
See Section 4.0 of Joint Application Package.
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf
h. Describe the planned sequence of activities:
See Section 4.4 of Joint Application Package.
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf
. Pollution control methods and other actions proposed to mitigate environmental impacts:
See Section 5 and Section 6 of Joint Application Package.
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf
. Erosion and silt control methods that will be used to prevent water quality impacts:
See Section 5 of Joint Application Package.
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf
k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:
See Section 7 of Joint Application Package.
https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf
l. Proposed use: ☐ Private ✓ Public ✓ Commercial
m. Proposed Start Date: April 2022 Estimated Completion Date: July 2023
n. Has work begun on project?
o. Will project occupy Federal, State, or Municipal Land? 🔛 Yes If Yes, explain below. 🗀 No
Wharf will be constructed along Hudson River and will required dredging of approximately 105,000 cubic yards
p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:
NYSDEC: DEC#4-0122-00322/00001 (Beacon Island Parcel Sampling Plan) USACE: NAN-2020-0811-UDA (Nationwide General Permit No. 6 for collection of sediment samples within Hudson River) NYDOS: F-2020-0538 (Federal Consistency with Coastal Zone Management)
q. Will this project require additional Federal, State, or Local authorizations, including zoning changes? Yes If Yes, list below.
No changes to zoning are proposed. See Joint Permit Application Package. https://mjinc-my.sharepoint.com/:f:/p/drosa/EtHhrX0spIVJtgtIERkTniwBHt-6pB-FTQxZNQ-8nKEwqA?e=4jg3Sf

JOINT APPLICATION FORM – Continued. Submit this completed page as part of your Application.

7 Signatures.

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

not more than 5 years, or both where an applicant knowingly and willin material fact; or knowingly makes or uses a false, fictitious or fraudulent sta	
Signature of Applicant	Date
	11/11/21
Applicant Must be (check all that apply): 🗸 Owner 🔃 Operator	Lessee
Printed Name Title	
Richard J. Hendrick	
Signature of Owner (if different than Applicant)	Date
Printed Name Title	
Signature of Contact / Agent	Date
Printed Name Title	
Steve Boisvert Direct	tor of Civil-Facilities
For Assessed Law Code	WHIDED
For Agency Use Only DETERMINATION OF NO PERMIT REC Agency Application Number	UIRED
	e) has determined that No Permit is
required from this Agency for the project described in this application.	,
Agency Representative:	
Printed Title Name	
Signature Date	

TABLE OF CONTENTS

1. P	PROJECT DESCRIPTION	1-1
1.1	Proposed Bridge over Normans Kill	1-2
1.2	Proposed Wharf and Dredging	1-3
1.3	HABITAT CHARACTERISTICS OF THE PROJECT SITE	1-5
2. C	DESCRIPTION OF LISTED SPECIES	2-1
3. A	AVOIDANCE AND MINIMIZATION MEASURES	3-1
3.1	Proposed Bridge over Normans Kill	3-1
3.2	Proposed Wharf and Dredging	3-2
4. P	POTENTIAL IMPACTS TO LISTED SPECIES	4-1
4.1	Underwater Noise	4-1
4.2	HABITAT MODIFICATION	4-3
4	2.1 Submerged Aquatic Vegetation	4-5
4	.2.2 Freshwater Mussels	4-9
4.3	VESSELS MOVEMENT	4-9
4.4	Dredge Entrapment	4-10
4.5	Turbidity	4-10
4.6	Maintenance Dredging	4-11
5. N	MITIGATION	5-1
5.1	ADDITIONAL MITIGATION MEASURES TO OFFSET POTENTIAL IMPACTS TO SHORTNOSE STURGEON HABITAT	5-1
6. N	MITIGATION IMPLEMENTATION AGREEMENT	6-1
7. E	NVIRONMENTAL MONITORING	7-1
7.1	FISH MONITORING	7-1
7.2	Water Quality / Turbidity Monitoring	7-1
7.3	BATHYMETRIC SURVEY	7-1
8. A	APPENDICES	8-1
	LIST OF TABLES	
Table :	1-1: Project Site	1-1
Table :	1-1: Project Site Habitat Characteristics Within Project Site	1-5
Table 2	2-1: Shortnose Sturgeon Distribution, Life Stages and Seasonal Movement in Hudson River	2-2
Table 4	4-1: Extent of Potential Effects and Mitigation Measures	4-1
Table 4	4-2: Estimating underwater Noise	4-2
Table 4	4-3: Based Estimates for Underwater Noise	4-2
Table 4	4-4: Estimated Distances to injury and Behavioral Thresholds	4-2



Port of Albany Expansion Project

Incidental Take Permit Application

LIST OF FIGURES

Figure 4-1: Spatial Ecology of the Shortnose sturgeon	4-4
Figure 4-2: General Wharf Layout and Dredging Area	4-7

LIST OF APPENDICES

Appendix 1:	Permit Sketches (Project Drawings)
Appendix 2:	Submerged Aquatic Vegetation Survey

Appendix 3: Freshwater Mussels Survey

Appendix 4: Sediment Sampling and Analysis Report

1. PROJECT DESCRIPTION

The Albany Port District Commission (APDC) has identified the need to expand their current land holdings in order to accommodate demand and support New York State in achieving its renewable energy goals by providing additional port infrastructure, building space, cargo and wharf capacity necessary for the manufacturing and distribution of wind turbine components. In order to continue fulfilling their mission to generate economic development for the region and to accommodate future growth, the APDC proposes the development of an industrial site, to expand and provide additional port infrastructure, building space, cargo and wharf capacity ("the Project").

The Project will transform an undeveloped property (zoned industrial) into an active port terminal with specialized infrastructure. The Project consists of approximately 589,000 square feet of manufacturing space located in five (5) separate buildings. See **Appendix 1** for Permit Sketches (Project Drawings). Manufacturing would include fabrication of large and heavy wind towers, transition pieces, and related elements. These fabricated components would be loaded on barges or other vessels for marine transport. The size and weight of the fabricated steel tower elements that will be manufactured on-site are significant; tower sections will be up to 165 feet in length, 33 feet in diameter, and weigh up to 600 tons each. Transition pieces are of variable height, between 50 and 115 feet, and will weigh up to 800 tons each; therefore, marine transport is required. The Proposed Action requires the construction of a new bridge of over Normans Kill, and construction of a new marginal wharf along the eastern edge of Beacon Island and limited dredging in the Hudson River.

A Joint Application Permit Package was submitted to the U.S. Army Corps of Engineer (USACE) (NAN-2021-00948-UDA) and New York State Department of Environmental Conservation (NYSDEC) (4-0122-00322/00002) on August 6, 2021, revised and resubmitted on October 25, 2021, which is under review by regulatory agencies. Copy of the application can be accessed via the following hyperlink: Joint Permit Application Package. A Supplemental Draft Environmental Impact Statement (SDEIS) was submitted to the Town of Bethlehem. Copy of the SDEIS can be accessed via the following link Permitting SharedFolder.

In summary, the Project Site is located on the east side of River Road/Route 144 along the Hudson River at approximately Hudson River Mile 142 (HRM 142). The Project Site is located in the Town of Bethlehem and City of Albany and is divided into a northern and southern section that is separated by the Normans Kill. The following table includes a breakdown of the Project Site and the areas subject to construction of the Project.

Proposed Action / Project Elements to be Project Site / Owner Location **Current Use** Acreage Constructed • Buildings A thru D • Wharf in the western bank of Hudson River 81.6-acre parcel River Vacant • Bridge over Normans Kill (Main site / APDC Road/Route (Former • Site access Beacon Island) Landfill) 144 • Utilities and site infrastructure (e.g., stormwater, wastewater, power and communications, etc.)

Table 1-1: Project Site

Project Site / Acreage	Owner	Location	Current Use	Proposed Action / Project Elements to be Constructed
4.5-acre adjoining parcel	National Grid	River Road/Route 144	Utilities easement	Surface parking Stormwater treatment
14.7-acre offsite parcel	APDC	700 Smith Boulevard	Vacant (Rail yard and metal recycling)	Building E and incidental site improvements
Normanskill Street	City of Albany	Normanskill Street	Existing Road	Road improvements connecting building E to the Beacon Island property

As discussed in the following sections, the general layout of the proposed wharf places the riverside face of structure coincident with the face of the existing timber revetment, so much of the earthwork and construction would be <u>landward</u>, including land excavation. In-water work activity mainly consists of dredging.

1.1 PROPOSED BRIDGE OVER NORMANS KILL

The Project includes a bridge over Normans Kill necessary to connect site operations between the 81.6-acre parcel and the 14.7-acre parcel north of this waterway (700 Smith Boulevard) and to provide trucking transportation in and out of the proposed manufacturing facility on existing Port property. The design of the proposed structure consists of a three (3) span bridge that allows for fully spanning the Normans Kill Floodway and <u>avoids</u> fill below the mean higher high water (MHHW) line. The configuration of the proposed bridge is shown in **Appendix 1** (Permit Sketches), including both a plan and profile view.

Coordinates:

Latitude: 42°36'26.99"NLongitude: -73°45'58.37"W

The Normans Kill channel is <u>not</u> proposed to be altered, modified, filled or excavated. Also, the Project does <u>not</u> involve permanent alteration of the floodway. The proposed layout has two (2) piers comprised of reinforced concrete drilled shafts to avoid and minimize environmental impacts. The piers would be constructed <u>outside</u> of the MHHW line and the floodway, avoiding impacts to the Normans Kill. Each pier would consist of a single row of reinforced concrete drilled shafts. A drilled shaft consists of a circular steel casing that is installed into the ground, excavated, and filled with reinforced concrete. The steel casing acts as a "cofferdam" that contains the excavation activities and greatly limits ground disturbance and impacts as compared to other foundation types. The proposed drilled shaft pier foundations for this project do not have a conventional footing and the only structure area that impacts the ground is the diameter of each drilled shaft.

In terms of bridge construction impacts, <u>no in-water work</u> (e.g., fill, excavation, dredging, pile driving) is proposed. A temporary construction access would be required to construct the foundations, erect the steel girders, and place the concrete bridge deck. The temporary construction access is anticipated to include earthen causeway and/or pile supported work trestles. Pile supported work trestles may be considered due to the poor soil strengths and high-water table. By rearranging the bridge span



configuration and relocating the piers, the temporary construction access would occur <u>outside</u> or above the MHHW line and is not anticipated to result in environmental impacts.

See Appendix 1 for Permit Sketches. The temporary construction access concept provides area to mobilize drilled shaft installation equipment, deliver and erect structural steel girders, and deliver and place the concrete bridge deck. The use if flexi flexi-floats or barge to strip the underside deck forms is not discarded. Additional temporary impacts between the pier and abutment on the north approach may be considered to provide flexibility for contractor means and methods. The temporary impact areas associated with construction are above MHHW line, outside the floodway, and would be returned to pre-construction conditions upon completion of the Project, as applicable. As all the bridge components will be out of the MHHW line and in the dry, the effects of the bridge construction is not required to be considered further.

1.2 PROPOSED WHARF AND DREDGING

As part of the overall development, the APDC intends to undertake the construction (landward) of approximately 500 linear feet of marginal wharf along the eastern edge of Beacon Island (81.6-acre parcel) on the Hudson River. The northern limit of the wharf is located approximately 300 feet south of the confluence of the Normans Kill with the Hudson River. The proposed wharf consists of a deep foundation-supported concrete-framed open-type wharf structure that provides overall dimensions of 500 feet in length by 93 feet in width. The wharf includes a heavy stone slope revetment, high-modulus steel sheet pile cutoff wall, and drilled shaft supported open wharf and relieving platform. This maritime infrastructure includes all dredging, foundations, marine structural components, and ancillary items that accommodate vessels at berth, and support equipment and products that are transferred to and from vessels and the site.

The total area of the wharf is approximately 45,500 square feet (SF). The area of the wharf provided over water (outboard of the sheet pile cutoff wall) is approximately 27,500 SF. The entire ballasted wharf deck is located <u>above</u> the MHHW elevation. MHHW is approximate elevation +4.56 NAVD29; elevation +3.78 NGVD88); hence, the structures below MHHW are limited to the 136 - 48" diameter drilled shaft foundations with permanent steel casing, and rip-rap. The design also takes into consideration sea level rise. The 136 in-water drilled shaft foundations have an equivalent area of coverage of approximately 1,710 SF.

Coordinates:

Latitude: 42°36'19.02"NLongitude: -73°45'46.99"W

Dredging is required to match current depth of Hudson River navigation channel providing adequate separation and safe draft to vessels at the proposed wharf, which will travel along the existing federal navigational channel (Hudson River). The proposed dredging area is approximately 190,000 SF (approximately 4.4 acres). The volume of material to be removed from this area in the Hudson River is limited to approximately 105,000 cubic yards of sediments to reach a minimum depth of -32 feet at mean lower low water (MLLW). Proposed depth is approximately 32 feet below the MLLW line, plus approximately two (2) feet of allowable overdredge. Hence, dredging would be performed to -32.0 (NAVD29), equivalent to -32.8 (NGVD88), plus two (2) feet allowable overdredge.

For the dredging activities ("construction phase"), one (1) dredging barge is anticipated. However, the number of scows and tugboats to support the temporary and short-term dredging activities is unknown at this moment. The homeport of the dredging and construction vessels is currently unknown.

Dredged material will be disposed (<u>upland</u>) at authorized facilities. The Proposed Action does not consider disposal / discharges of dredged or fill material into the Hudson River or Navigable Waters of the U.S. The dredged material would be loaded into dredge scows or barges, transported by tugs, and offloaded into the designated and authorized disposal site. The upland disposal site is unknown at this moment. The Dredging Contractor will be responsible to develop a Dredge Material Management Plan (including dewatering plan) in accordance to permit conditions and applicable regulations.

Once the wharf is constructed and dredging completed, during the operational phase of the facility, anticipated vessels that will dock and moor at the proposed wharf include a variety of high-capacity deck barges. The new wharf will provide space for docking/mooring one vessel at any given time. Any additional vessels associated with the wharf operations (e.g., tugs) would be docked and moored at the existing Port of Albany facility that is located upriver of the site. The "minimum" anticipated barge size is an ABS Ocean Deck Barge (250' length, 72' width, 16' depth); the "maximum" anticipated barge size is a Crowley Series 455, or equal (400' length, 105' width, 25' depth). The vessels will be docked and moored at the wharf for a duration required for loading wind tower components; once load-out is complete the vessels will depart for downriver transport. The current concept of operation indicates that a maximum of three (3) barges could be loaded per week, which means each barge would be at berth for approximately two (2) days each. These vessels are existing; however, routes are unknown at this moment. Additionally, this project will not draw any larger sized vessels than currently utilize the Hudson River or call to the Port of Albany. Please note that maritime vessel size remains restricted by the bridge clearance and vessels' air draft at the Castleton Bridge and therefore transport of cargo produced at the project size will utilize vessels at or below the size of vessels currently in use.

Regardless the new wharf, these vessels will continue to be part of the maritime traffic that operates and travel along the navigable waters (e.g., Hudson River). The expected traffic and number of vessels as result of the Project is not expected to exceed the highest number of vessels recorded by the APDC, traveling to and from the Port of Albany and all other wharf locations along the Hudson River. In addition, the Project is located south of the existing turning basin for the Hudson River; therefore, this area is currently subject to maritime traffic and port activities where all cargo vessels in this area currently navigates and pass the location of the new wharf to turn around and return to the ocean.

Overall, project construction activities would typically occur between 7am and 7pm seven (7) days a week, with some time-critical activities occurring during nights. Dredging is expected to start in mid-September 2022 and to be completed within 90 days, depending on weather conditions. Construction and <u>landside</u> excavation of the wharf is expected to start in April 2022. Construction of the proposed wharf is expected to be completed within 18 months. Construction in the Hudson River channel (in water-work) will be completed as per NYSDEC and USACE permit conditions.

1.3 HABITAT CHARACTERISTICS OF THE PROJECT SITE

Multiple site investigations and environmental studies have been conducted for the Project and presented as part of the Joint Permit Application, including:

- Wetland Delineation
- Submerged Aquatic Vegetation (SAV) Survey
- Freshwater Mussels Survey
- Terrestrial Threatened and Endangered Species (T&E) Survey
- Sediment Sampling

In the following table is presented a summary of the findings from the environmental surveys conducted within the project area.

Table 1-2: Project Site Habitat Characteristics Within Project Site

Wetlands	 USACE Regulated Wetlands (9.46 acres): +/- 1.49 acres of wetlands within Beacon Island +/- 7.13 acres of wetlands within adjoining National Grid property +/- 0.84 acre of wetland along Normanskill Street (including +/- 0.04 acre of wetland on the north embankment of Normans Kill) No NYSDEC regulated wetlands
SAV Survey	 Hudson River: Three (3) patches detected along the eastern edge of Beacon Island Dredging area: One (1) with a very low density of Vallisneria americana (water celery) along with very few solitary Trapa natans (water chestnut) and Potamogeton crispus (curly-leaf pondweed) Outside Project limits: One (1) with a moderate to high density, and one (1) with very low density of V. americana and very low densities of T. natans and P. crispus
Freshwater Mussels Survey	 113 of Elliptio complanata (S2S3)and 36 Leptodea fragilis (S1S2) were found in the Hudson River Eight (8) Leptodea fragilis located within the proposed dredging area No live mussels were found in Normans Kill Zebra mussels existed at moderate to high densities in subtidal areas
Threatened and Endangered Species	Rare Plant Species Investigation conducted, and no protected species found within Project Site.
Sediment Sampling	 15 cores / samples performed; 12 within the approximate dredging area Classification of the dredging material consists of silty clay, sand and some trace of gravel.

According to an Acoustic Telemetry and Benthic Habitat Mapping Informs the Spatial Ecology of Shortnose Sturgeon in the Hudson River, NY, USA (NYSDEC, 2018)¹, Shortnose sturgeon are dispersed, associating with muddy habitats, whereas in fall/winter, sturgeon congregated in specific regions of the river. Models from this telemetry and benthic habitat mapping indicated a strong habitat associations in the spring season defined by gravel-dominated substrate and specific depth ranges, presumably associated with spawning activity. According to the results from Sediment Sampling Analysis, substrate consists of silty clay, sand and some trace of gravel. See **Section 4.4** of Incidental Take Permit Application and **Figure 4-1** for Spatial Ecology of the Shortnose sturgeon.

The shoreline along the Hudson River does not remain in its natural state and was previously altered (engineered). However, the shoreline has naturally revegetated with mature trees, which assist in stabilizing the shoreline and provide shade and cover along the edge of the Hudson River. An degraded and remnant timber runs nearly the entire length of the study area, and there are various types of shoreline armoring (e.g., stone, concrete) (Biodrawversity, 2020). The timber revetment was constructed with a single row of timber piles joined by horizontal timber cribbing, and backed by compacted earth, gravel, and stone. Based on other historical documentation, it appears that portions of the revetment may have undergone periodic repairs or improvements, including placement of concrete slabs in lieu of stone surfacing; however, the exact locations and extents of such repair measures cannot be ascertained. These features have greatly altered intertidal and nearshore subtidal habitats and helped to create a steep depth gradient with little shallow subtidal habitat. SAV is generally absent or sparse. Turbidity likely limits the depth distribution of SAV since sunlight barely penetrates more than five (5) to six (6) feet.

The approximate width of the Hudson River at the proposed wharf and dredging area is over 700 feet. For additional information see the following appendices:

• Appendix 1: Permit Sketches (Project Drawings)

• Appendix 2: Submerged Aquatic Vegetation Survey

• Appendix 3: Freshwater Mussels Survey

• Appendix 4: Sediment Sampling and Analysis Report

Based on the environmental setting and ecological communities in the area (e.g., freshwater subtidal aquatic bed, and freshwater tidal creek), these are associated and more broadly defined by freshwater conditions with salinity <0.5‰.

¹https://www.researchgate.net/publication/327344844 Acoustic telemetry and benthic habitat mapping informs the spatial ecology of Shortnose Sturgeon in the Hudson River NY USA



2. DESCRIPTION OF LISTED SPECIES

According to the Endangered Species Act (ESA) Section 7 Mapper² from the National Oceanic and Atmospheric Administration (NOAA) Fisheries Greater Atlantic Region, the Hudson River is identified as spawning and foraging grounds for the Shortnose sturgeon and Atlantic Sturgeon. The Project is located within designated critical habitat for these species (New York Bight DPS, Hudson River Unit).

The NYSDEC, at its discretion, issues permit that authorizes the incidental take of a species listed as endangered or threatened under 6 CRR-NY 182.5³. Listed species subject to this Incidental Take Permit (6 CRR-NY 182.11) are:

• Shortnose Sturgeon (*Acipenser brevirostrum*)

Following is provided a description of subject listed species.

Shortnose Sturgeon (*Acipenser brevirostrum*)

Shortnose sturgeon are listed as endangered throughout their range which is from as far south as the St. Johns River, Florida (possibly extirpated from this system) to as far north as the Minas Basin in Nova Scotia, Canada. Shortnose sturgeon are anadromous bottom-feeding fish that can be found throughout the Hudson River from the Battery at the mouth of the river to the Federal Dam at Troy. Peterson and Bain (2002) estimated that the Hudson River Shortnose sturgeon population contained about 61,000 fish. Their preferred habitat is deep pools with soft substrates and vegetated bottoms (NYNHP, 2019b). Shortnose sturgeon are listed as endangered throughout their range.

Shortnose sturgeon prefer to spawn in freshwater and on hard bottom substrate. Spawning occurs from late March to mid-May in the region from the Federal Dam downstream to Coxsackie, NY (between river miles 152 and 118) (Dovel et al. 1992, Bain 1997). Early life stages from eggs to post yolk-sac larvae remain near the spawning grounds for approximately eight (8) weeks post-spawn (Buckley and Kynard 1981) and larvae are most commonly concentrated in deeper channel waters where the current is stronger (Hoff et al. 1988, Dovel et al. 1992). Eggs and yolk-sac larvae could be present from March 15 to June 15. Post yolk-sac larvae could be present from March 15 to July 15.

Juveniles are distributed throughout the mid-river region during summer and are found downriver of the project area, in the Kingston and Haverstraw Bay regions by late fall and early winter (Dovel et al. 1992, Bain et al. 1998, Geoghegan et al. 1992). Adult Shortnose sturgeon range between river miles 23 and 110 during the summer months, at least 30 miles south of the project area, and then congregate in overwintering areas at specific locations within that range (NMFS 2013). Based on the spatial distributions and seasonal movement patterns within the Hudson River, Shortnose sturgeon of all life stages have the potential to be present in the vicinity of the project area for at least some of the year.

Given the NYSDEC recommended <u>in-water work window (September 1 – January 31)</u>, young-of-the year, juveniles and adults may occur in the vicinity of the project site; however, spawning adults, eggs, and larvae

³ https://www.dec.ny.gov/animals/7494.html



² https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27

are not expected to be present. Transient juvenile and adult individuals could occur in the vicinity of the project site to opportunistically forage. Sturgeon post yolk-sac larvae could also be present in the vicinity of the Project from April to September; however, post yolk sac larvae are mobile and able to swim away into other areas of the Hudson River not to be impacted.

Table 2-1: Shortnose Sturgeon Distribution, Life Stages and Seasonal Movement in Hudson River

Body of Water (State)	Distribution / Range in Watershed	Life Stages	Use of Watershed	References
Hudson River (NY/NJ)	Up to Troy Dam, NY (approximat ely RKM 246)	eggs, larvae, YOY, juveniles, and adults	Spawning - Documented from late March to early May when water temperatures reach 10°-18°C ^[1] from Coxsackie to below the Federal Dam at Troy ^{[1][3]} (RKM 190-246) Rearing - Eggs on the spawning grounds; larvae downstream to at least RKM 104; YOY downstream to at least RKM 64 ^[1] Foraging - Throughout the Hudson River (RKM 38-175) ^{[3][5]} with concentrations in Haverstraw Bay ^[1] (RKM 56-64) Overwintering - Late fall to early spring ^[3] ; largest area (mainly spawning adults) near Kingston ^[2] (RKM 137-149); smaller overwintering areas are located from Saugerties to Hyde Park ^[2] (RKM 123-170) and in the Croton-Haverstraw Bay area ^[2] (RKM 54-61); many juveniles overwinter in the lower river (RKM 0-64) ^[1] (RKM 55-63) ^[4]	[1] Dovel et al. 1992; [2] Geoghegan et al. 1992; [3] Bain 1997; [4] Bain et al. 2007; [5] Pendleton et al. 2018

3. AVOIDANCE AND MINIMIZATION MEASURES

The Project (limit of disturbance) encompasses an overall area of approximately 100.8 acres. Multiple activities are proposed which would change existing site conditions as described in **Section 1**, and subject to this Part 182.11 Permit Application Package. However, the proposed design is the result of a cohesive and integrated planning effort, minimizing impacts by the post development condition. The Project has been designed to avoid impacts to the Normans Kill, and minimize impacts to wetland areas, SAV beds, mussels, and the Hudson River overall. Design elements implemented to avoid and minimize environmental impacts include:

- ✓ Wharf has been relocated and <u>size reduced to avoid</u> dredging in SAV beds; 1 bed within Normans Kill with moderate to high density of Vallisneria americana
- ✓ General layout of the proposed wharf places the riverside face of structure coincident with the face of the <u>existing timber revetment</u>
- ✓ Proposed bridge over Normans Kill <u>redesigned</u> and to be constructed <u>outside</u> Mean Higher-High Water (MHHW) line to meet NYSDEC and DOS criteria
- ✓ Reconfiguration of proposed surface parking to avoid wetland impacts
- ✓ Construction of a fill type retaining wall to minimize the need of fill in wetland area
- ✓ Improvements to Normanskill Street avoiding wetland areas
- ✓ Proposed site grading or fill avoiding and above the existing MHHW line
- ✓ Riparian <u>buffer</u> is proposed along the majority of the Hudson River waterfront, maintaining existing vegetation in natural state
- ✓ Site preparation would require soil excavation and placement of clean fill above the MHHW line.

Construction of the wharf and associated dredging in the Hudson River is limited to 0.21 acre of SAV impacts consisting of a long narrow shallow shelf along the edge of the concrete armored shoreline, with very low density of *Vallisneria americana* (water celery or eelgrass), *Trapa natans* (water chesnut), and *Potamogeton crispus* (curly-leaf pondweed) growing in shallow water no farther than approximate 16 feet from the mean low water (MLW) line. According to NYSDEC letter dated August 29, 2020 (DEC #4-0122-00322/00001, impacts to *V. americana* must be mitigated. The Project is committed to maintain collaborative actions with NYSDEC in finding a potential mitigation Project in accordance with The Hudson River Comprehensive Restoration Plan that could serve as mitigation for habitat modification due to dredging impacts.

Based on the Freshwater Mussels Survey (**Appendix 3**), live freshwater mussels were detected in the Hudson River, along the shoreline of the 81.6 acre parcel (Beacon Island). The proposed wharf has been designed to limit its footprint and minimize potential impacts to mussel beds.

3.1 PROPOSED BRIDGE OVER NORMANS KILL

In response to comments provided by regulatory agencies during interagency / pre-application meetings, the <u>revised</u> design of the proposed structure consists of a three (3) span bridge that allows for fully spanning the Normans Kill Floodway and <u>avoids</u> permanent fill below the MHHW line. The configuration of the proposed bridge is in included in **Appendix 1** (Permit Sketches), including both a plan and profile view.



The Normans Kill channel is <u>not</u> proposed to be altered, modified, filled or excavated. Also, the Project does <u>not</u> involve alteration of the base flood elevations, construction in the floodway or increasing the base flood water surface elevation more than the current height.

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented and maintained during the construction phase to address potential water quality impacts. Additionally, notes requiring pile supported work trestles as opposed to a causeway system will be included on the construction plans. Driving of piles or sheet piles is discarded. Vibratory or rotary methods is proposed. Additionally, the <u>use of nets, tarps, pans and/or flexi boats or barge</u> during construction of the bridge deck will be implemented to prevent debris falling into the water. Temporary access is a contractor means and methods item, so we will be providing notes to indicate preferred alternatives that meet permit requirements.

3.2 PROPOSED WHARF AND DREDGING

The dredging phase would avoid fish migration and spawning periods (e.g., September 1 to January 31st) specified by the Division of Fish, Wildlife and Marine Resources for species of concern. In an effort to reduce turbidity, Contractor would implement at all time turbidity and water quality controls while dredging. Timing restrictions for in-water work will be implemented as per guidelines from NYSDEC.

Other avoidance and minimization measures, and best management practices (BMPs) to be implemented by the contractor would include:

- The Contractor shall place dredged material deliberately in the barge to prevent spillage of material overboard.
- The closed clamshell environmental bucket shall be lifted slowly through the water, at a rate of 2 feet per second or less.
- The discharge (i.e., overflow) of water from the barge/scow into which dredged material is placed is prohibited.
- The Contractor shall not cause or allow any unreasonable interference with the free flow of regulated water by placing or dumping any materials, equipment, or structures within or adjacent to the channel while the regulated activity(ies) is being undertaken. Upon completion of the regulated activity(ies), the Contractor shall remove and dispose of in a lawful manner, all excess materials, debris and equipment from all regulated areas.
- The Contractor shall control the "bite" of the bucket to: (a) minimize the total number of passes needed to dredge the required sediment volume; and (b) minimize the loss of sediment due to extrusion through the bucket's vents openings or hinge area.
- The dredge shall control the rate of descent of the bucket to maximize the vertical cut of the clamshell bucket while not penetrating the sediment beyond the vertical dimension of the open bucket (i.e., overfilling the bucket). This will reduce the amount of free water in the dredged material, will avoid overfilling the bucket, and minimize the number of dredge bucket cycles needed to complete the dredging contract. The dredging contractor shall use appropriate software and sensors on the dredging equipment to ensure consistent compliance with this condition during the entire dredging season.
- The independent dredging inspector shall monitor the operation of the software and sensors during the inspections as specified in the below conditions. Any malfunction of the software and



sensors on the dredge at any time shall be immediately reported to the independent dredging inspector and the permittee by the dredging contractor and shall be immediately repaired to working order.

• The Contractor shall not drag the dredge bucket along the sediment surface.

Furthermore, the following BMPs and mitigation measures are proposed to minimize potential impacts to the Shortnose sturgeon:

- All in-water work areas for both dredging and wharf construction will be completed within the
 confines of a weighted turbidity curtain, which will isolate work areas from other areas of the river.
 The turbidity curtain is also anticipated to serve as a barrier that excludes potential entry of fish
 and other marine species into the work area during the time it is deployed.
 - o Turbidity curtains are proposed to avoid and minimize potential impacts to Shortnose sturgeon. Additionally, floating turbidity curtains, staked turbidity barriers and/or silt-fence would be installed to protect SAV beds to remain.
 - o Large portion of the channel will remain open for aquatic organism passage.
- The Project intends to avoid dredging during spawning periods of the Shortnose sturgeon. Dredging schedule will follow recommended timing restrictions as per NYSDEC. As per email from NYSDEC dated November 23, 2011, and Sturgeon Coordination Meeting held on November 18, 2021, with regulatory agencies (NYSDEC, USACE, NMFS and OGS), the regulatory staff discussed the work windows for in-water construction activities associated with this Project. Traditionally, the NYSDEC's work window is September 1 to October 31 to be protective of sturgeon species. Since there is no documentation of overwintering sturgeon in this location, NYSDEC is amenable to extending the work window further into winter. As such, regulatory staff suggested that the work window for this Project is September 1st through January 31st or ice-in, whichever comes first.
 - O All in-water work areas for both dredging and wharf construction will be completed within the confines of a weighted turbidity curtain, which will <u>isolate</u> work areas from other areas of the river. The turbidity curtain is also anticipated to serve as a barrier that excludes potential entry of fish and other marine species into the work area during the time it is deployed.
- For the wharf construction, the permanent steel casing for the drilled shaft foundations and the sheet pile wall components would be vibrated in, rather than utilizing an impact hammer. An impact hammer would be used only to seat the steel casing within the first few inches in the top of rock. Other BMPs considered include:
 - o Use of pre-drilling prior to vibratory hammering
 - o Implement soft start (i.e., pile tapping) prior to full energy impact hammering
 - o If necessary, cushion blocks, air bubbles curtain or other noise attenuating tools would be implemented when impact hammering to avoid reaching noise levels that could cause injury or behavioral disturbance to these species.
- A SWPPP will be implemented and maintained during the construction phase to address potential water quality impacts.

4. POTENTIAL IMPACTS TO LISTED SPECIES

There are various conditions that the aforementioned listed species may be subject during the Project's inwater work activities (i.e., wharf construction and dredging). These are mainly an increase in turbidity during the maintenance dredge operation, underwater noise, the risk of an incidental involuntary strikes (unlikely) and entrapment with dredging equipment to an individual of a protected species during in-water work activities. However, this is a short-term / temporary in-water work construction within a well define and limited area.

Concerning habitat modification and effects on critical habitat, the habitat to be affected (+/- <u>0.48 acre</u>) is small compared to available habitat within and outside the area to be occupied by the Project. (See **Section 4.2**) The following table summarizes the effects analysis for each species that may be present at the site.

Table 4-1: Extent of Potential Effects and Mitigation Measures

Species	Potential Effects	Summary of Key Conservation Measures
• Shortnose sturgeon	 Vessels movements and involuntary Vessel strikes Involuntary pinning between dredging bucket and riverbed; entrapment or capture in mechanical dredging Turbidity and resuspension of sediments Underwater noise due to pile driving Habitat modification Effects on critical habitat 	 Implement slow speed approach for project vessels No dredging outside the NYSDEC dredging window Closed clamshell environmental bucket would be lifted slowly through the water, at a rate of approximately two (2) feet per second Turbidity control with floating turbidity barriers, SWPPP and utilization of clamshell bucket in dredging Implementation of noise attenuation tools, as needed Monitoring and installation of signs and educational material For mitigation See Section 5.

4.1 UNDERWATER NOISE

The greatest potential for underwater noise impacts to Shortnose sturgeon from the Project would be associated with vibratory and impact pile driving during construction of the new wharf. The permanent steel casing for the drilled shaft foundations and the sheet pile wall components would be vibrated in, rather than utilizing an impact hammer. An impact hammer would be used only to seat the steel casing within the first few inches in the top of rock. "Soft start" and cushion blocks will be implemented when impact hammering is required, as applicable. Additionally, the drilled shafts would not occur in the open water which further attenuate noise vibration.

Predrilling activities could result in elevated noise levels, but not at a level that could impact sturgeon behavior. Information from case studies indicates that drills generate noise and vibration when in

operation as a result of friction between the drill bit face and the material it is boring through (Transit Link Consultants 2008), which in turn produces sound waves that travel through the substrate. Unmitigated sound levels from underwater geotechnical drills, for example, have been estimated at 118 to 145 dB re 1μ Pa at 1-meter, with noise decreasing to 101.5 dB at 150 meters, 97 dB at 250 meters, and 94.1 dB at 350 meters. Analysis by NOAA in Washington State concluded that rotating steel casements for drilled shafts are not prone to elevate underwater sound to a level that is likely to cause injury or noise that would induce adverse changes to fish behavior.

Based on this analysis, it is expected no behavioral or physical effects from pre-drilling for the Project on Shortnose sturgeon when added to the baseline conditions, and effects of underwater noise from pre-drilling are not assessed further. A vibratory hammer would be used to the extent feasible, and the minimal impact hammering that could be required for the temporary pier piles would be conducted using a cushion block to minimize underwater noise impacts. Pile tapping just prior to cushioned impact hammering would deter fish from the immediate vicinity of pile driving.

The projected noise at the source and distance to relevant thresholds for species in the vicinity of the project area was determined based on the National Marine Fisheries Services (NMFS) Greater Atlantic Regional Fisheries Office (GARFO) Acoustic Tool spreadsheet (version updated 9/23/2019). The estimated sound levels and distances to species injury and behavioral thresholds associated with the Project are presented in the following tables.

Table 4-2: Estimating underwater Noise

Proxy Projects for Estimating Underwater Noise

Project Location	Water Depth (m)	Pile Size (inches)	Pile Type	Hammer Type	Attenuation rate (dB/10m)
Not Available	15	24"	AZ Steel Sheet	Impact	5
Not Available	15	24"	AZ Steel Sheet	Vibratory	5
Not Available	15	24"	AZ Steel Sheet	Vibratory	5

Table 4-3: Based Estimates for Underwater Noise

Proxy-Based Estimates for Underwater Noise

Type of Pile	Hammer Type	Estimated Peak Noise Level (dB _{Peak})	Estimated Pressure Level (dB _{RMS})	Estimated Single Strike Sound Exposure Level (dB _{sSEL})
24" AZ Steel Sheet	Impact	205	190	180
24" AZ Steel Sheet	Vibratory	175	160	160
24" AZ Steel Sheet	Vibratory	182	165	165

Table 4-4: Estimated Distances to injury and Behavioral Thresholds

Estimated Distances to Sturgeon Injury and Behavioral Thresholds

Type of Pile	l Hammer Tyne	Distance (m) to 206dB _{Peak} (injury)	150 dB _{sSEL}	Distance (m) to Behavioral Disturbance Threshold (150 dB _{RMS})
24" AZ Steel Sheet	Impact	8.0	70.0	90.0
24" AZ Steel Sheet	Vibratory	NA	30.0	30.0
24" AZ Steel Sheet	Vibratory	NA	40.0	40.0

Exposure to underwater noise levels of 206 dB Peak and 187 dB cSEL can result in injury to sturgeon. In addition to the "peak" exposure criteria which relates to the energy received from a single pile strike, the potential for injury exists for multiple exposures to noise over a period of time; this is accounted for by the cSEL threshold. The cSEL is not an instantaneous maximum noise level but is a measure of the accumulated energy over a specific period of time (e.g., the period of time it takes to install a pile). As calculating the distance to the 187 dB cSEL isopleth is not possible, the 150 dB sSEL isopleth was calculated. The further a fish is away from the pile being driven, the more strikes it must be exposed to in order to accumulate enough energy to result in injury. At some distance from the pile, a fish is far enough away that, regardless of the number of strikes it is exposed to, the energy accumulated is low enough that there is no potential for injury.

As described in detail above, for this Project, the distance to the 187 dB cSEL (or 150 dB sSEL) isopleth associated with vibratory or cushioned impact hammering is no greater than 230 feet (70 meters) for sturgeon. In order to be exposed to potentially injurious levels of noise during installation of the piles, a sturgeon would need to be within 230 feet (70 meters) of the pile being driven to be exposed to this noise for any prolonged time period. This would be extremely unlikely to occur as it is expected that sturgeon would modify their behavior at 297 feet (90 meters) from the installed piles and quickly move away from the area before cumulative injury levels are reached, as described above. Given the small distance a sturgeon would need to move to avoid the disturbance levels of noise, any effects will be too small to be meaningfully measured or detected. Therefore, the effects of noise on sturgeon would be insignificant.

Behavioral effects, such as avoidance or disruption of foraging activities, may occur in sturgeon exposed to noise above 150 dB RMS. Considering all of the pile-driving activities, it is expected that underwater noise levels would be below 150 dB RMS at distances beyond a maximum of approximately 297 feet (90 meters) from the pile being installed for sturgeon. It is reasonable to assume that a sturgeon, upon detecting underwater noise levels at or above the 150 dB RMS isopleth, would modify its behavior such that it redirects its course of movement away from the ensonified area surrounding the area of the Project. If any movements away from the ensonified area do occur, it is extremely unlikely that these movements would affect essential sturgeon behaviors, as the Hudson River is sufficiently large and wide enough (over 700 feet wide) to allow sturgeon to avoid the ensonified area while continuing to forage and migrate. Therefore, the effect of underwater noise on ESA species would be too small to be meaningfully measured or detected and would be insignificant.

4.2 HABITAT MODIFICATION

The proposed in-water work activities (e.g., wharf and dredging) would occur along the western bank of the Hudson river in an area of approximately 740 feet in length by 167 feet in width. The proposed wharf consists of a deep foundation-supported concrete-framed open-type wharf structure that provides overall dimensions of approximately 500 feet in length by 93 feet in width. The total area of the wharf is approximately 45,500 SF.

The general layout of the proposed wharf places the riverside face of structure coincident with the face of the existing timber revetment, so much of the land disturbance would be <u>landward</u>. The area of the wharf provided over water (outboard of the sheet pile cutoff wall), where shade will occur, is approximately 27,500 SF. Shade would vary and subject to time of the day and season of the year. Dredging area encompasses approximately 4.4 acres. The existing width of the Hudson River at this location is over 700 feet.



According to the Acoustic Telemetry and Benthic Habitat Mapping Informs the Spatial Ecology of Shortnose Sturgeon in the Hudson River, NY, USA (NYSDEC, 2018)⁴, spawning activity or congregation of Shortnose sturgeon were not detected in the Project Area. The following figure shows the spatial ecology and seasonal distribution and movement of the Shortnose sturgeon.

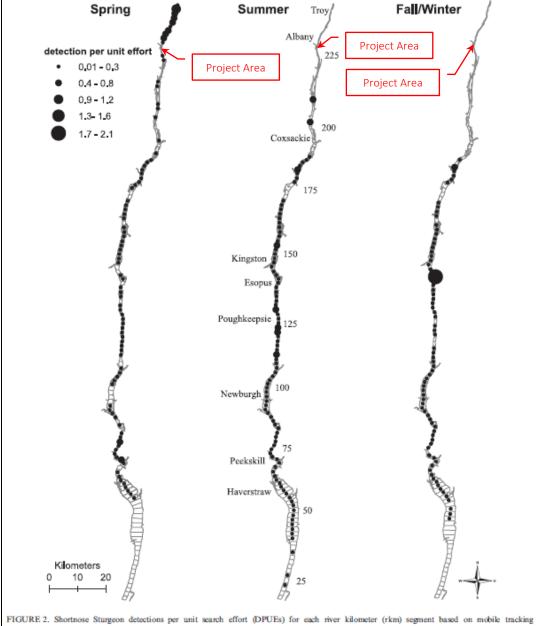


Figure 4-1: Spatial Ecology of the Shortnose sturgeon

⁴https://www.researchgate.net/publication/327344844 Acoustic telemetry and benthic habitat mapping informs the spatial ecology of Shortnose Sturgeon in the Hudson River NY USA



throughout the lower Hudson River, New York (center panel: rkm values are shown on the right). The DPUE was calculated for each season (i.e., spring, summer, and fall/winter) based on all detections pooled among years (2012–2016). Larger black circles denote higher DPUEs. River kilometer segments without a black circle had no sturgeon detections within a given season.

The models from the above reference study indicated strong habitat associations in the spring season defined by gravel-dominated substrates and specific depth ranges, presumably associated with spawning activity. According to the results from Sediment Sampling Analysis (**Appendix 4**), substrate within the project area consists of silty clay, sand and some trace of gravel. Also, the telemetry data indicated that after the spawning season, Shortnose Sturgeon redistribute more widely throughout the Hudson River, presumably to reach favored foraging areas (<u>outside project area</u>). However, subaqueous zones between elevations -5 to -10 (NAVD88) and -10 to -15 (NAVD88) have been computed within the footprint of the Project. It is assumed that either one or perhaps both of these zones could be considered by NYSDEC Shortnose Sturgeon potential spawning grounds and foraging habitat, which may be subject to mitigation. Elevations - 5 to -10 zone covers approximately 10,236 SF (0.235 acre) within the project area; elevations -10 to -15 covers approximately 10,476 SF (0.241 acre) within project area. Total area subject to habitat modification is approximately 0.48 acre. See **Figure 4-2** for General Wharf Layout and Dredging Area. The Project when completed would reestablish a reconfigured and relocated area between -5 and -15 NAVD88, beneath the wharf. This submerged zone would be sloped with heavy stone (rip-rap).

Shortnose Sturgeon are opportunistic suction feeders, exploiting deep water channel habitats (Dadswell 1979; Carlson and Simpson 1987). Overall, the area of the Project would be temporarily unavailable for foraging in the substrate during construction of the new wharf and dredging activities. The footprint of the Project is <u>not</u> expected to result in a substantial reduction in spawning grounds and foraging opportunities for sturgeon. According to the results from Sediment Sampling Analysis, substrate subject to dredging consists of silty clay, sand and some trace of gravel. High quality foraging habitat would continue to be available in the vicinity of the Project, and foraging habitat would be reinstated when the wharf and dredging is complete. Aquatic organisms (e.g., invertebrates) are expected to quickly recolonize such areas, as similar habitat is present in the surrounding area that would be unaffected or minimally affected by the project activities and would serve as the source of colonizing invertebrates.

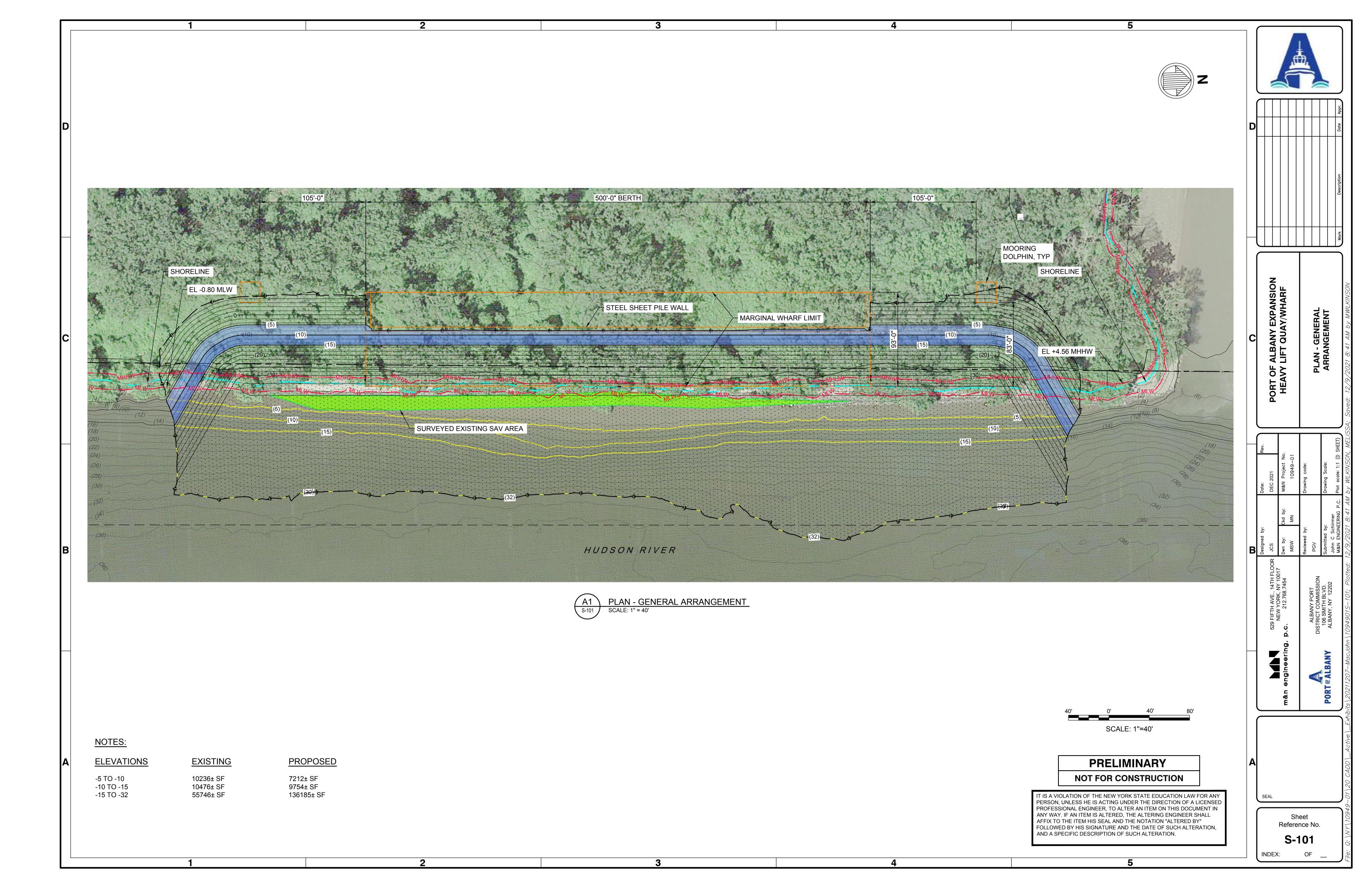
The area affected by the Project is small in comparison to the surrounding habitat that would continue to be available to sturgeon, including spawning, foraging and refuge in the vicinity of the project area. Additionally, similar and more favored substrates are present upstream and downstream of the Project, likely with more suitable conditions and higher quality habitat for Shortnose sturgeon. The Project would not create a physical barrier in the navigational channel of the Hudson River and does not impede movement of Shortnose sturgeon during its life stages. Additionally, the Project is not expected to change water flow, dissolved oxygen levels, salinity, or water temperature. The Project will not create physical barrier to the aquatic life movements in the Hudson River. Therefore, the effect of habitat modification on sturgeon would be too small to be meaningfully measured or detected and would be insignificant.

4.2.1 Submerged Aquatic Vegetation

A SAV Survey was conducted in the Hudson River and Normans Kill by Biodrawversity, LLC, in June 2020. The SAV Survey Report is included as **Appendix 2**.

⁵ Sturgeon spawning grounds as reaches with hard substrate and water depths between 1 and 5 meters (3- 15 feet) (Kynard et al. 2016)





Only three (3) patches of SAV were detected as shown Permit Sketches (Appendix 1), which two (2) have a <u>very low density</u> of *Vallisneria americana* (water celery or eelgrass) along with very few solitary *Trapa natans* (water chesnut) and *Potamogeton crispus* (curly-leaf pondweed), and one with a moderate to high density of *V. americana* and very low densities of *T. natans* and *P. crispus*. In accordance with NYSDEC letter dated August 29, 2020 (DEC #4-0122-00322/00001), *V. americana* from SAV patch # 3 (sparse, very low density) needs to be transplanted into to SAV beds to remain.

4.2.2 Freshwater Mussels

A Freshwater Mussels Survey (FMS) was conducted in the Hudson River and Normans Kill by Biodrawversity, LLC, in June 2020. The survey area was divided in 12 sections as shown in Appendix 3. The dredging limits falls withing FMS Sections 9, 10 and 11. Sections 1-8 and 12 are located outside the boundaries of the proposed dredging and qualifies as candidate relocation sites that have mussel and assemblage comparable to the Project Site. A low density of one (1) common native species was documented in the Hudson River (E. complanata), and a low density of one (1) species that is native to New York but not native to the Hudson River (L. fragilis), and shells of two (2) other native species (A. implicata and L. radiata). Live mussels of the two (2) native species are: E. complanata, and Leptodea fragilis (fragile papershell). E. complanata is common in New York, and L. fragilis has a state-rank of S3 and has rarely been observed in the tidal Hudson River where it is not native. A total of 113 E. complanata were found during the FMS Survey; most of these in deeper water (15-25 ft) of Sections 1-3 at the downstream end, outside the Project Site or proposed dredging zone. In addition to these two (2) species, old relic shells of Anodonta implicata (alewife floater) were found, and one (1) shell of Lampsilis radiata (eastern lampmussel) was found. Zebra mussels existed at moderate to high densities in subtidal areas and were exceptionally abundant on hard substrates in deep water. In accordance with NYSDEC letter dated August 29, 2020 (DEC #4-0122-00322/00001), L. fragilis mussels and "old relic" shells of A. implicata found within the proposed dredging zone (FSM Sections 9, 10 and 11) need to be relocated to areas outside the footprint of the proposed dredging.

4.3 VESSELS MOVEMENT

The baseline risk of a vessel strike within Hudson River is unknown. Although the baseline risk of vessel interaction is unknown, any increases in vessel capacity may not directly correlate to more vessels in the Hudson River or the project area since active vessels may move elsewhere, or be retired from use.

Regardless the new wharf, these vessels will continue to be part of the maritime traffic that operates and travel along the navigable waters (e.g., Hudson River). However, adding project vessels to the existing baseline is not expected to increase the risk that any vessel in the area will strike an individual, or may increase it to such a small extent that the effect of the action (i.e., any increase in risk of a strike caused by the Project) cannot be meaningfully measured or detected. During construction phase, one (1) dredging barge is anticipated. However, the number of scows and tugboats to support the short term dredging activities is unknown at this moment.

Once the wharf is constructed and dredging completed, during the operational phase of the facility, anticipated vessels that will dock and moor at the proposed wharf include a variety of high-capacity deck barges. The current concept of operation indicates that a maximum of three (3) barges could be loaded per week, which means each barge would be at berth for approximately two (2) days each. The "minimum" anticipated barge size is an ABS Ocean Deck Barge (250' length, 72' width, 16' depth); the "maximum" anticipated barge size is a Crowley Series 455, or equal (400' length, 105' width, 25' depth). These vessels are existing; however, routes are unknown at this moment. The expected traffic and number of vessels as



result of the Project would be intermittent and not expected to exceed the highest number of vessels recorded by the APDC, traveling to and from the Port of Albany and all other ports location along the Hudson River. In addition, the Project is located south of the existing turning basin for the Hudson River; therefore, this area is currently subject to maritime traffic and port activities where all cargo vessels in this area currently navigates and pass the location of the new wharf to turn around and return to the ocean.

The dredging itself will provide adequate draft to vessels at the proposed wharf and maintain navigation in this section of the Hudson River. As a result, it is expected to enable vessels to travel safely in the area and cleanup of the Hudson River by removing approximately 105,000 cubic yards of sediments containing concentrations of pesticides and PCBs. Allowing safe passage in the navigation channel is not expected to change the number of vessels that use the Hudson River; thus, preserving the status quo with regard to vessel routes and vessel numbers will not change the risk of a vessel strike. Any slight increase (if any) in risk from altered patterns of use would be too small to be detected or measured, and effects are, therefore, less than significant.

4.4 DREDGE ENTRAPMENT

Entrapment of sturgeon during the temporary performance of dredging operations is considered extremely unlikely. For involuntary or incidental entrapment to occur, an individual sturgeon would have to be present (without moving) directly below the dredge bucket at the time of operation. Based on past interactions between mechanical dredges and sturgeon, the greatest risk of capture is when dredging occurs in areas where sturgeon are densely aggregated such as when they experience sedentary behavior in overwintering areas. However, as given the NYSDEC recommended in-water work window (September 1 – January 31) to be followed, the area to be dredged is not likely to be an overwintering area and only migrating and opportunistically foraging adult, subadult, young-of-the-year, or juvenile sturgeon would potentially be present. Any such individuals would likely use adjacent open water areas in the waterway that provide for sufficient safe passage to avoid the work area during construction as a behavioral response to acoustical impacts. Also, a turbidity barrier surrounding the dredge site will prevent sturgeon from entering the area and will prevent them from being exposed to the dredge. Therefore, the effects of dredge entrapment are extremely unlikely and are discountable.

4.5 TURBIDITY

The area of the Project is characterized by high turbidity levels and low visibility. The dredging activities and in-water work construction for the new wharf will temporary disturb bottom sediments and may cause a temporary increase in suspended sediment above background levels.

Dredging would be conducted by mechanical means from a barge, using an environmentally friendly clamshell ("closed") bucket to restrict the inflow of water into the bucket during bucket ascension, thereby reducing the loss of material from the bucket due to washout. Based on literature from NMFS and USACE, total Suspended Sediments (TSS) concentrations associated with mechanical clamshell bucket dredging operations have been shown to range from 105 mg/L in the middle of the water column to 445 mg/L near the bottom (210 mg/L, depth-averaged) (ACOE 2001). Furthermore, a study by Burton (1993) measured TSS concentrations at distances of 500, 1,000, 2,000, and 3,300 feet (152, 305, 610, and 1006 meters) from dredge sites in the Delaware River and were able to detect concentrations between 15 mg/L and 191 mg/L up to 2,000 feet (610 meters) from the dredge site. In support of the New York/New Jersey Harbor Deepening Project, the USACE conducted extensive monitoring of mechanical dredge plumes (ACOE 2015). The dredge sites included Arthur Kill, Kill Van Kull, Newark Bay, and Upper New York Bay. Although briefly

addressed in the report, the effect of currents and tides on the dispersal of suspended sediment were not thoroughly examined or documented. Independent of bucket type or size, plumes dissipated to background levels within 600 feet (183 meters) of the source in the upper water column and 2,400 feet (732 meters) in the lower water column. Based on these studies, elevated suspended sediment concentrations at several hundreds of mg/L above background may be present in the immediate vicinity of the bucket, but would settle rapidly within a 2,400-foot (732 meter) radius of the dredge location. The TSS levels expected for mechanical dredging (up to 445.0 mg/L) are below those shown to have adverse effect on fish (typically up to 1,000.0 mg/L; see summary of scientific literature in Burton 1993; Wilber and Clarke 2001).

Using available information collected from the Tappan Zee Bridge Replacement Project (FHWA 2012) over the Hudson River, pile driving activities produce TSS concentrations of approximately 5 to 10 mg/L above background levels within approximately 300 feet (91 meters) of the pile being driven. The small resulting sediment plume is expected to settle out of the water column within a few hours. Studies of the effects of turbid water on fish suggest that concentrations of suspended solids can reach thousands of milligrams per liter before an acute toxic reaction is expected (Burton 1993). The TSS levels expected for pile driving (5 to 10 mg/L above ambient or background conditions) are below those shown to have adverse effect on fish (typically up to 1,000 mg/L; see summary of scientific literature in Burton 1993; Wilber and Clarke 2001) and benthic communities (390 mg/L (EPA 1986)).

TSS is most likely to affect sturgeon if a plume causes a barrier to normal behaviors. However, the increase in TSS levels expected for pile driving (5 to 10 mg/L above ambient or background conditions) is so minor that any effect of sediment plumes caused by the Proposed Action on sturgeon movements or behavior will be undetectable; we expect sturgeon to either swim through the plume or make small evasive movements to avoid it. Moreover, turbidity and TSS will be controlled and minimized with the implementation of a SWPPP, including installation of floating turbidity barriers around in-water work activities. The turbidity curtain will also prevent sturgeon from entering the area and thus, will prevent them from being exposed to the plumes. Based on the best available information, the effects of resuspended sediment on sturgeon resulting from pile installation when added to baseline conditions will be too small to be meaningfully measured or detected and are, therefore, insignificant.

4.6 MAINTENANCE DREDGING

Maintenance dredging is expected to be required periodically throughout the service life of the proposed facility. The frequency of and volumes of material removed during maintenance dredging are expected to be variable, based on both natural processes (i.e., river sediment load, flow velocities, flow patterns) and use of the facility. Currently, it is anticipated that maintenance dredging could be expected at approximate 5-year intervals, which is the same approximate interval at which the Port of Albany turning basin (located upstream of the project site) undergoes maintenance dredging. Protection measures and BMPs will also be implemented during maintenance dredging events. Dredged habitat outside of the wharf footprint is expected to recover in a short period of time (e.g., one year) after completion of project activities. Thus, transient individuals are expected to once again be able to opportunistically forage after habitat has recovered. Given that there will be only approximately one (1) dredging event approximately every five (5) years, this will allow benthic habitat to recover enough to provide forage in between dredge events. Additionally, habitat surrounding the Project provides more favored foraging and spawning areas for sturgeon species, and thus individuals are not limited to only opportunistically foraging. As such, aggregate effects of repeated habitat disturbance on listed species will be less than significant over the 10 year duration of the USACE permit.



5. MITIGATION

The Project is committed to maintain collaborative actions with NYSDEC in finding a potential mitigation project in accordance with The Hudson River Comprehensive Restoration Plan that could serve as mitigation due to habitat modification.

Construction of the wharf and associated dredging in the Hudson River is limited to 0.21 acre of SAV impacts consisting of a long narrow shallow shelf along the edge of the concrete armored shoreline, with very low density of *Vallisneria americana* (water celery or eelgrass), *Trapa natans* (water chesnut), and *Potamogeton crispus* (curly-leaf pondweed) growing in shallow water no farther than approximate 16 feet from the mean low water (MLW) line. According to NYSDEC letter dated August 29, 2020 (DEC #4-0122-00322/00001, impacts to *V. americana* must be mitigated.

Subaqueous zones, between elevations -5 to -10 (NAVD88) and -10 to -15 (NAVD88), to be modified by wharf construction and dredging were computed. It is assumed that either one or perhaps both of these zones could be considered by NYSDEC as potential sturgeon spawning and foraging habitat, which may be subject to mitigation. Elevations - 5 to -10 zone covers approximately 10,236 SF (0.235 acre) of project area; elevations -10 to -15 covers approximately 10,476 SF (0.241 acre) of project area. Total area considered as habitat modification is approximately 0.48 acres. As shown in Figure 4-2 (General Wharf layout and Dredging Area), the Project when completed would reestablish a reconfigured and relocated area between -5 and -15 NAVD88, beneath the wharf.

Additionally, in accordance with NYSDEC letter dated August 29, 2020 (DEC #4-0122-00322/00001), *L. fragilis* mussels and "old relic" shells of *A. implicata* found within the proposed dredging zone (FSM Sections 9, 10 and 11) need to be relocated to areas outside the footprint of the proposed dredging. As presented in Joint Permit Application (DEC #4-0122-00322/00001), the ADPC has the intent to relocate *L. fragilis* mussels found within the limits of the proposed dredging area (i.e., FMS Sections 9, 10 and 11) to FMS Sections 1-8 and portions of Section 11). Relocation would be conducted in accordance with NYS Freshwater Mussel Survey Guidelines for Waterbody Disturbance Projects (April 2021).

The APDC is working with the NYSDEC to identify final mitigation option to offset impacts to sturgeon habitat. Once the mitigation option is identify, an implementation agreement would be prepared and provided to the NYSDEC for review.

5.1 ADDITIONAL MITIGATION MEASURES TO OFFSET POTENTIAL IMPACTS TO SHORTNOSE STURGEON HABITAT

According to the Sediment Sampling Analysis, the proposed dredging will occur over a substrate consisting of silty clay, sand and some trace of gravel, including Class C sediments. The proposed mechanical dredging would remove of approximately 105,000 cubic yards containing concentrations of pesticides and PCBs contributing to the <u>cleanup</u> of the Hudson River. APDC is working with the NYSDEC to identify mitigation option for impacts to the sturgeon.

6. MITIGATION IMPLEMENTATION AGREEMENT

APDC is working with the NYSDEC to identify mitigation option for impacts to the sturgeon. Once mitigation option is identify, a implementation agreement would be prepared and provided to NYSDEC for review.

Also, once a final mitigation strategy for the sturgeon has been identified, a timeline for implementation will be established, and funding for the plan will be identified.

7. ENVIRONMENTAL MONITORING

The objective of the environmental monitoring is to comply with permit conditions to be established by NYSDEC. The APDC will ensure a proactive approach in monitoring and addressing water quality standards before it becomes a problem. As part of this approach, the APDC and project designated staff will be in constant coordination with NYSDEC for the completion and implementation of the environmental monitoring plan(s). Field coordination will be carried out during the construction phase to make sure that all activities are conducted in compliance with permit conditions.

7.1 FISH MONITORING

At least 45 days prior dredging activities, a plan will be submitted to NYSDEC for the monitoring of the movement of the Shortnose sturgeon in the immediate vicinity of the Project. (i.e., dredging area). Overall, fish monitoring will be conducted on visual survey from boat and shoreline along the project area during dredging and in-water construction, for the purpose of located stunned or dead fish. An Standard operating Procedure (SOP) detailing the procedure for this visual surveys will be submitted for review to NYSDEC as part of the Fish Monitoring Plan.

7.2 WATER QUALITY / TURBIDITY MONITORING

At least 45 days before starting dredging activities or in-water work activities that may cause resuspension of bottom sediments and increase in turbidity above background levels, the APDC will submit a water quality / turbidity monitoring plan to the NYSDEC. If activities that may cause resuspension of bottom sediments must be monitored separately. The Water Quality / Turbidity Monitoring Plan will be in effect at all times during these activities. Overall, the plan would consist of obtaining water samples in on the outside of the Floating Turbidity Barriers, in the direction of any visible plume and taking into consideration tidal cycle. This effort includes monitoring on a daily basis, twice a day (at least five (5) hours apart) the dredging zone. The definition of background and compliance stations and criteria will be presented in Water Quality / Turbidity Monitoring Plan to be submitted to NYSDEC for review. Monitoring for turbidity and TSS would be measured in Nephelometric Turbidity Units (NTU) using a standard portable Nephelometer. Turbidity monitoring stations will be recorded and located using a handheld Global Positioning System (GPS – WAAS Corrected) or a chart plotter. Since floating turbidity barriers are proposed around dredging area, water samples and monitoring would take place outside the confines of the turbidity curtain and compared to ambient or background turbidity levels. Turbidity sampling data will be collected and recorded by station in Daily Log Forms. All analysis results will be sent to NYSDEC via email within 48 hours of receipt of data results. In the event of exceedance of water quality standard, NYSDEC will be notified and the APDC will coordinate with NYSDEC if there is a need for procedural changes. The Water Quality Monitoring Plan will incorporate and take into consideration the Dewatering Plan to be developed and implemented by the Dredging Contractor. A monitoring report, summarizing the results of the monitoring and analysis, shall be submitted to the NYSDEC within 30 days of completion of the dredging activities.

7.3 BATHYMETRIC SURVEY

Within 60 days of completion of dredging and construction of the wharf, a bathymetric survey of the project area will be provide to NYSDEC. For comparison purposes, a pre-dredging survey will be provided with the post dredging bathymetric survey.



(This page is intentionally left blank)

8. APPENDICES

Appendix 1: Permit Sketches (Project Drawings)

Appendix 2: Submerged Aquatic Vegetation Survey

Appendix 3: Freshwater Mussels Survey

Appendix 4: Sediment Sampling and Analysis Report

(This page is intentionally left blank)

Appendix 1: Permit Sketches

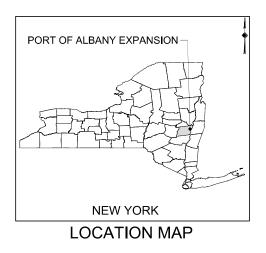


6 CRR-NY Part 182 Incidental Take Permit Application

Port of Albany Expansion Project

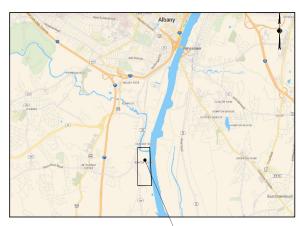


ALBANY PORT DISTRICT COMMISSION PORT OF ALBANY EXPANSION SITE



PERMIT SKETCHES JULY 2021

TOWN OF BETHLEHEM
ALBANY COUNTY
NEW YORK



PORT OF ALBANY EXPANSION

VICINITY MAP

PREPARED FOR:



ALBANY PORT DISTRICT COMMISSION 106 SMITH BOULEVARD ALBANY, NEW YORK (518) 463-8763 WWW.ALBANY.GOV

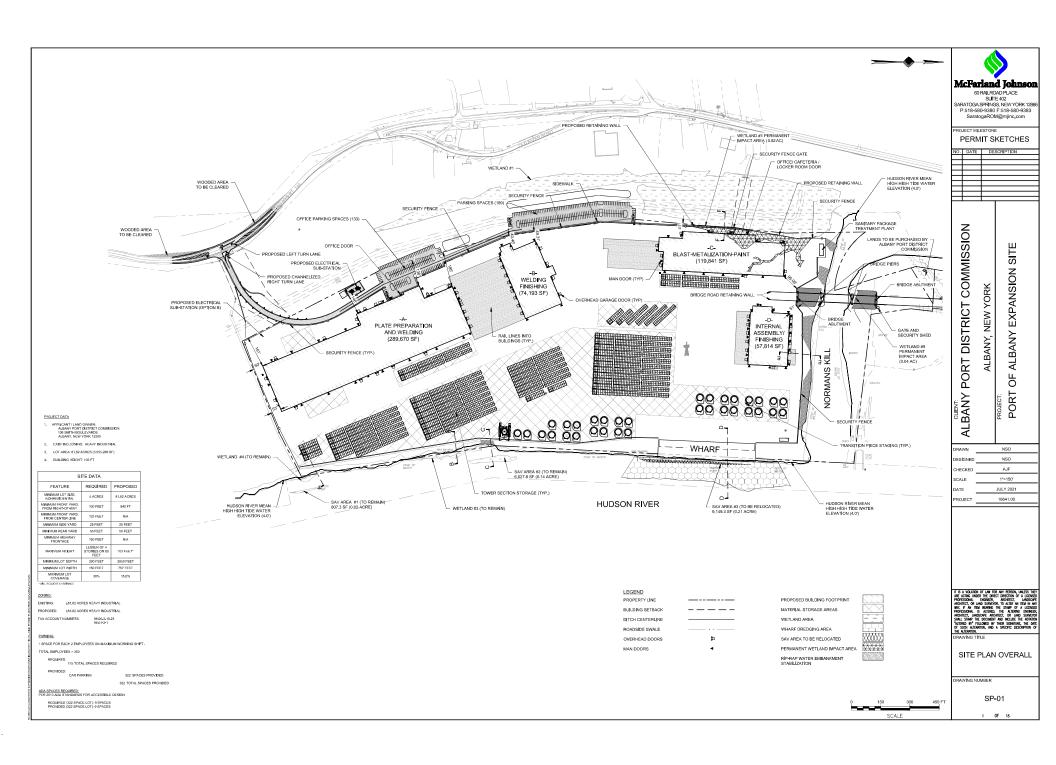
PREPARED BY:

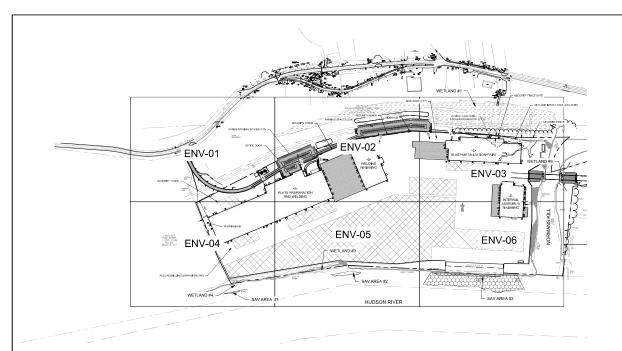


MCFARLAND JOHNSON PROJECT # 18641.00

SEALED	ADAM J. FROSINO		
PE_NO	088870		
PE_DATE	JULY 2021		

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL LENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY FOLLOWING DISTRIBUTION" ALTERED BY FOLLOWING DISTRIBUTION."





- REMOVE AND STOCKPILE TOPSOIL AS DIRECTED BY THE CONSTRUCTION
 MANAGER, REPLACE TOPSOIL TO A MINIMUM 4" DEPTH, ALL DISTURBED AREAS
 TO BE HYDROSEEDED AS DIRECTED BY THE CONSTRUCTION
 MANAGER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS, INCLUDING INLET PROTECTION AND SILT FENCE PROSING CONTROL MEASURES SHALL NOT BE REMOVED BEFORE VEGETATION HAS OCCURRED COMPLETELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF TOPSOIL TO ALL DISTURBED AREAS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
- EROSION CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, ALBANY COUNTY HEALTH DEPARTMENT, AND THE TOWN OF BETHLEHEM REQUIREMENTS.
- ALL INLETS TO THE STORM SEWER SHALL HAVE STONE DROP INLET PROTECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BEST MANAGEMENT PRACTICES (BMPS) UNTIL GROUND COVER IS ESTABLISHED.
- SILT FENCE, JUTE MESH, ANDIOR EROSION CONTROL BLANKETS WILL BE USED
 ON STEEP SLOPES AND WHEREVER NECESSARY TO CONTROL EROSION AND
 SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER OR
 SPECIFIED ON PLANS.
- THE CONTRACTOR SHALL DESIGNATE A MEMBER OF HIS/HER FIRM TO BE RESPONSIBLE TO MONITOR EROSION CONTROL, EROSION CONTROL STRUCTURES, TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.
- ALL GRADING AND EARTHWORK SHALL BE IN CONFORMANCE WITH NEW YORK STATE STANDARD SPECIFICATIONS SECTION 203 EXCAVATION AND EMBANKMENT, WHICH INCLUDES MAXIMUM EMBANKMENT LIFT THICKNESS ALLOWED BASED ON THE COMPACTION EQUIPMENT USE.
- 10. ALL PROPOSED ELEVATIONS SHOWN HEREON ARE FINISHED GRADE ELEVATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RIM ELEVATIONS IN RELATION TO PROPOSED GRADE PRIOR TO INSTALLATION.

STORM SEWER:

- 1. ALL HDPE PIPES SHALL FOLLOW NYSDOT SECTION 603-2 AND 706-12, BE SMOOTH INTERIOR.
- 2. PLACE RIP-RAP AROUND ALL END SECTIONS.
- IN INSTANCES WHERE THE STORM SEWER CROSSES THE SANITARY SEWER A CRUSHED STONE ENCASEMENT SHALL BE PROVIDED AROUND THE SANITARY SEWER UP TO THE STORM SEWER-COMPACT WITH APPROVED EQUIPMENT.
- 4. ALL CATCH BASINS AND STORM MANHOLES WITHIN PAVEMENT TO BE CONSTRUCTED TO WITHSTAND HS-20 LOADING.

LEGEND	
PROPERTY LINE	
BUILDING SETBACK	
EXISTING RAIL LINE	
EXISTING TREE LINE	~~~~
DITCH CENTERLINE	
ROADSIDE SWALE	
WETLAND AREA	5555

ENVIRONMENTAL PLAN NOTES & INDEX

McFarland Johnson 60 RAILROAD PLACE SUITE 402 SARATOGA SPRINGS, NEW YORK 1286 P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com ROJECT MILESTONE PERMIT SKETCHES

SIT

EXPANSION

ALBANY

Ю

PORT

NSO

AJF 1"=250' JULY 2021

18641.00

PORT DISTRICT COMMISSION

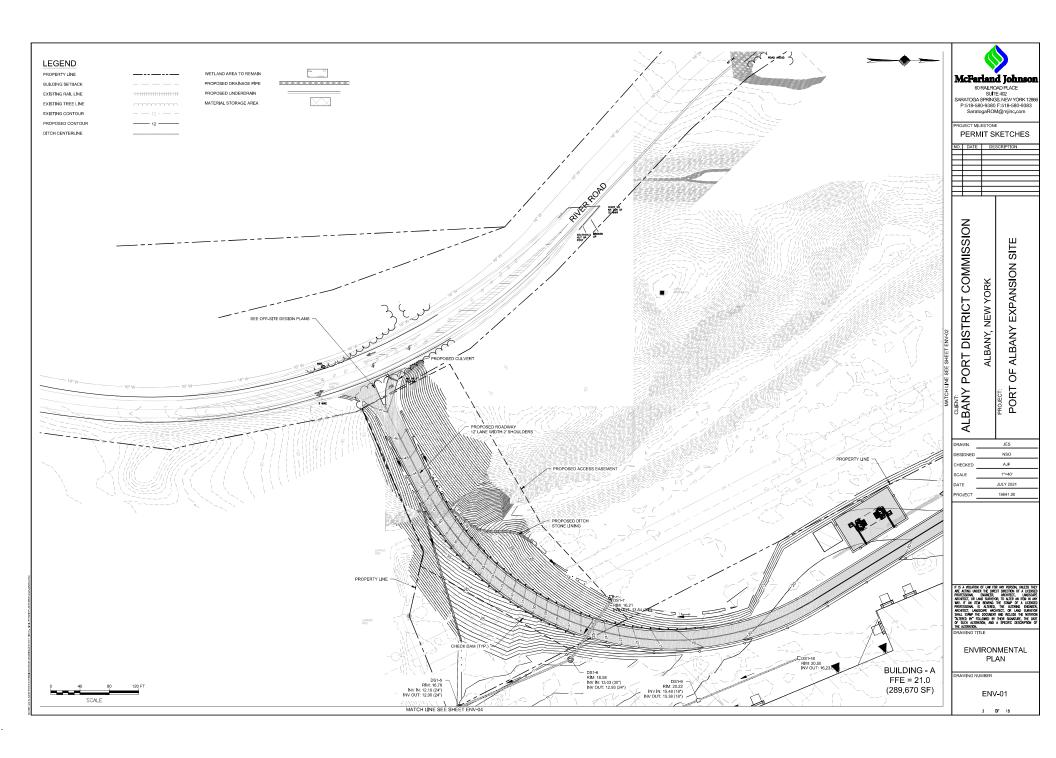
ALBANY I

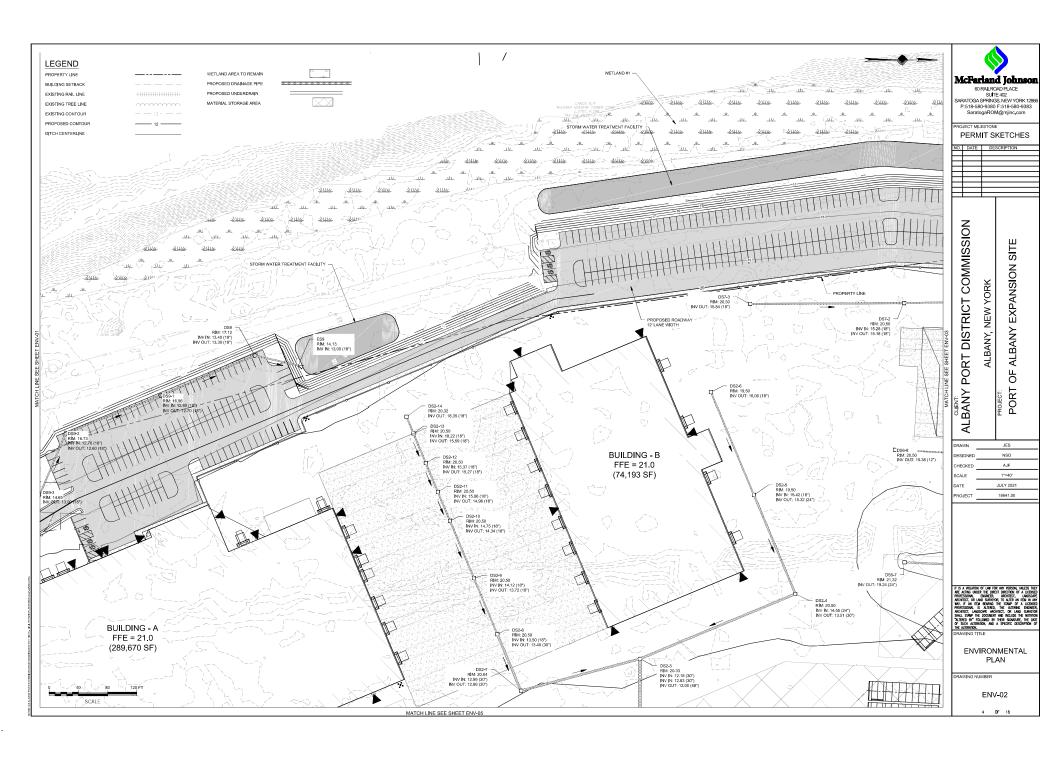
HECKED

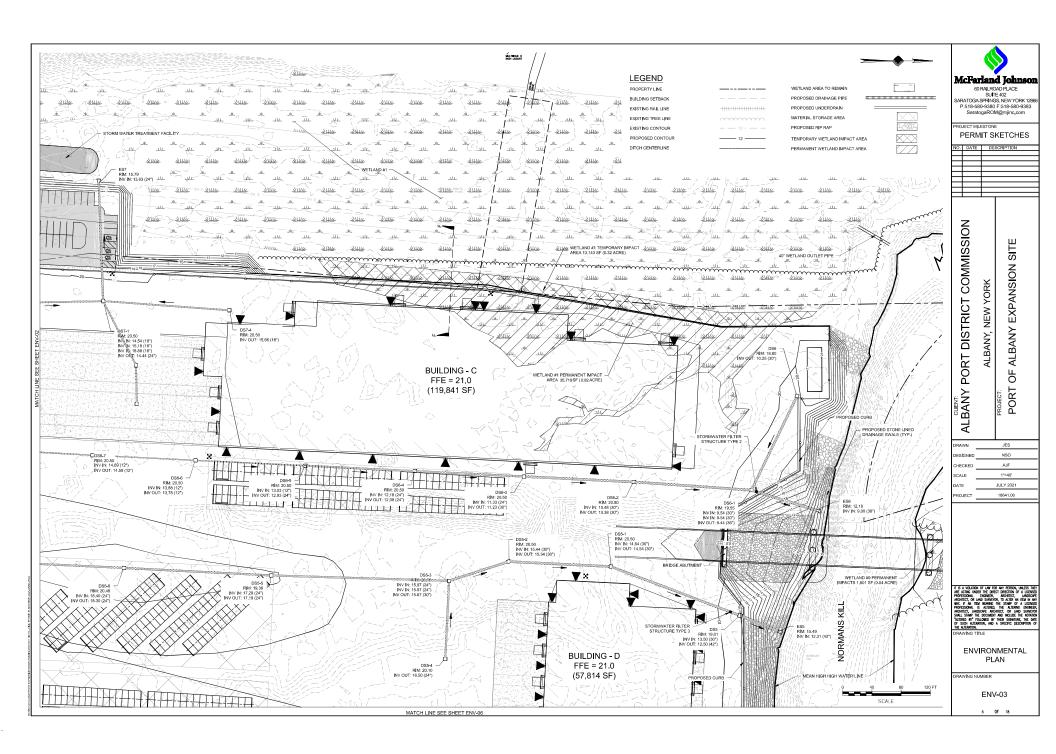
ROJECT

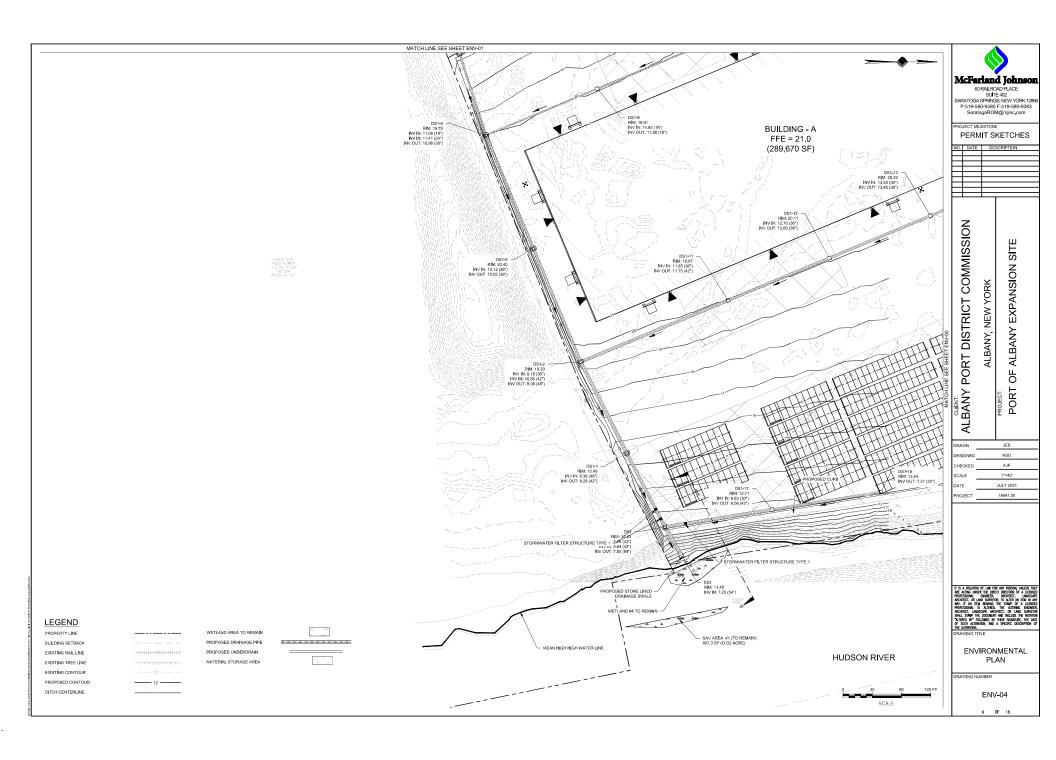
NEW

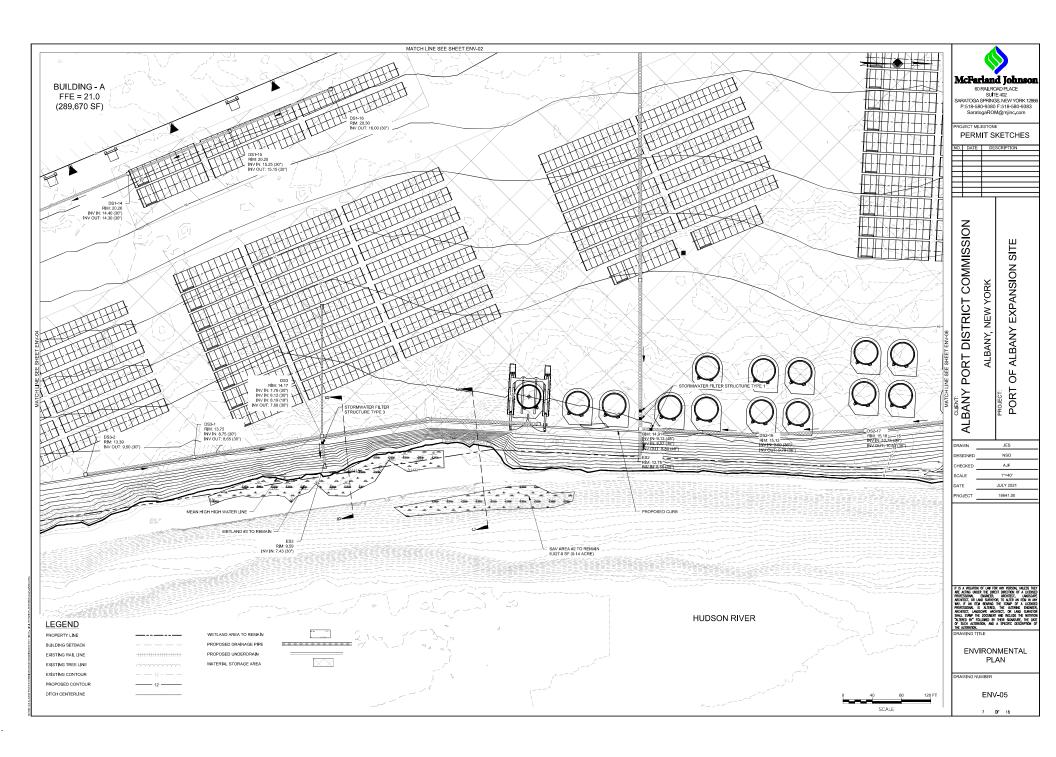
ENV-00

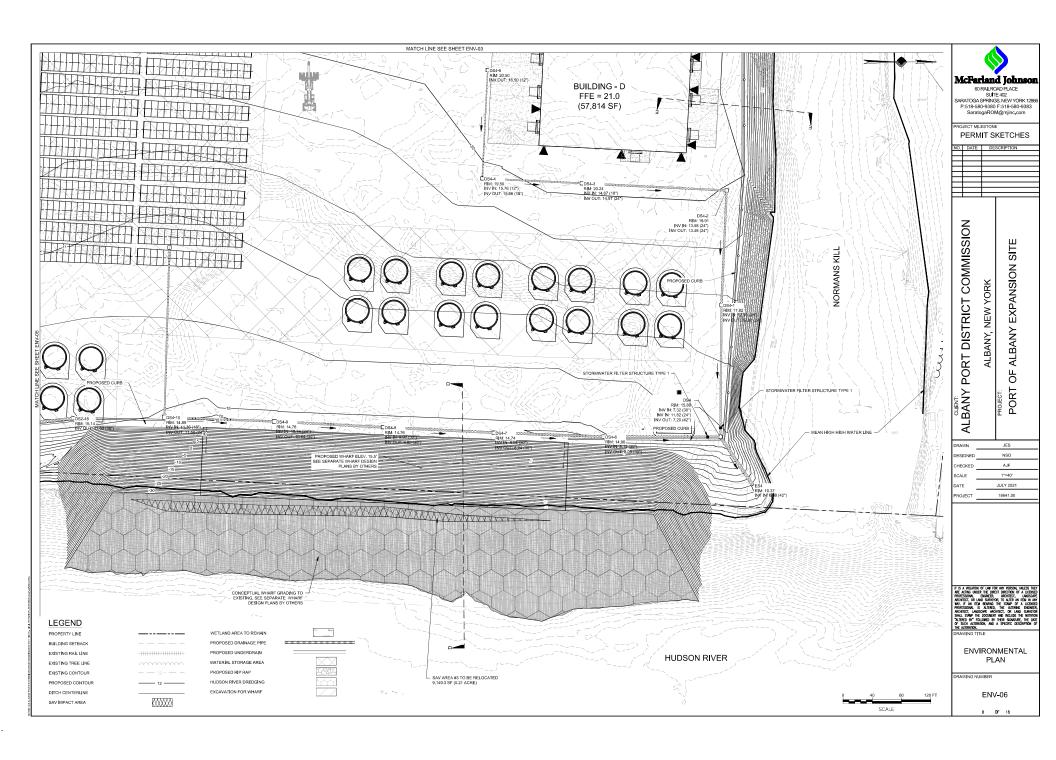


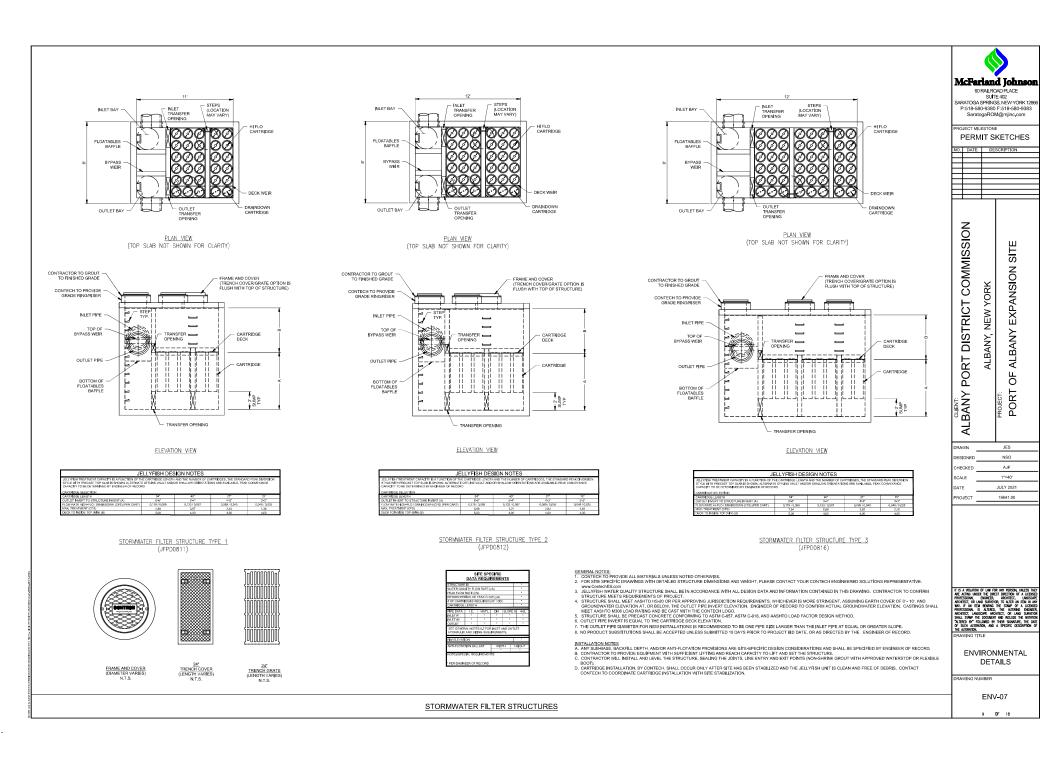


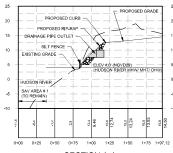




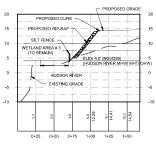




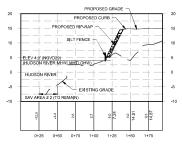




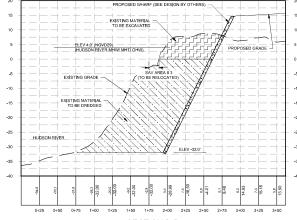
SECTION A-A Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



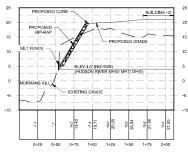
SECTION B-B Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



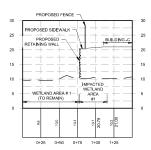
SECTION C-C Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



SECTION D-D Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



SECTION E-E Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'



SECTION F-F Horizontal Scale: 1" = 40' Vertical Scale: 1" = 10'

McFarland Johnson

60 RAILROAD PLACE SUITE 402 SARATOGA SPRINGS, NEW YORK 1286 P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com

ROJECT MILESTONE

PERMIT SKETCHES

-		
10.	DATE	DESCRIPTION

ALBANY PORT DISTRICT COMMISSION SITE

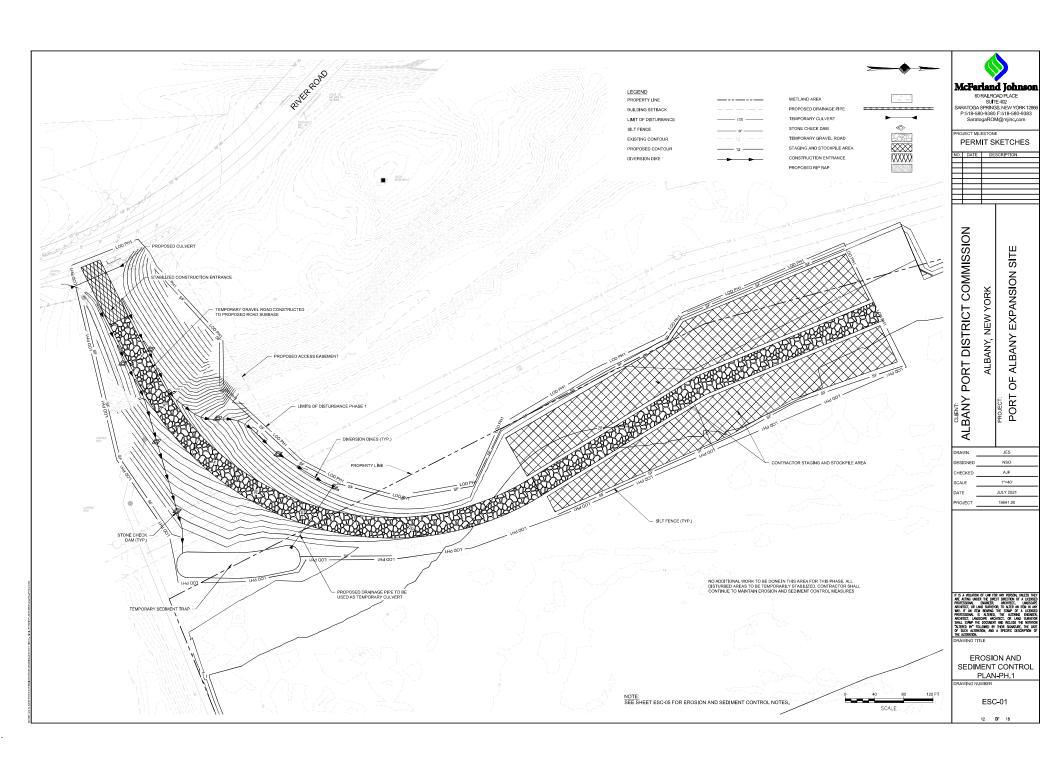
OF ALBANY EXPANSION

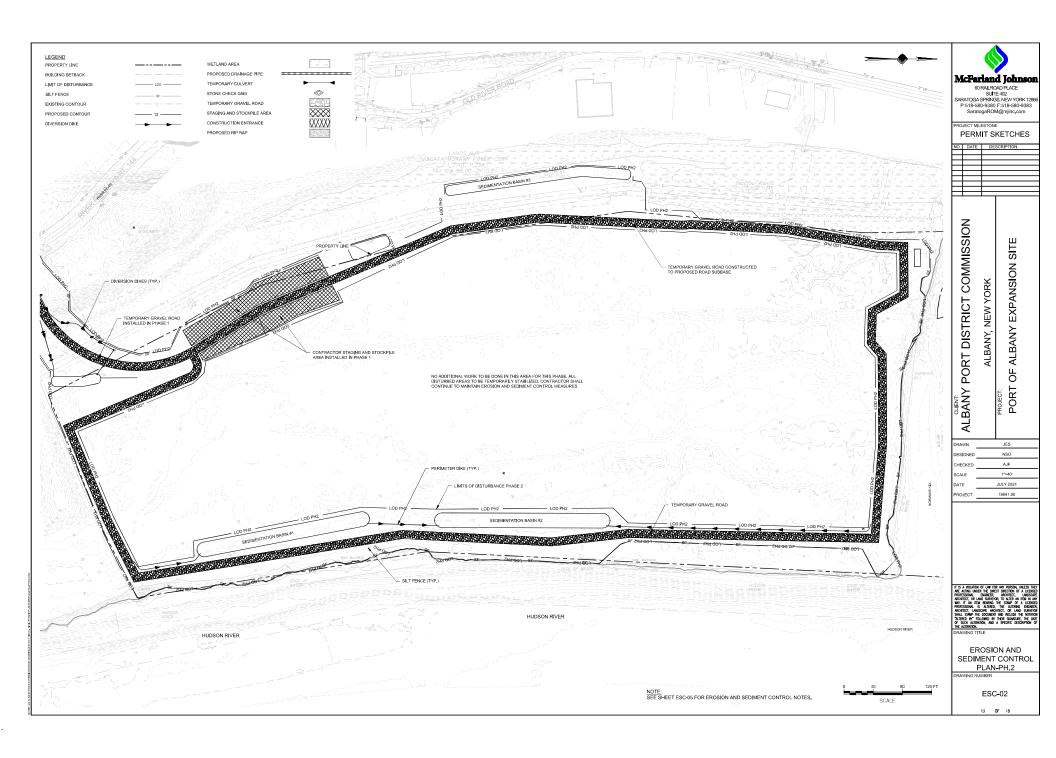
NSO AJF CHECKED 1"=40' DATE JULY 2021 18641.00 ROJECT

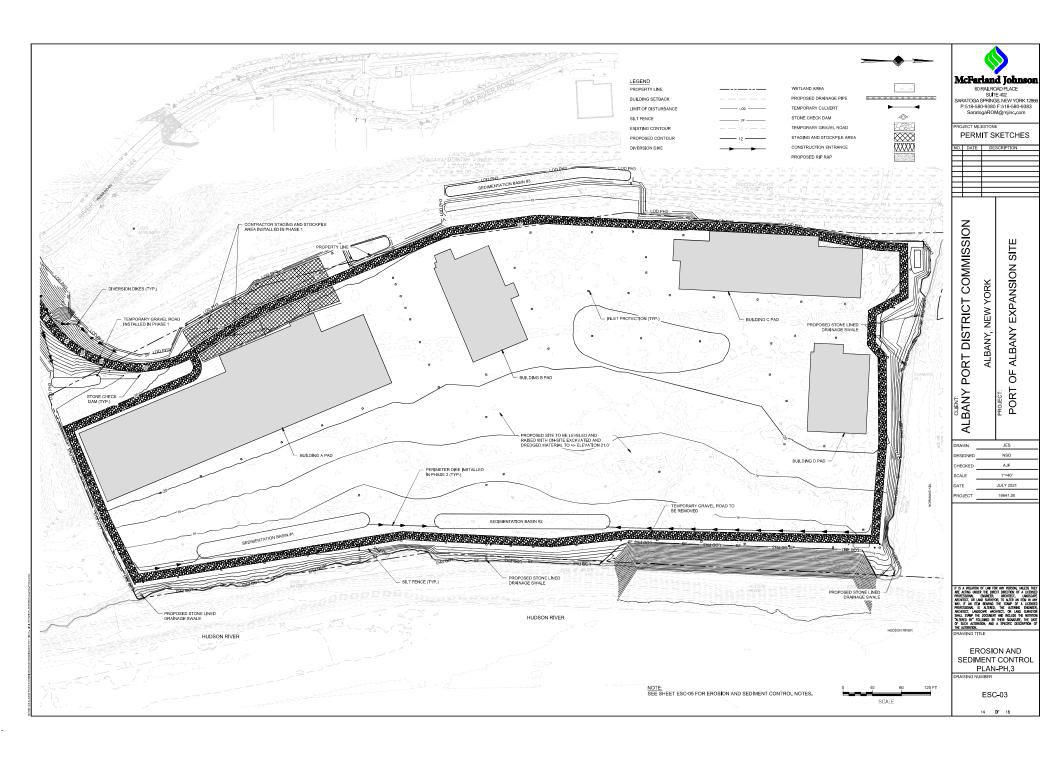
SECTION VIEWS

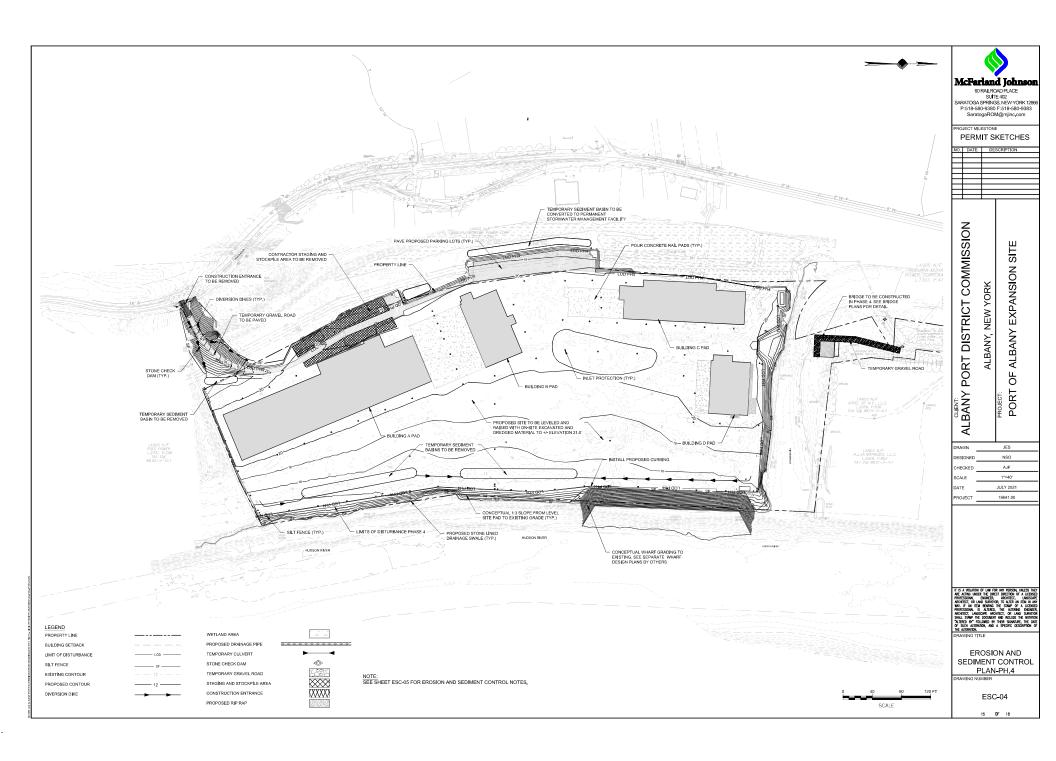
XS-01











EROSION AND SEDIMENT CONTROL PLAN NOTES:

- THE EROSION AND SEDIMENT CONTROL PLAN IS INTENDED TO REPRESENT A
 CONCEPTUAL APPROACH TO EROSION AND SEDIMENT CONTROL. IT IS FURTHER
 INTENDED THAT THE OWNER AND CONTRACTOR SHALL IMPLEMENT PRACTICES, AS
 REQUIRED, TO CONTROL EROSION AND SEDIMENT IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND
- 2. INSTAL SIX TENCE, AND ALL OTHER EROBON CONTROL MEASURES AS NODATED ON THE PLAN PRIPOR OT THE START OF ANY EXCANATION WORK, EROBON CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSON AND SECURITY CONTROL, NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSON AND SECURITY CONTROL, NEW YORK STANDARDS AND SPECIFICATION FOR EROSON AND SECURITY CONTROL NEW YORK STANDARDS AND SPECIFICATION AND THE GOVERNING.
- REMOVE AND STOCKPILE TOPSOIL IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN. REPLACE TOPSOIL TO A MINIMUM 4" DEPTH. ALL DISTURBED AREAS ARE TO BE HYDROSEEDED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS, INCLUDING INLET PROTECTION AND SILT FENCE. EROSION CONTROL MEASURES SHALL NOT BE REMOVED BEFORE AREAS HAVE BEEN PROPERLY STABILIZED.
- CONTRACTOR SHALL MAINTAIN A STOCK PILE OF EROSION AND SEDIMENT CONTROL MEASURES ON SITE AS INDICATED ON THE PLAN.
- NO PETROLEUM PRODUCTS ARE TO BE STORED ON SITE WITHOUT PRIOR APPROVAL OF THE LOCAL STORMWATER INSPECTOR. ANY PETROLEUM ON SITE WILL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL GOVERNMENT REGULATIONS.
- WRAP YARD INLET GRATES IN FILTER FABRIC PROGRESSIVELY AS STORM SEWER AND YARD INLETS ARE INSTALLED.
- ALL EROSION CONTROL MEASURES ARE TO BE REPLACED WHENEVER THEY BECOME CLOGGED OR INOPERABLE AND SHALL BE REPLACED AT A MINIMUM OF EVERY 3 MONTHS.
- 9. JUTE MESH WILL BE USED ON SLOPES STEEPER THAN 3:1 AND WHEREVER NECESSARY TO CONTROL EROSION AND SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER.
- 10. ALL DETURBED AREAS SANL BE FIRBLE GRACES TO PRODUCT SUGETATION OF ALL EXPOSED AREAS AS SONA SEPECTIONAL EXPOSED AREAS AS SONA SEPECTIONAL EXPOSED AREAS OF A SEPECTION OF A SEPECTION
- ALL RIP-RAP OUTLET PROTECTION TO BE CONSTRUCTED PER NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL FEATURES THROUGHOUT THE
- DURATION OF CONSTRUCTION.
 ALL SEDIMENT TRAPPING DEVICES AND INLET PROTECTION DEVICES SHALL BE
 CLEANED OF ACCUMULATED SILT WHEN STORAGE CAPACITY HAS BEEN REDUCED BY 50% OF THEIR DESIGN CAPACITY
- 50% OF THEIR DESIGN CAPACITY.

 8. ALL SEDIMENT SHALL BE REWOVED FROM BEHIND SILT FENCE AND STRAW BALES WHEN IT ACCUMULATES TO A MAXIMUM HEIGHT OF 6°.

 C. AFTER YEGGETATION HAS BEEN SUBSTANTIALLY STRABLISHED, EXCAVATE SWALES OF ACCUMULATED SILT, RE-ESTABLISHED VEGETATION ON DISTURBED AREAS.

 SEDIMENT OLIL CLETCH BY PROSONO CONTROL MEASURES SHALL BE LIPROSED OF BY
- SPREADING ON-SITE OR HAULED AWAY IF DETERMINED TO BE UNSUITABLE FOR FILL.
- ALL DISTURBED AREAS SHALL BE STABILIZED, SEEDED AND MULCHED WITHIN 7 DAYS OF CEASED CONSTRUCTION ACTIVITY.
- 13 TOTAL PROJECT DISTURBANCE AREA PER THE NYSDEC SPDES STANDARDS IS 79 ACRES
- 14. ALL AREAS TO REMAIN AS PERVICUS VEGETATED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE NYS STORMWATER MANAGEMENT DESIGN MANUAL TABLE 5.3 SCIL RESTORATION REQUIREMENTS.

PERMANENT SEEDING NON-SLOPED AREAS:

- IF SOILS ARE COMPACTED, SCARIFY UPPER TWO INCHES BY BACKBLADING WITH DOZER, RAKING, OR DISKING.
- 2. PLACE TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES.
- 3. SEED PER SCHEDULE SPECIFIED ON LANDSCAPE PLANS.
- FERTILIZE WITH 600 POUNDS PER ACRE OF 10-10-10. LIME TO ACHIEVE A PH OF NOT LESS THAN 5.5 OR GREATER THAN 7.6. IF HYDROSEEDER IS NOT USED, SEED AND FERTILIZER SHOULD BE LIGHTLY RAKED INTO SOIL.
- 5. MULCH WITH CLEAN (WEED FREE) STRAW IF SPECIFIED ON PLANS.

PERMANENT SEEDING SLOPED AREAS:

- IF SOILS ARE COMPACTED, SCARIFY UPPER TWO INCHES BY BACKBLADING WITH DOZER, RAKING, OR DISKING.
- 2. PLACE TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES.
- FERTILIZE WITH 600 POUNDS PER ACRE OF 10-10-10. LIME TO ACHIEVE A PH OF NOT LESS THAN 5.5 OR GREATER THAN 7.6. IF HYDROSEEDER IS NOT USED, SEED AND FERTILIZER SHOULD BE LIGHTLY RAKED INTO SOIL.
- 4. IMMEDIATELY SEED PER SEED SCHEDULE SPECIFIED ON LANDSCAPE PLAN.
- 5. PROVIDE JUTE MESH IF SPECIFIED ON PLANS OR MULCH WITH CLEAN (WEED

THE TOWN OF BETHLEHEM SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES STARTING AND CEASING DISTURBANCE OF OVER 5 ACRES AT ONE TIME.

- INSTALL CONSTRUCTION ENTRANCE ROADS
 ESTABLISH THE PROJECT CONSTRUCTION

- INSTALL CONSTRUCTION ENTRANCE ROADS
 ESTABLISH THE PROJECT CONSTRUCTION STAGING-OFFICE AREA
 USE ARM ACCESS ROAD CUT MATERIAL AS FILL FOR THE CONSTRUCTION STAGING AREA
 INSTALL SITE FORCE DOWNSTREAM OF ALL DISTURBED AREAS
 STABLIZE THE CONSTRUCTION ACCESS ROAD DISTURBANCE AREA PRIOR TO PROGRESSING TO PRASE II

- INSTALL PERIMETER CONTROLS
 INSTALL CONSTRUCTION ACCESS ROAD AROUND THE PERIMETER OF THE SITE CONSTRUCT SEDIMENTATION BASINS
 STABILIZE ALL DISTURBED AREAS BEFORE PROGRESSING INTO PHASE III

PHASE III:

- SITE TO BE CLEARED AND GRUBBED
 BALANCE GUT AND FILLS IN THE SITE
 COMPACTIBINATIVE DISTING REPORT
 COMPACTIBINATIVE DISTING REPORT
 COMPACTIBINATIVE DISTING REPORT
 COMPACTIBINATIVE DISTING REPORT
 COMPACTIBINATIVE DISTINGTON DESCRIPTION
 ESTABLISH BUILDING FOOTPRINTS AND MITHATON BUILDING FOUNDATION CONSTRUCTION
 INSTALL STORM SWERRY SYSTEM WITH IN, LET PROTECTION FOR DRANGE STRUCTURES AND
 STORE LINNS OUTLET FROTECTION
 NETALL SITE UTILITIES
- INSTALL SITE UTILITIES
 STABILIZE ALL DISTURBED AREAS BEFORE PROGRESSING INTO PHASE IV

PHASE IV:

- CONVERT TEMPORARY SEDIMENT BASINS TO PERMANENT STORMWATER MANAGEMENT FACILITIES

- PACELIES PROPOSED CONCRETE RAIL PLOS AND SEDEMARKS PROPOSED FOR ALL PROPOSED CONCRETE CURBINO PAGE AND SAND SEDEMARKS INSTALL PROPOSED CONCRETE CURBINO PAGE PAGE PAGE AND AT AREAS AND AS AREA AREA PAGE PAGE AND AT AREAS AND A RECA. PAGE A PAGE PAGE A

- IF SOILS ARE COMPACTED, SCARIFY UPPER TWO INCHES BY BACKBLADING WITH DOZER, RAKING, OR DISKING. FERTILIZE WITH 300 POUNDS PER ACRE OF 10-10-10.
- NOTE: NO FERTILIZER SHOULD BE USED AFTER OCTOBER 1ST IF THERE IS DANGER OF LEACHING INTO WATER RESOURCE.
- 3. IMMEDIATELY SEED PER SEED SCHEDULE SPECIFIED ON LANDSCAPE PLAN.
- APPLY STRAW MULCH AS NECESSARY TO HOLD IN MOISTURE, PROTECT SOIL FROM EROSION, HOLD SEED IN PLACE, AND KEEP SOIL TEMPERATURES MORE CONSTANT: 2 TONS PER ACRE.

SOIL RESTORATION NOTES:

DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE DISTURBED SUBSOILS ARE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOIL RESTORATION STEPS APPLIED:

- 1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL
- TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS
- ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
- 4. APPLY TOPSOIL TO A DEPTH OF 6 INCHES
- 5. VEGETATE AS REQUIRED BY APPROVED PLAN.

AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8" INETAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT, ITLLING (STEP 2 ABOVE) SHOULD NOT BE PERFORMED WITHIN THE DRIP JUNE OF ANY EXISTING TREES OR OVER UTILITY INSTALLATIONS THAT ARE WITHIN 24 INCHES OF THE SURFACE.

COMPOST SPECIFICATIONS:

COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF MABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

MAINTENANCE:

A SIMPLE MAINTENANCE AGREEMENT SHOULD IDENTIFY WHERE SOIL RESTORATION IS APPLIED, WHERE NEWLY RESTORED AREAS ARE/GANNOT BE CLEARED, WHO THE RESPONSIBLE PARTIES ARE TOO BROWER THAT ROUTINE VEGETATION IMPROVEMENTS ARE MADE (I.E., THINNING, INVASIVE PLANT REMOVAL, ETC.). SOIL COMPOST AMEDIMENTS WITHIN A PLEAR STRIP OR GRASS CHANNEL SHOULD BE LOCATED IN PUBLIC RIGHT OF WAY, OR WITHIN A DEDICATED STORMWATER OR DRAINAGE

FIRST YEAR MAINTENANCE OPERATIONS INCLUDES:

- INITIAL INSPECTIONS FOR THE FIRST SIX MONTHS (ONCE AFTER EACH STORM GREATER THAN HALF-INCH)
- RESEEDING TO REPAIR BARE OR ERODING AREAS TO ASSURE GRASS STABILIZATION
- WATER ONCE EVERY THREE DAYS FOR FIRST MONTH, AND THEN PROVIDE A HALF INCH OF WATER PER WEEK DURING FIRST YEAR, IRRIGATION PLAN MAY BE ADJUSTED ACCORDING TO THE RAIN EVENT.
- FERTILIZATION MAY BE NEEDED IN THE FALL AFTER THE FIRST GROWING SEASON TO INCREASE PLANT VIGOR.

TWO POINTS HELP ENSURE LASTING RESULTS OF DECOMPACTION:

- PLANTING THE APPROPRIATE GROUND COVER WITH DEEP ROOTS TO MAINTAIN SOIL STRUCTURE.
- KEEPING THE SITE FREE OF VEHICULAR AND FOOT TRAFFIC OR OTHER WEIGHT LOADS, CONSIDER PEDESTRIAN FOOTPATHS. (SOMETIMES IT MAY BE NECESSARY TO DE-THATCH THE TURF EVERY FEW YEARS).



ARATOGA SPRINGS, NEW YORK 128 P:518-580-9380 F:518-580-9383 SaratogaROM@mjinc.com

LIECT MILESTONE

PERMIT SKETCHES

IVU.	DATE	DESCRIPTION
		1
		1
		1
		1

COMMISSI S 8 EXPANS DISTRICT BANY PORT ٩F Ы BANY. PORT

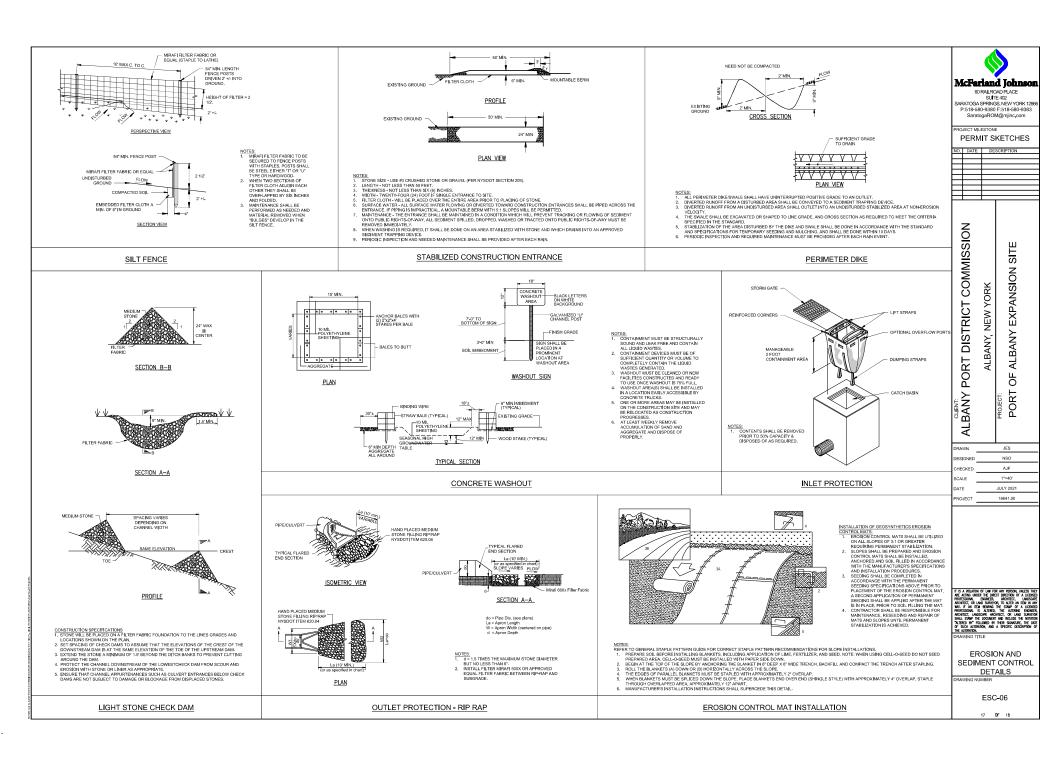
NSO HECKED AJF JULY 2021 ROJECT 18641.00

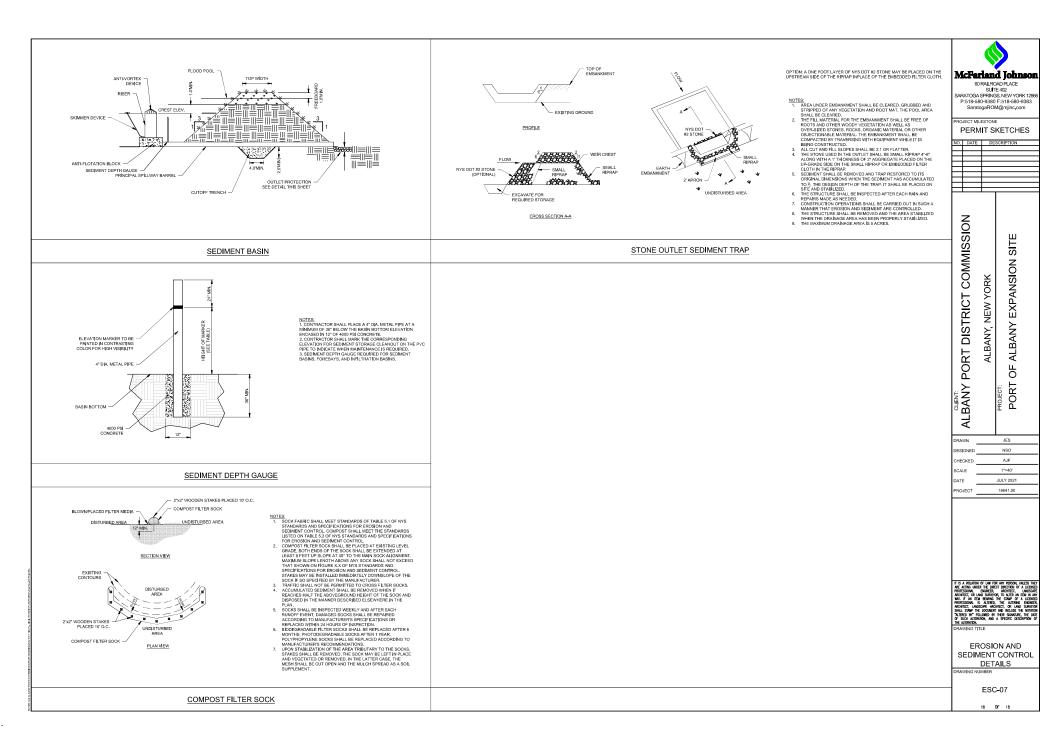
F

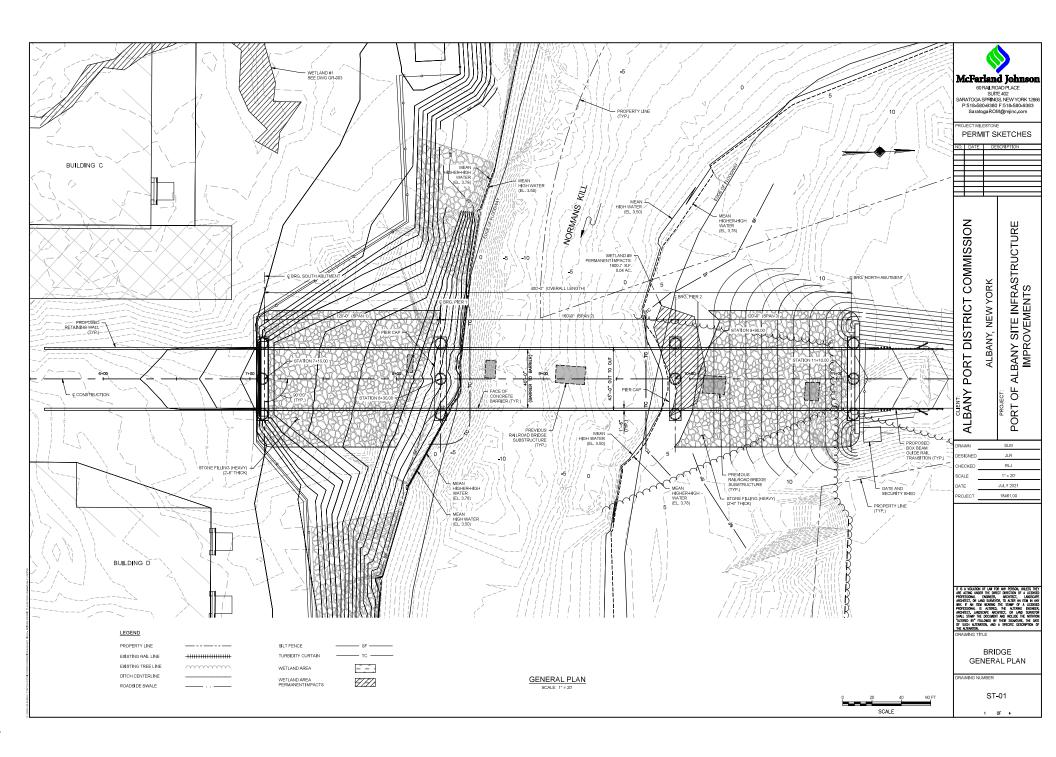
IT IS A VICLATION OF LAW FOR ANY PERSON, UNLESS THE AME ACTING UNICER HE DIRECT DIRECTION OF A LUCKS PROFESSIONAL DIRECTION OF A LUCKS WAS ASSESSED. THE CONTROL OF A LUCKS WAS ASSESSED ASSESSE

EROSION AND SEDIMENT CONTROL NOTES

ESC-05

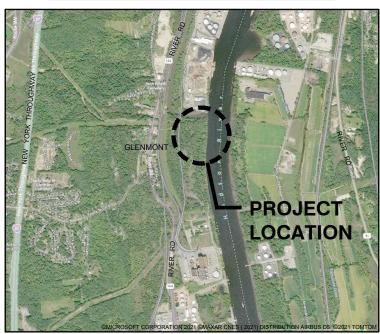












VICINITY AND LOCATION MAP SCALE: N.T.S.

NOTES:

- HORIZONTAL CONTROL REFERENCED TO NORTH AMERICAN DATUM OF 1983, STATE PLANE COORDINATE SYSTEM, NEW YORK, EAST ZONE, IN FEET.
- WATER LEVEL DATUM IS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929, AS FOLLOWS:
- MEAN HIGHER HIGH WATER LEVEL (MHHW) +4.56 FT (NGVD29)
- MEAN HIGH WATER LEVEL (MHW) = +4.18 FT (NGVD29)
- MEAN TIDE LEVEL (MTL) = +1.69 FT (NGVD29)
- MEAN LOW WATER LEVEL (MLW) = -0.80 FT (NGVD29)

PURPOSE: WHARF CONSTRUCTION PERMIT SUBMITTAL-NOT TO BE USED FOR CONSTRUCTION DATUM: NGVD29



m&n engineering, p.c.

OWNER/APPLICANT:

ALBANY PORT DISTRICT COMMISSION PORT OF ALBANY

IN: HUDSON RIVER
NEAR: SOUTH OF ALBANY
LOCATION: PORT OF ALBANY

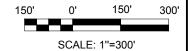
106 SMITH BOULEVARD ALBANY, NEW YORK 12202 WHARF DREDGING AND CONSTRUCTION

VICINITY AND LOCATION

SHEET 1 OF 4 DATE: 2021-07-15

PLAN - EXISTING CONDITIONS

ALBANY, NEW YORK 12202



PURPOSE: WHARF CONSTRUCTION PERMIT SUBMITTAL-NOT TO BE USED FOR CONSTRUCTION DATUM: NGVD29

7/14/2021 3:22 PM by MWILKINSON

Active | Permits11094901P-02; Plotted: 7/15/2021 8:44 AM by WILKINSON, MELISSA; Saved:

Q:INY110949-01120 CADDI



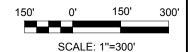
OWNER/APPLICANT: ALBANY PORT DISTRICT COMMISSION PORT OF ALBANY

HUDSON RIVER NEAR: SOUTH OF ALBANY LOCATION: PORT OF ALBANY 106 SMITH BOULEVARD WHARF DREDGING AND CONSTRUCTION

PLAN - EXISTING CONDITIONS

SHEET 2 OF 4 DATE: 2021-07-15

PLAN - PROPOSED CONDITIONS



PURPOSE: WHARF CONSTRUCTION PERMIT SUBMITTAL-NOT TO BE USED FOR CONSTRUCTION DATUM: NGVD29

7/14/2021 3:22 PM by MWILKINSON

Permits11094901P-03; Plotted: 7/15/2021 8:44 AM by WILKINSON, MELISSA; Saved:

Q:INY110949-01120 CADDI



m&n engineering, p.c.

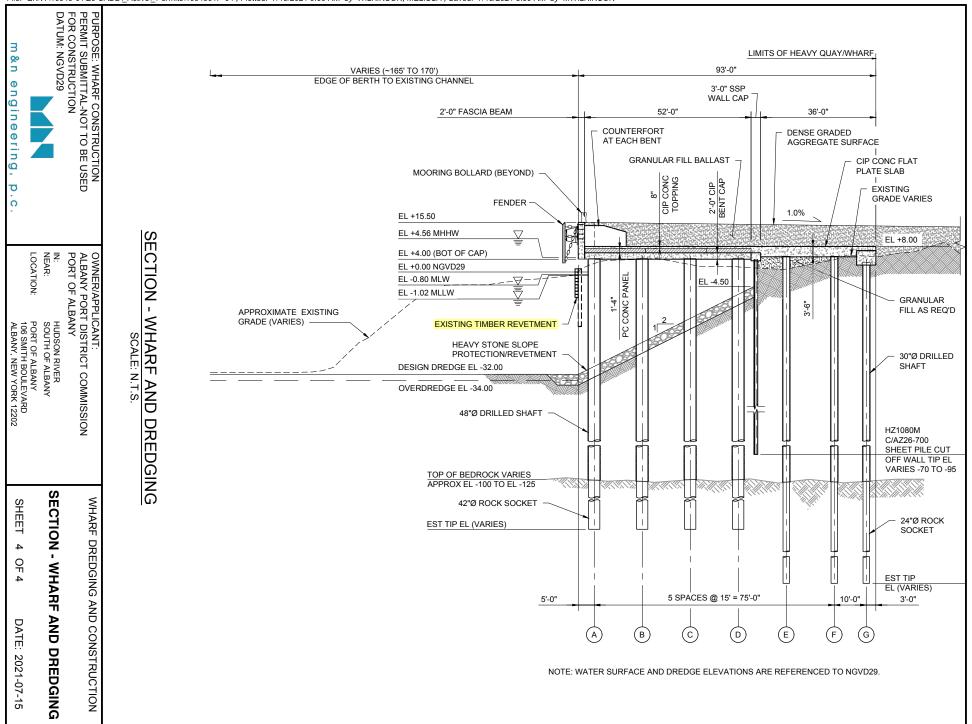
OWNER/APPLICANT: ALBANY PORT DISTRICT COMMISSION PORT OF ALBANY

IN: HUDSON RIVER
NEAR: SOUTH OF ALBANY
LOCATION: PORT OF ALBANY

PORT OF ALBANY 106 SMITH BOULEVARD ALBANY, NEW YORK 12202 WHARF DREDGING AND CONSTRUCTION

PLAN - PROPOSED CONDITIONS

SHEET 3 OF 4 DATE: 2021-07-15



Appendix 2: Submerged Aquatic Vegetation (SAV) Survey



6 CRR-NY Part 182 Incidental Take Permit Application

Port of Albany Expansion Project



REPORT

Submerged Aquatic Vegetation Survey in the Hudson River and Normanskill for the Port of Albany Project in Bethlehem, New York

prepared for

McFarland-Johnson, Inc. 60 Railroad Place, Suite 402, Saratoga Springs, NY 12866

prepared by

biodrawversity

Biodrawversity LLC 206 Pratt Corner Road Leverett, MA 01054

July 2020



Hudson River shoreline along the proposed Port of Albany development project.

INTRODUCTION

Biodrawversity LLC conducted a submerged aquatic vegetation (SAV) survey in the Hudson River and Normanskill for the proposed Port of Albany development project in Bethlehem, New York. The objectives of the survey were document the presence, species composition and relative abundance, density, depth distribution, and areal coverage of SAV along approximately 900 meters of Hudson River shoreline and a 350-meter reach of the lower Normanskill.

SURVEY DATE AND CONDITIONS

The SAV survey was completed concurrently with, and with the same personnel, as a freshwater mussel survey on five consecutive days, from June 15-19, 2020. Weather was sunny and warm on all five days, with air temperature in the mid-80s to low 90s. Water clarity was variable depending on the tidal cycle, but generally turbid (no more than 2-3 ft visibility) in the Normanskill and moderately turbid (usually 6-10 ft visibility) in the Hudson River. Water temperature was

in the low 70s. Low tide, which was the optimal time for surveying subtidal areas, was at approximately 7:30 am on June 15 and then an hour later each day, which was ideal timing for conducting the survey.

SURVEY AREA

In the Hudson River, the survey spanned 900 meters of shoreline, from near the transmission line crossing at the downstream end to the mouth of the Normanskill (Figure 1). The survey area also included a 350-meter reach of the lower Normanskill, from upstream of a proposed new bridge out to its confluence with the Hudson River, including the entire channel (bank to bank) (Figure 1).

METHODS

Due to deep and turbid water, biologists conducted surveys of the subtidal areas of the Hudson River and Normanskill almost entirely by SCUBA diving. As part of the concurrent mussel study, biologists surveyed as far as 50 meters from the shoreline, to water depths

1



Normanskill near the proposed bridge, looking downstream toward its confluence with the Hudson River.

of 9.5 meters (31 ft) below mean high tide, but all SAV was confined to shallow nearshore subtidal areas. In addition to SCUBA surveys, the entire length of the Hudson River shoreline, and both shorelines of the Normanskill, were surveyed at low tide to check the lower intertidal zone and shallow subtidal zone for SAV. Some of the methods originally proposed for this study were modified due to the absence or paucity of SAV in the survey area (confirmed during the concurrent mussel survey). Biologists recorded locations (upstream and downstream limits) of SAV patches using GPS, and recorded the widths and water depths of each patch. Biologists recorded and photographed SAV species present, approximate and relative density, and substrate.

RESULTS

Hudson River: Only three patches of SAV were detected in the survey area (Figure 1, Table 1), including two with a very low density of *Vallisneria americana* along with very few solitary *Trapa natans* and *Potamogeton crispus*, and one with a moderate to high density of *V. americana* and very low densities of *T. natans* and *P.*

crispus. Overall, the most important habitat features in the Hudson River include a large tidal range, and a heavily modified/armored shoreline. An old timber retaining wall runs nearly the entire length of the study area, and there are various types of shoreline armoring (stone, concrete). These features have greatly altered intertidal and nearshore subtidal habitats, and helped to create a steep depth gradient with very little shallow subtidal habitat. Substrate is primarily coarse rock and silt/muck out into deep water, with more sand and gravel in deeper areas. Flow velocities vary with tides, but are generally slow. Turbidity likely limits the presence and depth distribution of submerged aquatic vegetation, since sunlight barely penetrates more than 5-6 ft.

Normanskill: No SAV was observed anywhere in the lower Normanskill. The Normanskill has a large tidal range and a heavily modified shoreline, although it also has extensive intertidal mudflats along portions of the shoreline that were not historically armored. Aside from large rock (riprap) near its confluence with the Hudson River and along its southern shoreline (river-right), substrate was primarily silt/muck, sand,

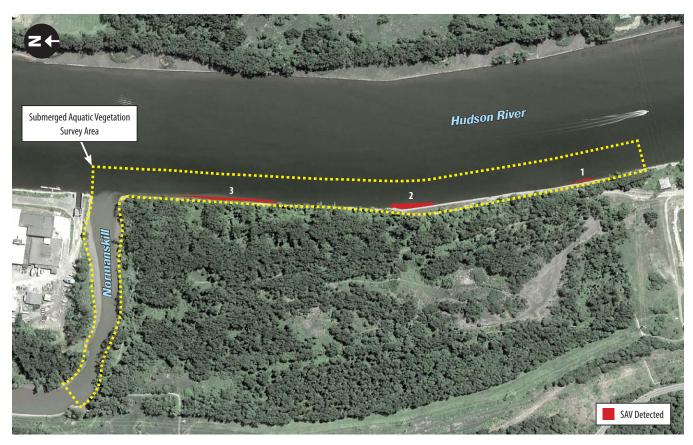


Figure 1. Submerged aquatic vegetation (SAV) survey area in the Hudson River and Normanskill for the proposed Port of Albany development project, showing where patches were detected. See Table 1 for descriptions of the three areas where SAV was detected.

Table 1. Description of the three areas where SAV was detected.

Patch	Length (m)	Width (m)	Area (m²)	SAV Density	Composition and Description
1	25.0	3.0	75.0	Very low	Isolated tufts of <i>V. americana</i> in depths of 2.0-3.5 ft along the edge of the timber retaining wall, in a substrate of silt, gravel, and cobble.
2	75.0	7.5	560.0	Moderate to high	An established bed of <i>V. americana</i> along the edge of the timber retaining wall, on a shallow subtidal shelf in depths of 1.5 to 3.5 ft, in a mix of silt, sand, gravel, cobble, and riprap. Solitary strands of <i>T. natans</i> and <i>P. crispus</i> present among the <i>V. americana</i> .
3	170.0	5.0	850.0	Very low	A long narrow shallow shelf along the edge of the concrete- armored shoreline, with very low density of <i>V. americana</i> , <i>T. natans</i> , and <i>P. crispus</i> growing in shallow water no farther than ~5 meters from the mean low water line.

and gravel in intertidal and subtidal areas. There were only small amounts of emergent aquatic vegetation in the upper intertidal zone. The Normanskill is very turbid, and the subtidal zone cannot support SAV due to poor light penetration.

CONCLUSION

The primary objective of this SAV survey was to determine the presence, species composition and relative abundance, density, depth distribution, and areal coverage of SAV in areas of the Hudson River or Normanskill that would be affected by the proposed Port of Albany development project. SAV was not observed



Bed of water celery, Vallisneria americana (Patch 2).



Solitary water chestnut, *Trapa natans*.

in the Normanskill, and was generally very sparse in the 900-meter reach of the Hudson River, with one notable patch (Patch 2) that contained moderate to high stem densities of *V. americana* in an area approximately 560 m² (75 meters long x 7.5 meters wide). All SAV observed in the Hudson River was concentrated



Solitary curly leaved pondweed, Potamogeton crispus.

very close to shore, in water depths shallower than 4 ft (at low tide), and was likely limited by a combination of turbidity, limited light penetration, and a heavily modified shoreline that essentially eliminated nearly all shallow subtidal areas.



Representative Hudson River shoreline at low tide, Sections 8-9.



Intertidal mudflat in the Normanskill, river-right.



Representative Hudson River shoreline at low tide, Sections 5-6.



Intertidal mudflat in the Normanskill, river-left.



Representative Hudson River shoreline at high tide, near Sections 1-2.



Confluence of the Normanskill and Hudson River, Section 11.

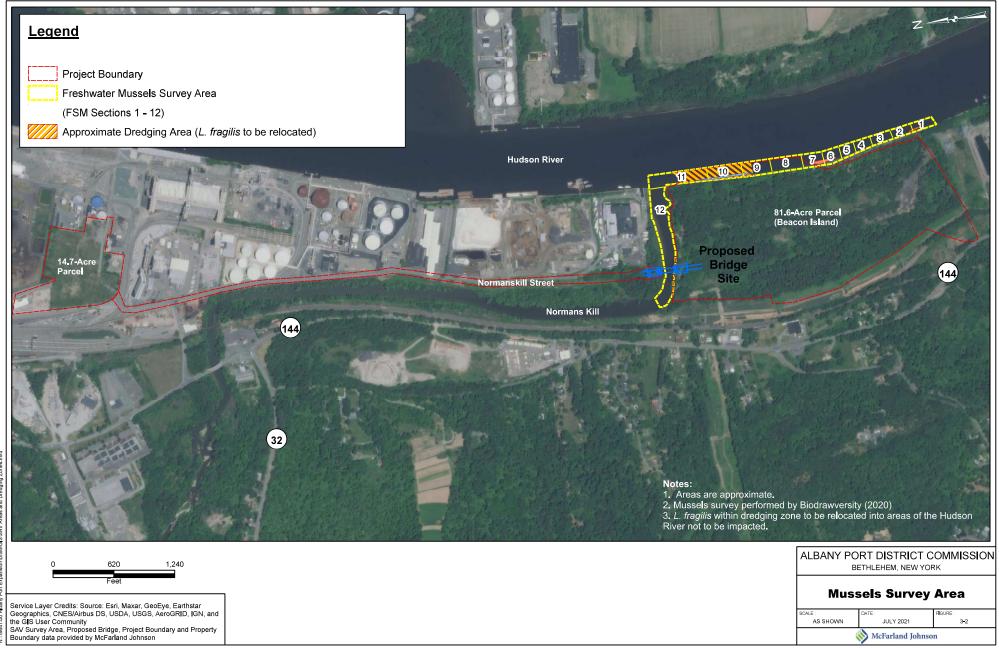
Appendix 3: Freshwater Mussels Survey



6 CRR-NY Part 182 Incidental Take Permit Application

Port of Albany Expansion Project





REPORT

Freshwater Mussel Survey in the Hudson River and Normanskill for the Port of Albany Project in Bethlehem, New York (Albany County)

prepared for

McFarland-Johnson, Inc. 60 Railroad Place, Suite 402, Saratoga Springs, NY 12866

prepared by

biodrawversity

Biodrawversity LLC 206 Pratt Corner Road Leverett, MA 01054

July 2, 2020



Hudson River shoreline along the proposed Port of Albany development project.

INTRODUCTION

Biodrawversity LLC conducted a freshwater mussel survey in the Hudson River and Normanskill for the proposed Port of Albany development project in Bethlehem, New York. The New York State Department of Environmental Conservation (NYSDEC) required the mussel survey as part of the planning and permitting for the project. The mussel survey included a general habitat assessment and a systematic survey of the project area to determine the presence, density, distribution, and habitat of any state-listed (Endangered [E] or Threatened [T]) or state-ranked (S1, S1/S2, or S2) mussel species. In these areas of the Hudson River and Normanskill, potential target species included Anodonta implicata (alewife floater, S-rank = S1/S2) and Leptodea ochracea (tidewater mucket, S-rank = S1). Ethan Nedeau was the point of contact and lead field biologist for this project; Ethan is recognized as a freshwater mussel expert in the region by the NYSDEC and the United States Fish and Wildlife Service.

SURVEY DATE AND CONDITIONS

The survey was completed on five consecutive days, from June 15-19, 2020. Weather was sunny and warm on all five

days, with air temperature in the mid-80s to low 90s. Water clarity was variable depending on the tidal cycle, but generally turbid (no more than 2-3 ft visibility) in the Normanskill and moderately turbid (usually 6-10 ft visibility) in the Hudson River. Water temperature was in the low 70s. Low tide, which was the optimal time for surveying deeper subtidal areas, was at approximately 7:30 am on June 15 and then an hour later each day, which was ideal timing for conducting the mussel surveys.

SURVEY AREA

In the Hudson River, the survey spanned 900 meters of shoreline, from near the transmission line crossing at the downstream end to the mouth of the Normanskill (Figure 1). This area was divided into 11 sections. Surveys extended outward as far as 50 meters from the shoreline, though biologists were constantly vigilant for commercial shipping vessels that passed through these areas regularly. Biologists surveyed to a maximum water depth of 8 meters (26 feet) at low tide, or closer to 9.5 meters (31 ft) below mean high tide. The survey area also included a 350-meter reach of the lower Normanskill, from upstream of a proposed new bridge out to its confluence with the Hudson River, including the entire channel (bank to bank) (Figure 1, Section 12).



Normanskill near the proposed bridge, looking downstream toward its confluence with the Hudson River.

METHODS

Due to deep and turbid water, biologists conducted surveys of the subtidal areas of the Hudson River and Normanskill almost entirely by SCUBA diving. Three SCUBA divers worked together to systematically survey each section, and stopped to record data after each section was completed. In addition, the entire length of the Hudson River shoreline,



Biologists stopping to record data and photographs.

and both shorelines of the Normanskill, were surveyed during low tide to look for live or dead mussels on shore, in the intertidal zone, and in the shallow (<2 ft) subtidal zone. Biologists focused on finding state-listed or S-ranked species, but all mussel species and non-native bivalves encountered during the survey were identified and counted. Biologists intended to record the shell lengths, habitat, and locations of state-listed, S1, S1/S2, and S2 species. Although no species with these ranks were found, biologists did record shell lengths of all species except *Elliptio complanata*. Biologists record general habitat conditions and survey duration for each section, and photographed the survey area, representative habitats, and mussel species found.

RESULTS

I. Hudson River

Mussels: Live mussels of only two native species were found: *E. complanata*, and *Leptodea fragilis* (fragile papershell). *E. complanata* is common in New York, and *L. fragilis* has a state-rank of S3 and has rarely been observed in the tidal Hudson River where it is not native. A total of 113 *E. complanata* were found (Table 1); most of these were found in deeper water (15-25 ft) of Sections 1-3 at the downstream end of the study area. Very few were found

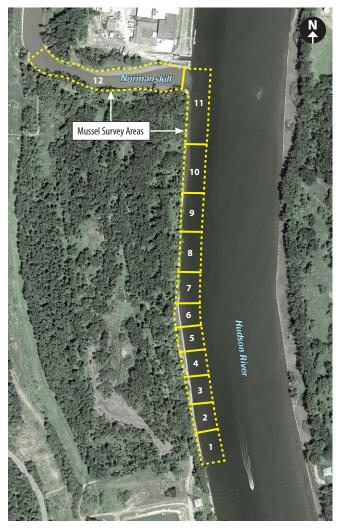


Figure 1. Freshwater mussel survey area in the Hudson River and Normanskill for the proposed Port of Albany development project.

in shallower subtidal areas. Nearly all *E. complanata* were fouled to some extent by the non-native zebra mussel (*Dreissena polymorpha*). A total of 36 *L. fragilis* were found; these occurred at low densities at variable depths in the subtidal zone, along nearly the entire length of the Hudson

River shoreline. *L. fragilis* preferred to embed themselves deeply in fine sediment (silt and sand), a trait which may allow them to escape heavy fouling by zebra mussels. *L. fragilis* ranged in length from 63.0 to 122.0 mm (average = 94.5 mm). In addition to these two species, several old relic shells of *Anodonta implicata* ((alewife floater) were found, and one shell of *Lampsilis radiata* (eastern lampmussel) was found. Zebra mussels existed at moderate to high densities in subtidal areas, and were exceptionally abundant on hard substrates in deep water. The non-native Asian clam (*Corbicula fluminea*) was observed throughout the Hudson River, but usually only shells. No mussel shells were found on the shoreline, and few were found in the intertidal zone.

Habitat Summary: Overall, the most important habitat features in the Hudson River include a large tidal range, and a heavily modified/armored shoreline. An old timber retaining wall runs nearly the entire length of the study area, and there are various types of shoreline armoring (stone, concrete). These features have greatly altered intertidal and nearshore subtidal habitats, and helped to create a steep depth gradient with very little shallow subtidal habitat. Substrate is primarily coarse rock and silt/muck out into deep water, with more sand and gravel in deeper areas. Flow velocities vary with tides, but are generally slow. Submerged aquatic vegetation is generally absent or sparse; only two small patches were observed where there was some shallow subtidal habitat. Turbidity likely limits the depth distribution of submerged aquatic vegetation, since sunlight barely penetrates more than 5-6 ft. Although the habitats we observed are generally suitable for several native mussel species that occur in the lower Hudson River, zebra mussels likely decimated native mussels and will prevent native mussels from ever reestablishing populations.

II. Normanskill

Mussels: No live mussels were found in the Normanskill. A few *E. complanata* shells were found in deep water, but none were found along the shoreline or in the intertidal zone. Zebra mussels were prevalent on hard surfaces in the

Table 1. Summary of survey section lengths, survey duration, species counts, and non-native species presence in the Hudson River and Normanskill.

Section	River	Length (m)	Duration (hrs)	Elliptio complanata	Leptodea fragilis	Anodonta implicata	Lampsilis radiata	Corbicula fluminea	Dreissena polymorpha
1	Hudson River	70	2.25	41	2	Shell	0	Χ	Χ
2	Hudson River	70	2.25	31	2	0	0	Χ	Χ
3	Hudson River	60	2.25	27	3	Shell	0	Χ	Χ
4	Hudson River	60	2.25	7	1	Shell	0	Χ	Χ
5	Hudson River	50	2.25	2	5	0	0	Χ	Χ
6	Hudson River	50	2.25	1	3	0	0	Χ	Χ
7	Hudson River	70	2.75	1	5	0	Shell	Χ	Χ
8	Hudson River	90	3.00	0	3	0	0	Χ	Χ
9	Hudson River	100	3.00	1	4	0	0	Χ	Χ
10	Hudson River	105	3.00	1	3	0	0	Χ	Χ
11	Hudson River	175	3.75	1	5	0	0	Χ	Χ
12	Normanskill	350	5.00	Shell	0	0	0	0	Χ



Representative Hudson River shoreline at low tide, Sections 8-9.



Intertidal mudflat in the Normanskill, river-right.



Representative Hudson River shoreline at low tide, Sections 5-6.



Intertidal mudflat in the Normanskill, river-left.



Representative Hudson River shoreline at high tide, near Sections 1-2.



Confluence of the Normanskill and Hudson River, Section 11.



Fragile papershell (Leptodea fragilis) found during the survey.



Fragile papershell (Leptodea fragilis) fouled with zebra mussels.

subtidal zone, especially the large stone riprap on the outside bend of the Normanskill near the proposed location of the new bridge. Asian clam shells were also found. **Habitat Summary:** The Normanskill also has a large tidal range and a modified shoreline, although it also has extensive intertidal mudflats along portions of the shoreline that

range and a modified shoreline, although it also has extensive intertidal mudflats along portions of the shoreline that were not historically armored. Aside from large riprap near its confluence with the Hudson River and along its southern shoreline, substrate was primarily silt/muck, sand, and gravel in intertidal and subtidal areas. Flow velocities vary with the tides but are generally slow to moderate. No submerged aquatic vegetation was observed and there were only small amounts of emergent aquatic vegetation in the upper intertidal zone. The Normanskill is very turbid, and reduced sunlight cannot support submerged aquatic vegetation in the subtidal zone. Overall, subtidal areas of the Normanskill do appear to provide suitable mussel habitat for several species, but the abundance of zebra mussels and possibly historical water quality issues may have contributed to the absence of native mussels in these areas.



Eastern elliptio (Elliptio complanata) found during the survey.



Zebra mussels (*Dreissena polymorpha*) encrusting a rock in deep water.

CONCLUSION

The primary objective of this mussel survey was to determine the presence, density, distribution, and habitat of any state-listed (Endangered [E] or Threatened [T]) or stateranked (S1, S1/S2, or S2) mussel species in areas of the Hudson River or Normanskill that would be affected by the proposed Port of Albany development project. No E, T, S1, S1/S2, or S2 mussel species were found. Biologists documented a low density of one common native species in the Hudson River (E. complanata), and a low density of one species that is native to New York but not native to the Hudson River (L. fragilis), and shells of two other native species (A. implicata and L. radiata). No live native mussels were found in the Normanskill. It is likely that the combined effects of zebra mussels, historic habitat alteration, and water quality have contributed to the paucity of native mussels in these areas. We do not recommend further freshwater mussel surveys or monitoring for this project.

Appendix 4: Sediment Sampling and Analysis Report



6 CRR-NY Part 182 Incidental Take Permit Application

Port of Albany Expansion Project





ATLANTIC TESTING LABORATORIES

Albany 22 Corporate Drive Clifton Park, NY 12065 518-383-9144 (T) atlantictesting.com

WBE certified company

September 24, 2020

McFarland-Johnson, Inc. 60 Railroad Place, Suite 402 Saratoga Springs, New York 12866

Attn: David Rosa

Re: Sediment Sampling and Analysis Report

Port of Albany Expansion Project

Beacon Island Parcel

Bethlehem, Albany County, New York

MJ Project No. 18641.02

ATL Report No. AT5596CE-03-09-20

Ladies/Gentlemen:

Enclosed is a copy of the Sediment Sampling and Analysis report prepared for the referenced site. This project was completed in accordance with the scope of work outlined in Atlantic Testing Laboratories, Limited (ATL) contract number AT5998-245-03-20, dated March 26, 2020.

Please contact our office should you have any questions, or if we may be of further assistance.

Sincerely.

ATLANTIC TESTING LABORATORIES, Limited

Cheyenne J. Dashnaw, P.E.

Senior Engineer

TSP/CJD/cjd

Enclosures

SEDIMENT SAMPLING AND ANALYSIS REPORT

PORT OF ALBANY EXPANSION PROJECT BEACON ISLAND PARCEL BETHLEHEM, ALBANY COUNTY, NEW YORK



WBE certified company

PREPARED BY:

ATLANTIC TESTING LABORATORIES, LIMITED 22 Corporate Drive Clifton Park, New York 12065

PREPARED FOR:

McFarland Johnson, Inc. 60 Railroad Place, Suite 402 Saratoga Springs, New York 12866 MJ Project No. 18641.02 Albany Port District Commission 106 Smith Boulevard Albany, New York 12202

ATL REPORT No. AT5596CE-03-09-20

September 24, 2020

TABLE OF CONTENTS

2.0 SITE DESCRIPTION	1.0	INTRODUCTION	1
3.1 Sampling Locations	2.0	SITE DESCRIPTION	1
3.2 Sampling Methodologies	3.0	SEDIMENT SAMPLING	1
3.2 Sampling Methodologies	3.1	Sampling Locations	1
4.1 Laboratory Samples			
4.1 Laboratory Samples	4.0	LABORATORY ANALYSIS	2
4.2 Summary of Laboratory Data			
APPENDICES Site Location Map/Sample Location Plan	4.2	Summary of Laboratory Data	2
Site Location Map/Sample Location Plan	5.0	CONCLUSIONS AND RECOMMENDATIONS	2
Core Logs	<u>API</u>	PENDICES	
Laboratory Reports and Sample Custody Documentation (September 2020 Samples)			
Laboratory Reports and Sample Custody Documentation (June 2019 Samples)D			
Laboratory Reports and Sample Custody Documentation (June 2019 Samples)D	Lab	oratory Reports and Sample Custody Documentation (September 2020 Samples)	С

1.0 INTRODUCTION

At the request of McFarland Johnson, representing the Port of Albany, and in accordance with Atlantic Testing Laboratories, Limited (ATL) contract number AT5998-245-03-20, dated March 26, 2020, sediment sampling and analysis were performed for the Beacon Island shoreline, Bethlehem, Albany County, New York. The sampling services were provided on September 2, 2020. The purpose of the sediment sampling and analysis was to provide requisite data for proposed dredging at the subject site, and evaluate potential reuse options.

2.0 SITE DESCRIPTION

The project site is located along the shoreline of Beacon Island on the Hudson River in Bethlehem, Albany County, New York. A Site Location Map/Core Location Plan, depicting the approximate location of the subject property, is contained in Appendix A.

3.0 SEDIMENT SAMPLING

A Sediment Sampling and Analysis Plan was prepared by ATL (reference ATL Report No. AT5596CE-02-06-20 Revision 2, dated July 21, 2020). The Sediment Sampling and Analysis Plan summarized the planned sediment sampling and analysis activities, identified the proposed sample locations and laboratory analysis, and described how the data would be evaluated relative to the proposed dredging work.

In addition to the current sediment sampling and analysis, sediment samples were previously collected by ATL in June 2019. The findings of the previous sediment sampling and analysis are summarized in ATL Report No. CD4644CE-01-07-19, dated July 15, 2019, and ATL Report No. CD4644CD-01-07-19 Addendum 1, dated August 2, 2019. Approximate core locations, core logs, laboratory reports, and summary of results for the previous samples are also incorporated herein.

3.1 Sampling Locations

The locations of the sediment cores were selected based on a plan created by ATL and as described in the Sediment Sampling and Analysis, to obtain representative samples for areas within the proposed dredging. A Site Location Map/Core Location Plan, depicting the approximate core locations for the June 2019 and September 2020 events, proposed dredging locations, and pertinent site features, is contained in Appendix A.

3.2 Sampling Methodologies

A total of 10 sediment cores were advanced to depths ranging between 10 and 15 feet below the surface of the sediment, with equipment refusal encountered prior to obtaining scheduled depths of 20 to 25 feet for some of the locations. All cores were advanced utilizing a Rossfelder P-3 Vibracore with 4-inch diameter core tubes. Sediment samples were collected continuously at each core location. 4-inch cellulose acetate butyrate (CAB) liners were utilized to extract the samples.

Recovered sediment material was field classified, in general accordance with ASTM D 2488, and representative material throughout the depth of the core was containerized. In addition to the soil type, soil descriptions included the general moisture content, color, and relative plasticity. Core Logs, containing a description of the subsurface stratigraphy

encountered at each core location, are contained in Appendix B. In addition to core logs for the 10 locations investigated in September 2020, Appendix B also includes core logs for 5 locations investigated in June 2019.

4.0 LABORATORY ANALYSIS

4.1 Laboratory Samples

Sediment samples requiring laboratory analysis for particle size/sieve analysis were collected in sealed polyethylene sample bags. Sediment samples that required other laboratory analysis were collected in clean laboratory glassware, with Teflon-lined lids, in accordance with industry standard protocol. Disposable sampling equipment (i.e., plastic bags, nitrile gloves) were utilized to collect these samples, and the samples were stored in a cooler, with ice, and maintained at approximately 4°C during storage and delivery to the laboratory.

A total of 10 sediment samples were collected on September 2, 2020 for subsequent analysis. The samples were submitted to Alpha Analytical, located in Westborough, Massachusetts, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) approved laboratory (ELAP No. 11148). The sediment samples were laboratory analyzed for total organic carbon (TOC), in accordance with EPA Method 9060A; Target Analtye List (TAL) metals, in accordance with EPA Methods 6010B, 7196, and 7471; volatile organic compound (VOC), in accordance with EPA Method 8260; semi-VOC, in accordance with EPA Method 8270; pesticides, in accordance with EPA Method 8081A; and total polychlorinated biphenyls (PCB), in accordance with EPA Method 8082.

The 10 sediment samples were also laboratory analyzed for particle size/sieve analysis at the ATL soil laboratory in Canton, New York.

A total of 2 quality control samples were collected, including a duplicate sediment sample, and MS/MSD sediment sample. These samples were laboratory analyzed for select metals, in accordance with EPA Methods 6010B, 7196, and 7471; volatile organic compound (VOC), in accordance with EPA Method 8260; semi-VOC, in accordance with EPA Method 8081A; and total polychlorinated biphenyls (PCB), in accordance with EPA Method 8082

4.2 Summary of Laboratory Data

A copy of the laboratory reports and associated sample custody documentation for the samples collected on is contained in Appendix C. Laboratory analysis reports are also provided in Appendix D, to include the data for sediment samples collected on June 13, 2019. Summaries of analytical results for all samples collected to date are provided in Tables E-1, E-2, and E-3, contained in Appendix E.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following is a summary of findings from the sediment sampling performed by ATL. Recommendations for further investigation and/or sediment disposal activities are also provided, as warranted.

The sediment sampling did identify various detectable concentrations of target metals, PCB, pesticides, VOC, and semi-VOC in the collected samples. All of the detected VOC, semi-VOC, and pesticides were below Class A NYSDEC TOGS 5.1.9 Threshold values. A majority of the detected metals were below Class A NYSDEC TOGS 5.1.9 Threshold values. Various detected metals in the samples S-10, S-11, S-14, and S-15 were identified as being in the Class B range. The concentration of PCB in samples S-10 were identified as being in the Class B range. The concentration of PCB in samples S-11 and S-14 were identified as being in the Class C range.

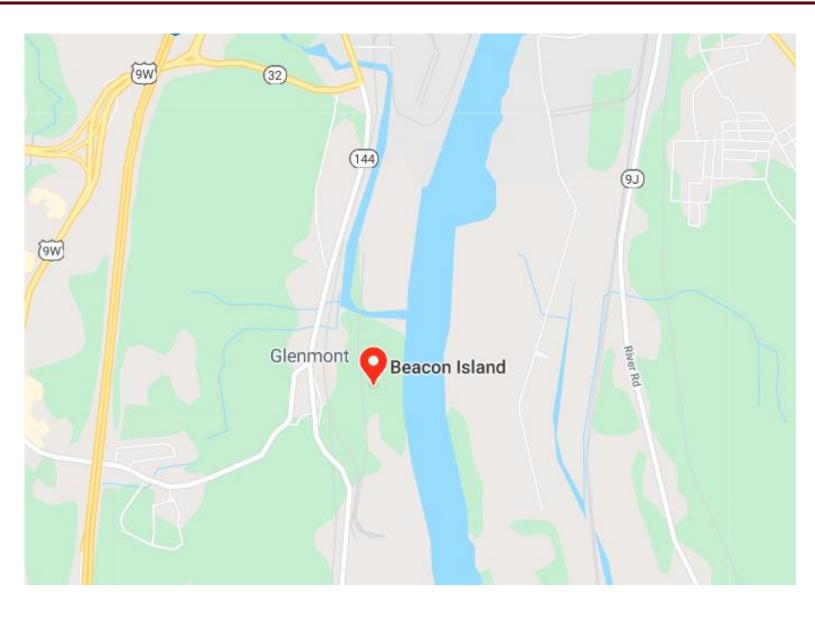
Based on the information collected during the sediment sampling and analysis, sediment located within sampled areas appears to be silty clay and sand with minimal portions of gravel. If this material is to be removed, it is anticipated that a majority of the dredging can be completed per criteria for Class B sediments (with Class C sediment considerations in the areas of S-11 and S-14).

Removed materials should be managed under an appropriate approved reuse option, via a Beneficial Use Determination, or properly disposed of per NYSDEC regulations. Based on a comparison of the laboratory analysis data to 6 NYCRR Part 360 fill material predetermined beneficial use criteria, there are exceedances of the limits for general fill, restricted-use fill, and limited-use fill. In consideration of these exceedances, it is anticipated that the dredge material (or portions thereof) will require transport and disposal at an authorized landfill facility.

It is noted that ATL cannot warrant similar conditions would be encountered in other areas not specifically investigated.

APPENDIX A

SITE LOCATION MAP/SAMPLE LOCATION PLAN



Site Location Map	Drawn by:		Scale:	Project No.:	Date:
	TSP		Not to scale	AT5596	May 2020
Beacon Island Parcel Bethlehem, Albany County, New York	Albany, NY Poughkeepsie,	ATLANTION Binghamton, N Syracuse, NY	·	Elmira, NY	Plattsburgh, NY Watertown, NY





LEGEND:

C-3

Approximate Core Location (June 2019)

C-9

Approximate Core Location (September 2020)

CORE LOCATION PLAN

Drawn By:

wirig.

Scale:

1 As Noted

Project No.: Date :

AT5596 September 2020

Beacon Island Parcel Bethlehem, Albany County, New York



Albany, NY Binghamton, NY Canton, NY Elmira, NY Poughkeepsie, NY Plattsburgh, NY Rochester, NY Syracuse, NY Utica, NY Watertown, NY

APPENDIX B

CORE LOGS

Sediment Sampling Services

McFarland Johnson

Beacon Island Expansion Bethlehem, Albany County, New York

ATL Project No. AT5596CE-03-09-20

SEDIMENT CORE NUMBER: **S-6**

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 23.58"

Longitude 73 45' 46.53"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 15'	Grey cmf SAND; little SILT; trace f GRAVEL
_			
1			
2			
3			
4			
5			
6			
7	7.5'		
8			
9			
10			
11			
12			
13			
14			
15			

See grain size laboratory analysis data for additional material classification information.

^{*} Depth is feet below top of sediment

Sediment Sampling Services
McFarland Johnson
Beacon Island Expansion
Bethlehem, Albany County, New York
ATL Project No. AT5596CE-03-09-20

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 22.39"

Latitude 42 36 22.39 Longitude 73 45' 46.66"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 15'	Grey cmf SAND; some SILT; trace f GRAVEL
1			
2			
3			
4			
5			
6			
7	7.1'		
8			
9			
10			
11			
12			
13			
14			
15			
NOTES:			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services
McFarland Johnson
Beacon Island Expansion
Bethlehem, Albany County, New York
ATL Project No. AT5596CE-03-09-20

METHOD OF CORE ADVANCEMENT: 4" Vibracore
ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 21.16"

Longitude 73 45' 46.50"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 10'	Grey cmf SAND; some SILT; little cmf GRAVEL
1			
2			
3			
4			
5	8.8'		
6			
7			
'			
8			
9			
10			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services
McFarland Johnson
Beacon Island Expansion
Bethlehem, Albany County, New York
ATL Project No. AT5596CE-03-09-20

METHOD OF CORE ADVANCEMENT: 4" Vibracore
ADVANCEMENT DATE: September 2, 2020
Latitude 42 36' 19.78"

Longitude 73 45' 46.70"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 10'	Grey cmf SAND; some SILT; trace mf GRAVEL
1			
2			
3			
4			
5	5.6'		
6			
7			
8			
9			
10			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services McFarland Johnson Beacon Island Expansion

Bethlehem, Albany County, New York ATL Project No. AT5596CE-03-09-20

SEDIMENT CORE NUMBER: S-10

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 17.77"

Longitude 73 45' 46.60"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 10'	Grey cmf SAND; some SILT; trace mf GRAVEL
1			
2			
3			
4			
5	4.2'		
6			
7			
8			
9			
10			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services **McFarland Johnson Beacon Island Expansion Bethlehem, Albany County, New York**

ATL Project No. AT5596CE-03-09-20

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 16.68"

Longitude 73 45' 47.00"

SEDIMENT SAMPLING CREW: Tim Gavin

SEDIMENT CORE NUMBER: **S-11**

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 15'	Grey cmf SAND; some SILT; trace mf GRAVEL
1			
2			
3			
4			
5			
6			
7	8.2'		
8			
9			
10			
11			
12			
13			
14			
15			

See grain size laboratory analysis data for additional material classification information.

^{*} Depth is feet below top of sediment

Sediment Sampling Services

McFarland Johnson

Beacon Island Expansion

Bethlehem, Albany County, New York

ATL Project No. AT5596CE-03-09-20

SEDIMENT CORE NUMBER: S-12

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 15.86"

Longitude 73 45' 46.43"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 10'	Grey cmf SAND; little cmf GRAVEL; trace SILT
1			
2			
3			
4			
5	3.8'		
6			
7			
8			
9			
10			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services McFarland Johnson Beacon Island Expansion

Bethlehem, Albany County, New York ATL Project No. AT5596CE-03-09-20

SEDIMENT CORE NUMBER: S-13

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 14.87"

Longitude 73 45' 46.73"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 15'	Grey SILT; and CLAY
1			
2			
3			
4			
5	<u> </u>		
6			
7	9.6'		
8			
9			
10			
11			
12			
13			
14			
15			
NOTES:	<u>!</u>		

See grain size laboratory analysis data for additional material classification information.

^{*} Depth is feet below top of sediment

Sediment Sampling Services
McFarland Johnson
Beacon Island Expansion
Bethlehem, Albany County, New York
ATL Project No. AT5596CE-03-09-20

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 13.88"

Longitude 73 45' 47.14"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0		0' - 15'	Grey cmf SAND; some SILT; little CLAY; trace cmf GRAVEL
1			
2			
3			
4			
5			
6			
7	14.8'		
8			
9			
10			
11			
12			
13			
14			
15			
NOTES:			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

Sediment Sampling Services McFarland Johnson Beacon Island Expansion

Bethlehem, Albany County, New York ATL Project No. AT5596CE-03-09-20

SEDIMENT CORE NUMBER: S-15

METHOD OF CORE ADVANCEMENT: 4" Vibracore

ADVANCEMENT DATE: September 2, 2020

Latitude 42 36' 13.15"

Longitude 73 45' 46.56"

SEDIMENT SAMPLING CREW: Tim Gavin

Corey Farmer

Depth** (feet)	Recovery (feet)	Depth (feet)	Classification of Material*
0 1 2 3 3 4 5 5 6 6 7 7 8 9 10 11	Recc (fe	(feet) 0' - 15'	Grey CLAY; and SILT; trace cmf GRAVEL; trace f SAND
12			
13			
14			
15			

^{*} See grain size laboratory analysis data for additional material classification information.

^{**} Depth is feet below top of sediment

APPENDIX C

LABORATORY REPORTS AND SAMPLE CUSTODY DOCUMENTATION (SEPTEMBER 2020 SAMPLES)



ANALYTICAL REPORT

Lab Number: L2036369

Client: Atlantic Testing Laboratories, Limited

22 Corporate Drive Clifton Park, NY 12065

ATTN: Cheyenne Dashnaw

Phone: (518) 383-9144

Project Name: BEACON ISLAND

Project Number: AT5596
Report Date: 09/17/20

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369 **Report Date:** 09/17/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2036369-01	S-6	SOIL	GLENMONT, NY	09/02/20 13:40	09/02/20
L2036369-02	S-7	SOIL	GLENMONT, NY	09/02/20 14:10	09/02/20
L2036369-03	S-8	SOIL	GLENMONT, NY	09/02/20 11:00	09/02/20
L2036369-04	S-9	SOIL	GLENMONT, NY	09/02/20 11:30	09/02/20
L2036369-05	S-10	SOIL	GLENMONT, NY	09/02/20 12:00	09/02/20
L2036369-06	S-11	SOIL	GLENMONT, NY	09/02/20 15:05	09/02/20
L2036369-07	S-12	SOIL	GLENMONT, NY	09/02/20 12:30	09/02/20
L2036369-08	S-13	SOIL	GLENMONT, NY	09/02/20 14:40	09/02/20
L2036369-09	S-14	SOIL	GLENMONT, NY	09/02/20 15:35	09/02/20
L2036369-10	S-15	SOIL	GLENMONT, NY	09/02/20 16:00	09/02/20
L2036369-11	DUP01	SOIL	GLENMONT, NY	09/02/20 00:00	09/02/20



L2036369

Lab Number:

Project Name: BEACON ISLAND

Project Number: AT5596 Report Date: 09/17/20

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.							



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Case Narrative (continued)

Report Submission

September 17, 2020: This final report includes the results of all requested analyses.

September 10, 2020: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Volatile Organics

L2036369-08: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (29%) and the surrogate recovery for 4-bromofluorobenzene (146%) were outside the acceptance criteria; however, re-analysis achieved similar results: chlorobenzene-d5 (34%), 1,4-dichlorobenzene-d4 (19%), and toluene-d8 (146%). The results of both analyses are reported.

L2036369-10: The internal standard (IS) responses for chlorobenzene-d5 (35%) and 1,4-dichlorobenzene-d4 (24%), and the surrogate recovery for toluene-d8 (135%) were outside the acceptance criteria; however, reanalysis achieved similar results: chlorobenzene-d5 (37%), 1,4-dichlorobenzene-d4 (26%), and toluene-d8 (137%). The results of both analyses are reported.

PCBs

L2036369-06 contains peaks which match the retention times for Aroclor 1242, but do not match the area ratios typical for this aroclor. The result for Aroclor 1242 is reported as "weathered".

L2036369-09: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Case Narrative (continued)

Total Metals

L2036369-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1406658-3/-4 MS/MSD recoveries for aluminum (354%/630%), calcium (249%/348%), iron (970%/1900%), and magnesium (145%/144%), performed on L2036369-04, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1406658-3/-4 MS/MSD recoveries, performed on L2036369-04, are outside the acceptance criteria for manganese (134%/170%). A post digestion spike was performed and was within acceptance criteria.

Total Organic Carbon

The WG1406703-3 MS recovery for total organic carbon (rep1) (74%) performed on L2036369-04, is outside the 75-125% acceptance criteria, possibly due to sample matrix. The associated SRM recoveries are within criteria, indicating the sample batch was in control, and all sample results were accepted.

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:

Title: Technical Director/Representative Date: 09/17/20

600, Sew on Kelly Stenstrom

ORGANICS



VOLATILES



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

O/tim EE ItE

Lab ID: L2036369-01 Client ID: S-6

Sample Location: GLENMONT, NY

Date Received: Field Prep:

Date Collected:

09/02/20 13:40 09/02/20 Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 09/08/20 16:38

Analyst: JC Percent Solids: 76%

Volatile Organics by GC/MS - Westborough I Methylene chloride 1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane	ND N		ug/kg ug/kg ug/kg ug/kg ug/kg	6.4 1.3 1.9 1.3 1.3	2.9 0.19 0.18 0.30 0.16 0.18	1 1 1 1
1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	ND ND ND ND ND ND ND		ug/kg ug/kg ug/kg ug/kg ug/kg	1.3 1.9 1.3 1.3	0.19 0.18 0.30 0.16	1 1 1
Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	ND ND ND ND		ug/kg ug/kg ug/kg ug/kg	1.9 1.3 1.3	0.18 0.30 0.16	1
Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	ND ND ND		ug/kg ug/kg ug/kg	1.3 1.3	0.30 0.16	1
1,2-Dichloropropane Dibromochloromethane	ND ND ND		ug/kg ug/kg	1.3	0.16	
Dibromochloromethane	ND ND		ug/kg			1
	ND			1.3	0.18	
1 1 2 Trichlaraethana			//			1
1, 1,2-111011010ethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene			ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.89	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.21	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.64	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.1	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.70	1
Ethylbenzene	0.18	J	ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.6	0.75	1
Vinyl chloride	ND		ug/kg	1.3	0.43	1
Chloroethane	ND		ug/kg	2.6	0.58	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.18	1



L2036369

Lab Number:

Project Name: BEACON ISLAND

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.64	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.72	1
o-Xylene	ND		ug/kg	1.3	0.37	1
Xylenes, Total	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.30	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	44		ug/kg	13	6.2	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	5.7	J	ug/kg	13	2.8	1
Vinyl acetate	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.16	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.64	0.17	1
Bromobenzene	ND		ug/kg	2.6	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.15	1
o-Chlorotoluene	ND		ug/kg	2.6	0.24	1
p-Chlorotoluene	ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.1	0.22	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.1	0.83	1
Acrylonitrile	ND		ug/kg	5.1	1.5	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.41	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.35	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.43	1	
1,4-Dioxane	ND		ug/kg	100	45.	1	
p-Diethylbenzene	ND		ug/kg	2.6	0.23	1	
p-Ethyltoluene	ND		ug/kg	2.6	0.49	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.24	1	
Ethyl ether	ND		ug/kg	2.6	0.44	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.4	1.8	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	100		70-130	
Toluene-d8	101		70-130	
4-Bromofluorobenzene	111		70-130	
Dibromofluoromethane	117		70-130	



09/02/20 14:10

Not Specified

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Date Received:

Field Prep:

Lab ID: L2036369-02

Client ID: S-7

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 16:59

Analyst: JC Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	h Lab					
Methylene chloride	ND		ug/kg	7.2	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.72	0.28	1
Chlorobenzene	ND		ug/kg	0.72	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.72	0.24	1
Bromodichloromethane	ND		ug/kg	0.72	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.72	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.72	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.72	0.23	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.72	0.24	1
Benzene	ND		ug/kg	0.72	0.24	1
Toluene	ND		ug/kg	1.4	0.78	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.9	0.83	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.9	0.65	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND	ı	ug/kg	0.72	0.20	1
1,2-Dichlorobenzene	ND	ı	ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND	ı	ug/kg	2.9	0.21	1
1,4-Dichlorobenzene	ND	ı	ug/kg	2.9	0.24	1
Methyl tert butyl ether	ND	ı	ug/kg	2.9	0.29	1
p/m-Xylene	ND	ı	ug/kg	2.9	0.80	1
o-Xylene	ND	ı	ug/kg	1.4	0.42	1
Xylenes, Total	ND	ı	ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND	ı	ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND	ı	ug/kg	1.4	0.20	1
Dibromomethane	ND	ı	ug/kg	2.9	0.34	1
Styrene	ND	ı	ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND	ı	ug/kg	14	1.3	1
Acetone	89	ı	ug/kg	14	6.9	1
Carbon disulfide	ND	ı	ug/kg	14	6.5	1
2-Butanone	16	ı	ug/kg	14	3.2	1
Vinyl acetate	ND	ı	ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND	ı	ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND	ı	ug/kg	2.9	0.18	1
2-Hexanone	ND	ı	ug/kg	14	1.7	1
Bromochloromethane	ND	ı	ug/kg	2.9	0.29	1
2,2-Dichloropropane	ND	ı	ug/kg	2.9	0.29	1
1,2-Dibromoethane	ND	ı	ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND	ı	ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND	ı	ug/kg	0.72	0.19	1
Bromobenzene	ND	ı	ug/kg	2.9	0.21	1
n-Butylbenzene	ND	ı	ug/kg	1.4	0.24	1
sec-Butylbenzene	ND	ı	ug/kg	1.4	0.21	1
tert-Butylbenzene	ND	ı	ug/kg	2.9	0.17	1
o-Chlorotoluene	ND	ı	ug/kg	2.9	0.27	1
p-Chlorotoluene	ND	ı	ug/kg	2.9	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.7	0.93	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.46	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.39	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	0.48	1	
1,4-Dioxane	ND		ug/kg	110	50.	1	
p-Diethylbenzene	ND		ug/kg	2.9	0.25	1	
p-Ethyltoluene	ND		ug/kg	2.9	0.55	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.27	1	
Ethyl ether	ND		ug/kg	2.9	0.49	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.2	2.0	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	117	70-130	



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8

Date Received: 09/02/20 Field Prep: Sample Location: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 09/08/20 17:19

Analyst: JC 75% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	jh Lab					
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.61	0.19	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.17	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg ug/kg	12	1.1	1
Acetone	35		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	4.9	J		12	2.7	1
Vinyl acetate	ND	J	ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
	ND		ug/kg	2.4	0.25	1
Bromochloromethane 2,2-Dichloropropane	ND ND		ug/kg	2.4	0.25	1
	ND		ug/kg	1.2	0.25	
1,2-Dibromoethane			ug/kg			1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.79	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20 Field Prep: Not Specified

Sample Location: GLENMONT, NY

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1	
1,4-Dioxane	ND		ug/kg	98	43.	1	
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1	
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1	
Ethyl ether	ND		ug/kg	2.4	0.42	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	97	70-130	
Dibromofluoromethane	111	70-130	



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: Date Received: 09/02/20 S-9

Sample Location: Field Prep: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 09/08/20 17:40

JC Analyst: 75% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methylene chloride	ND		ug/kg	6.6	3.0	1	
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1	
Chloroform	ND		ug/kg	2.0	0.18	1	
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1	
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1	
Dibromochloromethane	ND		ug/kg	1.3	0.18	1	
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.35	1	
Tetrachloroethene	ND		ug/kg	0.66	0.26	1	
Chlorobenzene	ND		ug/kg	0.66	0.17	1	
Trichlorofluoromethane	ND		ug/kg	5.2	0.91	1	
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1	
1,1,1-Trichloroethane	ND		ug/kg	0.66	0.22	1	
Bromodichloromethane	ND		ug/kg	0.66	0.14	1	
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1	
cis-1,3-Dichloropropene	ND		ug/kg	0.66	0.21	1	
1,3-Dichloropropene, Total	ND		ug/kg	0.66	0.21	1	
1,1-Dichloropropene	ND		ug/kg	0.66	0.21	1	
Bromoform	ND		ug/kg	5.2	0.32	1	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.66	0.22	1	
Benzene	ND		ug/kg	0.66	0.22	1	
Toluene	ND		ug/kg	1.3	0.71	1	
Ethylbenzene	ND		ug/kg	1.3	0.18	1	
Chloromethane	ND		ug/kg	5.2	1.2	1	
Bromomethane	ND		ug/kg	2.6	0.76	1	
Vinyl chloride	ND		ug/kg	1.3	0.44	1	
Chloroethane	ND		ug/kg	2.6	0.59	1	
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1	
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1	



L2036369

Lab Number:

Project Name: BEACON ISLAND

Project Number: Report Date: 09/17/20 AT5596

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20 Not Specified

Sample Location: GLENMONT, NY Field Prep:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.66	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.73	1
o-Xylene	ND		ug/kg	1.3	0.38	1
Xylenes, Total	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.31	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	46		ug/kg	13	6.3	1
Carbon disulfide	ND		ug/kg	13	6.0	1
2-Butanone	7.2	J	ug/kg	13	2.9	1
Vinyl acetate	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.17	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.27	1
2,2-Dichloropropane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.66	0.17	1
Bromobenzene	ND		ug/kg	2.6	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.15	1
o-Chlorotoluene	ND		ug/kg	2.6	0.25	1
p-Chlorotoluene	ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.22	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.2	0.85	1
Acrylonitrile	ND		ug/kg	5.2	1.5	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Campio Location. CLETWICTT, 141

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.36	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.44	1	
1,4-Dioxane	ND		ug/kg	100	46.	1	
p-Diethylbenzene	ND		ug/kg	2.6	0.23	1	
p-Ethyltoluene	ND		ug/kg	2.6	0.50	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.25	1	
Ethyl ether	ND		ug/kg	2.6	0.45	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.6	1.9	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	107	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	96	70-130	
Dibromofluoromethane	110	70-130	

09/02/20 12:00

Not Specified

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Date Received:

Field Prep:

SAIVIFLE RESU

Lab ID: L2036369-05 Client ID: S-10

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 18:01

Analyst: JC Percent Solids: 74%

1,1-Dichloroethane ND ug/kg 1.3 0.19 1 Chloroform ND ug/kg 2.0 0.18 1 Carbon eterachloride ND ug/kg 1.3 0.30 1 1,2-Dichloropropane ND ug/kg 1.3 0.17 1 Dibromochloromethane ND ug/kg 1.3 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.3 0.35 1 Tetrachloroethane ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.26 1 Trichloroflucromethane ND ug/kg 0.66 0.26 1 1,2-Dichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 cis-1,3-Dichloropropene ND ug/kg 0.66 </th <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,1-Dichloroethane ND ug/kg 1.3 0.19 1 Chloroform ND ug/kg 2.0 0.18 1 Carbon eterachloride ND ug/kg 1.3 0.30 1 1,2-Dichloropropane ND ug/kg 1.3 0.17 1 Dibromochloromethane ND ug/kg 1.3 0.35 1 1,1,2-Trichloroethane ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.26 1 Trichlorofluoromethane ND ug/kg 0.66 0.26 1 1,2-Dichloroethane ND ug/kg 0.66 0.17 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 cis-1,3-Dichloropropene ND ug/kg 0.66	Volatile Organics by GC/MS - Wes	stborough Lab					
1,1-Dichloroethane ND ug/kg 1.3 0.19 1 Chloroform ND ug/kg 2.0 0.18 1 Carbon tetrachloride ND ug/kg 1.3 0.30 1 1,2-Dichloropropane ND ug/kg 1.3 0.17 1 Dibromochloromethane ND ug/kg 1.3 0.35 1 1,1,2-Trichloroethane ND ug/kg 1.3 0.35 1 Tetrachloroethane ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.26 1 Trichlorofubromethane ND ug/kg 5.3 0.92 1 1,1-1-Trichloroethane ND ug/kg 0.66 0.14 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 trans-1,3-Dichloropropene ND ug/kg 0.6	Methylene chloride	ND		ug/kg	6.6	3.0	1
Chloroform ND ug/kg 2.0 0.18 1 Carbon tetrachloride ND ug/kg 1.3 0.30 1 1.2-Dichloropropane ND ug/kg 1.3 0.17 1 Dibromochloromethane ND ug/kg 1.3 0.18 1 1.1,2-Trichloroethane ND ug/kg 1.3 0.18 1 1.1,2-Trichloroethane ND ug/kg 1.3 0.35 1 1.10-Trichloroethane ND ug/kg 0.66 0.26 1 1.2-Dichloroethane ND ug/kg 5.3 0.92 1 1.1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.21 1 Bromodichloromethane ND ug/kg 0.66 0.21 1 1.1,1-Dichloropropene ND ug/kg 0.	1,1-Dichloroethane	ND			1.3	0.19	1
1,2-Dichloropropane ND	Chloroform	ND		ug/kg	2.0	0.18	1
Dibromochloromethane ND ug/kg 1.3 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.3 0.35 1 Tetrachloroethane ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.17 1 Trichlorofluoromethane ND ug/kg 5.3 0.92 1 1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.22 1 Bromodichloropropene ND ug/kg 0.66 0.22 1 Bromodichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 1,1,1,2,2-Tetrachloroethane ND ug/kg	Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,1,2-Trichloroethane ND ug/kg 1.3 0.35 1 Tetrachloroethane ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.17 1 Trichloroftuoromethane ND ug/kg 5.3 0.92 1 1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.22 1 Bromodichloropropene ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 sis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.22 1 Bromoform ND ug/kg	1,2-Dichloropropane	ND		ug/kg	1.3	0.17	1
Tetrachloroethene ND ug/kg 0.66 0.26 1 Chlorobenzene ND ug/kg 0.66 0.17 1 Trichlorofluoromethane ND ug/kg 5.3 0.92 1 1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 Bromodichloropropene ND ug/kg 0.66 0.14 1 Bromodichloropropene ND ug/kg 0.66 0.21 1 cis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 1.3	Dibromochloromethane	ND		ug/kg	1.3	0.18	1
Chlorobenzene ND ug/kg 0.66 0.17 1 Trichlorofluoromethane ND ug/kg 5.3 0.92 1 1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,1-Dichloropropene, Total ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.19 </td <td>1,1,2-Trichloroethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.3</td> <td>0.35</td> <td>1</td>	1,1,2-Trichloroethane	ND		ug/kg	1.3	0.35	1
Trichlorofluoromethane ND ug/kg 5.3 0.92 1 1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 1.3 0.36 1 sis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 0.66 0.21 1 1,1-2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 5.3	Tetrachloroethene	ND		ug/kg	0.66	0.26	1
1,2-Dichloroethane ND ug/kg 1.3 0.34 1 1,1,1-Trichloroethane ND ug/kg 0.66 0.22 1 Bromodichloromethane ND ug/kg 0.66 0.14 1 Bromodichloropropene ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene, Total ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 2.6	Chlorobenzene	ND		ug/kg	0.66	0.17	1
ND	Trichlorofluoromethane	ND		ug/kg	5.3	0.92	1
Bromodichloromethane ND ug/kg 0.66 0.14 1 trans-1,3-Dichloropropene ND ug/kg 1.3 0.36 1 cis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 2.6 0.60 <t< td=""><td>1,2-Dichloroethane</td><td>ND</td><td></td><td>ug/kg</td><td>1.3</td><td>0.34</td><td>1</td></t<>	1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
trans-1,3-Dichloropropene ND ug/kg 1.3 0.36 1 cis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 0.66 0.22 1 Ethylbenzene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 1.3 0.44 1	1,1,1-Trichloroethane	ND		ug/kg	0.66	0.22	1
cis-1,3-Dichloropropene ND ug/kg 0.66 0.21 1 1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1 <td>Bromodichloromethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>0.66</td> <td>0.14</td> <td>1</td>	Bromodichloromethane	ND		ug/kg	0.66	0.14	1
1,3-Dichloropropene, Total ND ug/kg 0.66 0.21 1 1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
1,1-Dichloropropene ND ug/kg 0.66 0.21 1 Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	cis-1,3-Dichloropropene	ND		ug/kg	0.66	0.21	1
Bromoform ND ug/kg 5.3 0.33 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	1,3-Dichloropropene, Total	ND		ug/kg	0.66	0.21	1
1,1,2,2-Tetrachloroethane ND ug/kg 0.66 0.22 1 Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	1,1-Dichloropropene	ND		ug/kg	0.66	0.21	1
Benzene ND ug/kg 0.66 0.22 1 Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Bromoform	ND		ug/kg	5.3	0.33	1
Toluene ND ug/kg 1.3 0.72 1 Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	1,1,2,2-Tetrachloroethane	ND		ug/kg	0.66	0.22	1
Ethylbenzene ND ug/kg 1.3 0.19 1 Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Benzene	ND		ug/kg	0.66	0.22	1
Chloromethane ND ug/kg 5.3 1.2 1 Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Toluene	ND		ug/kg	1.3	0.72	1
Bromomethane ND ug/kg 2.6 0.77 1 Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Ethylbenzene	ND		ug/kg	1.3	0.19	1
Vinyl chloride ND ug/kg 1.3 0.44 1 Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Chloromethane	ND		ug/kg	5.3	1.2	1
Chloroethane ND ug/kg 2.6 0.60 1 1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Bromomethane	ND		ug/kg	2.6	0.77	1
1,1-Dichloroethene ND ug/kg 1.3 0.32 1	Vinyl chloride	ND		ug/kg	1.3	0.44	1
-9.19	Chloroethane	ND		ug/kg	2.6	0.60	1
trans-1,2-Dichloroethene ND ug/kg 2.0 0.18 1	1,1-Dichloroethene	ND		ug/kg	1.3	0.32	1
	trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Trichloroethene	ND		ug/kg	0.66	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.20	
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.27	1
p/m-Xylene	ND		ug/kg	2.6	0.74	1
o-Xylene	ND		ug/kg	1.3	0.39	 1
Xylenes, Total	ND		ug/kg	1.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.32	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg ug/kg	13	1.2	1
Acetone	61		ug/kg	13	6.4	1
Carbon disulfide	ND		ug/kg	13	6.0	1
2-Butanone	12	J	ug/kg	13	2.9	1
Vinyl acetate	ND	J		13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg ug/kg	13	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.17	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg ug/kg	2.6	0.27	1
2,2-Dichloropropane	ND			2.6	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.37	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.66	0.22	1
Bromobenzene	ND		ug/kg	2.6	0.18	1
n-Butylbenzene	ND		ug/kg	1.3	0.19	1
	ND		ug/kg			
sec-Butylbenzene	ND		ug/kg	2.6	0.19	1
tert-Butylbenzene			ug/kg			
o-Chlorotoluene	ND		ug/kg	2.6	0.25	1
p-Chlorotoluene	ND ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane Hexachlorobutadiene	ND ND		ug/kg	5.3	0.22	1
			ug/kg			
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.3	0.86	1
Acrylonitrile	ND		ug/kg	5.3	1.5	1



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: Date Received: 09/02/20 S-10

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.23	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.43	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.36	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.26	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.44	1	
1,4-Dioxane	ND		ug/kg	110	47.	1	
p-Diethylbenzene	ND		ug/kg	2.6	0.24	1	
p-Ethyltoluene	ND		ug/kg	2.6	0.51	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.25	1	
Ethyl ether	ND		ug/kg	2.6	0.45	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.6	1.9	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	110		70-130	
Toluene-d8	99		70-130	
4-Bromofluorobenzene	109		70-130	
Dibromofluoromethane	119		70-130	



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date: 09/17/20

Lab Number:

Lab ID: L2036369-06

Client ID: S-11

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 09/08/20 18:22

Analyst: JC 74% Percent Solids:

Date Co	llected: 09	/02/20 15:05

Date Received: 09/02/20 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We	stborough Lab					
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.77	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.18	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.64	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	68		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	12		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.72	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboroug	gh Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1	
1,4-Dioxane	ND		ug/kg	89	39.	1	
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1	
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1	
Ethyl ether	ND		ug/kg	2.2	0.38	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	104	70-130	
Dibromofluoromethane	116	70-130	



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Lab ID: L2036369-07 Client ID: S-12

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 18:43

Analyst: JC Percent Solids: 72%

Date Collected:	09/02/20 12:30
Date Received:	09/02/20
Field Prep:	Not Specified

ough Lab					
ND		ug/kg	6.2	2.8	1
ND		ug/kg	1.2	0.18	1
ND		ug/kg	1.8	0.17	1
ND		ug/kg	1.2	0.28	1
ND		ug/kg	1.2	0.15	1
ND		ug/kg	1.2	0.17	1
ND		ug/kg	1.2	0.33	1
ND		ug/kg	0.62	0.24	1
ND		ug/kg	0.62	0.16	1
ND		ug/kg	5.0	0.86	1
ND		ug/kg	1.2	0.32	1
ND		ug/kg	0.62	0.21	1
ND		ug/kg	0.62	0.14	1
ND		ug/kg	1.2	0.34	1
ND		ug/kg	0.62	0.20	1
ND		ug/kg	0.62	0.20	1
ND		ug/kg	0.62	0.20	1
ND		ug/kg	5.0	0.30	1
ND		ug/kg	0.62	0.20	1
ND		ug/kg	0.62	0.20	1
ND		ug/kg	1.2	0.67	1
ND		ug/kg	1.2	0.17	1
ND		ug/kg	5.0	1.2	1
ND		ug/kg	2.5	0.72	1
ND		ug/kg	1.2	0.42	1
ND		ug/kg	2.5	0.56	1
ND		ug/kg	1.2	0.30	1
ND		ug/kg	1.8	0.17	1
	ND N	ND N	ND ug/kg ND ug/kg	ND ug/kg 1.2 ND ug/kg 1.2 ND ug/kg 1.8 ND ug/kg 1.2 ND ug/kg 1.2 ND ug/kg 1.2 ND ug/kg 1.2 ND ug/kg 0.62 ND ug/kg 0.62 ND ug/kg 5.0 ND ug/kg 0.62 ND ug/kg 0.62	ND ug/kg 6.2 2.8 ND ug/kg 1.2 0.18 ND ug/kg 1.8 0.17 ND ug/kg 1.2 0.28 ND ug/kg 1.2 0.15 ND ug/kg 1.2 0.17 ND ug/kg 1.2 0.33 ND ug/kg 0.62 0.24 ND ug/kg 0.62 0.16 ND ug/kg 0.62 0.16 ND ug/kg 5.0 0.86 ND ug/kg 5.0 0.86 ND ug/kg 0.62 0.21 ND ug/kg 0.62 0.21 ND ug/kg 0.62 0.21 ND ug/kg 0.62 0.20 ND ug/kg 0.62 0.20 ND ug/kg 0.62 0.20 ND ug/kg 0.62 0.20 ND <td< td=""></td<>



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg ug/kg	2.5	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	 1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	 1
p/m-Xylene	ND		ug/kg	2.5	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	 1
Xylenes, Total	ND		ug/kg	1.2	0.36	 1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	 1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	 1
Dibromomethane	ND		ug/kg	2.5	0.30	 1
Styrene	ND		ug/kg	1.2	0.24	 1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	 1
Acetone	30		ug/kg	12	6.0	 1
Carbon disulfide	ND		ug/kg	12	5.6	 1
2-Butanone	3.8	J	ug/kg	12	2.8	 1
Vinyl acetate	ND		ug/kg	12	2.7	 1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	 1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.80	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboro	ugh Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1	
1,4-Dioxane	ND		ug/kg	99	44.	1	
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1	
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1	
Ethyl ether	ND		ug/kg	2.5	0.42	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	96	70-130	
Dibromofluoromethane	111	70-130	



L2036369

09/17/20

Project Name: BEACON ISLAND

L2036369-08

GLENMONT, NY

S-13

Lab Number: Report Date:

Project Number: AT5596

SAMPLE RESULTS

Date Collected: 09/02/20 14:40

Date Received: 09/02/20
Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 19:04

Analyst: JC Percent Solids: 77%

1,1-Dichloroethane ND ug/kg 1,2 0.17 1 Chloroform ND ug/kg 1.8 0.17 1 Carbon tetrachloride ND ug/kg 1.2 0.27 1 1,2-Dichloropropane ND ug/kg 1.2 0.15 1 Dibromochloromethane ND ug/kg 1.2 0.15 1 1,1,2-Trichloroethane ND ug/kg 0.59 0.23 1 Tetrachloroethane ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.23 1 Tichlorothane ND ug/kg 0.59 0.15 1 Tichlorothane ND ug/kg 4.8 0.82 1 Tichlorothane ND ug/kg 0.59 0.13 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 Itans-1,3-Dichloropropene ND ug/kg 0.59 0.19 <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,1-Dichloroethane ND ug/kg 1.2 0.17 1 Chloroform ND ug/kg 1.8 0.17 1 Carbon tetrachloride ND ug/kg 1.2 0.27 1 1,2-Dichloropropane ND ug/kg 1.2 0.15 1 Dibromochloromethane ND ug/kg 1.2 0.15 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.32 1 Tetrachloroethane ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.15 1 Trichloroftuoromethane ND ug/kg 0.59 0.15 1 1,2-Dichloroethane ND ug/kg 0.59 0.13 1 1,2-Dichloroethane ND ug/kg 0.59 0.13 1 1,2-Dichloroethane ND ug/kg 0.59 0.13 1 Bromodichloromethane ND ug/kg 0.59	Volatile Organics by GC/MS - Westl	oorough Lab					
Chloroform ND ug/kg 1.8 0.17 1 Carbon tetrachloride ND ug/kg 1.2 0.27 1 1,2-Dichloropropane ND ug/kg 1.2 0.15 1 Dibromochloromethane ND ug/kg 1.2 0.17 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.32 1 Tetrachloroethane ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.15 1 Trichloroethane ND ug/kg 4.8 0.82 1 1,2-Dichloroethane ND ug/kg 0.59 0.15 1 1,1,1-Trichloroethane ND ug/kg 0.59 0.20 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg 0.59 <td>Methylene chloride</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>5.9</td> <td>2.7</td> <td>1</td>	Methylene chloride	ND		ug/kg	5.9	2.7	1
Carbon tetrachloride ND ug/kg 1.2 0.27 1 1,2-Dichloropropane ND ug/kg 1.2 0.15 1 Dibromochloromethane ND ug/kg 1.2 0.17 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.32 1 Tetrachloroethane ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.15 1 Chloroberthane ND ug/kg 0.59 0.15 1 Trichlorofluoromethane ND ug/kg 0.59 0.15 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg <th< td=""><td>1,1-Dichloroethane</td><td>ND</td><td></td><td>ug/kg</td><td>1.2</td><td>0.17</td><td>1</td></th<>	1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
1,2-Dichloropropane ND	Chloroform	ND		ug/kg	1.8	0.17	1
Dibromochloromethane ND ug/kg 1.2 0.17 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.32 1 Tetrachloroethane ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.15 1 Trichlorofluoromethane ND ug/kg 4.8 0.82 1 1,2-Dichloroethane ND ug/kg 1.2 0.30 1 1,1,1-Trichloroethane ND ug/kg 0.59 0.20 1 Bromodichloromethane ND ug/kg 0.59 0.20 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg	Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,1,2-Trichloroethane	1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Tetrachloroethene ND ug/kg 0.59 0.23 1 Chlorobenzene ND ug/kg 0.59 0.15 1 Trichlorofluoromethane ND ug/kg 4.8 0.82 1 1,2-Dichloroethane ND ug/kg 1.2 0.30 1 1,1,1-Trichloroethane ND ug/kg 0.59 0.20 1 Eromodichloromethane ND ug/kg 0.59 0.20 1 Eromodichloromethane ND ug/kg 0.59 0.13 1 Eromodichloromethane ND ug/kg 0.59 0.13 1 Eromodichloropropene ND ug/kg 0.59 0.13 1 Eromodichloropropene ND ug/kg 0.59 0.19 1 Eromodichloropropene ND ug/kg 0.59 0.19 1 I,3-Dichloropropene ND ug/kg 0.59 0.19 1 I,3-Dichloropropene ND ug/kg 0.59 0.19 1 I,1-Dichloropropene ND ug/kg 0.59 0.19 1 I,1-Dichloropropene ND ug/kg 0.59 0.19 1 I,1-Dichloropropene ND ug/kg 0.59 0.19 1 Eromoform ND ug/kg 0.59 0.19 1 I,1-2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Eromoform ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.69 1 Ethylbenzene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.60 1 Ethylbenzene ND ug/kg 1.2 0.60 1 Ethylbenzene ND ug/kg 1.2 0.60 1 Ethylbenzene ND ug/kg 1.2 0.40 1 Chloromethane ND ug/kg 1.2 0.40 1 Chloromethane ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 1.2 0.40 1	Dibromochloromethane	ND		ug/kg	1.2	0.17	1
Chlorobenzene ND ug/kg 0.59 0.15 1 Trichlorofluoromethane ND ug/kg 4.8 0.82 1 1,2-Dichloroethane ND ug/kg 1.2 0.30 1 1,1,1-Trichloroethane ND ug/kg 0.59 0.20 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 Bromodichloropropene ND ug/kg 1.2 0.32 1 trans-1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene, Total ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 Bromoform ND ug/kg 0.59 0.19 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 </td <td>1,1,2-Trichloroethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.2</td> <td>0.32</td> <td>1</td>	1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Trichlorofluoromethane ND ug/kg 4.8 0.82 1 1,2-Dichloroethane ND ug/kg 1.2 0.30 1 1,1,1-Trichloroethane ND ug/kg 0.59 0.20 1 Bromodichloromethane ND ug/kg 0.59 0.13 1 trans-1,3-Dichloropropene ND ug/kg 1.2 0.32 1 cis-1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene, Total ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 Eromoform ND ug/kg 0.59 0.19 1 1,1-L,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.69 1 Chloromethane ND ug/kg 1.2 0.69 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 1.2 0.69 1 Ethylbenzene ND ug/kg 1.2 0.40 1 Chloromethane ND ug/kg 1.2 0.40 1 Chloromethane ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 1.2 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.54 1	Tetrachloroethene	ND		ug/kg	0.59	0.23	1
1,2-Dichloroethane	Chlorobenzene	ND		ug/kg	0.59	0.15	1
1,1,1-Trichloroethane	Trichlorofluoromethane	ND		ug/kg	4.8	0.82	1
Bromodichloromethane ND	1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
trans-1,3-Dichloropropene ND ug/kg 1.2 0.32 1 cis-1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene, Total ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 1,1.2,2-Tetrachloroethane ND ug/kg 4.8 0.29 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 1,1-Dichloropropene ND ug/kg 1.2 0.64 1 1,1-Dichloroethane ND ug/kg 1.2 0.64 1 1,1-Dichloroethane ND ug/kg 1.2 0.17 1 1,1-Dichloroethane ND ug/kg 1.2 0.17 1 1,1-Dichloroethane ND ug/kg 1.2 0.40 1 1,1-Dichloroethane ND ug/kg 1.2 0.54 1 1,1-Dichloroethane ND ug/kg 1.2 0.28 1	1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
cis-1,3-Dichloropropene ND ug/kg 0.59 0.19 1 1,3-Dichloropropene, Total ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 Bromoform ND ug/kg 0.59 0.19 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1 </td <td>Bromodichloromethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>0.59</td> <td>0.13</td> <td>1</td>	Bromodichloromethane	ND		ug/kg	0.59	0.13	1
1,3-Dichloropropene, Total ND ug/kg 0.59 0.19 1 1,1-Dichloropropene ND ug/kg 0.59 0.19 1 Bromoform ND ug/kg 4.8 0.29 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
1,1-Dichloropropene ND ug/kg 0.59 0.19 1 Bromoform ND ug/kg 4.8 0.29 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform ND ug/kg 4.8 0.29 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.19	1
1,1,2,2-Tetrachloroethane ND ug/kg 0.59 0.20 1 Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Benzene ND ug/kg 0.59 0.20 1 Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Bromoform	ND		ug/kg	4.8	0.29	1
Toluene ND ug/kg 1.2 0.64 1 Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Ethylbenzene ND ug/kg 1.2 0.17 1 Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Benzene	ND		ug/kg	0.59	0.20	1
Chloromethane ND ug/kg 4.8 1.1 1 Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Toluene	ND		ug/kg	1.2	0.64	1
Bromomethane ND ug/kg 2.4 0.69 1 Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Ethylbenzene	ND		ug/kg	1.2	0.17	1
Vinyl chloride ND ug/kg 1.2 0.40 1 Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Chloromethane	ND		ug/kg	4.8	1.1	1
Chloroethane ND ug/kg 2.4 0.54 1 1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Bromomethane	ND		ug/kg	2.4	0.69	1
1,1-Dichloroethene ND ug/kg 1.2 0.28 1	Vinyl chloride	ND		ug/kg	1.2	0.40	1
÷ ÷	Chloroethane	ND		ug/kg	2.4	0.54	1
trans-1,2-Dichloroethene ND ug/kg 1.8 0.16 1	1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
	trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1



L2036369

Lab Number:

Project Name: BEACON ISLAND

Project Number: Report Date: 09/17/20

AT5596

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: Date Received: 09/02/20 S-13 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wo	estborough Lab					
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.77	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboro	ugh Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1	
1,4-Dioxane	ND		ug/kg	95	42.	1	
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1	
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1	
Ethyl ether	ND		ug/kg	2.4	0.40	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	101		70-130	
Toluene-d8	120		70-130	
4-Bromofluorobenzene	146	Q	70-130	
Dibromofluoromethane	112		70-130	



09/02/20 14:40

Not Specified

Dilution Factor

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Date Received:

Field Prep:

RL

MDL

Result

Lab ID: R L2036369-08

Client ID: S-13

Sample Location: GLENMONT, NY

Sample Depth:

Parameter

Matrix: Soil 1,8260C Analytical Method: Analytical Date: 09/09/20 10:19

Analyst: MV 77% Percent Solids:

raiailielei	Nesuit	Qualifier	Ullita	INL.	MIDL	Dilution Lactor
Volatile Organics by GC/MS - We	stborough Lab					
Methylene chloride	ND		ug/kg	6.4	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.21	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.64	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.1	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.69	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Qualifier

Units



Project Name: Lab Number: BEACON ISLAND L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 R Date Collected: 09/02/20 14:40

Client ID: S-13

Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	stborough Lab					
Trichloroethene	ND		ug/kg	0.64	0.17	1
1,2-Dichlorobenzene	3.6		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	1.0	J	ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.26	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
Xylenes, Total	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
Vinyl acetate	ND		ug/kg	13	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.64	0.17	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.1	0.21	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	0.42	J	ug/kg	1.3	0.14	1
Naphthalene	0.83	J	ug/kg	5.1	0.83	1
Acrylonitrile	ND		ug/kg	5.1	1.5	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 R Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1	
1,2,4-Trichlorobenzene	0.97	J	ug/kg	2.5	0.34	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1	
1,4-Dioxane	ND		ug/kg	100	45.	1	
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1	
p-Ethyltoluene	ND		ug/kg	2.5	0.49	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1	
Ethyl ether	ND		ug/kg	2.5	0.43	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.4	1.8	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	146	Q	70-130
4-Bromofluorobenzene	126		70-130
Dibromofluoromethane	130		70-130



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date: 09/17/20

Lab Number:

Lab ID: L2036369-09

Client ID: S-14

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C 09/08/20 19:25 Analytical Date:

Analyst: JC 66% Percent Solids:

Date Collected:	09/02/20 15:35
Date Received:	09/02/20
Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We	estborough Lab					
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	0.33	J	ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.95	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.23	1
Benzene	ND		ug/kg	0.68	0.23	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.7	0.80	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 Date Collected: 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichlanathana	ND			0.00	0.40	4
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.28	<u> </u>
p/m-Xylene	ND		ug/kg	2.7	0.77	1
o-Xylene	ND		ug/kg	1.4	0.40	1
Xylenes, Total	ND		ug/kg	1.4	0.40	<u> </u>
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.7	0.33	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	52		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	10	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.23	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.5	0.89	1
Acrylonitrile	ND		ug/kg	5.5	1.6	1



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 Date Collected: 09/02/20 15:35

Client ID: Date Received: 09/02/20 S-14

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	tborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.23	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.46	1	
1,4-Dioxane	ND		ug/kg	110	48.	1	
p-Diethylbenzene	ND		ug/kg	2.7	0.24	1	
p-Ethyltoluene	ND		ug/kg	2.7	0.53	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.7	0.26	1	
Ethyl ether	ND		ug/kg	2.7	0.47	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	110	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	117	70-130	



09/02/20 16:00

Not Specified

Dilution Factor

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Result

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Date Received:

Field Prep:

RL

MDL

Lab ID: L2036369-10

Client ID: S-15

Sample Location: GLENMONT, NY

Sample Depth:

Parameter

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 19:46

Analyst: JC Percent Solids: 77%

raiailielei		Qualifici		INL.	WIDL	Dilution ractor	
Volatile Organics by GC/MS - Westb	orough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1	
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1	
Chloroform	ND		ug/kg	1.8	0.17	1	
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1	
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1	
Dibromochloromethane	ND		ug/kg	1.2	0.17	1	
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1	
Tetrachloroethene	ND		ug/kg	0.61	0.24	1	
Chlorobenzene	ND		ug/kg	0.61	0.16	1	
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1	
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1	
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1	
Bromodichloromethane	ND		ug/kg	0.61	0.13	1	
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1	
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1	
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1	
1,1-Dichloropropene	ND		ug/kg	0.61	0.19	1	
Bromoform	ND		ug/kg	4.9	0.30	1	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1	
Benzene	ND		ug/kg	0.61	0.20	1	
Toluene	ND		ug/kg	1.2	0.66	1	
Ethylbenzene	ND		ug/kg	1.2	0.17	1	
Chloromethane	ND		ug/kg	4.9	1.1	1	
Bromomethane	ND		ug/kg	2.4	0.71	1	
Vinyl chloride	ND		ug/kg	1.2	0.41	1	
Chloroethane	ND		ug/kg	2.4	0.55	1	
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1	
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1	

Qualifier

Units



L2036369

Project Name: Lab Number: BEACON ISLAND

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: Date Received: 09/02/20 S-15 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We	stborough Lab					
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.21	1
	ND		ug/kg	2.4	0.23	1
p/m-Xylene	ND ND		ug/kg	1.2	0.86	1
o-Xylene Vylenea Total			ug/kg			
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.29	<u> </u>
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	8.7	J	ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.80	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1
·			5 5			



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: Date Received: 09/02/20 S-15

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1	
1,4-Dioxane	ND		ug/kg	98	43.	1	
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1	
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1	
Ethyl ether	ND		ug/kg	2.4	0.42	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	135	Q	70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	126		70-130



09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Received:

Lab ID: L2036369-10 R Date Collected: 09/02/20 16:00

Client ID: S-15

Field Prep: Sample Location: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 09/09/20 10:40

Analyst: MV77% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	ND		ug/kg	0.59	0.20	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1



Project Name: Lab Number: BEACON ISLAND L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 R Date Collected: 09/02/20 16:00

Client ID: Date Received: S-15

09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	stborough Lab					
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	0.90	J	ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	0.25	J	ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	9.1	J	ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 R Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westborou	gh Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1	
1,4-Dioxane	ND		ug/kg	94	41.	1	
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1	
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1	
Ethyl ether	ND		ug/kg	2.4	0.40	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	103		70-130	
Toluene-d8	137	Q	70-130	
4-Bromofluorobenzene	112		70-130	
Dibromofluoromethane	127		70-130	



09/02/20 00:00

Not Specified

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Date Received:

Field Prep:

SAIVIPLE RESU

Lab ID: L2036369-11 Client ID: DUP01

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/20 20:07

Analyst: JC Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We		Qualifici	- Clints	- KE		Direction Factor
	-					
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1

ND

ND

ND

ND

ND

ND



1

1

1

1

1

1

4.6

2.3

1.1

2.3

1.1

1.7

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

1.1

0.66

0.38

0.52

0.27

0.16

Chloromethane

Bromomethane

Vinyl chloride

Chloroethane

1,1-Dichloroethene

trans-1,2-Dichloroethene

L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We	stborough Lab					
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	48		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	7.2	J	ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.6	0.74	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Volatile Organics by GC/MS - West	Volatile Organics by GC/MS - Westborough Lab								
n-Propylbenzene	ND		ug/kg	1.1	0.20	1			
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1			
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1			
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1			
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1			
1,4-Dioxane	ND		ug/kg	92	40.	1			
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1			
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1			
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1			
Ethyl ether	ND		ug/kg	2.3	0.39	1			
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1			

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	96	70-130	
Dibromofluoromethane	108	70-130	



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/08/20 15:33

Analyst: AD

arameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS - W	estborough Lab	for sample(s):	01-11 Batch:	WG1407859-5
Methylene chloride	ND	ug/k	g 5.0	2.3
1,1-Dichloroethane	ND	ug/k	g 1.0	0.14
Chloroform	ND	ug/k	g 1.5	0.14
Carbon tetrachloride	ND	ug/k	g 1.0	0.23
1,2-Dichloropropane	ND	ug/k	g 1.0	0.12
Dibromochloromethane	ND	ug/k	g 1.0	0.14
1,1,2-Trichloroethane	ND	ug/k	g 1.0	0.27
Tetrachloroethene	ND	ug/k	g 0.50	0.20
Chlorobenzene	ND	ug/k	g 0.50	0.13
Trichlorofluoromethane	ND	ug/k	g 4.0	0.70
1,2-Dichloroethane	ND	ug/k	g 1.0	0.26
1,1,1-Trichloroethane	ND	ug/k	g 0.50	0.17
Bromodichloromethane	ND	ug/k	g 0.50	0.11
trans-1,3-Dichloropropene	ND	ug/k	g 1.0	0.27
cis-1,3-Dichloropropene	ND	ug/k	g 0.50	0.16
1,3-Dichloropropene, Total	ND	ug/k	g 0.50	0.16
1,1-Dichloropropene	ND	ug/k	g 0.50	0.16
Bromoform	ND	ug/k	g 4.0	0.25
1,1,2,2-Tetrachloroethane	ND	ug/k	g 0.50	0.17
Benzene	ND	ug/k	g 0.50	0.17
Toluene	ND	ug/k	g 1.0	0.54
Ethylbenzene	ND	ug/k	g 1.0	0.14
Chloromethane	ND	ug/k	g 4.0	0.93
Bromomethane	ND	ug/k	g 2.0	0.58
Vinyl chloride	ND	ug/k	g 1.0	0.34
Chloroethane	ND	ug/k	g 2.0	0.45
1,1-Dichloroethene	ND	ug/k	g 1.0	0.24
trans-1,2-Dichloroethene	ND	ug/k	g 1.5	0.14
Trichloroethene	ND	ug/k	g 0.50	0.14



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/08/20 15:33

Analyst: AD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS -	Westborough Lab	for sample(s):	01-11 Batch:	WG1407859-5
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND	ug/kg	2.0	0.17
Methyl tert butyl ether	ND	ug/kg	2.0	0.20
p/m-Xylene	ND	ug/kg	2.0	0.56
o-Xylene	ND	ug/kg	1.0	0.29
Xylenes, Total	ND	ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND	ug/kg	1.0	0.14
Dibromomethane	ND	ug/kg	2.0	0.24
Styrene	ND	ug/kg	1.0	0.20
Dichlorodifluoromethane	ND	ug/kg	10	0.92
Acetone	ND	ug/kg	10	4.8
Carbon disulfide	ND	ug/kg	10	4.6
2-Butanone	ND	ug/kg	10	2.2
Vinyl acetate	ND	ug/kg	10	2.2
4-Methyl-2-pentanone	ND	ug/kg	10	1.3
1,2,3-Trichloropropane	ND	ug/kg	2.0	0.13
2-Hexanone	ND	ug/kg	10	1.2
Bromochloromethane	ND	ug/kg	2.0	0.20
2,2-Dichloropropane	ND	ug/kg	2.0	0.20
1,2-Dibromoethane	ND	ug/kg	1.0	0.28
1,3-Dichloropropane	ND	ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.50	0.13
Bromobenzene	ND	ug/kg	2.0	0.14
n-Butylbenzene	ND	ug/kg	1.0	0.17
sec-Butylbenzene	ND	ug/kg	1.0	0.15
tert-Butylbenzene	ND	ug/kg	2.0	0.12
o-Chlorotoluene	ND	ug/kg	2.0	0.19



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/08/20 15:33

Analyst: AD

Parameter	Result	Qualifier Units	s RL	MDL
Volatile Organics by GC/MS - West	borough Lab	for sample(s):	01-11 Batch:	WG1407859-5
p-Chlorotoluene	ND	ug/k	g 2.0	0.11
1,2-Dibromo-3-chloropropane	ND	ug/k	g 3.0	1.0
Hexachlorobutadiene	ND	ug/k	g 4.0	0.17
Isopropylbenzene	ND	ug/k	g 1.0	0.11
p-Isopropyltoluene	ND	ug/k	g 1.0	0.11
Naphthalene	ND	ug/k	g 4.0	0.65
Acrylonitrile	ND	ug/k	g 4.0	1.2
n-Propylbenzene	ND	ug/k	g 1.0	0.17
1,2,3-Trichlorobenzene	ND	ug/k	g 2.0	0.32
1,2,4-Trichlorobenzene	ND	ug/k	g 2.0	0.27
1,3,5-Trimethylbenzene	ND	ug/k	g 2.0	0.19
1,2,4-Trimethylbenzene	ND	ug/k	g 2.0	0.33
1,4-Dioxane	ND	ug/k	g 80	35.
p-Diethylbenzene	ND	ug/k	g 2.0	0.18
p-Ethyltoluene	ND	ug/k	g 2.0	0.38
1,2,4,5-Tetramethylbenzene	ND	ug/k	g 2.0	0.19
Ethyl ether	ND	ug/k	g 2.0	0.34
trans-1,4-Dichloro-2-butene	ND	ug/k	g 5.0	1.4

	Acceptance
%Recovery Q	ualifier Criteria
107	70-130
100	70-130
97	70-130
110	70-130
	107 100 97



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/09/20 09:37

Analyst: MV

Parameter	Result	Qualifier Units	RL	MDL	
olatile Organics by EPA 5035 Low	- Westboro	ough Lab for samp	ole(s): 08,10	Batch: WG1	408039-5
Methylene chloride	ND	ug/kg	5.0	2.3	
1,1-Dichloroethane	ND	ug/kg	1.0	0.14	
Chloroform	ND	ug/kg	1.5	0.14	
Carbon tetrachloride	ND	ug/kg	1.0	0.23	
1,2-Dichloropropane	ND	ug/kg	1.0	0.12	
Dibromochloromethane	ND	ug/kg	1.0	0.14	
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.27	
Tetrachloroethene	ND	ug/kg	0.50	0.20	
Chlorobenzene	ND	ug/kg	0.50	0.13	
Trichlorofluoromethane	ND	ug/kg	4.0	0.70	
1,2-Dichloroethane	ND	ug/kg	1.0	0.26	
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17	
Bromodichloromethane	ND	ug/kg	0.50	0.11	
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27	
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16	
1,3-Dichloropropene, Total	ND	ug/kg	0.50	0.16	
1,1-Dichloropropene	ND	ug/kg	0.50	0.16	
Bromoform	ND	ug/kg	4.0	0.25	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.17	
Benzene	ND	ug/kg	0.50	0.17	
Toluene	ND	ug/kg	1.0	0.54	
Ethylbenzene	ND	ug/kg	1.0	0.14	
Chloromethane	ND	ug/kg	4.0	0.93	
Bromomethane	ND	ug/kg	2.0	0.58	
Vinyl chloride	ND	ug/kg	1.0	0.34	
Chloroethane	ND	ug/kg	2.0	0.45	
1,1-Dichloroethene	ND	ug/kg	1.0	0.24	
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14	
Trichloroethene	ND	ug/kg	0.50	0.14	



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/09/20 09:37

Analyst: MV

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by EPA 5035 Lov	v - Westbord	ough Lab for sample(s)	: 08,10	Batch: WG1408039-5
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND	ug/kg	2.0	0.17
Methyl tert butyl ether	ND	ug/kg	2.0	0.20
p/m-Xylene	ND	ug/kg	2.0	0.56
o-Xylene	ND	ug/kg	1.0	0.29
Xylenes, Total	ND	ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND	ug/kg	1.0	0.14
Dibromomethane	ND	ug/kg	2.0	0.24
Styrene	ND	ug/kg	1.0	0.20
Dichlorodifluoromethane	ND	ug/kg	10	0.92
Acetone	ND	ug/kg	10	4.8
Carbon disulfide	ND	ug/kg	10	4.6
2-Butanone	ND	ug/kg	10	2.2
Vinyl acetate	ND	ug/kg	10	2.2
4-Methyl-2-pentanone	ND	ug/kg	10	1.3
1,2,3-Trichloropropane	ND	ug/kg	2.0	0.13
2-Hexanone	ND	ug/kg	10	1.2
Bromochloromethane	ND	ug/kg	2.0	0.20
2,2-Dichloropropane	ND	ug/kg	2.0	0.20
1,2-Dibromoethane	ND	ug/kg	1.0	0.28
1,3-Dichloropropane	ND	ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.50	0.13
Bromobenzene	ND	ug/kg	2.0	0.14
n-Butylbenzene	ND	ug/kg	1.0	0.17
sec-Butylbenzene	ND	ug/kg	1.0	0.15
tert-Butylbenzene	ND	ug/kg	2.0	0.12
o-Chlorotoluene	ND	ug/kg	2.0	0.19



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 09/09/20 09:37

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
olatile Organics by EPA 5035 Lov	v - Westboro	ugh Lab fo	r sample(s):	08,10	Batch: WG1408039-5
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

		Acceptance
Surrogate	%Recovery Q	ualifier Criteria
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130
Dibromofluoromethane	107	70-130



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSD %Recovery		%Recovery Limits	RPD	RPD Qual Limits	
olatile Organics by GC/MS - Westborough L	_ab Associated	sample(s):	01-11 Batch:	WG1407859-3	WG1407859-4			
Methylene chloride	108		105		70-130	3	30	
1,1-Dichloroethane	103		100		70-130	3	30	
Chloroform	100		97		70-130	3	30	
Carbon tetrachloride	96		92		70-130	4	30	
1,2-Dichloropropane	97		95		70-130	2	30	
Dibromochloromethane	99		101		70-130	2	30	
1,1,2-Trichloroethane	94		96		70-130	2	30	
Tetrachloroethene	102		100		70-130	2	30	
Chlorobenzene	102		101		70-130	1	30	
Trichlorofluoromethane	87		86		70-139	1	30	
1,2-Dichloroethane	96		97		70-130	1	30	
1,1,1-Trichloroethane	100		97		70-130	3	30	
Bromodichloromethane	96		94		70-130	2	30	
trans-1,3-Dichloropropene	98		99		70-130	1	30	
cis-1,3-Dichloropropene	98		98		70-130	0	30	
1,1-Dichloropropene	99		96		70-130	3	30	
Bromoform	87		86		70-130	1	30	
1,1,2,2-Tetrachloroethane	99		99		70-130	0	30	
Benzene	99		97		70-130	2	30	
Toluene	102		98		70-130	4	30	
Ethylbenzene	105		102		70-130	3	30	
Chloromethane	91		84		52-130	8	30	
Bromomethane	147		139		57-147	6	30	



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	01-11 Batch:	WG1407859-3	WG1407859-4			
Vinyl chloride	101		96		67-130	5	30	
Chloroethane	108		106		50-151	2	30	
1,1-Dichloroethene	99		95		65-135	4	30	
trans-1,2-Dichloroethene	103		100		70-130	3	30	
Trichloroethene	100		99		70-130	1	30	
1,2-Dichlorobenzene	105		101		70-130	4	30	
1,3-Dichlorobenzene	107		101		70-130	6	30	
1,4-Dichlorobenzene	107		100		70-130	7	30	
Methyl tert butyl ether	91		95		66-130	4	30	
p/m-Xylene	106		103		70-130	3	30	
o-Xylene	104		102		70-130	2	30	
cis-1,2-Dichloroethene	103		99		70-130	4	30	
Dibromomethane	96		96		70-130	0	30	
Styrene	106		103		70-130	3	30	
Dichlorodifluoromethane	74		71		30-146	4	30	
Acetone	103		114		54-140	10	30	
Carbon disulfide	105		101		59-130	4	30	
2-Butanone	91		96		70-130	5	30	
Vinyl acetate	87		88		70-130	1	30	
4-Methyl-2-pentanone	95		103		70-130	8	30	
1,2,3-Trichloropropane	98		97		68-130	1	30	
2-Hexanone	90		98		70-130	9	30	
Bromochloromethane	101		97		70-130	4	30	



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westboro	ugh Lab Associated	sample(s):	01-11 Batch: W0	G1407859-	3 WG1407859-4		
2,2-Dichloropropane	102		97		70-130	5	30
1,2-Dibromoethane	96		100		70-130	4	30
1,3-Dichloropropane	94		98		69-130	4	30
1,1,1,2-Tetrachloroethane	102		100		70-130	2	30
Bromobenzene	104		97		70-130	7	30
n-Butylbenzene	108		100		70-130	8	30
sec-Butylbenzene	107		100		70-130	7	30
tert-Butylbenzene	107		100		70-130	7	30
o-Chlorotoluene	106		99		70-130	7	30
p-Chlorotoluene	107		99		70-130	8	30
1,2-Dibromo-3-chloropropane	99		102		68-130	3	30
Hexachlorobutadiene	101		96		67-130	5	30
Isopropylbenzene	107		100		70-130	7	30
p-lsopropyltoluene	109		102		70-130	7	30
Naphthalene	97		99		70-130	2	30
Acrylonitrile	94		100		70-130	6	30
n-Propylbenzene	108		101		70-130	7	30
1,2,3-Trichlorobenzene	102		100		70-130	2	30
1,2,4-Trichlorobenzene	103		99		70-130	4	30
1,3,5-Trimethylbenzene	109		101		70-130	8	30
1,2,4-Trimethylbenzene	110		102		70-130	8	30
1,4-Dioxane	122		148	Q	65-136	19	30
p-Diethylbenzene	110		103		70-130	7	30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSD %Recovery		%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	01-11 Batch:	WG1407859-3	WG1407859-4			
p-Ethyltoluene	110		102		70-130	8		30
1,2,4,5-Tetramethylbenzene	108		103		70-130	5		30
Ethyl ether	94		99		67-130	5		30
trans-1,4-Dichloro-2-butene	99		98		70-130	1		30

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	95	96	70-130
Toluene-d8	100	102	70-130
4-Bromofluorobenzene	99	98	70-130
Dibromofluoromethane	98	99	70-130



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westh	orough Lab Asso	ociated sample(s): 08,10 Ba	atch: WG1408039-3 WG1408	3039-4	
Methylene chloride	98	94	70-130	4	30
1,1-Dichloroethane	94	88	70-130	7	30
Chloroform	92	89	70-130	3	30
Carbon tetrachloride	89	81	70-130	9	30
1,2-Dichloropropane	91	87	70-130	4	30
Dibromochloromethane	94	92	70-130	2	30
1,1,2-Trichloroethane	88	88	70-130	0	30
Tetrachloroethene	94	88	70-130	7	30
Chlorobenzene	95	91	70-130	4	30
Trichlorofluoromethane	90	83	70-139	8	30
1,2-Dichloroethane	91	89	70-130	2	30
1,1,1-Trichloroethane	92	85	70-130	8	30
Bromodichloromethane	90	88	70-130	2	30
trans-1,3-Dichloropropene	91	88	70-130	3	30
cis-1,3-Dichloropropene	92	90	70-130	2	30
1,1-Dichloropropene	90	85	70-130	6	30
Bromoform	83	78	70-130	6	30
1,1,2,2-Tetrachloroethane	94	88	70-130	7	30
Benzene	93	88	70-130	6	30
Toluene	92	87	70-130	6	30
Ethylbenzene	96	90	70-130	6	30
Chloromethane	77	71	52-130	8	30
Bromomethane	136	127	57-147	7	30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

arameter	LCS %Recovery		CSD ecovery	%Recove Qual Limits	-	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westh	oorough Lab Ass	ociated sample(s): ()8,10 Batch	n: WG1408039-3	WG1408039-4	
Vinyl chloride	88		82	67-130	7	30
Chloroethane	103		94	50-151	9	30
1,1-Dichloroethene	88		83	65-135	6	30
trans-1,2-Dichloroethene	94		89	70-130	5	30
Trichloroethene	94		89	70-130	5	30
1,2-Dichlorobenzene	102		91	70-130	11	30
1,3-Dichlorobenzene	102		91	70-130	11	30
1,4-Dichlorobenzene	102		91	70-130	11	30
Methyl tert butyl ether	86		87	66-130	1	30
p/m-Xylene	96		91	70-130	5	30
o-Xylene	96		91	70-130	5	30
cis-1,2-Dichloroethene	94		89	70-130	5	30
Dibromomethane	90		88	70-130	2	30
Styrene	98		93	70-130	5	30
Dichlorodifluoromethane	75		69	30-146	8	30
Acetone	85		88	54-140	3	30
Carbon disulfide	92		86	59-130	7	30
2-Butanone	81		78	70-130	4	30
Vinyl acetate	82		82	70-130	0	30
4-Methyl-2-pentanone	88		92	70-130	4	30
1,2,3-Trichloropropane	93		92	68-130	1	30
2-Hexanone	79		83	70-130	5	30
Bromochloromethane	91		90	70-130	1	30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - West	borough Lab Ass	ociated sample(s): 08,10 Batc	h: WG1408039-3 WG1408	3039-4	
2,2-Dichloropropane	92	85	70-130	8	30
1,2-Dibromoethane	93	91	70-130	2	30
1,3-Dichloropropane	90	90	69-130	0	30
1,1,1,2-Tetrachloroethane	96	93	70-130	3	30
Bromobenzene	98	89	70-130	10	30
n-Butylbenzene	101	87	70-130	15	30
sec-Butylbenzene	101	87	70-130	15	30
tert-Butylbenzene	100	88	70-130	13	30
o-Chlorotoluene	117	103	70-130	13	30
p-Chlorotoluene	102	89	70-130	14	30
1,2-Dibromo-3-chloropropane	93	89	68-130	4	30
Hexachlorobutadiene	97	84	67-130	14	30
Isopropylbenzene	101	88	70-130	14	30
p-Isopropyltoluene	101	89	70-130	13	30
Naphthalene	93	88	70-130	6	30
Acrylonitrile	82	85	70-130	4	30
n-Propylbenzene	101	88	70-130	14	30
1,2,3-Trichlorobenzene	98	90	70-130	9	30
1,2,4-Trichlorobenzene	98	89	70-130	10	30
1,3,5-Trimethylbenzene	102	89	70-130	14	30
1,2,4-Trimethylbenzene	103	90	70-130	13	30
1,4-Dioxane	94	103	65-136	9	30
p-Diethylbenzene	102	90	70-130	13	30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbo	orough Lab Ass	ociated sample	e(s): 08,10 Ba	atch: WG14	108039-3 WG140	8039-4		
p-Ethyltoluene	102		90		70-130	13		30
1,2,4,5-Tetramethylbenzene	105		92		70-130	13		30
Ethyl ether	89		89		67-130	0		30
trans-1,4-Dichloro-2-butene	90		85		70-130	6		30

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	
1,2-Dichloroethane-d4	93	97	70-130	
Toluene-d8	101	100	70-130	
4-Bromofluorobenzene	102	98	70-130	
Dibromofluoromethane	99	97	70-130	



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - 9	- Westborough	Lab Assoc	ciated sample(s): 01-11 QC	Batch ID: WG14078	359-6 WG140	7859-7	QC Sample	: L203	6369-04	Client ID: S-
Methylene chloride	ND	126	120	98	110	90		70-130	8		30
1,1-Dichloroethane	ND	126	130	102	120	92		70-130	10		30
Chloroform	ND	126	120	95	110	88		70-130	8		30
Carbon tetrachloride	ND	126	120	98	120	91		70-130	8		30
1,2-Dichloropropane	ND	126	110	88	110	86		70-130	2		30
Dibromochloromethane	ND	126	97	77	98	78		70-130	1		30
1,1,2-Trichloroethane	ND	126	97	77	100	82		70-130	6		30
Tetrachloroethene	ND	126	110	90	100	82		70-130	8		30
Chlorobenzene	ND	126	97	77	86	68	Q	70-130	12		30
Trichlorofluoromethane	ND	126	160	127	140	111		70-139	13		30
1,2-Dichloroethane	ND	126	100	82	99	78		70-130	4		30
1,1,1-Trichloroethane	ND	126	140	110	130	100		70-130	9		30
Bromodichloromethane	ND	126	100	82	99	78		70-130	4		30
trans-1,3-Dichloropropene	ND	126	79	62	Q 76	60	Q	70-130	3		30
cis-1,3-Dichloropropene	ND	126	89	71	86	68	Q	70-130	4		30
1,1-Dichloropropene	ND	126	130	101	120	94		70-130	7		30
Bromoform	ND	126	70	55	Q 75	60	Q	70-130	8		30
1,1,2,2-Tetrachloroethane	ND	126	87	69	Q 100	79		70-130	13		30
Benzene	ND	126	120	94	110	89		70-130	4		30
Toluene	ND	126	110	88	100	81		70-130	8		30
Ethylbenzene	ND	126	110	85	93	73		70-130	15		30
Chloromethane	ND	126	110	91	100	80		52-130	12		30
Bromomethane	ND	126	180	141	150	118		57-147	18		30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recover	y Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS 9	- Westborough	Lab Asso	ciated sample((s): 01-11 (QC Batch ID	: WG14078	359-6 WG140	7859-7	QC Sample	e: L2036	369-04	Client ID: S-
Vinyl chloride	ND	126	150	116		130	102		67-130	12		30
Chloroethane	ND	126	150	118		130	106		50-151	11		30
1,1-Dichloroethene	ND	126	140	111		130	100		65-135	11		30
trans-1,2-Dichloroethene	ND	126	120	95		110	86		70-130	10		30
Trichloroethene	ND	126	120	91		110	86		70-130	6		30
1,2-Dichlorobenzene	ND	126	74	58	Q	62	49	Q	70-130	17		30
1,3-Dichlorobenzene	ND	126	71	56	Q	57	45	Q	70-130	22		30
1,4-Dichlorobenzene	ND	126	67	53	Q	53	42	Q	70-130	24		30
Methyl tert butyl ether	ND	126	100	83		120	91		66-130	10		30
p/m-Xylene	ND	252	210	83		180	70		70-130	16		30
o-Xylene	ND	252	220	85		180	73		70-130	16		30
cis-1,2-Dichloroethene	ND	126	120	91		110	84		70-130	8		30
Dibromomethane	ND	126	97	77		92	73		70-130	5		30
Styrene	ND	252	180	72		140	55	Q	70-130	26		30
Dichlorodifluoromethane	ND	126	150	118		130	102		30-146	14		30
Acetone	46	126	160	87		160	93		54-140	5		30
Carbon disulfide	ND	126	130	99		110	89		59-130	11		30
2-Butanone	7.2J	126	82	65	Q	110	86		70-130	28		30
Vinyl acetate	ND	126	57	46	Q	52	41	Q	70-130	10		30
4-Methyl-2-pentanone	ND	126	92	73		110	88		70-130	19		30
1,2,3-Trichloropropane	ND	126	87	69		99	79		68-130	13		30
2-Hexanone	ND	126	78	62	Q	92	73		70-130	17		30
Bromochloromethane	ND	126	110	88		100	81		70-130	8		30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recover	y Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS 9	- Westborough	Lab Assoc	ciated sample(s): 01-11 C	QC Batch IC): WG14078	359-6 WG140	7859-7	QC Sample	e: L2036	369-04	Client ID: S-
2,2-Dichloropropane	ND	126	130	106		120	97		70-130	9		30
1,2-Dibromoethane	ND	126	85	68	Q	86	68	Q	70-130	0		30
1,3-Dichloropropane	ND	126	94	75		96	76		69-130	2		30
1,1,1,2-Tetrachloroethane	ND	126	110	84		110	83		70-130	1		30
Bromobenzene	ND	126	80	64	Q	73	58	Q	70-130	10		30
n-Butylbenzene	ND	126	73	58	Q	53	42	Q	70-130	31	Q	30
sec-Butylbenzene	ND	126	93	74		78	61	Q	70-130	18		30
tert-Butylbenzene	ND	126	100	79		88	70		70-130	13		30
o-Chlorotoluene	ND	126	110	83		92	72		70-130	14		30
p-Chlorotoluene	ND	126	79	63	Q	64	50	Q	70-130	22		30
1,2-Dibromo-3-chloropropane	ND	126	78	62	Q	87	69		68-130	12		30
Hexachlorobutadiene	ND	126	58	46	Q	39	31	Q	67-130	39	Q	30
Isopropylbenzene	ND	126	100	83		94	75		70-130	10		30
p-Isopropyltoluene	ND	126	87	69	Q	69	55	Q	70-130	23		30
Naphthalene	ND	126	59	47	Q	52	41	Q	70-130	13		30
Acrylonitrile	ND	126	94	74		94	74		70-130	0		30
n-Propylbenzene	ND	126	93	74		77	61	Q	70-130	18		30
1,2,3-Trichlorobenzene	ND	126	48	38	Q	38	30	Q	70-130	23		30
1,2,4-Trichlorobenzene	ND	126	45	35	Q	35	28	Q	70-130	24		30
1,3,5-Trimethylbenzene	ND	126	93	74		80	63	Q	70-130	15		30
1,2,4-Trimethylbenzene	ND	126	89	70		74	59	Q	70-130	18		30
1,4-Dioxane	ND	6290	7400	117		7000	110		65-136	6		30
p-Diethylbenzene	ND	126	77	61	Q	57	45	Q	70-130	31	Q	30



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recove	ery (Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - 9	- Westborough	Lab Asso	ociated sample((s): 01-11	QC Ba	atch ID:	WG14078	359-6 WG1407	7859-7	QC Sample	: L2036	369-04	Client ID: S-
p-Ethyltoluene	ND	126	91	72			74	59	Q	70-130	20		30
1,2,4,5-Tetramethylbenzene	ND	126	72	57		Q	56	45	Q	70-130	25		30
Ethyl ether	ND	126	110	88			110	88		67-130	0		30
trans-1,4-Dichloro-2-butene	ND	126	54	43		Q	54	43	Q	70-130	1		30

	MS	MSD	Acceptance	
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria	
1,2-Dichloroethane-d4	99	97	70-130	_
4-Bromofluorobenzene	96	100	70-130	
Dibromofluoromethane	100	96	70-130	
Toluene-d8	102	101	70-130	

SEMIVOLATILES



09/02/20 13:40

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Date Collected:

Lab ID: L2036369-01

Client ID: S-6

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 15:56

Analyst: SZ 76% Percent Solids:

Date Received: 09/02/20

Field Prep: Not Specified

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - W	estborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1	
Hexachlorobenzene	ND		ug/kg	130	25.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1	
2-Chloronaphthalene	ND		ug/kg	220	22.	1	
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1	
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1	
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	220	58.	1	
2,4-Dinitrotoluene	ND		ug/kg	220	44.	1	
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1	
Fluoranthene	54	J	ug/kg	130	25.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	38.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1	
Hexachlorobutadiene	ND		ug/kg	220	32.	1	
Hexachlorocyclopentadiene	ND		ug/kg	630	200	1	
Hexachloroethane	ND		ug/kg	180	36.	1	
Isophorone	ND		ug/kg	200	28.	1	
Naphthalene	ND		ug/kg	220	27.	1	
Nitrobenzene	ND		ug/kg	200	32.	1	
NDPA/DPA	ND		ug/kg	180	25.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	76.	1	
Butyl benzyl phthalate	ND		ug/kg	220	55.	1	
Di-n-butylphthalate	ND		ug/kg	220	42.	1	
Di-n-octylphthalate	ND		ug/kg	220	75.	1	



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: Date Received: 09/02/20 S-6 Not Specified

Field Prep: Sample Location: GLENMONT, NY

Dimethyl phthalate ND ug/kg 220 46. 1 Benzo(a)anthracene 49 J ug/kg 130 25. 1 Benzo(b)fluoranthene ND ug/kg 180 54. 1 Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(b)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 33. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 180 34. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 130 27. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 500	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Dimethyl phthalate ND ug/kg 220 46. 1 Benzo(a)anthracene 49 J ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 130 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 25. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 500	Semivolatile Organics by GC/MS - We	estborough Lab					
Dimethyl phthalate ND ug/kg 220 46. 1 Benzo(a)anthracene 49 J ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 130 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 25. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 500	Diethyl phthalate	ND		ua/ka	220	20.	1
Benzo(a)anthracene 49 J ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Anthracene ND ug/kg 180 26. 1 Enucor(a)pyrene ND ug/kg 130 27. 1 Anthracene ND ug/kg 130 27. 1 Phensanthracene ND ug/kg 130 27. 1 Indenzo(1,2,3-cd)pyrene ND ug/kg 130 22. 1 Indenzo(1,2,3-cd)pyrene ND ug/kg 500	Dimethyl phthalate						1
Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 27. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 51 J ug/kg 30 51. 1 Biphenyl ND ug/kg 220 42.	Benzo(a)anthracene	49	J		130	25.	1
Benzo(b)fluoranthene 45 J ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 35. 1 Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 27. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 22. 1 Pyrene 51 J ug/kg 30 51. 1 4-Chloroaniline ND ug/kg 220 40. 1 4-Chloroaniline ND ug/kg 220 42.	Benzo(a)pyrene	ND			180	54.	1
Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 51 J ug/kg 130 22. 1 Biphenyl ND ug/kg 500 51. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1	Benzo(b)fluoranthene	45	J		130	37.	1
Chrysene 39 J ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 51 J ug/kg 130 22. 1 Biphenyl ND ug/kg 500 51. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1	Benzo(k)fluoranthene	ND		ug/kg	130	35.	1
Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 21. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 51 J ug/kg 130 22. 1 Biphenyl ND ug/kg 500 51. 1 4-Chloroaniline ND ug/kg 20 40. 1 2-Nitroaniline ND ug/kg 220 40. 1 3-Nitroaniline ND ug/kg 220 42. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 42. 1 2-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 77. 1 Benzyl Alcohol	Chrysene	39	J		130	23.	1
Benzo(ghi)perylene ND	Acenaphthylene	ND		ug/kg	180	34.	1
Fluorene ND	Anthracene	ND		ug/kg	130	43.	1
Phenanthrene ND ug/kg 130 27. 1	Benzo(ghi)perylene	ND		ug/kg	180	26.	1
Dibenzo(a,h)anthracene ND ug/kg 130 25. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 51 J ug/kg 130 22. 1 Biphenyl ND ug/kg 500 51. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1 4-Nitroaniline ND ug/kg 220 91. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 27. 1 Acetophenone ND ug/kg 220 67. 1 <td>Fluorene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>220</td> <td>21.</td> <td>1</td>	Fluorene	ND		ug/kg	220	21.	1
Indeno(1,2,3-cd)pyrene ND	Phenanthrene	ND		ug/kg	130	27.	1
Pyrene 51 J ug/kg 130 22. 1 Biphenyl ND ug/kg 500 51. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
ND	Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1
4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	Pyrene	51	J	ug/kg	130	22.	1
2-Nitroaniline ND ug/kg 220 42. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	Biphenyl	ND		ug/kg	500	51.	1
3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 91. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	4-Chloroaniline	ND		ug/kg	220	40.	1
4-Nitroaniline ND ug/kg 220 91. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	2-Nitroaniline	ND		ug/kg	220	42.	1
Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	3-Nitroaniline	ND		ug/kg	220	42.	1
2-Methylnaphthalene ND ug/kg 260 26. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	4-Nitroaniline	ND		ug/kg	220	91.	1
1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	Dibenzofuran	ND		ug/kg	220	21.	1
Acetophenone ND ug/kg 220 27. 1 Benzyl Alcohol ND ug/kg 220 67. 1	2-Methylnaphthalene	ND		ug/kg	260	26.	1
Benzyl Alcohol ND ug/kg 220 67. 1	1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
,	Acetophenone	ND		ug/kg	220	27.	1
Carbazole ND ug/kg 220 21. 1	Benzyl Alcohol	ND		ug/kg	220	67.	1
	Carbazole	ND		ug/kg	220	21.	1

% Recovery	Acceptance Qualifier Criteria
69	25-120
69	10-120
78	23-120
65	30-120
54	10-136
46	18-120
	69 69 78 65 54



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596

Report Date: 09/17/20

Lab Number:

SAMPLE RESULTS

Lab ID: L2036369-02

Client ID: S-7

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D 09/04/20 12:04 Analytical Date:

Analyst: SZ 66% Percent Solids:

Date Collected: 09/02/20 14:10

Date Received: 09/02/20

Field Prep: Not Specified

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Semivolatile Organics by GC/MS - Westbo	ماما ماستنمت				
o ,	rough Lab				
Acenaphthene	ND	ug/kg	200	25.	1
1,2,4-Trichlorobenzene	ND	ug/kg	240	28.	1
Hexachlorobenzene	ND	ug/kg	150	27.	1
Bis(2-chloroethyl)ether	ND	ug/kg	220	33.	1
2-Chloronaphthalene	ND	ug/kg	240	24.	1
1,2-Dichlorobenzene	ND	ug/kg	240	44.	1
1,3-Dichlorobenzene	ND	ug/kg	240	42.	1
1,4-Dichlorobenzene	ND	ug/kg	240	43.	1
3,3'-Dichlorobenzidine	ND	ug/kg	240	65.	1
2,4-Dinitrotoluene	ND	ug/kg	240	49.	1
2,6-Dinitrotoluene	ND	ug/kg	240	42.	1
Fluoranthene	ND	ug/kg	150	28.	1
4-Chlorophenyl phenyl ether	ND	ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND	ug/kg	240	37.	1
Bis(2-chloroisopropyl)ether	ND	ug/kg	290	42.	1
Bis(2-chloroethoxy)methane	ND	ug/kg	260	24.	1
Hexachlorobutadiene	ND	ug/kg	240	36.	1
Hexachlorocyclopentadiene	ND	ug/kg	700	220	1
Hexachloroethane	ND	ug/kg	200	40.	1
Isophorone	ND	ug/kg	220	32.	1
Naphthalene	ND	ug/kg	240	30.	1
Nitrobenzene	ND	ug/kg	220	36.	1
NDPA/DPA	ND	ug/kg	200	28.	1
n-Nitrosodi-n-propylamine	ND	ug/kg	240	38.	1
Bis(2-ethylhexyl)phthalate	ND	ug/kg	240	85.	1
Butyl benzyl phthalate	ND	ug/kg	240	62.	1
Di-n-butylphthalate	ND	ug/kg	240	46.	1
Di-n-octylphthalate	ND	ug/kg	240	83.	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
Diethyl phthalate	ND		ug/kg	240	23.	1
Dimethyl phthalate	ND		ug/kg	240	51.	1
Benzo(a)anthracene	ND		ug/kg	150	28.	1
Benzo(a)pyrene	ND		ug/kg	200	60.	1
Benzo(b)fluoranthene	ND		ug/kg	150	41.	1
Benzo(k)fluoranthene	ND		ug/kg	150	39.	1
Chrysene	ND		ug/kg	150	25.	1
Acenaphthylene	ND		ug/kg	200	38.	1
Anthracene	ND		ug/kg	150	48.	1
Benzo(ghi)perylene	ND		ug/kg	200	29.	1
Fluorene	ND		ug/kg	240	24.	1
Phenanthrene	ND		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	150	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	200	34.	1
Pyrene	ND		ug/kg	150	24.	1
Biphenyl	ND		ug/kg	560	57.	1
4-Chloroaniline	ND		ug/kg	240	45.	1
2-Nitroaniline	ND		ug/kg	240	47.	1
3-Nitroaniline	ND		ug/kg	240	46.	1
4-Nitroaniline	ND		ug/kg	240	100	1
Dibenzofuran	ND		ug/kg	240	23.	1
2-Methylnaphthalene	ND		ug/kg	290	30.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	26.	1
Acetophenone	ND		ug/kg	240	30.	1
Benzyl Alcohol	ND		ug/kg	240	75.	1
Carbazole	ND		ug/kg	240	24.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	70	25-120
Phenol-d6	69	10-120
Nitrobenzene-d5	79	23-120
2-Fluorobiphenyl	67	30-120
2,4,6-Tribromophenol	55	10-136
4-Terphenyl-d14	44	18-120



L2036369

09/02/20 11:00

Not Specified

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date:

09/17/20

Lab Number:

Date Collected:

Date Received:

Field Prep:

Lab ID: L2036369-03

Client ID: S-8

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 11:41

Analyst: SZ 75% Percent Solids:

Extraction Method: EPA 3546 **Extraction Date:** 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - \	Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1	
Hexachlorobenzene	ND		ug/kg	130	25.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1	
2-Chloronaphthalene	ND		ug/kg	220	22.	1	
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1	
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1	
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	220	59.	1	
2,4-Dinitrotoluene	ND		ug/kg	220	44.	1	
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1	
Fluoranthene	ND		ug/kg	130	25.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	38.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1	
Hexachlorobutadiene	ND		ug/kg	220	32.	1	
Hexachlorocyclopentadiene	ND		ug/kg	630	200	1	
Hexachloroethane	ND		ug/kg	180	36.	1	
Isophorone	ND		ug/kg	200	29.	1	
Naphthalene	ND		ug/kg	220	27.	1	
Nitrobenzene	ND		ug/kg	200	33.	1	
NDPA/DPA	ND		ug/kg	180	25.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	77.	1	
Butyl benzyl phthalate	ND		ug/kg	220	56.	1	
Di-n-butylphthalate	ND		ug/kg	220	42.	1	
Di-n-octylphthalate	ND		ug/kg	220	75.	1	



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	46.	1
Benzo(a)anthracene	ND		ug/kg	130	25.	1
Benzo(a)pyrene	ND		ug/kg	180	54.	1
Benzo(b)fluoranthene	ND		ug/kg	130	37.	1
Benzo(k)fluoranthene	ND		ug/kg	130	35.	1
Chrysene	ND		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	34.	1
Anthracene	ND		ug/kg	130	43.	1
Benzo(ghi)perylene	ND		ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	ND		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1
Pyrene	ND		ug/kg	130	22.	1
Biphenyl	ND		ug/kg	500	51.	1
4-Chloroaniline	ND		ug/kg	220	40.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	92.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	260	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	27.	1
Benzyl Alcohol	ND		ug/kg	220	68.	1
Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	78	25-120
Phenol-d6	78	10-120
Nitrobenzene-d5	91	23-120
2-Fluorobiphenyl	82	30-120
2,4,6-Tribromophenol	60	10-136
4-Terphenyl-d14	57	18-120



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date: 09/17/20

Lab ID: L2036369-04

Client ID: S-9

Sample Location: GLENMONT, NY Field Prep:

Lab Number:

Date Collected:

Date Received:

09/02/20 11:30 09/02/20 Not Specified

L2036369

Sample Depth:

Percent Solids:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 11:18

Analyst: SZ 75% Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS - Westborough Lab								
Acenaphthene	ND		ug/kg	170	22.	1		
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1		
Hexachlorobenzene	ND		ug/kg	130	24.	1		
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1		
2-Chloronaphthalene	ND		ug/kg	220	21.	1		
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1		
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1		
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1		
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1		
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1		
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1		
Fluoranthene	ND		ug/kg	130	25.	1		
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1		
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1		
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1		
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1		
Hexachlorobutadiene	ND		ug/kg	220	32.	1		
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1		
Hexachloroethane	ND		ug/kg	170	35.	1		
Isophorone	ND		ug/kg	190	28.	1		
Naphthalene	ND		ug/kg	220	26.	1		
Nitrobenzene	ND		ug/kg	190	32.	1		
NDPA/DPA	ND		ug/kg	170	24.	1		
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1		
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1		
Butyl benzyl phthalate	ND		ug/kg	220	54.	1		
Di-n-butylphthalate	ND		ug/kg	220	41.	1		
Di-n-octylphthalate	ND		ug/kg	220	73.	1		



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: Date Received: 09/02/20 S-9

Field Prep: Sample Location: GLENMONT, NY Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	ND		ug/kg	130	24.	1
Benzo(a)pyrene	ND		ug/kg	170	53.	1
Benzo(b)fluoranthene	ND		ug/kg	130	36.	1
Benzo(k)fluoranthene	ND		ug/kg	130	34.	1
Chrysene	ND		ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	ND		ug/kg	130	42.	1
Benzo(ghi)perylene	ND		ug/kg	170	25.	1
Fluorene	ND		ug/kg	220	21.	1
Phenanthrene	ND		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	30.	1
Pyrene	ND		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	50.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	ND		ug/kg	220	20.	1
2-Methylnaphthalene	ND		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	ND		ug/kg	220	21.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	70	25-120
Phenol-d6	71	10-120
Nitrobenzene-d5	81	23-120
2-Fluorobiphenyl	72	30-120
2,4,6-Tribromophenol	58	10-136
4-Terphenyl-d14	48	18-120



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date: 09/17/20

Lab ID: L2036369-05 Client ID: S-10

Sample Location: GLENMONT, NY Date Received: Field Prep:

Date Collected:

Lab Number:

09/02/20 12:00 09/02/20

Not Specified

L2036369

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

Analytical Date: 09/04/20 15:33

Analyst: SZ 74% Percent Solids:

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS -	Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1	
Hexachlorobenzene	ND		ug/kg	130	25.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1	
2-Chloronaphthalene	ND		ug/kg	220	22.	1	
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1	
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1	
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	220	59.	1	
2,4-Dinitrotoluene	ND		ug/kg	220	44.	1	
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1	
Fluoranthene	27	J	ug/kg	130	26.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1	
Hexachlorobutadiene	ND		ug/kg	220	32.	1	
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1	
Hexachloroethane	ND		ug/kg	180	36.	1	
Isophorone	ND		ug/kg	200	29.	1	
Naphthalene	ND		ug/kg	220	27.	1	
Nitrobenzene	ND		ug/kg	200	33.	1	
NDPA/DPA	ND		ug/kg	180	25.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	77.	1	
Butyl benzyl phthalate	ND		ug/kg	220	56.	1	
Di-n-butylphthalate	ND		ug/kg	220	42.	1	
Di-n-octylphthalate	ND		ug/kg	220	76.	1	



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20

Field Prep: Sample Location: GLENMONT, NY Not Specified

Semivolatile Organics by GC/MS - Westborow Lab Diethyl phthalate ND ug/kg 20 20 1 Dimethyl phthalate ND ug/kg 22 47 1 Benzo(a)anthracene ND ug/kg 130 25 1 Benzo(a)byrene ND ug/kg 130 37 1 Benzo(b)fluoranthene ND ug/kg 130 37 1 Benzo(k)fluoranthene ND ug/kg 130 36 1 Chrysene ND ug/kg 130 36 1 Chrysene ND ug/kg 130 36 1 Acenaphthylene ND ug/kg 130 34 1 Anthracene ND ug/kg 130 26 1 Fluorene ND ug/kg 130 27 1 Phenanthracene ND ug/kg 130 27 1 Ibenzo(a)hjanthracene ND ug/kg <td< th=""><th>Parameter</th><th>Result</th><th>Qualifier</th><th>Units</th><th>RL</th><th>MDL</th><th>Dilution Factor</th></td<>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Dimethyl phthalate ND ug/kg 220 47. 1 Benzo(a)anthracene ND ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene ND ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 23. 1 Chrysene ND ug/kg 180 34. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 180 26. 1 Fluorene ND ug/kg 180 26. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(s,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 22. 1	Semivolatile Organics by GC/MS - We	estborough Lab					
Dimethyl phthalate ND ug/kg 220 47. 1 Benzo(a)anthracene ND ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene ND ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 34. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 180 26. 1 Benzo(gh)perlene ND ug/kg 130 26. 1 Fluorene ND ug/kg 130 27. 1 Phenanthrene ND ug/kg 130 26. 1 Inderen ND ug/kg 130 22. 1 Pibenzo(a, h)anth	Diethyl phthalate	ND		ua/ka	220	20.	1
Benzo(a)anthracene ND ug/kg 130 25. 1 Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene ND ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 34. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 22. 1 Phenanthrene ND ug/kg 130 27. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 22. 1 Biphenyl ND ug/kg 210 40. 1	Dimethyl phthalate	ND					1
Benzo(a)pyrene ND ug/kg 180 54. 1 Benzo(b)fluoranthene ND ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 130 26. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 <td< td=""><td>Benzo(a)anthracene</td><td>ND</td><td></td><td></td><td>130</td><td>25.</td><td>1</td></td<>	Benzo(a)anthracene	ND			130	25.	1
Benzo(b)fluoranthene ND ug/kg 130 37. 1 Benzo(k)fluoranthene ND ug/kg 130 36. 1 Chrysene ND ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 180 34. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 130 27. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 27. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 22. 1 Pyrene 27 J ug/kg 180 31. 1 Pyrene ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 43. 1	Benzo(a)pyrene	ND			180	54.	1
Chrysene ND ug/kg 130 23. 1 Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 22. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 27. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 180 31. 1 Pyrene 27 J ug/kg 180 31. 1 4-Chloroaniline ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 42. 1	Benzo(b)fluoranthene	ND			130	37.	1
Acenaphthylene ND ug/kg 180 34. 1 Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 22. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 130 22. 1 4-Chloroaniline ND ug/kg 210 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 21. 1	Benzo(k)fluoranthene	ND		ug/kg	130	36.	1
Anthracene ND ug/kg 130 43. 1 Benzo(ghi)perylene ND ug/kg 180 26. 1 Fluorene ND ug/kg 220 22. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 42. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 220 27. 1 2-Methylnaphthalene ND ug/kg 220 23. 1 2-Actophenone ND ug/kg 220 28. 1 Acetophenone ND ug/kg 220 28. 1	Chrysene	ND		ug/kg	130	23.	1
Benzo(ghi)perylene ND	Acenaphthylene	ND		ug/kg	180	34.	1
Fluorene ND ug/kg 220 22. 1 Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 4-Nitroaniline ND ug/kg 220 92. 1 2-Methylnaphthalene ND ug/kg 220 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 <td>Anthracene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>130</td> <td>43.</td> <td>1</td>	Anthracene	ND		ug/kg	130	43.	1
Phenanthrene ND ug/kg 130 27. 1 Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 4-Nitroaniline ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1	Benzo(ghi)perylene	ND		ug/kg	180	26.	1
Dibenzo(a,h)anthracene ND ug/kg 130 26. 1 Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1 Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 28. 1 Acetophenone ND ug/kg 220 68. 1	Fluorene	ND		ug/kg	220	22.	1
Indeno(1,2,3-cd)pyrene ND ug/kg 180 31. 1	Phenanthrene	ND		ug/kg	130	27.	1
Pyrene 27 J ug/kg 130 22. 1 Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1
Biphenyl ND ug/kg 510 52. 1 4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1
4-Chloroaniline ND ug/kg 220 40. 1 2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 92. 1 2-Methylnaphthalene ND ug/kg 220 21. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 23. 1 Benzyl Alcohol ND ug/kg 220 68. 1	Pyrene	27	J	ug/kg	130	22.	1
2-Nitroaniline ND ug/kg 220 43. 1 3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	Biphenyl	ND		ug/kg	510	52.	1
3-Nitroaniline ND ug/kg 220 42. 1 4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	4-Chloroaniline	ND		ug/kg	220	40.	1
4-Nitroaniline ND ug/kg 220 92. 1 Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	2-Nitroaniline	ND		ug/kg	220	43.	1
Dibenzofuran ND ug/kg 220 21. 1 2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	3-Nitroaniline	ND		ug/kg	220	42.	1
2-Methylnaphthalene ND ug/kg 270 27. 1 1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	4-Nitroaniline	ND		ug/kg	220	92.	1
1,2,4,5-Tetrachlorobenzene ND ug/kg 220 23. 1 Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	Dibenzofuran	ND		ug/kg	220	21.	1
Acetophenone ND ug/kg 220 28. 1 Benzyl Alcohol ND ug/kg 220 68. 1	2-Methylnaphthalene	ND		ug/kg	270	27.	1
Benzyl Alcohol ND ug/kg 220 68. 1	1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
, , , , , , , , , , , , , , , , , , , ,	Acetophenone	ND		ug/kg	220	28.	1
Carbazole ND ug/kg 220 22. 1	Benzyl Alcohol	ND		ug/kg	220	68.	1
	Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	90	25-120
Phenol-d6	88	10-120
Nitrobenzene-d5	106	23-120
2-Fluorobiphenyl	89	30-120
2,4,6-Tribromophenol	69	10-136
4-Terphenyl-d14	70	18-120



L2036369

Lab Number:

Project Name: BEACON ISLAND

Report Date: **Project Number:** AT5596 09/17/20

SAMPLE RESULTS

Lab ID: Date Collected: 09/02/20 15:05 L2036369-06

Date Received: Client ID: S-11 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 09/03/20 21:51 1,8270D Analytical Method:

Analytical Date: 09/04/20 16:20

Analyst: SZ 74% Percent Solids:

1,2,4-Trichlorobenzene ND	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,24-Trichlorobenzene ND	Semivolatile Organics by GC/MS - W	estborough Lab					
1,24-Trichlorobenzene ND	Acenaphthene	ND		ug/kg	180	23.	1
ND	1,2,4-Trichlorobenzene	ND			220	26.	1
2-Chloronaphthalene ND ug/kg 220 22. 1 1,2-Dichlorobenzene ND ug/kg 220 40. 1 1,3-Dichlorobenzene ND ug/kg 220 38. 1 1,4-Dichlorobenzene ND ug/kg 220 38. 1 1,4-Dichlorobenzene ND ug/kg 220 39. 1 3,3-'Dichlorobenzidine ND ug/kg 220 60. 1 2,4-Dinitrotoluene ND ug/kg 220 45. 1 2,6-Dinitrotoluene ND ug/kg 220 38. 1 1	Hexachlorobenzene	ND			130	25.	1
1,2-Dichlorobenzene ND ug/kg 220 40. 1 1,3-Dichlorobenzene ND ug/kg 220 38. 1 1,4-Dichlorobenzene ND ug/kg 220 39. 1 3,3-Dichlorobenzidine ND ug/kg 220 60. 1 2,4-Dinitrotoluene ND ug/kg 220 45. 1 2,4-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 24. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 Bis(2-chlorostopotyl)ether ND ug/kg 220 34. 1 Bis(2-chlorostopotyl)ether ND ug/kg 240 22. 1 Hexachlorostopotylether ND ug/kg <td>Bis(2-chloroethyl)ether</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>200</td> <td>30.</td> <td>1</td>	Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
1,3-Dichlorobenzene ND ug/kg 220 38. 1 1,4-Dichlorobenzene ND ug/kg 220 39. 1 3,3-Dichlorobenzidine ND ug/kg 220 60. 1 2,4-Dinitrotoluene ND ug/kg 220 45. 1 2,6-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 38. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 4-Brodophenyl phenyl ether ND ug/kg 220 34. 1 4-Brodophenyl phenyl ether ND ug/kg 220 34. 1 Bis(2-chloroistophyl) ether ND ug/kg 20 33. 1 Hexachlorostuddiene ND <td>2-Chloronaphthalene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>220</td> <td>22.</td> <td>1</td>	2-Chloronaphthalene	ND		ug/kg	220	22.	1
1.4-Dichlorobenzene ND ug/kg 220 39. 1 3.3-Dichlorobenzidine ND ug/kg 220 60. 1 2.4-Dinitrotoluene ND ug/kg 220 45. 1 2.6-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 24. 1 4-Chlorophenyl petnyl ether ND ug/kg 220 34. 1 4-Bis(2-chloroisopropyl)ether ND ug/kg 270 38. 1 Bis(2-chloroisopropyl)ether ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 240 22. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 200 29. 1 Insphralene ND	1,2-Dichlorobenzene	ND		ug/kg	220	40.	1
3.3°-Dichlorobenzidine ND ug/kg 220 60. 1 2.4-Dinitrotoluene ND ug/kg 220 45. 1 2.6-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 220 24. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bis(2-chloroisopropyl)ether ND ug/kg 220 34. 1 Bis(2-chloroethoxy)methane ND ug/kg 270 38. 1 Hexachlorobutadiene ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 240 22. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 200 29. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg	1,3-Dichlorobenzene	ND		ug/kg	220	38.	1
2,4-Dinitrotoluene ND ug/kg 220 45. 1 2,6-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 130 26. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 4-Bromophenyl phenyl ether ND ug/kg 220 38. 1 Bis(2-chlorostrouthoxy)methane ND ug/kg 240 22. 1 Hexachlorostrouthoxy)methane ND ug/kg 220 33. 1 Hexachlorostrouthoxylmethane ND ug/kg 200 29. 1 Hexachlorostrouthane<	1,4-Dichlorobenzene	ND		ug/kg	220	39.	1
2,6-Dinitrotoluene ND ug/kg 220 38. 1 Fluoranthene 74 J ug/kg 130 26. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 8is(2-chlorostopropyl)ether ND ug/kg 270 38. 1 Bis(2-chlorostopropyl)ether ND ug/kg 240 22. 1 Hexachlorostopropylether ND ug/kg 220 33. 1 Hexachlorostopropylether ND ug/kg 180 36. 1 Hexachlorostopropylether ND ug/kg 200 29. 1 Isophorone	3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
Fluoranthene 74 J ug/kg 130 26. 1 4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 Bis(2-chloroisopropyl)ether ND ug/kg 270 38. 1 Bis(2-chloroethoxy)methane ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 240 22. 1 Hexachlorocyclopentadiene ND ug/kg 20 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 200 29. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 56. 1	2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
4-Chlorophenyl phenyl ether ND ug/kg 220 24. 1 4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 Bis(2-chloroisopropyl)ether ND ug/kg 270 38. 1 Bis(2-chloroethoxy)methane ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 220 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 200 29. 1 Naphthalene ND ug/kg 200 29. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 33. 1 Signatural NDPA/DPA ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 56. 1	2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
4-Bromophenyl phenyl ether ND ug/kg 220 34. 1 Bis(2-chloroisopropyl)ether ND ug/kg 270 38. 1 Bis(2-chloroethoxy)methane ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 220 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 200 29. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 37. 1 NDPA/DPA ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 200 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Bityl benzyl phthalate ND ug/kg 220 56. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Fluoranthene	74	J	ug/kg	130	26.	1
Bis(2-chloroisopropyl)ether ND ug/kg 270 38. 1 Bis(2-chloroethoxy)methane ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 220 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 180 36. 1 Hexachlorocyclopentadiene ND ug/kg 200 29. 1 Isophorone ND ug/kg 200 29. 1 Isophorone ND ug/kg 220 27. 1 Naphthalene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220	4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
Bis(2-chloroethoxy)methane ND ug/kg 240 22. 1 Hexachlorobutadiene ND ug/kg 220 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachloroethane ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 220 27. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Hexachlorobutadiene ND ug/kg 220 33. 1 Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachloroethane ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 220 27. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Hexachlorocyclopentadiene ND ug/kg 640 200 1 Hexachlorocyclopentadiene ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 220 27. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachloroethane ND ug/kg 180 36. 1 Isophorone ND ug/kg 200 29. 1 Naphthalene ND ug/kg 220 27. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Hexachlorobutadiene	ND		ug/kg	220	33.	1
Sophorone ND Ug/kg 200 29. 1	Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Naphthalene ND ug/kg 220 27. 1 Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Hexachloroethane	ND		ug/kg	180	36.	1
Nitrobenzene ND ug/kg 200 33. 1 NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Isophorone	ND		ug/kg	200	29.	1
NDPA/DPA ND ug/kg 180 25. 1 n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Naphthalene	ND		ug/kg	220	27.	1
n-Nitrosodi-n-propylamine ND ug/kg 220 34. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	Nitrobenzene	ND		ug/kg	200	33.	1
Bis(2-ethylhexyl)phthalate ND ug/kg 220 77. 1 Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	NDPA/DPA	ND		ug/kg	180	25.	1
Butyl benzyl phthalate ND ug/kg 220 56. 1 Di-n-butylphthalate ND ug/kg 220 42. 1	n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1
Di-n-butylphthalate ND ug/kg 220 42. 1	Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	77.	1
21 25-19	Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-octylphthalate ND ug/kg 220 76. 1	Di-n-butylphthalate	ND		ug/kg	220	42.	1
	Di-n-octylphthalate	ND		ug/kg	220	76.	1



MDL

Dilution Factor

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20

Result

Sample Location: GLENMONT, NY Field Prep: Not Specified

Qualifier

Units

RL

Sample Depth:

Parameter

raiailielei	Nesun	Qualifier	Office	11.	INDL	Dilution ractor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Diethyl phthalate	ND		ug/kg	220	21.	1	
Dimethyl phthalate	ND		ug/kg	220	47.	1	
Benzo(a)anthracene	56	J	ug/kg	130	25.	1	
Benzo(a)pyrene	ND		ug/kg	180	55.	1	
Benzo(b)fluoranthene	63	J	ug/kg	130	38.	1	
Benzo(k)fluoranthene	ND		ug/kg	130	36.	1	
Chrysene	45	J	ug/kg	130	23.	1	
Acenaphthylene	ND		ug/kg	180	34.	1	
Anthracene	ND		ug/kg	130	44.	1	
Benzo(ghi)perylene	28	J	ug/kg	180	26.	1	
Fluorene	ND		ug/kg	220	22.	1	
Phenanthrene	45	J	ug/kg	130	27.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1	
Pyrene	74	J	ug/kg	130	22.	1	
Biphenyl	ND		ug/kg	510	52.	1	
4-Chloroaniline	ND		ug/kg	220	41.	1	
2-Nitroaniline	ND		ug/kg	220	43.	1	
3-Nitroaniline	ND		ug/kg	220	42.	1	
4-Nitroaniline	ND		ug/kg	220	93.	1	
Dibenzofuran	ND		ug/kg	220	21.	1	
2-Methylnaphthalene	ND		ug/kg	270	27.	1	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1	
Acetophenone	ND		ug/kg	220	28.	1	
Benzyl Alcohol	ND		ug/kg	220	68.	1	
Carbazole	ND		ug/kg	220	22.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	69	25-120
Phenol-d6	71	10-120
Nitrobenzene-d5	83	23-120
2-Fluorobiphenyl	71	30-120
2,4,6-Tribromophenol	56	10-136
4-Terphenyl-d14	49	18-120
4-Terprienyi-d14	49	10-120



L2036369

09/02/20 12:30

Not Specified

09/02/20

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Report Date: 09/17/20

Lab Number:

Date Collected:

Date Received:

Field Prep:

Lab ID: L2036369-07

Client ID: S-12

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 16:18

Analyst: IM 72% Percent Solids:

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

1,2,4-Trichlorobenzene Hexachlorobenzene Bis(2-chloroethyl)ether 2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	Lab ID ID ID ID ID ID ID ID ID I	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	180 230 140 200 230 230 230	24. 26. 26. 31. 23. 41.	1 1 1 1
1,2,4-Trichlorobenzene Hexachlorobenzene Bis(2-chloroethyl)ether 2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ID ID ID ID ID ID	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	230 140 200 230 230	26. 26. 31. 23. 41.	1 1 1 1
Hexachlorobenzene Bis(2-chloroethyl)ether 2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ND ND ND ND	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	140 200 230 230	26. 31. 23. 41.	1 1 1
Bis(2-chloroethyl)ether 2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ID ID ID ID	ug/kg ug/kg ug/kg ug/kg	200 230 230	31. 23. 41.	1
2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ND ND ND	ug/kg ug/kg ug/kg	230 230	23. 41.	1
1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ND ND	ug/kg ug/kg	230	41.	
1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine	ND ND	ug/kg			
1,4-Dichlorobenzene N 3,3'-Dichlorobenzidine N	ND		230		1
3,3'-Dichlorobenzidine		ug/kg		39.	1
	ND .		230	40.	1
2,4-Dinitrotoluene		ug/kg	230	61.	1
	ND.	ug/kg	230	46.	1
2,6-Dinitrotoluene	ID	ug/kg	230	39.	1
Fluoranthene	ID.	ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ID	ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ID	ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ID	ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ID	ug/kg	250	23.	1
Hexachlorobutadiene	ID	ug/kg	230	33.	1
Hexachlorocyclopentadiene N	ID	ug/kg	650	210	1
Hexachloroethane	ID	ug/kg	180	37.	1
Isophorone	ID	ug/kg	200	30.	1
Naphthalene N	ID	ug/kg	230	28.	1
Nitrobenzene	ID	ug/kg	200	34.	1
NDPA/DPA N	ID	ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ID	ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ID	ug/kg	230	79.	1
Butyl benzyl phthalate	ID	ug/kg	230	58.	1
Di-n-butylphthalate N	ID	ug/kg	230	43.	1
Di-n-octylphthalate N	ID	ug/kg	230	78.	1

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - 1	Westborough Lab					
Diethyl phthalate	ND	ı	ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	ND		ug/kg	140	26.	1
Benzo(a)pyrene	ND	ı	ug/kg	180	56.	1
Benzo(b)fluoranthene	ND	ı	ug/kg	140	38.	1
Benzo(k)fluoranthene	ND	ı	ug/kg	140	36.	1
Chrysene	ND	ı	ug/kg	140	24.	1
Acenaphthylene	ND	· ·	ug/kg	180	35.	1
Anthracene	ND	· ·	ug/kg	140	44.	1
Benzo(ghi)perylene	ND	ı	ug/kg	180	27.	1
Fluorene	ND	ı	ug/kg	230	22.	1
Phenanthrene	ND	ı	ug/kg	140	28.	1
Dibenzo(a,h)anthracene	ND	ı	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	ND	ı	ug/kg	180	32.	1
Pyrene	ND	ı	ug/kg	140	23.	1
Biphenyl	ND	ı	ug/kg	520	53.	1
4-Chloroaniline	ND	ı	ug/kg	230	42.	1
2-Nitroaniline	ND	ı	ug/kg	230	44.	1
3-Nitroaniline	ND	ı	ug/kg	230	43.	1
4-Nitroaniline	ND	ı	ug/kg	230	94.	1
Dibenzofuran	ND	ı	ug/kg	230	22.	1
2-Methylnaphthalene	ND	ı	ug/kg	270	28.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
Benzyl Alcohol	ND		ug/kg	230	70.	1
Carbazole	ND		ug/kg	230	22.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	57	25-120
Phenol-d6	59	10-120
Nitrobenzene-d5	62	23-120
2-Fluorobiphenyl	66	30-120
2,4,6-Tribromophenol	65	10-136
4-Terphenyl-d14	48	18-120



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number:

Report Date: 09/17/20

Lab ID: L2036369-08

Client ID: S-13

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 16:48

Analyst: IM 77% Percent Solids:

Date Collected: 09/02/20 14:40

Date Received: 09/02/20

Field Prep: Not Specified

Extraction Method: EPA 3546 **Extraction Date:** 09/03/20 21:51

1,2,4-Trichlorobenzene ND ug/kg 210 24. 1	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,2,4-Trichlorobenzene ND ug/kg 210 24. 1	Semivolatile Organics by GC/MS - We	estborough Lab					
1,2,4-Trichlorobenzene ND ug/kg 210 24. 1	Acenaphthene	ND		ug/kg	170	22.	1
Bis(2-chloroethyl)ether ND ug/kg 190 29. 1 22-chloroethyl)ether ND ug/kg 210 21. 1 1 1 22-chlorobaphthalene ND ug/kg 210 39. 1 1 1 1 1 1 1 1 1	1,2,4-Trichlorobenzene	ND			210	24.	1
Bis(2-chloroethyl)ether ND	Hexachlorobenzene	ND		ug/kg	130	24.	1
1,2-Dichlorobenzene ND	Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
1,3-Dichlorobenzene ND	2-Chloronaphthalene	ND		ug/kg	210	21.	1
1,4-Dichlorobenzene ND Ug/kg 210 38. 1	1,2-Dichlorobenzene	ND		ug/kg	210	39.	1
3.3Dichlorobenzidine ND ug/kg 210 57. 1 2.4-Dinitrotoluene ND ug/kg 210 43. 1 2.6-Dinitrotoluene ND ug/kg 210 37. 1 Fluoranthene ND ug/kg 130 25. 1 4-Chlorophenyl phenyl ether ND ug/kg 210 23. 1 4-Bromophenyl phenyl ether ND ug/kg 210 33. 1 4-Bromophenyl phenyl ether ND ug/kg 260 37. 1 Bis(2-chloroisopropyl)ether ND ug/kg 230 22. 1 Bis(2-chloroethoxy)methane ND ug/kg 230 22. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg	1,3-Dichlorobenzene	ND		ug/kg	210	37.	1
2,4-Dinitrotoluene ND ug/kg 210 43. 1 2,6-Dinitrotoluene ND ug/kg 210 37. 1 Fluoranthene ND ug/kg 130 25. 1 4-Chlorophenyl phenyl ether ND ug/kg 210 23. 1 4-Bromophenyl phenyl ether ND ug/kg 210 33. 1 Bis(2-chloroisopropyl)ether ND ug/kg 260 37. 1 Bis(2-chloroisopropyl)ether ND ug/kg 260 37. 1 Bis(2-chloroisopropyl)ether ND ug/kg 230 22. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorobutadiene ND ug/kg 110 31. 1 Hexachlorocyclopentadiene ND ug/kg 110 35. 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 170 35. 1 Siscophorone ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 35. 1 Siscophoropylamine ND ug/kg 210 33. 1 Siscophoropylamine ND ug/kg 210 33. 1 Siscophoropylamine ND ug/kg 210 54. 1 Siscophoropylamine ND ug/kg 210 54. 1 Siscophoropylamine ND ug/kg 210 54. 1	1,4-Dichlorobenzene	ND		ug/kg	210	38.	1
2.6-Dinitrotoluene ND ug/kg 210 37. 1 Fluoranthene ND ug/kg 130 25. 1 4-Chlorophenyl phenyl ether ND ug/kg 210 23. 1 4-Bromophenyl phenyl ether ND ug/kg 210 33. 1 4-Bromophenyl phenyl ether ND ug/kg 260 37. 1 Bis(2-chloroisopropyl)ether ND ug/kg 230 22. 1 Bis(2-chloroethoxy)methane ND ug/kg 210 31. 1 Hexachloroethoxylmethane ND ug/kg 210 31. 1 Hexachloroethane ND ug/kg 610 190 1 Hexachloroethane ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 32. 1 NITrobenzene ND ug/kg 170 24. 1 NDPA/DPA ND ug/kg 210 33. </td <td>3,3'-Dichlorobenzidine</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>210</td> <td>57.</td> <td>1</td>	3,3'-Dichlorobenzidine	ND		ug/kg	210	57.	1
ND	2,4-Dinitrotoluene	ND		ug/kg	210	43.	1
4-Chlorophenyl phenyl ether ND ug/kg 210 23. 1 4-Bromophenyl phenyl ether ND ug/kg 210 33. 1 Bis(2-chloroisopropyl)ether ND ug/kg 260 37. 1 Bis(2-chloroethoxy)methane ND ug/kg 230 22. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorocyclopentadiene ND ug/kg 610 190 1 Hexachloroethane ND ug/kg 170 35. 1 Isophorone ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 28. 1 Nitrobenzene ND ug/kg 190 26. 1 Nitrobenzene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 Nn-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 54. 1	2,6-Dinitrotoluene	ND		ug/kg	210	37.	1
A-Bromophenyl phenyl ether ND ug/kg 210 33. 1 Bis(2-chloroisopropyl)ether ND ug/kg 260 37. 1 Bis(2-chloroethoxy)methane ND ug/kg 230 22. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorocyclopentadiene ND ug/kg 610 190 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 210 26. 1 Nitrobenzene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 35. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 26. 1 ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 54. 1	Fluoranthene	ND		ug/kg	130	25.	1
Bis(2-chloroisopropyl)ether ND ug/kg 260 37. 1 Bis(2-chloroethoxy)methane ND ug/kg 230 22. 1 Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorocyclopentadiene ND ug/kg 610 190 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 28. 1 Naphthalene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 54. 1	4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
Bis(2-chloroethoxy)methane ND	4-Bromophenyl phenyl ether	ND		ug/kg	210	33.	1
Hexachlorobutadiene ND ug/kg 210 31. 1 Hexachlorocyclopentadiene ND ug/kg 610 190 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 210 26. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Hexachlorocyclopentadiene ND ug/kg 610 190 1 Hexachlorocyclopentadiene ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 210 26. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachloroethane ND ug/kg 170 35. 1 Isophorone ND ug/kg 190 28. 1 Naphthalene ND ug/kg 210 26. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Hexachlorobutadiene	ND		ug/kg	210	31.	1
ND	Hexachlorocyclopentadiene	ND		ug/kg	610	190	1
Naphthalene ND ug/kg 210 26. 1 Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Hexachloroethane	ND		ug/kg	170	35.	1
Nitrobenzene ND ug/kg 190 32. 1 NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Isophorone	ND		ug/kg	190	28.	1
NDPA/DPA ND ug/kg 170 24. 1 n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Naphthalene	ND		ug/kg	210	26.	1
n-Nitrosodi-n-propylamine ND ug/kg 210 33. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	Nitrobenzene	ND		ug/kg	190	32.	1
Bis(2-ethylhexyl)phthalate ND ug/kg 210 74. 1 Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	NDPA/DPA	ND		ug/kg	170	24.	1
Butyl benzyl phthalate ND ug/kg 210 54. 1 Di-n-butylphthalate ND ug/kg 210 41. 1	n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Di-n-butylphthalate ND ug/kg 210 41. 1	Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	74.	1
29.09	Butyl benzyl phthalate	ND		ug/kg	210	54.	1
Di-n-octylohthalate ND ug/kg 210 73. 1	Di-n-butylphthalate	ND		ug/kg	210	41.	1
aging 2.0	Di-n-octylphthalate	ND		ug/kg	210	73.	1

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier U	nits RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - 1	Westborough Lab				
Diethyl phthalate	ND	ug	ı/kg 210	20.	1
Dimethyl phthalate	ND		ı/kg 210	45.	1
Benzo(a)anthracene	ND		ı/kg 130	24.	1
Benzo(a)pyrene	ND	ug	ı/kg 170	52.	1
Benzo(b)fluoranthene	ND	ug	ı/kg 130	36.	1
Benzo(k)fluoranthene	ND	ug	ı/kg 130	34.	1
Chrysene	ND	ug	ı/kg 130	22.	1
Acenaphthylene	ND	ug	ı/kg 170	33.	1
Anthracene	ND	ug	ı/kg 130	42.	1
Benzo(ghi)perylene	ND	ug	ı/kg 170	25.	1
Fluorene	ND	ug	ı/kg 210	21.	1
Phenanthrene	ND	ug	ı/kg 130	26.	1
Dibenzo(a,h)anthracene	ND	ug	ı/kg 130	25.	1
Indeno(1,2,3-cd)pyrene	ND	ug	ı/kg 170	30.	1
Pyrene	ND	ug	ı/kg 130	21.	1
Biphenyl	ND	ug	ı/kg 490	50.	1
4-Chloroaniline	ND	ug	ı/kg 210	39.	1
2-Nitroaniline	ND	ug	ı/kg 210	41.	1
3-Nitroaniline	ND	ug	ı/kg 210	40.	1
4-Nitroaniline	ND	ug	ı/kg 210	89.	1
Dibenzofuran	ND	ug	ı/kg 210	20.	1
2-Methylnaphthalene	ND	ug	ı/kg 260	26.	1
1,2,4,5-Tetrachlorobenzene	ND	ug	ı/kg 210	22.	1
Acetophenone	ND	ug	ı/kg 210	27.	1
Benzyl Alcohol	ND	ug	ı/kg 210	66.	1
Carbazole	ND	ug	J/kg 210	21.	1

% Recovery	Acceptance Qualifier Criteria
58	25-120
60	10-120
62	23-120
69	30-120
60	10-136
62	18-120
	58 60 62 69 60



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number:

Report Date: 09/17/20

Lab ID: L2036369-09

Client ID: S-14

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/10/20 01:14

Analyst: WR 66% Percent Solids:

Date Collected: 09/02/20 15:35

Date Received: 09/02/20

Field Prep: Not Specified

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - \	Westborough Lab						
Acenaphthene	ND		ug/kg	200	26.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	250	29.	1	
Hexachlorobenzene	ND		ug/kg	150	28.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	220	34.	1	
2-Chloronaphthalene	ND		ug/kg	250	25.	1	
1,2-Dichlorobenzene	ND		ug/kg	250	45.	1	
1,3-Dichlorobenzene	ND		ug/kg	250	43.	1	
1,4-Dichlorobenzene	ND		ug/kg	250	44.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	250	67.	1	
2,4-Dinitrotoluene	ND		ug/kg	250	50.	1	
2,6-Dinitrotoluene	ND		ug/kg	250	43.	1	
Fluoranthene	72	J	ug/kg	150	29.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	250	27.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	250	38.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	300	43.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	270	25.	1	
Hexachlorobutadiene	ND		ug/kg	250	37.	1	
Hexachlorocyclopentadiene	ND		ug/kg	720	230	1	
Hexachloroethane	ND		ug/kg	200	40.	1	
Isophorone	ND		ug/kg	220	32.	1	
Naphthalene	ND		ug/kg	250	30.	1	
Nitrobenzene	ND		ug/kg	220	37.	1	
NDPA/DPA	ND		ug/kg	200	28.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	250	39.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	250	87.	1	
Butyl benzyl phthalate	ND		ug/kg	250	63.	1	
Di-n-butylphthalate	ND		ug/kg	250	48.	1	
Di-n-octylphthalate	ND		ug/kg	250	85.	1	



MDL

Dilution Factor

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 Date Collected: 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20

Result

Sample Location: GLENMONT, NY Field Prep: Not Specified

Qualifier

Units

RL

Sample Depth:

Parameter

raiailielei	Nesun	Quanner	Offica	IXL	WDL.	Dilution i actor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Diethyl phthalate	ND		ug/kg	250	23.	1	
Dimethyl phthalate	ND		ug/kg	250	53.	1	
Benzo(a)anthracene	58	J	ug/kg	150	28.	1	
Benzo(a)pyrene	ND		ug/kg	200	61.	1	
Benzo(b)fluoranthene	51	J	ug/kg	150	42.	1	
Benzo(k)fluoranthene	ND		ug/kg	150	40.	1	
Chrysene	43	J	ug/kg	150	26.	1	
Acenaphthylene	ND		ug/kg	200	39.	1	
Anthracene	ND		ug/kg	150	49.	1	
Benzo(ghi)perylene	ND		ug/kg	200	29.	1	
Fluorene	ND		ug/kg	250	24.	1	
Phenanthrene	ND		ug/kg	150	30.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	150	29.	1	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	200	35.	1	
Pyrene	66	J	ug/kg	150	25.	1	
Biphenyl	ND		ug/kg	570	58.	1	
4-Chloroaniline	ND		ug/kg	250	46.	1	
2-Nitroaniline	ND		ug/kg	250	48.	1	
3-Nitroaniline	ND		ug/kg	250	47.	1	
4-Nitroaniline	ND		ug/kg	250	100	1	
Dibenzofuran	ND		ug/kg	250	24.	1	
2-Methylnaphthalene	ND		ug/kg	300	30.	1	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	250	26.	1	
Acetophenone	ND		ug/kg	250	31.	1	
Benzyl Alcohol	ND		ug/kg	250	77.	1	
Carbazole	ND		ug/kg	250	24.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	80	25-120
Phenol-d6	76	10-120
Nitrobenzene-d5	86	23-120
2-Fluorobiphenyl	83	30-120
2,4,6-Tribromophenol	82	10-136
4-Terphenyl-d14	66	18-120



L2036369

Project Name: BEACON ISLAND

09/04/20 17:12

Project Number: AT5596

SAMPLE RESULTS

Date Collected: 09/02/20 16:00

Report Date: 09/17/20

Lab Number:

Lab ID: L2036369-10 Date Coll

Client ID: S-15 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 09/03/20 21:51

Analyst: IM
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westb	orough Lab					
Acenaphthene	ND		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	ND		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	ND		ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20
Sample Location: GLENMONT NV Field Pres: Not Specific

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier Unit	ts RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - 1	Westborough Lab				
Diethyl phthalate	ND	ug/k	g 220	20.	1
Dimethyl phthalate	ND	ug/k	_	45.	1
Benzo(a)anthracene	ND	ug/k		24.	1
Benzo(a)pyrene	ND	ug/k	g 170	53.	1
Benzo(b)fluoranthene	ND	ug/k	g 130	36.	1
Benzo(k)fluoranthene	ND	ug/k	g 130	34.	1
Chrysene	ND	ug/k	g 130	22.	1
Acenaphthylene	ND	ug/k	g 170	33.	1
Anthracene	ND	ug/k	g 130	42.	1
Benzo(ghi)perylene	ND	ug/k	g 170	25.	1
Fluorene	ND	ug/k	g 220	21.	1
Phenanthrene	ND	ug/k	g 130	26.	1
Dibenzo(a,h)anthracene	ND	ug/k	g 130	25.	1
Indeno(1,2,3-cd)pyrene	ND	ug/k	g 170	30.	1
Pyrene	ND	ug/k	g 130	21.	1
Biphenyl	ND	ug/k	g 490	50.	1
4-Chloroaniline	ND	ug/k	g 220	39.	1
2-Nitroaniline	ND	ug/k	g 220	42.	1
3-Nitroaniline	ND	ug/k	g 220	41.	1
4-Nitroaniline	ND	ug/k	g 220	89.	1
Dibenzofuran	ND	ug/k	g 220	20.	1
2-Methylnaphthalene	ND	ug/k	g 260	26.	1
1,2,4,5-Tetrachlorobenzene	ND	ug/k	g 220	22.	1
Acetophenone	ND	ug/k	g 220	27.	1
Benzyl Alcohol	ND	ug/k	g 220	66.	1
Carbazole	ND	ug/k	g 220	21.	1

% Recovery	Acceptance Qualifier Criteria
70	25-120
73	10-120
79	23-120
82	30-120
76	10-136
73	18-120
	70 73 79 82 76



Project Name: BEACON ISLAND

Project Number: AT5596

SAMPLE RESULTS

Lab Number: L2036369

Report Date: 09/17/20

Lab ID: L2036369-11

Client ID: DUP01

Sample Location: GLENMONT, NY

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 09/04/20 17:36

Analyst: IM 81% Percent Solids:

Date Collected:

09/02/20 00:00

Date Received:

09/02/20

Field Prep:

Not Specified

Extraction Method: EPA 3546

Extraction Date: 09/03/20 21:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westb	orough Lab					
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	ND		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1

% Recovery	Acceptance Qualifier Criteria
64	25-120
64	10-120
71	23-120
72	30-120
65	10-136
47	18-120
	64 64 71 72 65



Project Name: BEACON ISLAND

Project Number: AT5596 Lab Number: L2036369

Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 09/04/20 10:08 WR

Analyst:

Extraction Method: EPA 3546 09/03/20 18:58 **Extraction Date:**

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/N	1S - Westborough	n Lab for s	ample(s):	01-11	Batch:	WG1406373-1
Acenaphthene	ND		ug/kg	130		17.
1,2,4-Trichlorobenzene	ND		ug/kg	160		19.
Hexachlorobenzene	ND		ug/kg	99		18.
Bis(2-chloroethyl)ether	ND		ug/kg	150		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
1,2-Dichlorobenzene	ND		ug/kg	160		30.
1,3-Dichlorobenzene	ND		ug/kg	160		28.
1,4-Dichlorobenzene	ND		ug/kg	160		29.
3,3'-Dichlorobenzidine	ND		ug/kg	160		44.
2,4-Dinitrotoluene	ND		ug/kg	160		33.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	99		19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		18.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		16.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	470		150
Hexachloroethane	ND		ug/kg	130		27.
Isophorone	ND		ug/kg	150		21.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	150		24.
NDPA/DPA	ND		ug/kg	130		19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		57.
Butyl benzyl phthalate	ND		ug/kg	160		42.
Di-n-butylphthalate	ND		ug/kg	160		31.
Di-n-octylphthalate	ND		ug/kg	160		56.
Diethyl phthalate	ND		ug/kg	160		15.



L2036369

Lab Number:

Project Name: BEACON ISLAND

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 09/04/20 10:08

Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 09/03/20 18:58

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS - V	Vestborough	Lab for s	ample(s):	01-11	Batch:	WG1406373-1
Dimethyl phthalate	ND		ug/kg	160		35.
Benzo(a)anthracene	ND		ug/kg	99		18.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	99		28.
Benzo(k)fluoranthene	ND		ug/kg	99		26.
Chrysene	ND		ug/kg	99		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	99		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	99		20.
Dibenzo(a,h)anthracene	ND		ug/kg	99		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		23.
Pyrene	ND		ug/kg	99		16.
Biphenyl	ND		ug/kg	380		38.
4-Chloroaniline	ND		ug/kg	160		30.
2-Nitroaniline	ND		ug/kg	160		32.
3-Nitroaniline	ND		ug/kg	160		31.
4-Nitroaniline	ND		ug/kg	160		68.
Dibenzofuran	ND		ug/kg	160		16.
2-Methylnaphthalene	ND		ug/kg	200		20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		17.
Acetophenone	ND		ug/kg	160		20.
Benzyl Alcohol	ND		ug/kg	160		50.
Carbazole	ND		ug/kg	160		16.



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: Report Date: AT5596 09/17/20

> **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D Extraction Method: EPA 3546

Analytical Date: 09/04/20 10:08 09/03/20 18:58 **Extraction Date:**

Analyst: WR

> Result Qualifier Units RLMDL **Parameter**

> Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1406373-1

		Acceptance	
Surrogate	%Recovery Qualif	ier Criteria	
2-Fluorophenol	68	25-120	
Phenol-d6	67	10-120	
Nitrobenzene-d5	80	23-120	
2-Fluorobiphenyl	71	30-120	
2,4,6-Tribromophenol	52	10-136	
4-Terphenyl-d14	63	18-120	



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSE %Recov		% Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westbore	ough Lab Associ	ated sample(s):	01-11	Batch:	WG1406373	3-2 WG14063	373-3		
Acenaphthene	65		72			31-137	10		50
1,2,4-Trichlorobenzene	68		75			38-107	10		50
Hexachlorobenzene	57		64			40-140	12		50
Bis(2-chloroethyl)ether	68		78			40-140	14		50
2-Chloronaphthalene	69		76			40-140	10		50
1,2-Dichlorobenzene	66		74			40-140	11		50
1,3-Dichlorobenzene	66		73			40-140	10		50
1,4-Dichlorobenzene	64		71			28-104	10		50
3,3'-Dichlorobenzidine	57		60			40-140	5		50
2,4-Dinitrotoluene	76		82			40-132	8		50
2,6-Dinitrotoluene	76		81			40-140	6		50
Fluoranthene	69		74			40-140	7		50
4-Chlorophenyl phenyl ether	69		75			40-140	8		50
4-Bromophenyl phenyl ether	63		68			40-140	8		50
Bis(2-chloroisopropyl)ether	65		73			40-140	12		50
Bis(2-chloroethoxy)methane	76		86			40-117	12		50
Hexachlorobutadiene	64		68			40-140	6		50
Hexachlorocyclopentadiene	66		71			40-140	7		50
Hexachloroethane	61		68			40-140	11		50
Isophorone	73		81			40-140	10		50
Naphthalene	68		73			40-140	7		50
Nitrobenzene	80		89			40-140	11		50
NDPA/DPA	69		76			36-157	10		50



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Parameter	LCS %Recovery	Qual	LCSD %Recove		% Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westb	orough Lab Associ	ated sample(s):	01-11	Batch:	WG1406373	3-2 WG14063	373-3		
n-Nitrosodi-n-propylamine	77		85			32-121	10		50
Bis(2-ethylhexyl)phthalate	80		88			40-140	10		50
Butyl benzyl phthalate	78		82			40-140	5		50
Di-n-butylphthalate	75		80			40-140	6		50
Di-n-octylphthalate	81		90			40-140	11		50
Diethyl phthalate	68		74			40-140	8		50
Dimethyl phthalate	70		75			40-140	7		50
Benzo(a)anthracene	77		84			40-140	9		50
Benzo(a)pyrene	67		75			40-140	11		50
Benzo(b)fluoranthene	80		88			40-140	10		50
Benzo(k)fluoranthene	60		65			40-140	8		50
Chrysene	65		72			40-140	10		50
Acenaphthylene	73		79			40-140	8		50
Anthracene	72		76			40-140	5		50
Benzo(ghi)perylene	69		78			40-140	12		50
Fluorene	68		74			40-140	8		50
Phenanthrene	70		74			40-140	6		50
Dibenzo(a,h)anthracene	74		82			40-140	10		50
Indeno(1,2,3-cd)pyrene	74		82			40-140	10		50
Pyrene	68		75			35-142	10		50
Biphenyl	70		76			37-127	8		50
4-Chloroaniline	50		51			40-140	2		50
2-Nitroaniline	75		80			47-134	6		50



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
emivolatile Organics by GC/MS - Wes	tborough Lab Associa	ted sample(s): 01-11 Batch	: WG1406	373-2 WG14063	73-3			
3-Nitroaniline	64		68		26-129	6		50	
4-Nitroaniline	69		77		41-125	11		50	
Dibenzofuran	68		74		40-140	8		50	
2-Methylnaphthalene	76		81		40-140	6		50	
1,2,4,5-Tetrachlorobenzene	64		69		40-117	8		50	
Acetophenone	76		85		14-144	11		50	
Benzyl Alcohol	88		95		40-140	8		50	
Carbazole	74		79		54-128	7		50	

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qu	al %Recovery Qual	Criteria	
2-Fluorophenol	69	75	25-120	
Phenol-d6	72	78	10-120	
Nitrobenzene-d5	81	89	23-120	
2-Fluorobiphenyl	74	80	30-120	
2,4,6-Tribromophenol	54	57	10-136	
4-Terphenyl-d14	66	70	18-120	

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by G ID: S-9	C/MS - Westbor	ough Lab	Associated sa	mple(s): 01-11	QC Batch ID: WG1	406373-6 WO	G1406373-7 QC Sa	ample: L	_2036369-04 Client
Acenaphthene	ND	1750	1300	74	1100	62	31-137	17	50
1,2,4-Trichlorobenzene	ND	1750	1400	80	1200	68	38-107	15	50
Hexachlorobenzene	ND	1750	1100	63	990	56	40-140	11	50
Bis(2-chloroethyl)ether	ND	1750	1400	80	1300	74	40-140	7	50
2-Chloronaphthalene	ND	1750	1400	80	1200	68	40-140	15	50
1,2-Dichlorobenzene	ND	1750	1400	80	1200	68	40-140	15	50
1,3-Dichlorobenzene	ND	1750	1400	80	1200	68	40-140	15	50
1,4-Dichlorobenzene	ND	1750	1300	74	1200	68	28-104	8	50
3,3'-Dichlorobenzidine	ND	1750	1100	63	960	54	40-140	14	50
2,4-Dinitrotoluene	ND	1750	1300	74	1100	62	40-132	17	50
2,6-Dinitrotoluene	ND	1750	1300	74	1100	62	40-140	17	50
Fluoranthene	ND	1750	1200	68	1100	62	40-140	9	50
1-Chlorophenyl phenyl ether	ND	1750	1300	74	1200	68	40-140	8	50
1-Bromophenyl phenyl ether	ND	1750	1200	68	1100	62	40-140	9	50
Bis(2-chloroisopropyl)ether	ND	1750	1400	80	1200	68	40-140	15	50
Bis(2-chloroethoxy)methane	ND	1750	1600	91	1400	79	40-117	13	50
Hexachlorobutadiene	ND	1750	1200	68	1100	62	40-140	9	50
Hexachlorocyclopentadiene	ND	1750	1100	63	880	50	40-140	22	50
Hexachloroethane	ND	1750	1200	68	1100	62	40-140	9	50
sophorone	ND	1750	1500	86	1300	74	40-140	14	50
Naphthalene	ND	1750	1400	80	1200	68	40-140	15	50
Nitrobenzene	ND	1750	1600	91	1400	79	40-140	13	50
NDPA/DPA	ND	1750	1300	74	1200	68	36-157	8	50



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GID: S-9	C/MS - Westbor	ough Lab	Associated sa	mple(s): 01-11	QC Batch ID: WG1	406373-6 W	G1406373-7 QC Sa	ımple: L	.2036369-04 Client
n-Nitrosodi-n-propylamine	ND	1750	1500	86	1400	79	32-121	7	50
Bis(2-ethylhexyl)phthalate	ND	1750	1500	86	1300	74	40-140	14	50
Butyl benzyl phthalate	ND	1750	1400	80	1200	68	40-140	15	50
Di-n-butylphthalate	ND	1750	1400	80	1200	68	40-140	15	50
Di-n-octylphthalate	ND	1750	1500	86	1400	79	40-140	7	50
Diethyl phthalate	ND	1750	1200	68	1100	62	40-140	9	50
Dimethyl phthalate	ND	1750	1400	80	1200	68	40-140	15	50
Benzo(a)anthracene	ND	1750	1400	80	1200	68	40-140	15	50
Benzo(a)pyrene	ND	1750	1300	74	1100	62	40-140	17	50
Benzo(b)fluoranthene	ND	1750	1500	86	1300	74	40-140	14	50
Benzo(k)fluoranthene	ND	1750	1200	68	990	56	40-140	19	50
Chrysene	ND	1750	1200	68	1100	62	40-140	9	50
Acenaphthylene	ND	1750	1400	80	1300	74	40-140	7	50
Anthracene	ND	1750	1300	74	1200	68	40-140	8	50
Benzo(ghi)perylene	ND	1750	1300	74	1200	68	40-140	8	50
Fluorene	ND	1750	1300	74	1100	62	40-140	17	50
Phenanthrene	ND	1750	1200	68	1100	62	40-140	9	50
Dibenzo(a,h)anthracene	ND	1750	1400	80	1200	68	40-140	15	50
Indeno(1,2,3-cd)pyrene	ND	1750	1400	80	1200	68	40-140	15	50
Pyrene	ND	1750	1200	68	1100	62	35-142	9	50
Biphenyl	ND	1750	1400	80	1200	68	37-127	15	50
4-Chloroaniline	ND	1750	1200	68	750	42	40-140	46	50
2-Nitroaniline	ND	1750	1600	91	1400	79	47-134	13	50



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		SD und	MSD %Recovery		Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GO ID: S-9	C/MS - Westbor	ough Lab	Associated sam	nple(s): 01-11	QC Batch ID:	: WG1	406373-6 WG	140637	3-7 QC Sa	imple: L	.2036369	9-04 Client
3-Nitroaniline	ND	1750	1200	68	1	100	62		26-129	9		50
4-Nitroaniline	ND	1750	1600	91	1:	300	74		41-125	21		50
Dibenzofuran	ND	1750	1300	74	1:	200	68		40-140	8		50
2-Methylnaphthalene	ND	1750	1500	86	1	400	79		40-140	7		50
1,2,4,5-Tetrachlorobenzene	ND	1750	1300	74	1	100	62		40-117	17		50
Acetophenone	ND	1750	1600	91	1.	400	79		14-144	13		50
Benzyl Alcohol	ND	1750	1600	91	1-	400	79		40-140	13		50
Carbazole	ND	1750	1300	74	1:	200	68		54-128	8		50

	MS	M .	SD Acceptance	
Surrogate	% Recovery	Qualifier % Recovery	Qualifier Criteria	
2,4,6-Tribromophenol	54	49	10-136	
2-Fluorobiphenyl	81	71	30-120	
2-Fluorophenol	75	67	25-120	
4-Terphenyl-d14	65	58	18-120	
Nitrobenzene-d5	87	78	23-120	
Phenol-d6	76	67	10-120	



PCBS



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/04/20 17:04 Cleanup Method: EPA 3665A

Analytical Date: 09/04/20 17:04 Cleanup Method: EPA 3665A
Analyst: CW

Percent Solids: 76% Cleanup Method: EPA 3665A
Cleanup Date: 09/04/20
Cleanup Method: EPA 3660B
Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - W	estborough Lab						
Aroclor 1016	ND		ug/kg	42.0	3.73	1	Α
Aroclor 1221	ND		ug/kg	42.0	4.21	1	Α
Aroclor 1232	ND		ug/kg	42.0	8.91	1	Α
Aroclor 1242	71.1		ug/kg	42.0	5.66	1	Α
Aroclor 1248	ND		ug/kg	42.0	6.30	1	Α
Aroclor 1254	38.4	J	ug/kg	42.0	4.60	1	Α
Aroclor 1260	ND		ug/kg	42.0	7.76	1	Α
Aroclor 1262	ND		ug/kg	42.0	5.34	1	Α
Aroclor 1268	ND		ug/kg	42.0	4.35	1	Α
PCBs, Total	110	J	ug/kg	42.0	3.73	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	Α
Decachlorobiphenyl	76		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	73		30-150	В
Decachlorobiphenyl	82		30-150	В

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58

Analytical Date: 09/04/20 17:12 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 09/04/20
Percent Solids: 66% Cleanup Date: 09/04/20
Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by G0	C - Westborough Lab						
Aroclor 1016	ND		ug/kg	49.8	4.42	1	Α
Aroclor 1221	ND		ug/kg	49.8	4.99	1	Α
Aroclor 1232	ND		ug/kg	49.8	10.6	1	Α
Aroclor 1242	17.5	J	ug/kg	49.8	6.71	1	Α
Aroclor 1248	ND		ug/kg	49.8	7.46	1	Α
Aroclor 1254	ND		ug/kg	49.8	5.44	1	Α
Aroclor 1260	ND		ug/kg	49.8	9.20	1	Α
Aroclor 1262	ND		ug/kg	49.8	6.32	1	Α
Aroclor 1268	ND		ug/kg	49.8	5.16	1	Α
PCBs, Total	17.5	J	ug/kg	49.8	4.42	1	Α

Surrogato	0/ Весения	Ovelities	Acceptance	0 - 1
Surrogate	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	Α
Decachlorobiphenyl	42		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	42		30-150	В
Decachlorobiphenyl	45		30-150	В



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: AT5596 **Report Date:** 09/17/20

SAMPLE RESULTS

Lab ID: Date Collected: 09/02/20 11:00 L2036369-03

S-8 Client ID: Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth: Matrix: Soil

Extraction Method: EPA 3546 **Extraction Date:** 09/03/20 21:58 1,8082A Analytical Method: Cleanup Method: EPA 3665A Analytical Date: 09/04/20 17:19

Cleanup Date: 09/04/20 Analyst: CW Cleanup Method: EPA 3660B 75% Percent Solids: Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - West	borough Lab						
Aroclor 1016	ND		ug/kg	43.1	3.82	1	Α
Aroclor 1221	ND		ug/kg	43.1	4.32	1	Α
Aroclor 1232	ND		ug/kg	43.1	9.13	1	Α
Aroclor 1242	ND		ug/kg	43.1	5.81	1	Α
Aroclor 1248	ND		ug/kg	43.1	6.46	1	Α
Aroclor 1254	ND		ug/kg	43.1	4.71	1	Α
Aroclor 1260	ND		ug/kg	43.1	7.96	1	Α
Aroclor 1262	ND		ug/kg	43.1	5.47	1	Α
Aroclor 1268	ND		ug/kg	43.1	4.46	1	Α
PCBs, Total	ND		ug/kg	43.1	3.82	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	73		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	78		30-150	В
Decachlorobiphenyl	80		30-150	В

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/04/20 16:13 Cleanup Method: EPA 3665A

Analytical Date: 09/04/20 16:13 Cleanup Method: EPA 3665A
Analyst: HT Cleanup Date: 09/04/20
Percent Solids: 75% Cleanup Method: EPA 3660B
Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - W	estborough Lab						
Aroclor 1016	ND		ug/kg	42.1	3.74	1	Α
Aroclor 1221	ND		ug/kg	42.1	4.22	1	Α
Aroclor 1232	ND		ug/kg	42.1	8.93	1	Α
Aroclor 1242	ND		ug/kg	42.1	5.68	1	Α
Aroclor 1248	ND		ug/kg	42.1	6.32	1	Α
Aroclor 1254	ND		ug/kg	42.1	4.61	1	Α
Aroclor 1260	ND		ug/kg	42.1	7.78	1	Α
Aroclor 1262	ND		ug/kg	42.1	5.35	1	Α
Aroclor 1268	ND		ug/kg	42.1	4.36	1	Α
PCBs, Total	ND		ug/kg	42.1	3.74	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	Α
Decachlorobiphenyl	66		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	67		30-150	В
Decachlorobiphenyl	70		30-150	В

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/04/20 17:26 Cleanup Method: EPA 3665A

Analytical Date: 09/04/20 17:26 Cleanup Method: EPA 3665A

Analyst: CW Cleanup Date: 09/04/20

Percent Solids: 74% Cleanup Method: EPA 3660B

Percent Solids: 74% Cleanup Method: EPA 366 Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - W	estborough Lab						
Aroclor 1016	ND		ug/kg	43.0	3.82	1	Α
Aroclor 1221	ND		ug/kg	43.0	4.31	1	A
Aroclor 1232	ND		ug/kg	43.0	9.12	1	Α
Aroclor 1242	330		ug/kg	43.0	5.80	1	Α
Aroclor 1248	ND		ug/kg	43.0	6.45	1	Α
Aroclor 1254	86.6		ug/kg	43.0	4.71	1	Α
Aroclor 1260	38.2	J	ug/kg	43.0	7.95	1	Α
Aroclor 1262	ND		ug/kg	43.0	5.46	1	Α
Aroclor 1268	ND		ug/kg	43.0	4.46	1	Α
PCBs, Total	455	J	ug/kg	43.0	3.82	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
	70 Necovery	Qualifici	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	Α
Decachlorobiphenyl	76		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	77		30-150	В
Decachlorobiphenyl	86		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 D Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/04/20 21:44 Cleanup Method: EPA 3665A

Analyst: CW Cleanup Date: 09/04/20
Percent Solids: 74% Cleanup Method: EPA 3660B
Cleanup Date: 09/04/20
Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - V	Vestborough Lab						
Aroclor 1016	ND		ug/kg	214	19.0	5	А
Aroclor 1221	ND		ug/kg	214	21.4	5	Α
Aroclor 1232	ND		ug/kg	214	45.4	5	Α
Aroclor 1242	1480		ug/kg	214	28.8	5	Α
Aroclor 1248	ND		ug/kg	214	32.1	5	Α
Aroclor 1254	ND		ug/kg	214	23.4	5	Α
Aroclor 1260	ND		ug/kg	214	39.5	5	Α
Aroclor 1262	ND		ug/kg	214	27.2	5	А
Aroclor 1268	ND		ug/kg	214	22.2	5	Α
PCBs, Total	1480		ug/kg	214	19.0	5	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	Α
Decachlorobiphenyl	69		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	77		30-150	В
Decachlorobiphenyl	76		30-150	В

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58

Analytical Date: 09/04/20 17:41 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 09/04/20
Percent Solids: 72% Cleanup Method: EPA 3660B

Percent Solids: 72% Cleanup Method: EPA 366 Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westb	orough Lab						
Aroclor 1016	ND			44.2	3.93	1	Α
			ug/kg			I	A
Aroclor 1221	ND		ug/kg	44.2	4.43	1	Α
Aroclor 1232	ND		ug/kg	44.2	9.38	1	Α
Aroclor 1242	9.99	J	ug/kg	44.2	5.96	1	Α
Aroclor 1248	ND		ug/kg	44.2	6.64	1	Α
Aroclor 1254	ND		ug/kg	44.2	4.84	1	Α
Aroclor 1260	ND		ug/kg	44.2	8.18	1	Α
Aroclor 1262	ND		ug/kg	44.2	5.62	1	Α
Aroclor 1268	ND		ug/kg	44.2	4.58	1	Α
PCBs, Total	9.99	J	ug/kg	44.2	3.93	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	Α
Decachlorobiphenyl	73		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	75		30-150	В
Decachlorobiphenyl	82		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58

Analytical Date: 09/04/20 17:48 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 09/04/20
Percent Solids: 77% Cleanup Method: EPA 3660B

Percent Solids: 77% Cleanup Method: EPA 366 Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westl	oorough Lab						
Aroclor 1016	ND			41.0	3.64	4	А
ATOCIOI TOTO	ND		ug/kg	41.0	3.04	ı .	A
Aroclor 1221	ND		ug/kg	41.0	4.11	1	Α
Aroclor 1232	ND		ug/kg	41.0	8.69	1	Α
Aroclor 1242	ND		ug/kg	41.0	5.53	1	В
Aroclor 1248	ND		ug/kg	41.0	6.15	1	Α
Aroclor 1254	ND		ug/kg	41.0	4.48	1	Α
Aroclor 1260	ND		ug/kg	41.0	7.58	1	Α
Aroclor 1262	ND		ug/kg	41.0	5.21	1	Α
Aroclor 1268	ND		ug/kg	41.0	4.25	1	Α
PCBs, Total	ND		ug/kg	41.0	3.64	1	В

O	a. =		Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	А
Decachlorobiphenyl	62		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	62		30-150	В
Decachlorobiphenyl	69		30-150	В



09/04/20

Cleanup Date:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 D Date Collected: 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/05/20 11:14 Cleanup Method: EPA 3665A

Analytical Date: 09/05/20 11:14 Cleanup Method: EPA 3665A
Analyst: JM Cleanup Date: 09/04/20
Percent Solids: 66% Cleanup Method: EPA 3660B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by G0	C - Westborough Lab						
Aroclor 1016	ND		ug/kg	954	84.7	20	Α
Aroclor 1221	ND		ug/kg	954	95.6	20	Α
Aroclor 1232	ND		ug/kg	954	202.	20	Α
Aroclor 1242	8360		ug/kg	954	128.	20	В
Aroclor 1248	ND		ug/kg	954	143.	20	Α
Aroclor 1254	ND		ug/kg	954	104.	20	Α
Aroclor 1260	ND		ug/kg	954	176.	20	Α
Aroclor 1262	ND		ug/kg	954	121.	20	Α
Aroclor 1268	ND		ug/kg	954	98.8	20	Α
PCBs, Total	8360		ug/kg	954	84.7	20	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58
Analytical Date: 09/04/20 18:10 Cleanup Method: EPA 3665A

Analytical Date: 09/04/20 18:10 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 09/04/20
Percent Solids: 77% Cleanup Method: EPA 3660B
Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Wes	tborough Lab						
Aroclor 1016	ND		ug/kg	43.0	3.82	1	Α
Aroclor 1221	ND		ug/kg	43.0	4.30	1	Α
Aroclor 1232	ND		ug/kg	43.0	9.11	1	Α
Aroclor 1242	ND		ug/kg	43.0	5.79	1	Α
Aroclor 1248	ND		ug/kg	43.0	6.44	1	Α
Aroclor 1254	ND		ug/kg	43.0	4.70	1	А
Aroclor 1260	ND		ug/kg	43.0	7.94	1	Α
Aroclor 1262	ND		ug/kg	43.0	5.46	1	А
Aroclor 1268	ND		ug/kg	43.0	4.45	1	Α
PCBs, Total	ND		ug/kg	43.0	3.82	1	А

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	74		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	70		30-150	В
Decachlorobiphenyl	81		30-150	В

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 09/03/20 21:58

Analystical Date: 09/04/20 18:17 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 09/04/20

Percent Solids: 81% Cleanup Method: EPA 3660B Cleanup Date: 09/04/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC -	Westborough Lab						
Aroclor 1016	ND		ug/kg	39.3	3.49	1	Α
Aroclor 1221	ND		ug/kg	39.3	3.94	1	Α
Aroclor 1232	ND		ug/kg	39.3	8.33	1	Α
Aroclor 1242	ND		ug/kg	39.3	5.30	1	Α
Aroclor 1248	ND		ug/kg	39.3	5.90	1	Α
Aroclor 1254	ND		ug/kg	39.3	4.30	1	Α
Aroclor 1260	ND		ug/kg	39.3	7.26	1	Α
Aroclor 1262	ND		ug/kg	39.3	4.99	1	Α
Aroclor 1268	ND		ug/kg	39.3	4.07	1	Α
PCBs, Total	ND		ug/kg	39.3	3.49	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	75		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	78		30-150	В
Decachlorobiphenyl	84		30-150	В



L2036369

Lab Number:

Project Name: BEACON ISLAND

Report Date: Project Number: AT5596 09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 09/04/20 15:29

Analyst: HT

Extraction Method: EPA 3546 09/03/20 17:59 **Extraction Date:** Cleanup Method: EPA 3665A Cleanup Date: 09/04/20 Cleanup Method: EPA 3660B Cleanup Date: 09/04/20

Parameter	Result	Qualifier Uni	ts R	L	MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	Lab for samp	le(s): 01-1	1 Batch:	WG140	6360-1
Aroclor 1016	ND	ug	′kg 32	2.0	2.84	А
Aroclor 1221	ND	ug,	/kg 32	2.0	3.21	Α
Aroclor 1232	ND	ug,	/kg 32	2.0	6.79	Α
Aroclor 1242	ND	ug	/kg 32	2.0	4.32	А
Aroclor 1248	ND	ug	/kg 32	2.0	4.80	Α
Aroclor 1254	ND	ug	/kg 32	2.0	3.50	Α
Aroclor 1260	ND	ug	/kg 32	2.0	5.92	А
Aroclor 1262	ND	ug	/kg 32	2.0	4.07	Α
Aroclor 1268	ND	ug	/kg 32	2.0	3.32	Α
PCBs, Total	ND	ug	kg 32	2.0	2.84	Α

		Acceptance				
Surrogate	%Recovery Qualifie	Criteria	Column			
2,4,5,6-Tetrachloro-m-xylene	77	30-150	Α			
Decachlorobiphenyl	76	30-150	Α			
2,4,5,6-Tetrachloro-m-xylene	79	30-150	В			
Decachlorobiphenyl	84	30-150	В			



Project Name: BEACON ISLAND

Lab Number:

L2036369

Project Number: AT5596

Report Date:

oort Date:	09/17/20	

	LCS		LCSD		%Recovery		F	RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual L	imits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1406360-2 WG1406360-3									
Aroclor 1016	80		84		40-140	5		50	Α
Aroclor 1260	68		69		40-140	1		50	А

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	82	83	30-150 A
Decachlorobiphenyl	77	80	30-150 A
2,4,5,6-Tetrachloro-m-xylene	82	83	30-150 B
Decachlorobiphenyl	86	84	30-150 B

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		ecovery Limits	RPD	RF Qual Lin	_	olum <u>n</u>
Polychlorinated Biphenyls by ID: S-9	GC - Westbor	ough Lab	Associated sar	mple(s): 01-11	QC Batch	ID: WG1	406360-6 WG	61406360-	7 QC Sa	ample: L	2036369-04	Client	t
Aroclor 1016	ND	269	213	79		214	79		40-140	0	5	0	Α
Aroclor 1260	ND	269	177	66		177	65		40-140	0	5	0	Α

	MS	MSD	Acceptance		
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	78	77	30-150	A	
Decachlorobiphenyl	73	72	30-150	Α	
2,4,5,6-Tetrachloro-m-xylene	74	75	30-150	В	
Decachlorobiphenyl	82	78	30-150	В	



PESTICIDES



09/05/20

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/10/20 12:45 Cleanup Method: EPA 3620B

Analyst: SM Cleanup Date:
Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	2.06	0.403	1	Α
Lindane	ND		ug/kg	0.857	0.383	1	Α
Alpha-BHC	ND		ug/kg	0.857	0.243	1	Α
Beta-BHC	ND		ug/kg	2.06	0.780	1	Α
Heptachlor	ND		ug/kg	1.03	0.461	1	Α
Aldrin	ND		ug/kg	2.06	0.724	1	Α
Heptachlor epoxide	ND		ug/kg	3.86	1.16	1	Α
Endrin	ND		ug/kg	0.857	0.351	1	Α
Endrin aldehyde	ND		ug/kg	2.57	0.900	1	Α
Endrin ketone	ND		ug/kg	2.06	0.529	1	Α
Dieldrin	ND		ug/kg	1.28	0.642	1	Α
4,4'-DDE	ND		ug/kg	2.06	0.475	1	Α
4,4'-DDD	ND		ug/kg	2.06	0.733	1	Α
4,4'-DDT	ND		ug/kg	3.86	1.65	1	Α
Endosulfan I	ND		ug/kg	2.06	0.486	1	Α
Endosulfan II	ND		ug/kg	2.06	0.687	1	Α
Endosulfan sulfate	ND		ug/kg	0.857	0.408	1	Α
Methoxychlor	ND		ug/kg	3.86	1.20	1	Α
Toxaphene	ND		ug/kg	38.6	10.8	1	Α
cis-Chlordane	ND		ug/kg	2.57	0.716	1	Α
trans-Chlordane	ND		ug/kg	2.57	0.678	1	Α
Chlordane	ND		ug/kg	17.1	6.81	1	Α

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	119		30-150	Α
Decachlorobiphenyl	80		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	79		30-150	В
Decachlorobiphenyl	77		30-150	В



09/05/20

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 05:25 Cleanup Method: EPA 3620B

Analyst: EL Cleanup Date:
Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - We	estborough Lab						
Delta-BHC	ND		ug/kg	2.26	0.444	1	А
Lindane	ND		ug/kg	0.944	0.422	1	A
Alpha-BHC	ND		ug/kg	0.944	0.268	1	Α
Beta-BHC	ND		ug/kg	2.26	0.859	1	Α
Heptachlor	ND		ug/kg	1.13	0.508	1	Α
Aldrin	ND		ug/kg	2.26	0.797	1	Α
Heptachlor epoxide	ND		ug/kg	4.25	1.27	1	А
Endrin	ND		ug/kg	0.944	0.387	1	Α
Endrin aldehyde	ND		ug/kg	2.83	0.991	1	Α
Endrin ketone	ND		ug/kg	2.26	0.583	1	Α
Dieldrin	ND		ug/kg	1.42	0.708	1	Α
4,4'-DDE	ND		ug/kg	2.26	0.524	1	Α
4,4'-DDD	0.928	J	ug/kg	2.26	0.808	1	В
4,4'-DDT	ND		ug/kg	4.25	1.82	1	Α
Endosulfan I	ND		ug/kg	2.26	0.535	1	Α
Endosulfan II	ND		ug/kg	2.26	0.757	1	Α
Endosulfan sulfate	ND		ug/kg	0.944	0.449	1	Α
Methoxychlor	ND		ug/kg	4.25	1.32	1	Α
Toxaphene	ND		ug/kg	42.5	11.9	1	Α
cis-Chlordane	ND		ug/kg	2.83	0.789	1	А
trans-Chlordane	ND		ug/kg	2.83	0.747	1	Α
Chlordane	ND		ug/kg	18.9	7.50	1	Α

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	125		30-150	Α
Decachlorobiphenyl	77		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	90		30-150	В
Decachlorobiphenyl	78		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 11:12 Cleanup Method: EPA 3620B

Analyst: BM Cleanup Date: 09/05/20 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - W	estborough Lab						
Delta-BHC	ND		ug/kg	2.12	0.416	1	Α
Lindane	ND		ug/kg	0.885	0.396	1	Α
Alpha-BHC	ND		ug/kg	0.885	0.251	1	Α
Beta-BHC	ND		ug/kg	2.12	0.806	1	Α
Heptachlor	ND		ug/kg	1.06	0.476	1	Α
Aldrin	ND		ug/kg	2.12	0.748	1	А
Heptachlor epoxide	ND		ug/kg	3.98	1.20	1	Α
Endrin	ND		ug/kg	0.885	0.363	1	Α
Endrin aldehyde	ND		ug/kg	2.66	0.930	1	Α
Endrin ketone	ND		ug/kg	2.12	0.547	1	Α
Dieldrin	ND		ug/kg	1.33	0.664	1	Α
4,4'-DDE	ND		ug/kg	2.12	0.491	1	Α
4,4'-DDD	ND		ug/kg	2.12	0.758	1	Α
4,4'-DDT	ND		ug/kg	3.98	1.71	1	Α
Endosulfan I	ND		ug/kg	2.12	0.502	1	Α
Endosulfan II	ND		ug/kg	2.12	0.710	1	А
Endosulfan sulfate	ND		ug/kg	0.885	0.421	1	А
Methoxychlor	ND		ug/kg	3.98	1.24	1	Α
Toxaphene	ND		ug/kg	39.8	11.2	1	Α
cis-Chlordane	ND		ug/kg	2.66	0.740	1	Α
trans-Chlordane	ND		ug/kg	2.66	0.701	1	Α
Chlordane	ND		ug/kg	17.7	7.04	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	Α
Decachlorobiphenyl	66		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	74		30-150	В
Decachlorobiphenyl	70		30-150	В



09/05/20

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/08/20 22:00 Cleanup Method: EPA 3620B

Analyst: EL Cleanup Date:
Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westb	orough Lab						
Delta-BHC	ND		ug/kg	2.02	0.396	1	Α
Lindane	ND		ug/kg	0.842	0.376	1	A
Alpha-BHC	ND		ug/kg	0.842	0.239	1	Α
Beta-BHC	ND		ug/kg	2.02	0.766	1	Α
Heptachlor	ND		ug/kg	1.01	0.453	1	Α
Aldrin	ND		ug/kg	2.02	0.712	1	Α
Heptachlor epoxide	ND		ug/kg	3.79	1.14	1	А
Endrin	ND		ug/kg	0.842	0.345	1	Α
Endrin aldehyde	ND		ug/kg	2.53	0.884	1	Α
Endrin ketone	ND		ug/kg	2.02	0.520	1	Α
Dieldrin	ND		ug/kg	1.26	0.632	1	Α
4,4'-DDE	ND		ug/kg	2.02	0.467	1	А
4,4'-DDD	ND		ug/kg	2.02	0.721	1	А
4,4'-DDT	ND		ug/kg	3.79	1.62	1	А
Endosulfan I	ND		ug/kg	2.02	0.478	1	Α
Endosulfan II	ND		ug/kg	2.02	0.675	1	А
Endosulfan sulfate	ND		ug/kg	0.842	0.401	1	А
Methoxychlor	ND		ug/kg	3.79	1.18	1	Α
Toxaphene	ND		ug/kg	37.9	10.6	1	Α
cis-Chlordane	ND		ug/kg	2.53	0.704	1	Α
trans-Chlordane	ND		ug/kg	2.53	0.667	1	Α
Chlordane	ND		ug/kg	16.8	6.70	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	Α
Decachlorobiphenyl	53		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	69		30-150	В
Decachlorobiphenyl	71		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55

Analytical Date: 09/09/20 23:55

Analyst: SM

Cleanup Method: EPA 3620B

Cleanup Date: 09/05/20

Analyst: SM Clean Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	2.05	0.402	1	Α
Lindane	ND		ug/kg	0.855	0.382	1	Α
Alpha-BHC	ND		ug/kg	0.855	0.243	1	Α
Beta-BHC	ND		ug/kg	2.05	0.778	1	Α
Heptachlor	ND		ug/kg	1.03	0.460	1	Α
Aldrin	ND		ug/kg	2.05	0.722	1	Α
Heptachlor epoxide	ND		ug/kg	3.85	1.15	1	Α
Endrin	ND		ug/kg	0.855	0.350	1	Α
Endrin aldehyde	ND		ug/kg	2.56	0.898	1	Α
Endrin ketone	ND		ug/kg	2.05	0.528	1	Α
Dieldrin	ND		ug/kg	1.28	0.641	1	Α
4,4'-DDE	ND		ug/kg	2.05	0.474	1	Α
4,4'-DDD	ND		ug/kg	2.05	0.732	1	Α
4,4'-DDT	ND		ug/kg	3.85	1.65	1	Α
Endosulfan I	ND		ug/kg	2.05	0.485	1	Α
Endosulfan II	ND		ug/kg	2.05	0.686	1	Α
Endosulfan sulfate	ND		ug/kg	0.855	0.407	1	Α
Methoxychlor	ND		ug/kg	3.85	1.20	1	Α
Toxaphene	ND		ug/kg	38.5	10.8	1	Α
cis-Chlordane	ND		ug/kg	2.56	0.715	1	Α
trans-Chlordane	ND		ug/kg	2.56	0.677	1	Α
Chlordane	ND		ug/kg	17.1	6.80	1	Α

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	Α
Decachlorobiphenyl	48		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	66		30-150	В
Decachlorobiphenyl	51		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55

Analytical Date: 09/10/20 12:22 Cleanup Method: EPA 3620B
Analyst: SM Cleanup Date: 09/05/20

Percent Solids: 74% Cleanup Method: EPA 3660B Cleanup Date: 09/10/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - V	Vestborough Lab						
Delta-BHC	ND		ug/kg	2.14	0.418	1	А
Lindane	ND		ug/kg	0.890	0.398	1	Α
Alpha-BHC	ND		ug/kg	0.890	0.253	1	A
Beta-BHC	ND		ug/kg	2.14	0.810	1	Α
Heptachlor	ND		ug/kg	1.07	0.479	1	Α
Aldrin	ND		ug/kg	2.14	0.752	1	Α
Heptachlor epoxide	ND		ug/kg	4.00	1.20	1	Α
Endrin	ND		ug/kg	0.890	0.365	1	Α
Endrin aldehyde	ND		ug/kg	2.67	0.934	1	Α
Endrin ketone	ND		ug/kg	2.14	0.550	1	Α
Dieldrin	ND		ug/kg	1.33	0.667	1	Α
4,4'-DDE	ND		ug/kg	2.14	0.494	1	Α
4,4'-DDD	ND		ug/kg	2.14	0.762	1	Α
4,4'-DDT	ND		ug/kg	4.00	1.72	1	Α
Endosulfan I	ND		ug/kg	2.14	0.504	1	Α
Endosulfan II	ND		ug/kg	2.14	0.714	1	Α
Endosulfan sulfate	ND		ug/kg	0.890	0.424	1	Α
Methoxychlor	ND		ug/kg	4.00	1.24	1	Α
Toxaphene	ND		ug/kg	40.0	11.2	1	Α
cis-Chlordane	ND		ug/kg	2.67	0.744	1	А
trans-Chlordane	ND		ug/kg	2.67	0.705	1	Α
Chlordane	ND		ug/kg	17.8	7.07	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	175	Q	30-150	Α
Decachlorobiphenyl	69		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	77		30-150	В
Decachlorobiphenyl	68		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 14:57 Cleanup Method: EPA 3620B

Analytical Date: 09/09/20 14:57 Cleanup Method: EPA 3620
Analyst: BM Cleanup Date: 09/05/20
Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - We	estborough Lab						
Delta-BHC	ND		ug/kg	2.16	0.424	1	Α
Lindane	ND		ug/kg	0.902	0.403	1	А
Alpha-BHC	ND		ug/kg	0.902	0.256	1	Α
Beta-BHC	ND		ug/kg	2.16	0.821	1	Α
Heptachlor	ND		ug/kg	1.08	0.485	1	Α
Aldrin	ND		ug/kg	2.16	0.762	1	Α
Heptachlor epoxide	ND		ug/kg	4.06	1.22	1	Α
Endrin	ND		ug/kg	0.902	0.370	1	Α
Endrin aldehyde	ND		ug/kg	2.71	0.947	1	Α
Endrin ketone	ND		ug/kg	2.16	0.558	1	Α
Dieldrin	ND		ug/kg	1.35	0.677	1	Α
4,4'-DDE	ND		ug/kg	2.16	0.501	1	Α
4,4'-DDD	ND		ug/kg	2.16	0.772	1	Α
4,4'-DDT	ND		ug/kg	4.06	1.74	1	Α
Endosulfan I	ND		ug/kg	2.16	0.512	1	Α
Endosulfan II	ND		ug/kg	2.16	0.724	1	Α
Endosulfan sulfate	ND		ug/kg	0.902	0.429	1	Α
Methoxychlor	ND		ug/kg	4.06	1.26	1	Α
Toxaphene	ND		ug/kg	40.6	11.4	1	Α
cis-Chlordane	ND		ug/kg	2.71	0.754	1	Α
trans-Chlordane	ND		ug/kg	2.71	0.714	1	Α
Chlordane	ND		ug/kg	18.0	7.17	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	Α
Decachlorobiphenyl	63		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	75		30-150	В
Decachlorobiphenyl	77		30-150	В



09/05/20

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 15:09 Cleanup Method: EPA 3620B

Analyst: BM Cleanup Date: Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	2.01	0.394	1	Α
Lindane	ND		ug/kg	0.838	0.375	1	Α
Alpha-BHC	ND		ug/kg	0.838	0.238	1	Α
Beta-BHC	ND		ug/kg	2.01	0.763	1	Α
Heptachlor	ND		ug/kg	1.01	0.451	1	Α
Aldrin	ND		ug/kg	2.01	0.708	1	Α
Heptachlor epoxide	ND		ug/kg	3.77	1.13	1	Α
Endrin	ND		ug/kg	0.838	0.344	1	Α
Endrin aldehyde	ND		ug/kg	2.52	0.880	1	Α
Endrin ketone	ND		ug/kg	2.01	0.518	1	Α
Dieldrin	ND		ug/kg	1.26	0.629	1	Α
4,4'-DDE	ND		ug/kg	2.01	0.465	1	Α
4,4'-DDD	ND		ug/kg	2.01	0.718	1	Α
4,4'-DDT	ND		ug/kg	3.77	1.62	1	Α
Endosulfan I	ND		ug/kg	2.01	0.475	1	Α
Endosulfan II	ND		ug/kg	2.01	0.672	1	Α
Endosulfan sulfate	ND		ug/kg	0.838	0.399	1	Α
Methoxychlor	ND		ug/kg	3.77	1.17	1	Α
Toxaphene	ND		ug/kg	37.7	10.6	1	Α
cis-Chlordane	ND		ug/kg	2.52	0.701	1	Α
trans-Chlordane	ND		ug/kg	2.52	0.664	1	Α
Chlordane	ND		ug/kg	16.8	6.66	1	Α

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	Α
Decachlorobiphenyl	53		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	52		30-150	В
Decachlorobiphenyl	55		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 Date Collected: 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 15:20 Cleanup Method: EPA 3620B

Analytical Date: 09/09/20 15:20 Cleanup Method: EPA 3620 Analyst: BM Cleanup Date: 09/05/20

Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	2.30	0.450	1	Α
Lindane	ND		ug/kg	0.959	0.428	1	Α
Alpha-BHC	ND		ug/kg	0.959	0.272	1	Α
Beta-BHC	ND		ug/kg	2.30	0.872	1	Α
Heptachlor	ND		ug/kg	1.15	0.516	1	Α
Aldrin	ND		ug/kg	2.30	0.810	1	Α
Heptachlor epoxide	ND		ug/kg	4.31	1.29	1	Α
Endrin	ND		ug/kg	0.959	0.393	1	Α
Endrin aldehyde	ND		ug/kg	2.88	1.01	1	Α
Endrin ketone	ND		ug/kg	2.30	0.592	1	Α
Dieldrin	ND		ug/kg	1.44	0.719	1	Α
4,4'-DDE	ND		ug/kg	2.30	0.532	1	Α
4,4'-DDD	ND		ug/kg	2.30	0.820	1	Α
4,4'-DDT	ND		ug/kg	4.31	1.85	1	Α
Endosulfan I	ND		ug/kg	2.30	0.544	1	Α
Endosulfan II	ND		ug/kg	2.30	0.769	1	Α
Endosulfan sulfate	ND		ug/kg	0.959	0.456	1	Α
Methoxychlor	ND		ug/kg	4.31	1.34	1	Α
Toxaphene	ND		ug/kg	43.1	12.1	1	Α
cis-Chlordane	ND		ug/kg	2.88	0.801	1	Α
trans-Chlordane	ND		ug/kg	2.88	0.759	1	Α
Chlordane	ND		ug/kg	19.2	7.62	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09 Date Collected: 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	172	Q	30-150	Α
Decachlorobiphenyl	57		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	74		30-150	В
Decachlorobiphenyl	67		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20
Sample Location: CLENMONT NV Field Prop. Not Specific

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 12:12 Cleanup Method: EPA 3620B

Analyst: BM Cleanup Date: 09/05/20 Percent Solids: 77%

Qualifier Result Units RL MDL **Dilution Factor** Column **Parameter** Organochlorine Pesticides by GC - Westborough Lab Delta-BHC ND ug/kg 2.02 0.395 1 Α Lindane ND 0.840 0.376 Α ug/kg Alpha-BHC ND ug/kg 0.840 0.238 1 Α Beta-BHC ND ug/kg 2.02 0.764 1 Α Heptachlor ND ug/kg 1.01 0.452 1 Α Aldrin ND ug/kg 2.02 0.710 1 Α ND 3.78 Α Heptachlor epoxide ug/kg 1.13 1 Endrin ND 0.840 0.344 1 Α ug/kg ND 1 Endrin aldehyde ug/kg 2.52 0.882 Α ND Endrin ketone 2.02 0.519 1 Α ug/kg Dieldrin ND 1.26 0.630 1 Α ug/kg 4,4'-DDE ND 2.02 0.466 1 ug/kg Α 4,4'-DDD ND 0.719 Α 2.02 1 ug/kg 4,4'-DDT ND ug/kg 3.78 1.62 1 Α Endosulfan I ND 2.02 0.476 1 ug/kg Α Endosulfan II ND 2.02 0.674 1 Α ug/kg Endosulfan sulfate ND 0.840 0.400 ug/kg 1 Α ND 1 Methoxychlor 3.78 1.18 Α ug/kg Toxaphene ND 37.8 10.6 1 Α ug/kg cis-Chlordane ND 2.52 0.702 1 Α ug/kg trans-Chlordane ND 2.52 0.665 1 Α ug/kg Chlordane ND ug/kg 16.8 6.68 1 Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	Α
Decachlorobiphenyl	41		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	47		30-150	В
Decachlorobiphenyl	50		30-150	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 09/03/20 21:55
Analytical Date: 09/09/20 15:31 Cleanup Method: EPA 3620B

Analyst: BM Cleanup Date: 09/05/20 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	1.90	0.371	1	Α
Lindane	ND		ug/kg	0.790	0.353	1	Α
Alpha-BHC	ND		ug/kg	0.790	0.224	1	Α
Beta-BHC	ND		ug/kg	1.90	0.719	1	Α
Heptachlor	ND		ug/kg	0.948	0.425	1	Α
Aldrin	ND		ug/kg	1.90	0.667	1	Α
Heptachlor epoxide	ND		ug/kg	3.55	1.07	1	Α
Endrin	ND		ug/kg	0.790	0.324	1	Α
Endrin aldehyde	ND		ug/kg	2.37	0.829	1	Α
Endrin ketone	ND		ug/kg	1.90	0.488	1	Α
Dieldrin	ND		ug/kg	1.18	0.592	1	Α
4,4'-DDE	ND		ug/kg	1.90	0.438	1	Α
4,4'-DDD	ND		ug/kg	1.90	0.676	1	Α
4,4'-DDT	ND		ug/kg	3.55	1.52	1	Α
Endosulfan I	ND		ug/kg	1.90	0.448	1	Α
Endosulfan II	ND		ug/kg	1.90	0.633	1	Α
Endosulfan sulfate	ND		ug/kg	0.790	0.376	1	Α
Methoxychlor	ND		ug/kg	3.55	1.10	1	Α
Toxaphene	ND		ug/kg	35.5	9.95	1	Α
cis-Chlordane	ND		ug/kg	2.37	0.660	1	Α
trans-Chlordane	ND		ug/kg	2.37	0.625	1	Α
Chlordane	ND		ug/kg	15.8	6.28	1	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	Α
Decachlorobiphenyl	67		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	71		30-150	В
Decachlorobiphenyl	70		30-150	В



L2036369

Lab Number:

Project Name: BEACON ISLAND

Report Date: Project Number: AT5596

09/17/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 09/08/20 11:36

Analyst: DGM Extraction Method: EPA 3546 09/03/20 18:04 **Extraction Date:** Cleanup Method: EPA 3620B Cleanup Date: 09/05/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC	- Westboroug	h Lab for	sample(s):	01-05,07-11	Batch:	WG1406366-1
Delta-BHC	ND		ug/kg	1.56	0.305	А
Lindane	ND		ug/kg	0.648	0.290	A
Alpha-BHC	ND		ug/kg	0.648	0.184	Α
Beta-BHC	ND		ug/kg	1.56	0.590	Α
Heptachlor	ND		ug/kg	0.778	0.349	Α
Aldrin	ND		ug/kg	1.56	0.548	Α
Heptachlor epoxide	ND		ug/kg	2.92	0.875	Α
Endrin	ND		ug/kg	0.648	0.266	А
Endrin aldehyde	ND		ug/kg	1.94	0.681	А
Endrin ketone	ND		ug/kg	1.56	0.401	А
Dieldrin	ND		ug/kg	0.973	0.486	А
4,4'-DDE	ND		ug/kg	1.56	0.360	А
4,4'-DDD	ND		ug/kg	1.56	0.555	Α
4,4'-DDT	ND		ug/kg	2.92	1.25	Α
Endosulfan I	ND		ug/kg	1.56	0.368	А
Endosulfan II	ND		ug/kg	1.56	0.520	Α
Endosulfan sulfate	ND		ug/kg	0.648	0.309	А
Methoxychlor	ND		ug/kg	2.92	0.908	Α
Toxaphene	ND		ug/kg	29.2	8.17	А
cis-Chlordane	ND		ug/kg	1.94	0.542	А
trans-Chlordane	ND		ug/kg	1.94	0.514	Α
Chlordane	ND		ug/kg	13.0	5.16	Α



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 09/08/20 11:36

Analyst: DGM

Extraction Method: EPA 3546
Extraction Date: 09/03/20 18:04
Cleanup Method: EPA 3620B
Cleanup Date: 09/05/20

Parameter Result Qualifier Units RL MDL Column

Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05,07-11 Batch: WG1406366-1

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria	Column	
2.4.5.6. Totrocklara m videna	0.4		30-150	^	
2,4,5,6-Tetrachloro-m-xylene	84		30-150	Α	
Decachlorobiphenyl	49		30-150	Α	
2,4,5,6-Tetrachloro-m-xylene	60		30-150	В	
Decachlorobiphenyl	60		30-150	В	



Project Name: BEACON ISLAND

Project Number: AT5596

Report Date: 09/17/20

L2036369

Lab Number:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 09/10/20 11:48

Analyst: SM

Extraction Method: EPA 3546
Extraction Date: 09/03/20 18:04
Cleanup Method: EPA 3620B
Cleanup Date: 09/05/20
Cleanup Method: EPA 3660B
Cleanup Date: 09/10/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC	- Westboroug	h Lab for	sample(s):	06 Batch	n: WG1408298	-1
Delta-BHC	ND		ug/kg	1.56	0.305	Α
Lindane	ND		ug/kg	0.648	0.290	А
Alpha-BHC	ND		ug/kg	0.648	0.184	А
Beta-BHC	ND		ug/kg	1.56	0.590	Α
Heptachlor	ND		ug/kg	0.778	0.349	Α
Aldrin	ND		ug/kg	1.56	0.548	Α
Heptachlor epoxide	ND		ug/kg	2.92	0.875	Α
Endrin	ND		ug/kg	0.648	0.266	А
Endrin ketone	ND		ug/kg	1.56	0.401	А
Dieldrin	ND		ug/kg	0.973	0.486	А
4,4'-DDE	ND		ug/kg	1.56	0.360	А
4,4'-DDD	ND		ug/kg	1.56	0.555	Α
4,4'-DDT	ND		ug/kg	2.92	1.25	А
Endosulfan I	ND		ug/kg	1.56	0.368	Α
Endosulfan II	ND		ug/kg	1.56	0.520	Α
Endosulfan sulfate	ND		ug/kg	0.648	0.309	Α
Methoxychlor	ND		ug/kg	2.92	0.908	Α
Toxaphene	ND		ug/kg	29.2	8.17	Α
cis-Chlordane	ND		ug/kg	1.94	0.542	Α
trans-Chlordane	ND		ug/kg	1.94	0.514	Α
Chlordane	ND		ug/kg	13.0	5.16	Α
Endrin aldehyde	ND		ug/kg	1.94	0.681	В



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 09/10/20 11:48

Analyst: SM

Extraction Method: EPA 3546
Extraction Date: 09/03/20 18:04
Cleanup Method: EPA 3620B
Cleanup Date: 09/05/20
Cleanup Method: EPA 3660B
Cleanup Date: 09/10/20

ParameterResultQualifierUnitsRLMDLColumnOrganochlorine Pesticides by GC - Westborough Lab for sample(s):06Batch:WG1408298-1

		Acceptance							
Surrogate	%Recovery Qu	ualifier	Criteria	Column					
0.450 Tatasahlara ayada a	00		00.450						
2,4,5,6-Tetrachloro-m-xylene	86		30-150	А					
Decachlorobiphenyl	54		30-150	Α					
2,4,5,6-Tetrachloro-m-xylene	59		30-150	В					
Decachlorobiphenyl	63		30-150	В					



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC	- Westborough Lab Assoc	iated sample(s)	: 01-05,07-11	Batch:	WG1406366-2 W	G1406366-3			
Delta-BHC	79		78		30-150	1		30	Α
Lindane	75		74		30-150	1		30	Α
Alpha-BHC	82		81		30-150	1		30	А
Beta-BHC	85		84		30-150	1		30	А
Heptachlor	75		74		30-150	1		30	А
Aldrin	63		62		30-150	2		30	А
Heptachlor epoxide	69		69		30-150	0		30	А
Endrin	74		73		30-150	1		30	А
Endrin aldehyde	50		49		30-150	2		30	А
Endrin ketone	68		66		30-150	3		30	А
Dieldrin	72		72		30-150	0		30	А
4,4'-DDE	63		62		30-150	2		30	А
4,4'-DDD	74		74		30-150	0		30	А
4,4'-DDT	73		74		30-150	1		30	А
Endosulfan I	74		74		30-150	0		30	А
Endosulfan II	69		69		30-150	0		30	А
Endosulfan sulfate	65		63		30-150	3		30	А
Methoxychlor	85		84		30-150	1		30	А
cis-Chlordane	63		62		30-150	2		30	А
trans-Chlordane	68		67		30-150	1		30	Α



Project Name: BEACON ISLAND

Lab Number:

L2036369

Project Number:

AT5596

Report Date:

09/17/20

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,07-11 Batch: WG1406366-2 WG1406366-3

Surrogate	LCS %Recovery G	LCSD Qual %Recovery Qu	Acceptance al Criteria Column
2,4,5,6-Tetrachloro-m-xylene	85	84	30-150 A
Decachlorobiphenyl	60	44	30-150 A
2,4,5,6-Tetrachloro-m-xylene	70	71	30-150 B
Decachlorobiphenyl	72	72	30-150 B

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westboro	ough Lab Assoc	ciated sample(s)	: 06 Batch:	WG1408298-	2 WG1408298-3	3			
Delta-BHC	91		88		30-150	3		30	Α
Lindane	84		83		30-150	1		30	А
Alpha-BHC	93		92		30-150	1		30	А
Beta-BHC	97		95		30-150	2		30	А
Heptachlor	88		89		30-150	1		30	А
Aldrin	79		74		30-150	7		30	А
Heptachlor epoxide	83		78		30-150	6		30	А
Endrin	90		87		30-150	3		30	А
Endrin aldehyde	68		56		30-150	19		30	А
Endrin ketone	85		80		30-150	6		30	А
Dieldrin	90		86		30-150	5		30	А
4,4'-DDE	80		76		30-150	5		30	А
4,4'-DDD	93		88		30-150	6		30	А
4,4'-DDT	95		89		30-150	7		30	А
Endosulfan I	92		88		30-150	4		30	А
Endosulfan II	83		79		30-150	5		30	А
Endosulfan sulfate	83		76		30-150	9		30	А
Methoxychlor	109		103		30-150	6		30	А
cis-Chlordane	75		71		30-150	5		30	А
trans-Chlordane	81		80		30-150	1		30	А



Project Name: BEACON ISLAND

Lab Number:

L2036369

Project Number: /

AT5596

Report Date:

09/17/20

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 06 Batch: WG1408298-2 WG1408298-3

Surrogate	LCS %Recovery Q	LCSD Jual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	94	92	30-150 A
Decachlorobiphenyl	76	53	30-150 A
2,4,5,6-Tetrachloro-m-xylene	71	71	30-150 B
Decachlorobiphenyl	81	77	30-150 B

Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		covery imits	RPD	Qual	RPD Limits	<u>Colum</u> n
Organochlorine Pesticides by Client ID: S-9	GC - Westbor	rough Lab	Associated sa	mple(s): 01-05,	07-11 Q	C Batch ID	D: WG1406366	i-6 WG140	6366-7	QC Sai	mple: L2	036369-	04
Delta-BHC	ND	43.2	35.9	83		28.3	67	3	30-150	24		50	Α
Lindane	ND	43.2	31.8	74		25.1	59	3	80-150	24		50	Α
Alpha-BHC	ND	43.2	39.2	91		31.1	73	3	80-150	23		50	Α
Beta-BHC	ND	43.2	37.4	87		30.2	71	3	80-150	21		50	Α
Heptachlor	ND	43.2	38.7	90		29.6	70	3	80-150	27		50	Α
Aldrin	ND	43.2	28.4	66		22.7	53	3	80-150	22		50	Α
Heptachlor epoxide	ND	43.2	32.8	76		27.4	64	3	80-150	18		50	Α
Endrin	ND	43.2	31.0	72		26.8	63	3	80-150	15		50	Α
Endrin aldehyde	ND	43.2	17.3	40		16.0	38	3	80-150	8		50	Α
Endrin ketone	ND	43.2	24.8	57		20.2	48	3	80-150	20		50	Α
Dieldrin	ND	43.2	31.3	73		25.3	59	3	80-150	21		50	Α
4,4'-DDE	ND	43.2	28.8	67		23.2	55	3	80-150	22		50	Α
4,4'-DDD	ND	43.2	32.9	76		27.6	65	3	80-150	18		50	Α
4,4'-DDT	ND	43.2	31.7	73		27.6	65	3	80-150	14		50	Α
Endosulfan I	ND	43.2	32.9	76		26.5	62	3	80-150	22		50	Α
Endosulfan II	ND	43.2	28.4	66		24.9	59	3	80-150	13		50	Α
Endosulfan sulfate	ND	43.2	23.9	55		20.3	48	3	80-150	16		50	Α
Methoxychlor	ND	43.2	32.0	74		27.4	64	3	80-150	15		50	Α
cis-Chlordane	ND	43.2	30.8	71		23.5	55	3	80-150	27		50	Α
trans-Chlordane	ND	43.2	32.6	76		26.5	62	3	80-150	21		50	Α



Matrix Spike Analysis Batch Quality Control

Project Name:

BEACON ISLAND

Project Number: AT5596 Lab Number:

L2036369

Report Date:

09/17/20

	Native	MS	MS	MS		MSD	MSD	Recovery			RPD
Parameter	Sample	Added	Found	%Recovery	Qual	Found	%Recovery	/ Qual Limits	RPD	Qual L	Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,07-11 QC Batch ID: WG1406366-6 WG1406366-7 QC Sample: L2036369-04 Client ID: S-9

	MS	MSD	Acceptance		
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	87	67	30-150	А	
Decachlorobiphenyl	58	43	30-150	Α	
2,4,5,6-Tetrachloro-m-xylene	63	61	30-150	В	
Decachlorobiphenyl	78	93	30-150	В	



METALS



09/02/20 13:40

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 **Report Date:** 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01

Client ID: S-6 Date Received: 09/02/20

Field Prep: Sample Location: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil 76%

Percent Solids: Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 4220 mg/kg 10.3 2.79 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV ND 2 1,6010D Antimony, Total mg/kg 5.17 0.393 09/05/20 07:30 09/08/20 16:46 EPA 3050B R۷ Arsenic, Total 3.26 mg/kg 1.03 0.215 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV 2 Barium, Total 26.8 1.03 0.180 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV mg/kg 0.258 J 0.034 2 1,6010D Beryllium, Total mg/kg 0.517 09/05/20 07:30 09/08/20 16:46 EPA 3050B ΒV J 2 1,6010D ΒV Cadmium, Total 0.155 mg/kg 1.03 0.101 09/05/20 07:30 09/08/20 16:46 EPA 3050B 09/05/20 07:30 09/08/20 16:46 EPA 3050B Calcium, Total 3240 10.3 3.62 2 1,6010D mg/kg ΒV 1.03 2 1,6010D 0.099 09/05/20 07:30 09/08/20 16:46 EPA 3050B ΒV Chromium, Total 9.19 mg/kg 2 1,6010D Cobalt, Total 5.37 mg/kg 2.07 0.172 09/05/20 07:30 09/08/20 16:46 EPA 3050B BV 2 Copper, Total 6.62 1.03 0.267 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV mg/kg 10800 2 1,6010D Iron, Total 0.933 09/05/20 07:30 09/08/20 16:46 EPA 3050B ΒV mg/kg 5.17 2 Lead, Total 6.85 mg/kg 5.17 0.277 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D BV Magnesium, Total 2540 10.3 1.59 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV mg/kg 1.03 2 1,6010D ΒV Manganese, Total 160 mg/kg 0.164 09/05/20 07:30 09/08/20 16:46 EPA 3050B Mercury, Total ND mg/kg 0.084 0.055 1 09/05/20 10:00 09/08/20 08:54 EPA 7471B 1,7471B EW Nickel, Total 10.6 2.58 0.250 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D BV mg/kg 324 258 2 1,6010D Potassium, Total mg/kg 14.9 09/05/20 07:30 09/08/20 16:46 EPA 3050B BV Selenium, Total ND mg/kg 2.07 0.267 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.03 0.292 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D BV J Sodium, Total 39.0 mg/kg 207 3.26 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.07 0.326 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D ΒV Vanadium, Total 9.68 2 09/05/20 07:30 09/08/20 16:46 EPA 3050B 1,6010D mg/kg 1.03 0.210 R۷ 2 1,6010D

0.303

5.17

mg/kg



09/05/20 07:30 09/08/20 16:46 EPA 3050B

ΒV

Zinc, Total

34.2

09/02/20 14:10

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 **Report Date:** 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02

Client ID: S-7 Date Received: 09/02/20

Field Prep: Sample Location: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil 66% Percent Solids:

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 6050 mg/kg 11.7 3.17 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV ND 2 1,6010D Antimony, Total mg/kg 5.87 0.446 09/05/20 07:30 09/08/20 16:50 EPA 3050B R۷ Arsenic, Total 2.13 mg/kg 1.17 0.244 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV 2 Barium, Total 25.6 1.17 0.204 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV mg/kg 0.258 J 0.039 2 1,6010D Beryllium, Total mg/kg 0.587 09/05/20 07:30 09/08/20 16:50 EPA 3050B ΒV J 2 1,6010D ΒV Cadmium, Total 0.200 mg/kg 1.17 0.115 09/05/20 07:30 09/08/20 16:50 EPA 3050B 09/05/20 07:30 09/08/20 16:50 EPA 3050B Calcium, Total 3480 11.7 4.11 2 1,6010D mg/kg ΒV 2 1,6010D 10.7 1.17 0.113 09/05/20 07:30 09/08/20 16:50 EPA 3050B ΒV Chromium, Total mg/kg 2 6.32 1,6010D Cobalt, Total mg/kg 2.35 0.195 09/05/20 07:30 09/08/20 16:50 EPA 3050B BV 2 Copper, Total 6.14 1.17 0.303 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV mg/kg 5.87 2 1,6010D Iron, Total 15300 1.06 09/05/20 07:30 09/08/20 16:50 EPA 3050B ΒV mg/kg 2 Lead, Total 8.19 mg/kg 5.87 0.315 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D BV Magnesium, Total 3450 11.7 1.81 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV mg/kg 200 0.187 2 1,6010D ΒV Manganese, Total mg/kg 1.17 09/05/20 07:30 09/08/20 16:50 EPA 3050B Mercury, Total ND mg/kg 0.095 0.062 1 09/05/20 10:00 09/08/20 08:58 EPA 7471B 1,7471B EW Nickel, Total 13.7 2.94 0.284 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D BV mg/kg 476 294 2 1,6010D Potassium, Total mg/kg 16.9 09/05/20 07:30 09/08/20 16:50 EPA 3050B BV Selenium, Total ND mg/kg 2.35 0.303 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.17 0.332 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D BV J Sodium, Total 43.2 mg/kg 235 3.70 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.35 0.370 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D ΒV Vanadium, Total 10.4 0.238 2 09/05/20 07:30 09/08/20 16:50 EPA 3050B 1,6010D mg/kg 1.17 R۷ 2 1,6010D

0.344

5.87

mg/kg



09/05/20 07:30 09/08/20 16:50 EPA 3050B

ΒV

Zinc, Total

47.1

09/02/20 11:00

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 **Report Date:** 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03

Client ID: S-8 Date Received: 09/02/20

Field Prep: Sample Location: GLENMONT, NY Not Specified

Sample Depth:

Matrix: Soil 75%

Percent Solids: Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 6460 mg/kg 10.1 2.72 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV ND 2 1,6010D Antimony, Total mg/kg 5.04 0.383 09/05/20 07:30 09/08/20 16:55 EPA 3050B R۷ Arsenic, Total 3.20 mg/kg 1.01 0.209 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV 2 Barium, Total 41.5 1.01 0.175 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV mg/kg J 0.033 2 1,6010D Beryllium, Total 0.322 mg/kg 0.504 09/05/20 07:30 09/08/20 16:55 EPA 3050B ΒV J 2 0.252 0.099 1,6010D ΒV Cadmium, Total mg/kg 1.01 09/05/20 07:30 09/08/20 16:55 EPA 3050B Calcium, Total 12700 10.1 3.52 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D mg/kg ΒV 1.01 2 1,6010D 10.1 0.097 09/05/20 07:30 09/08/20 16:55 EPA 3050B ΒV Chromium, Total mg/kg 2 7.28 1,6010D Cobalt, Total mg/kg 2.01 0.167 09/05/20 07:30 09/08/20 16:55 EPA 3050B BV 2 Copper, Total 10.4 1.01 0.260 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV mg/kg 0.909 2 1,6010D Iron, Total 18300 5.04 09/05/20 07:30 09/08/20 16:55 EPA 3050B ΒV mg/kg 2 Lead, Total 6.99 mg/kg 5.04 0.270 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D BV Magnesium, Total 4480 10.1 1.55 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV mg/kg 386 1.01 0.160 2 1,6010D ΒV Manganese, Total mg/kg 09/05/20 07:30 09/08/20 16:55 EPA 3050B Mercury, Total ND mg/kg 0.084 0.055 1 09/05/20 10:00 09/08/20 09:01 EPA 7471B 1,7471B EW Nickel, Total 15.2 2.52 0.244 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D BV mg/kg 510 2 1,6010D Potassium, Total mg/kg 252 14.5 09/05/20 07:30 09/08/20 16:55 EPA 3050B BV Selenium, Total 0.352 J mg/kg 2.01 0.260 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.01 0.285 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D BV J Sodium, Total 54.4 mg/kg 201 3.17 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.01 0.317 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D ΒV Vanadium, Total 15.1 1.01 0.204 2 09/05/20 07:30 09/08/20 16:55 EPA 3050B 1,6010D mg/kg R۷ 2 1,6010D

5.04

mg/kg

0.295



09/05/20 07:30 09/08/20 16:55 EPA 3050B

ΒV

Zinc, Total

41.5

09/02/20 11:30

Date Collected:

Project Name: Lab Number: **BEACON ISLAND** L2036369

Report Date: Project Number: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04

Client ID: S-9

Date Received: 09/02/20 GLENMONT, NY Field Prep: Sample Location: Not Specified

Sample Depth:

Matrix: Soil

75% Percent Solids: **Analytical** Dilution Date Date Prep

Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Aluminum, Total	5490		mg/kg	10.5	2.83	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	5.24	0.398	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Arsenic, Total	3.10		mg/kg	1.05	0.218	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Barium, Total	29.7		mg/kg	1.05	0.182	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Beryllium, Total	0.230	J	mg/kg	0.524	0.035	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Cadmium, Total	0.199	J	mg/kg	1.05	0.103	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Calcium, Total	7930		mg/kg	10.5	3.67	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Chromium, Total	8.67		mg/kg	1.05	0.100	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Cobalt, Total	6.69		mg/kg	2.10	0.174	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Copper, Total	7.58		mg/kg	1.05	0.270	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Iron, Total	14600		mg/kg	5.24	0.946	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Lead, Total	5.58		mg/kg	5.24	0.281	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Magnesium, Total	4670		mg/kg	10.5	1.61	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Manganese, Total	206		mg/kg	1.05	0.166	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.084	0.055	1	09/05/20 10:00	09/08/20 08:41	EPA 7471B	1,7471B	EW
Nickel, Total	12.8		mg/kg	2.62	0.254	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Potassium, Total	533		mg/kg	262	15.1	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Selenium, Total	0.576	J	mg/kg	2.10	0.270	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.05	0.296	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Sodium, Total	48.4	J	mg/kg	210	3.30	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.10	0.330	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Vanadium, Total	13.2		mg/kg	1.05	0.213	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC
Zinc, Total	37.3		mg/kg	5.24	0.307	2	09/05/20 07:30	09/08/20 15:33	EPA 3050B	1,6010D	LC



09/02/20 12:00

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05

Client ID: S-10 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

74% Percent Solids: Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units MDL RL Analyst Total Metals - Mansfield Lab Aluminum, Total 6060 mg/kg 10.5 2.84 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV ND 2 1,6010D Antimony, Total mg/kg 5.25 0.399 09/05/20 07:30 09/08/20 16:59 EPA 3050B R۷ ΒV Arsenic, Total 2.89 mg/kg 1.05 0.218 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D 2 Barium, Total 48.1 1.05 0.183 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV mg/kg 0.294 J 0.035 2 1,6010D Beryllium, Total mg/kg 0.525 09/05/20 07:30 09/08/20 16:59 EPA 3050B ΒV J 2 1,6010D ΒV Cadmium, Total 0.830 mg/kg 1.05 0.103 09/05/20 07:30 09/08/20 16:59 EPA 3050B 09/05/20 07:30 09/08/20 16:59 EPA 3050B Calcium, Total 5070 10.5 3.68 2 1,6010D mg/kg ΒV 2 1,6010D 31.5 1.05 0.101 09/05/20 07:30 09/08/20 16:59 EPA 3050B ΒV Chromium, Total mg/kg 2 1,6010D Cobalt, Total 6.35 mg/kg 2.10 0.174 09/05/20 07:30 09/08/20 16:59 EPA 3050B BV Copper, Total 22.5 1.05 0.271 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV mg/kg 2 1,6010D 15300 5.25 0.948 09/05/20 07:30 09/08/20 16:59 EPA 3050B ΒV Iron, Total mg/kg 2 Lead, Total 38.8 mg/kg 5.25 0.281 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D BV Magnesium, Total 3520 10.5 1.62 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV mg/kg 290 1.05 0.167 2 1,6010D ΒV Manganese, Total mg/kg 09/05/20 07:30 09/08/20 16:59 EPA 3050B Mercury, Total 0.167 mg/kg 0.084 0.055 1 09/05/20 10:00 09/08/20 09:11 EPA 7471B 1,7471B EW Nickel, Total 13.4 2.62 0.254 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D BV mg/kg 408 2 1,6010D Potassium, Total mg/kg 262 15.1 09/05/20 07:30 09/08/20 16:59 EPA 3050B BV Selenium, Total ND mg/kg 2.10 0.271 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.05 0.297 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D BV J Sodium, Total 49.0 mg/kg 210 3.31 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.10 0.331 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D ΒV 14.5 2 09/05/20 07:30 09/08/20 16:59 EPA 3050B 1,6010D Vanadium, Total mg/kg 1.05 0.213 R۷

2

09/05/20 07:30 09/08/20 16:59 EPA 3050B

0.308

5.25

mg/kg



1,6010D

ΒV

Zinc, Total

80.1

09/02/20 15:05

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06

Client ID: S-11 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 74%

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 4840 mg/kg 10.8 2.91 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV ND 0.409 2 1,6010D Antimony, Total mg/kg 5.38 09/05/20 07:30 09/08/20 23:41 EPA 3050B R۷ Arsenic, Total 3.27 mg/kg 1.08 0.224 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV 2 Barium, Total 33.8 1.08 0.187 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV mg/kg 0.258 J 0.036 2 1,6010D Beryllium, Total mg/kg 0.538 09/05/20 07:30 09/08/20 23:41 EPA 3050B ΒV 2 1,6010D ΒV Cadmium, Total 1.10 mg/kg 1.08 0.105 09/05/20 07:30 09/08/20 23:41 EPA 3050B 09/05/20 07:30 09/08/20 23:41 EPA 3050B Calcium, Total 3800 10.8 3.77 2 1,6010D mg/kg ΒV 1.08 2 1,6010D 31.4 0.103 09/05/20 07:30 09/08/20 23:41 EPA 3050B ΒV Chromium, Total mg/kg 2 1,6010D Cobalt, Total 5.84 mg/kg 2.15 0.179 09/05/20 07:30 09/08/20 23:41 EPA 3050B BV 2 Copper, Total 17.8 1.08 0.278 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV mg/kg 2 1,6010D 16100 5.38 0.972 09/05/20 07:30 09/08/20 23:41 EPA 3050B ΒV Iron, Total mg/kg 2 Lead, Total 33.1 mg/kg 5.38 0.288 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D BV Magnesium, Total 3160 10.8 1.66 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV mg/kg 1.08 2 1,6010D ΒV Manganese, Total 177 mg/kg 0.171 09/05/20 07:30 09/08/20 23:41 EPA 3050B Mercury, Total 0.140 mg/kg 0.087 0.057 1 09/05/20 10:00 09/08/20 09:14 EPA 7471B 1,7471B EW Nickel, Total 13.7 2.69 0.260 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D BV mg/kg 391 2 1,6010D Potassium, Total mg/kg 269 15.5 09/05/20 07:30 09/08/20 23:41 EPA 3050B BV Selenium, Total ND mg/kg 2.15 0.278 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.08 0.305 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D BV J Sodium, Total 84.2 mg/kg 215 3.39 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.15 0.339 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D ΒV Vanadium, Total 1.08 2 09/05/20 07:30 09/08/20 23:41 EPA 3050B 1,6010D 11.0 mg/kg 0.218 R۷

2

09/05/20 07:30 09/08/20 23:41 EPA 3050B

0.315

5.38

mg/kg



1,6010D

ΒV

Zinc, Total

83.7

09/02/20 12:30

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07

Client ID: S-12 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 72%

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 5060 mg/kg 10.6 2.86 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV ND 0.403 2 1,6010D Antimony, Total mg/kg 5.30 09/05/20 07:30 09/08/20 23:46 EPA 3050B R۷ 2 Arsenic, Total 4.05 mg/kg 1.06 0.221 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV 2 Barium, Total 18.3 1.06 0.184 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV mg/kg J 0.035 2 1,6010D Beryllium, Total 0.244 mg/kg 0.530 09/05/20 07:30 09/08/20 23:46 EPA 3050B ΒV J 2 1,6010D ΒV Cadmium, Total 0.138 mg/kg 1.06 0.104 09/05/20 07:30 09/08/20 23:46 EPA 3050B Calcium, Total 1450 10.6 3.71 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D mg/kg ΒV 1.06 2 1,6010D 7.42 0.102 09/05/20 07:30 09/08/20 23:46 EPA 3050B ΒV Chromium, Total mg/kg 2 1,6010D Cobalt, Total 5.62 mg/kg 2.12 0.176 09/05/20 07:30 09/08/20 23:46 EPA 3050B BV 2 Copper, Total 4.35 1.06 0.274 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV mg/kg 13600 2 1,6010D Iron, Total 5.30 0.958 09/05/20 07:30 09/08/20 23:46 EPA 3050B ΒV mg/kg 4.70 J 2 Lead, Total mg/kg 5.30 0.284 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D BV Magnesium, Total 3370 10.6 1.63 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV mg/kg 1.06 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV Manganese, Total 159 mg/kg 0.169 Mercury, Total ND mg/kg 0.087 0.057 1 09/05/20 10:00 09/08/20 09:18 EPA 7471B 1,7471B EW Nickel, Total 11.3 2.65 0.257 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D BV mg/kg 380 265 2 1,6010D Potassium, Total mg/kg 15.3 09/05/20 07:30 09/08/20 23:46 EPA 3050B BV Selenium, Total 0.392 J mg/kg 2.12 0.274 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 1.06 0.300 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D BV J Sodium, Total 67.1 mg/kg 212 3.34 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV Thallium, Total ND mg/kg 2.12 0.334 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D ΒV Vanadium, Total 10.7 2 09/05/20 07:30 09/08/20 23:46 EPA 3050B 1,6010D mg/kg 1.06 0.215 R۷ 2 1,6010D 32.6 5.30 0.311 ΒV Zinc, Total mg/kg 09/05/20 07:30 09/08/20 23:46 EPA 3050B



09/02/20 14:40

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08

Client ID: S-13 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 77%

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units MDL RL Analyst Total Metals - Mansfield Lab Aluminum, Total 11400 mg/kg 9.78 2.64 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV ND 0.371 2 1,6010D Antimony, Total mg/kg 4.89 09/05/20 07:30 09/08/20 23:50 EPA 3050B R۷ Arsenic, Total 7.58 mg/kg 0.978 0.203 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV 2 Barium, Total 70.7 0.978 0.170 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV mg/kg 0.032 2 1,6010D Beryllium, Total 0.538 mg/kg 0.489 09/05/20 07:30 09/08/20 23:50 EPA 3050B ΒV J 0.096 2 1,6010D ΒV Cadmium, Total 0.381 mg/kg 0.978 09/05/20 07:30 09/08/20 23:50 EPA 3050B Calcium, Total 26200 9.78 3.42 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D mg/kg ΒV 2 1,6010D 18.0 0.978 0.094 09/05/20 07:30 09/08/20 23:50 EPA 3050B ΒV Chromium, Total mg/kg 2 1,6010D Cobalt, Total 13.5 mg/kg 1.96 0.162 09/05/20 07:30 09/08/20 23:50 EPA 3050B BV Copper, Total 29.2 0.978 0.252 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV mg/kg 27800 0.883 2 1,6010D 4.89 09/05/20 07:30 09/08/20 23:50 EPA 3050B ΒV Iron, Total mg/kg 2 Lead, Total 15.9 mg/kg 4.89 0.262 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D BV Magnesium, Total 9780 9.78 1.50 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV mg/kg 0.978 0.155 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV Manganese, Total 581 mg/kg Mercury, Total ND mg/kg 0.082 0.053 1 09/05/20 10:00 09/08/20 09:21 EPA 7471B 1,7471B EW Nickel, Total 29.5 2.44 0.236 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D BV mg/kg 2 1,6010D Potassium, Total 1140 mg/kg 244 14.1 09/05/20 07:30 09/08/20 23:50 EPA 3050B BV Selenium, Total 0.342 J mg/kg 1.96 0.252 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 0.978 0.277 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D BV Sodium, Total 156 J mg/kg 196 3.08 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV Thallium, Total 0.665 J 1.96 0.308 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D ΒV mg/kg 0.198 2 09/05/20 07:30 09/08/20 23:50 EPA 3050B 1,6010D Vanadium, Total 21.3 mg/kg 0.978 R۷ 2 1,6010D 67.1 4.89 0.286 ΒV Zinc, Total mg/kg 09/05/20 07:30 09/08/20 23:50 EPA 3050B



09/02/20 15:35

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-09

Client ID: S-14 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 66%

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 6240 mg/kg 11.5 3.10 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV ND 0.436 2 1,6010D Antimony, Total mg/kg 5.74 09/05/20 07:30 09/08/20 23:55 EPA 3050B R۷ Arsenic, Total 4.26 mg/kg 1.15 0.239 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV 2 Barium, Total 81.4 1.15 0.200 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV mg/kg J 0.038 2 1,6010D Beryllium, Total 0.310 mg/kg 0.574 09/05/20 07:30 09/08/20 23:55 EPA 3050B ΒV 3.01 2 1,6010D ΒV Cadmium, Total mg/kg 1.15 0.112 09/05/20 07:30 09/08/20 23:55 EPA 3050B Calcium, Total 5270 11.5 4.02 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D mg/kg ΒV 2 1,6010D 86.0 0.110 09/05/20 07:30 09/08/20 23:55 EPA 3050B ΒV Chromium, Total mg/kg 1.15 2 6.30 1,6010D Cobalt, Total mg/kg 2.30 0.191 09/05/20 07:30 09/08/20 23:55 EPA 3050B BV Copper, Total 55.0 1.15 0.296 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV mg/kg 2 1,6010D Iron, Total 15300 5.74 1.04 09/05/20 07:30 09/08/20 23:55 EPA 3050B ΒV mg/kg 2 Lead, Total 117 mg/kg 5.74 0.308 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D BV Magnesium, Total 3660 11.5 1.77 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV mg/kg 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV Manganese, Total 212 mg/kg 1.15 0.183 Mercury, Total 0.776 mg/kg 0.094 0.062 1 09/05/20 10:00 09/08/20 09:24 EPA 7471B 1,7471B EW Nickel, Total 15.5 2.87 0.278 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D BV mg/kg 466 2 1,6010D Potassium, Total mg/kg 287 16.5 09/05/20 07:30 09/08/20 23:55 EPA 3050B BV Selenium, Total ND mg/kg 2.30 0.296 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D BV Silver, Total 1.12 J mg/kg 1.15 0.325 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D BV J Sodium, Total 107 mg/kg 230 3.62 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV Thallium, Total ND 2.30 0.362 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D ΒV mg/kg Vanadium, Total 14.6 0.233 2 09/05/20 07:30 09/08/20 23:55 EPA 3050B 1,6010D mg/kg 1.15 R۷ 2 1,6010D 218 0.336 ΒV Zinc, Total mg/kg 5.74 09/05/20 07:30 09/08/20 23:55 EPA 3050B



09/02/20 16:00

Date Collected:

Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10

Client ID: S-15 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 77%

Dilution Date Date Prep Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units MDL RL Analyst Total Metals - Mansfield Lab Aluminum, Total 11100 mg/kg 9.90 2.67 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV ND 2 1,6010D Antimony, Total mg/kg 4.95 0.376 09/05/20 07:30 09/09/20 00:00 EPA 3050B R۷ 2 Arsenic, Total 20.0 mg/kg 0.990 0.206 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV 2 Barium, Total 73.9 0.990 0.172 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV mg/kg J 0.033 2 1,6010D Beryllium, Total 0.465 mg/kg 0.495 09/05/20 07:30 09/09/20 00:00 EPA 3050B ΒV J 0.097 2 1,6010D ΒV Cadmium, Total 0.356 mg/kg 0.990 09/05/20 07:30 09/09/20 00:00 EPA 3050B Calcium, Total 21300 9.90 3.46 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D mg/kg ΒV 2 1,6010D 17.2 0.990 0.095 09/05/20 07:30 09/09/20 00:00 EPA 3050B ΒV Chromium, Total mg/kg 2 1,6010D Cobalt, Total 12.9 mg/kg 1.98 0.164 09/05/20 07:30 09/09/20 00:00 EPA 3050B BV 2 Copper, Total 25.0 0.990 0.255 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV mg/kg 2 1,6010D Iron, Total 29000 4.95 0.894 09/05/20 07:30 09/09/20 00:00 EPA 3050B ΒV mg/kg 2 Lead, Total 12.3 mg/kg 4.95 0.265 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D BV Magnesium, Total 9220 9.90 1.52 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV mg/kg 696 0.990 0.157 2 1,6010D ΒV Manganese, Total mg/kg 09/05/20 07:30 09/09/20 00:00 EPA 3050B Mercury, Total ND mg/kg 0.082 0.054 1 09/05/20 10:00 09/08/20 09:28 EPA 7471B 1,7471B EW Nickel, Total 26.6 2.47 0.240 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D BV mg/kg 2 1,6010D Potassium, Total 1180 mg/kg 247 14.2 09/05/20 07:30 09/09/20 00:00 EPA 3050B BV Selenium, Total 0.722 J mg/kg 1.98 0.255 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D BV Silver, Total ND mg/kg 0.990 0.280 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D BV Sodium, Total 167 J mg/kg 198 3.12 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV Thallium, Total 0.802 J 1.98 0.312 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D ΒV mg/kg Vanadium, Total 0.990 0.201 2 09/05/20 07:30 09/09/20 00:00 EPA 3050B 1,6010D 21.7 mg/kg R۷

2

09/05/20 07:30 09/09/20 00:00 EPA 3050B

0.290

4.95

mg/kg



1,6010D

ΒV

Zinc, Total

63.2

09/02/20 00:00

Date Collected:

Project Name: Lab Number: **BEACON ISLAND** L2036369

Report Date: Project Number: AT5596 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11

Client ID: DUP01

Date Received: 09/02/20 GLENMONT, NY Field Prep: Sample Location: Not Specified

Sample Depth:

Matrix: Soil

81% Percent Solids: Date Date Prep Analytical Dilution

Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Mar	nsfield Lab										
Aluminum, Total	4330		mg/kg	9.47	2.56	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.73	0.360	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Arsenic, Total	1.68		mg/kg	0.947	0.197	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Barium, Total	21.7		mg/kg	0.947	0.165	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Beryllium, Total	0.208	J	mg/kg	0.473	0.031	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Cadmium, Total	0.161	J	mg/kg	0.947	0.093	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Calcium, Total	9290		mg/kg	9.47	3.31	2	09/05/20 07:30	09/09/20 00:04	EPA 3050B	1,6010D	BV
Chromium, Total	6.77		mg/kg	0.947	0.091	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Cobalt, Total	5.33		mg/kg	1.89	0.157	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Copper, Total	5.98		mg/kg	0.947	0.244	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Iron, Total	11600		mg/kg	4.73	0.855	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Lead, Total	4.78		mg/kg	4.73	0.254	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Magnesium, Total	4690		mg/kg	9.47	1.46	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Manganese, Total	164		mg/kg	0.947	0.150	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.079	0.051	1	09/05/20 10:00	0 09/08/20 09:31	EPA 7471B	1,7471B	EW
Nickel, Total	10.9		mg/kg	2.37	0.229	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Potassium, Total	335		mg/kg	237	13.6	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.89	0.244	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.947	0.268	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Sodium, Total	57.2	J	mg/kg	189	2.98	2	09/05/20 07:30	09/09/20 00:04	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.89	0.298	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Vanadium, Total	9.97		mg/kg	0.947	0.192	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV
Zinc, Total	32.5		mg/kg	4.73	0.277	2	09/05/20 07:30	0 09/09/20 00:04	EPA 3050B	1,6010D	BV



Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	l Analyst
Total Metals - Mansfield	Lab for sar	mple(s):	01-11 B	atch: W	G14066	58-1				
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Iron, Total	1.04	J	mg/kg	2.00	0.361	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Manganese, Total	0.160	J	mg/kg	0.400	0.064	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/05/20 07:30	09/08/20 15:24	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mans	sfield Lab for sample(s):	01-11 B	atch: Wo	G14069	86-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	09/05/20 10:00	09/08/20 08:35	1,7471B	EW



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

arameter	LCS %Recovery		CSD covery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
otal Metals - Mansfield Lab Associated sampl	e(s): 01-11 B	atch: WG1406658-2	SRM Lot	Number: [D109-540			
Aluminum, Total	76		-		50-150	-		
Antimony, Total	134		-		19-250	-		
Arsenic, Total	105		-		70-130	-		
Barium, Total	99		-		75-125	-		
Beryllium, Total	99		-		75-125	-		
Cadmium, Total	97		-		75-125	-		
Calcium, Total	97		-		73-128	-		
Chromium, Total	99		-		70-130	-		
Cobalt, Total	98		-		75-125	-		
Copper, Total	103		-		75-125	-		
Iron, Total	108		-		35-165	-		
Lead, Total	101		-		72-128	-		
Magnesium, Total	88		-		62-138	-		
Manganese, Total	99		-		74-126	-		
Nickel, Total	99		-		70-130	-		
Potassium, Total	92		-		59-141	-		
Selenium, Total	102		-		68-132	-		
Silver, Total	104		-		68-131	-		
Sodium, Total	101		-		35-165	-		
Thallium, Total	100		-		68-131	-		
Vanadium, Total	105		-		59-141	-		



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

Parameter	LCS %Recove	LC ery %Rec	_	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated san	nple(s): 01-11	Batch: WG1406658-2	SRM Lot Number	er: D109-540		
Zinc, Total	98		-	70-130	-	
Total Metals - Mansfield Lab Associated san	nple(s): 01-11	Batch: WG1406986-2	SRM Lot Number	er: D109-540		
Mercury, Total	100		-	60-140	-	



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number: L2036369

Report Date: 09/17/20

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	RPD Qual Limits
otal Metals - Mansfield Lab	Associated sar	nple(s): 01-11	QC Bat	tch ID: WG140	6658-3	WG1406658	8-4 QC Sam	ple: L2	036369-04	Clien	t ID: S-9
Aluminum, Total	5490	206	6220	354	Q	6820	630	Q	75-125	9	20
Antimony, Total	ND	51.6	44.5	86		45.6	86		75-125	2	20
Arsenic, Total	3.10	12.4	16.0	104		17.6	114		75-125	10	20
Barium, Total	29.7	206	244	104		259	109		75-125	6	20
Beryllium, Total	0.230J	5.16	5.46	106		5.68	108		75-125	4	20
Cadmium, Total	0.199J	5.26	5.44	103		5.69	106		75-125	4	20
Calcium, Total	7930	1030	10500	249	Q	11600	348	Q	75-125	10	20
Chromium, Total	8.67	20.6	29.2	100		31.2	107		75-125	7	20
Cobalt, Total	6.69	51.6	55.9	95		58.5	98		75-125	5	20
Copper, Total	7.58	25.8	35.4	108		39.9	122		75-125	12	20
Iron, Total	14600	103	15600	970	Q	16600	1900	Q	75-125	6	20
Lead, Total	5.58	52.6	57.6	99		60.4	102		75-125	5	20
Magnesium, Total	4670	1030	6170	145	Q	6190	144	Q	75-125	0	20
Manganese, Total	206	51.6	275	134	Q	296	170	Q	75-125	7	20
Nickel, Total	12.8	51.6	61.1	94		64.4	98		75-125	5	20
Potassium, Total	533	1030	1440	88		1540	95		75-125	7	20
Selenium, Total	0.576J	12.4	12.3	99		12.7	100		75-125	3	20
Silver, Total	ND	30.9	32.8	106		34.5	109		75-125	5	20
Sodium, Total	48.4J	1030	1120	108		1170	111		75-125	4	20
Thallium, Total	ND	12.4	10.6	86		11.0	87		75-125	4	20
Vanadium, Total	13.2	51.6	64.6	100		68.6	105		75-125	6	20



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

<u>Parameter</u>	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found %	MSD Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab A	ssociated sam	ple(s): 01-11	QC Bat	ch ID: WG1406658-3	WG1406658-	4 QC Sample	e: L2036369-04	Client ID:	S-9
Zinc, Total	37.3	51.6	89.2	101	95.6	110	75-125	7	20
Total Metals - Mansfield Lab A	ssociated sam	ple(s): 01-11	QC Bate	ch ID: WG1406986-3	WG1406986-	4 QC Sample	e: L2036369-04	Client ID:	S-9
Mercury, Total	ND	0.167	0.168	100	0.167	98	80-120	1	20

INORGANICS & MISCELLANEOUS



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-01 Date Collected: 09/02/20 13:40

Client ID: S-6 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.717		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.842		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.780		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	75.6		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-02 Date Collected: 09/02/20 14:10

Client ID: S-7 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.968		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.820		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.894		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	66.4		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



L2036369

Project Name: BEACON ISLAND Lab Number:

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-03 Date Collected: 09/02/20 11:00

Client ID: S-8 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.677		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.682		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.680		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	74.6		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: Lab Number: **BEACON ISLAND**

L2036369 Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-04 Date Collected: 09/02/20 11:30

Client ID: S-9 Date Received: 09/02/20

Not Specified Sample Location: GLENMONT, NY Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	1.10		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.843		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.972		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	75.1		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-05 Date Collected: 09/02/20 12:00

Client ID: S-10 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	1.03		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.828		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.928		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	74.4		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-06 Date Collected: 09/02/20 15:05

Client ID: S-11 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.736		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.544		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.640		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	73.5		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-07 Date Collected: 09/02/20 12:30

Client ID: S-12 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.138		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.173		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.156		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	72.4		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-08 Date Collected: 09/02/20 14:40

Client ID: S-13 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	1.09		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.999		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	1.04		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	76.8		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: Lab Number: **BEACON ISLAND** L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: Date Collected: L2036369-09 09/02/20 15:35

Client ID: S-14 Date Received: 09/02/20 Sample Location: GLENMONT, NY

Not Specified Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	2.02		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	1.95		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	1.98		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	66.4		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-10 Date Collected: 09/02/20 16:00

Client ID: S-15 Date Received: 09/02/20 Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.425		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.435		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.430		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	76.6		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



Project Name: BEACON ISLAND Lab Number: L2036369

Project Number: AT5596 Report Date: 09/17/20

SAMPLE RESULTS

Lab ID: L2036369-11 Date Collected: 09/02/20 00:00

Client ID: DUP01 Date Received: 09/02/20

Sample Location: GLENMONT, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mar	nsfield Lab									
Total Organic Carbon (Rep1)	0.937		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	0.840		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	0.888		%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
General Chemistry - Westb	orough Lab)								
Solids, Total	80.5		%	0.100	NA	1	-	09/03/20 19:32	121,2540G	TR



L2036369

Project Name: BEACON ISLAND

Project Number: AT5596 Repo

Report Date: 09/17/20

Lab Number:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Ma	ansfield Lab for samp	ole(s): 01-	11 Bate	ch: WG	1406703-1				
Total Organic Carbon (Rep1)	ND	%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Rep2)	ND	%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP
Total Organic Carbon (Average)	ND	%	0.010	0.010	1	-	09/14/20 12:24	1,9060A	SP



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number: AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Total Organic Carbon - Mansfield Lab As	ssociated sample(s):	01-11	Batch: WG14067	03-2					
Total Organic Carbon (Rep1)	108		-		75-125	-		25	
Total Organic Carbon (Rep2)	104		-		75-125	-		25	
Total Organic Carbon (Average)	106		-		75-125	-		25	



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND

Project Number:

AT5596

Lab Number:

L2036369

Report Date:

09/17/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD	RPD <u>Qual Limit</u> s
Total Organic Carbon - Mansfiel	d Lab Assoc	ciated sample	e(s): 01-11	QC Batch ID	: WG14	06703-3	WG1406703-4	QC Sample: L203	6369-04	Client ID: S-9
Total Organic Carbon (Rep1)	1.10	0.802	1.69	74	Q	1.80	90	75-125	6	25
Total Organic Carbon (Rep2)	0.843	1.18	2.17	112		1.88	122	75-125	14	25

Lab Duplicate Analysis

Batch Quality Control

Lab Number: **Project Name: BEACON ISLAND** L2036369

09/17/20 **Project Number:** AT5596 Report Date:

Parameter	Native Samp	ple Dup	licate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab A	Associated sample(s): 01-11	QC Batch ID: W	/G1406386-1	QC Sample:	L2036369-04	Client ID:	S-9
Solids, Total	75.1		78.5	%	4		20



Lab Number: L2036369

Report Date: 09/17/20

Sample Receipt and Container Information

Were project specific reporting limits specified?

BEACON ISLAND

YES

Cooler Information

Container Information

Project Name:

Project Number: AT5596

Cooler Custody Seal

A Absent

Container Info	ormation		Initial	Final	Temp	Frozen		Frozen	
Container ID	Container Type	Cooler	рH	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2036369-01A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-01B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),A2-TOC-9060-2REPS(28),FE-TI(180),MN-TI(180),HG-T(28),MG-TI(180),K-TI(180),CA-TI(180),CD-TI(180),NA-TI(180)
L2036369-01C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-01D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-01X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-01Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-01Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-02A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),NI-TI(180),ZN-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),CO-TI(180),V-TI(180),A2-TOC-9060-2REPS(28),MG-TI(180),FE-TI(180),HG-T(28),MN-TI(180),CD-TI(180),CA-TI(180),K-TI(180),NA-TI(180)
L2036369-02C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-02D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-02X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-02Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-02Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-03A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)



Lab Number: L2036369

Report Date: 09/17/20

Project Name: BEACON ISLAND

Project Number: AT5596

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler		рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2036369-03B	Metals Only-Glass 60mL/2oz unpreserved	А	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),SB- TI(180),CU-TI(180),CO-TI(180),V-TI(180),HG- T(28),A2-TOC-9060-2REPS(28),MG- TI(180),MN-TI(180),FE-TI(180),CD-TI(180),K- TI(180),CA-TI(180),NA-TI(180)
L2036369-03C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-03D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-03X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-03Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-03Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-04A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-04A1	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-04B	Metals Only-Glass 60mL/2oz unpreserved	А	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),CU-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MN-TI(180),MG-TI(180),HG-T(28),A2-TOC-9060-2REPS(28),FE-TI(180),CA-TI(180),NA-TI(180),CD-TI(180),K-TI(180)
L2036369-04B1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),CU-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MN-TI(180),MG-TI(180),HG-T(28),A2-TOC-9060-2REPS(28),FE-TI(180),CA-TI(180),NA-TI(180),CD-TI(180),K-TI(180)
L2036369-04C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-04C1	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-04D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-04D1	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-04X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-04X1	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-04X2	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-04Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)



Lab Number: L2036369

Report Date: 09/17/20

Project Name: BEACON ISLAND

Project Number: AT5596

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2036369-04Y1	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-04Y2	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-04Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-04Z1	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-04Z2	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-05A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-05B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG- TI(180),TL-TI(180),NI-TI(180),CR-TI(180),AL- TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),PB- TI(180),SB-TI(180),CO-TI(180),V-TI(180),HG- T(28),MN-TI(180),FE-TI(180),MG-TI(180),A2- TOC-9060-2REPS(28),CD-TI(180),K- TI(180),NA-TI(180),CA-TI(180)
L2036369-05C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-05D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-05X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-05Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-05Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-06A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-06B	Metals Only-Glass 60mL/2oz unpreserved	А	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),CU-TI(180),SB-TI(180),CD-TI(180),BB-TI(180),V-TI(180),CO-TI(180),HG-T(28),FE-TI(180),MG-TI(180),MN-TI(180),A2-TOC-9060-2REPS(28),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L2036369-06C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-06D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-06X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-06Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-06Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-07A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)



Lab Number: L2036369

Report Date: 09/17/20

Project Name: BEACON ISLAND

Project Number: AT5596

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2036369-07B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CU-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MG-TI(180),A2-TOC-9060-2REPS(28),HG-T(28),FE-TI(180),MN-TI(180),CD-TI(180),NA-TI(180),K-TI(180),CA-TI(180)
L2036369-07C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-07D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-07X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-07Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-07Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-08A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-08B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),SB-TI(180),CN-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),CO-TI(180),V-TI(180),A2-TOC-9060-2REPS(28),HG-T(28),FE-TI(180),MG-TI(180),MN-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2036369-08C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-08D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-08X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-08Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-08Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-09A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-09B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),AL-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),A2-TOC-9060-2REPS(28),MG-TI(180),MN-TI(180),HG-T(28),FE-TI(180),NA-TI(180),CA-TI(180),K-TI(180),CD-TI(180)
L2036369-09C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-09D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-09X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)



Lab Number: L2036369

Report Date: 09/17/20

NYTCL-8260(14)

NYTCL-8260(14)

04-SEP-20 14:09

04-SEP-20 14:09

Container Information				Final	Temp			Frozen	
Container ID	Container Type	Cooler	Initial pH	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2036369-09Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-09Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-10A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-10B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),A2-TOC-9060-2REPS(28),MN-TI(180),FE-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2036369-10C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-10D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-10X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-10Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-10Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	04-SEP-20 14:09	NYTCL-8260(14)
L2036369-11A	Plastic 2oz unpreserved for TS	Α	NA		3.5	Υ	Absent		TS(7)
L2036369-11B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),SB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),V-TI(180),CO-TI(180),HG-T(28),MN-TI(180),FE-TI(180),MG-TI(180),A2-TOC-9060-2REPS(28),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2036369-11C	Vial Large Septa unpreserved (4oz)	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)
L2036369-11D	Glass 250ml/8oz unpreserved	Α	NA		3.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2036369-11X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260(14)



3.5

3.5

Υ

Absent

Absent

L2036369-11Y

L2036369-11Z

Project Name:

Project Number: AT5596

BEACON ISLAND

Vial Water preserved split

Vial Water preserved split

Α

NA

NA

Project Name: Lab Number: BEACON ISLAND L2036369

Report Date: Project Number: AT5596 09/17/20

GLOSSARY

Acronyms

LOD

LOQ

MS

DL - 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 limit of quantitation (LOQ). The DL includes any adjustments

from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

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).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

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.

- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.) - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The

LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

MDI - 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.

- 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. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

- Matrix Spike Sample Duplicate: Refer to MS. MSD

NA - Not Applicable.

- 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.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the RPD 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.

- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

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

Report Format: DU Report with 'J' Qualifiers



Project Name:BEACON ISLANDLab Number:L2036369Project Number:AT5596Report Date:09/17/20

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

Terms

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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benza(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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 concentrations of the analyte at less than ten times (10x) the concentrations of the analyte was 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- F The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name:BEACON ISLANDLab Number:L2036369Project Number:AT5596Report Date:09/17/20

Data Qualifiers

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.)

 \boldsymbol{R} - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Serial_No:09172013:02

Project Name:BEACON ISLANDLab Number:L2036369Project Number:AT5596Report Date:09/17/20

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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.



Serial_No:09172013:02

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873

Published Date: 4/28/2020 9:42:21 AM

Page 1 of 1

Revision 17

Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, 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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

Document Type: Form

Utica

301 St. Anthony Street

Utica, NY 13501

315/735-3309 (T)

315/735-0742 (F)



ATLANTIC TESTING LABORATORIES

L2036369 No 10542

Environmental Chain-Of-Custody Record

Albany 22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9166 (F)

Binghamton 126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F) Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F) Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F) Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F) Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6098 (1) 845/691-6099 (F)

Rochester 3445 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F) Syracuse 6085 Court Street Road Syracuse, NY 13206 315/699-5281 (T) 315/699-3374 (F) Watertown 26581 NYS Route 283 Watertown, NY 13601 315/786-7887 (T) 315/786-2022 (F)

							_				N				_			
Project No.			C	lient Nam	e				C Code	-	G13	Para	neters			Repor	Distribution	
Page 1 of 2	G	Mct	Farland	Joh	1500			□ NYSDEC □ NYSDOH □ Other	□ SW-846 □ CLP	EPA9460A	500	Tak	14	2		Dates Required:	Stande	− 1 1 1
Project Con	1	Une	-yerre	P	arlina	<u></u>			Location	EPA	35	Metaly	180	000		Send Report To:	Labs CT	
Project N	Name:	Lea	in Is	lan	J		(Glenn	N. town	100	A 10	A	300	02		E-mail Results:	XYES C	dy Sea
Date Ti	ime Field :	Sample io.		Samp	ple Location			Sample Type	No. of Containers	F	四四	F	臣	W W		Notes	Laborato Sample ID	77
1340 9/0	1/20 -	-	5-6	6				C 50	4	2	XX	0	Q	4				
9/1/2017	to -	-	5-)_			(0,5		9	6	X	X	X				
911	00 -	-	5-	8				C, Sd		×	4X	X	X	X				\perp
7/2/20 113	30 -		5-	3				5,5		2	KIK	V	2	X				_
12/20 12	00 -)	LC				C 50		V	X	X	X	X				
1/2/2015	65		5-	- 11		-		C Sd		9	20	X	X	X				
1200	50			- V	}			Cisa		2	41	X	X	Y			-	
1/2/2014	99-		5	- 1	3			4.50	1	7	XX	X	X	X				
23/2/15	22 -			- /	4_			4,50	N	4	YX	X	X	X				
6	00 -		PS	-/	5	16%	60	6,50	U	S	MX	X	X	X			Shipme	nt Dan'd
Samplers Name:	V	M	he Fark	35	Date:	4/20	128	Received	for Name:							Date:		ict?
Samplers Signatur	re:	4	2		Time:	161			ry Signature:				_		_	Time:	☐ YES	□ NO
	Samp	les Relinga	ushed By:		~11			Sample	Received By:	11				Sample	e Type (Code Key:	Laboratory	Remarks
Name:	Tint	5/ /0	16 Car	Date:	4/2/20	Name:	4	Jy .	1	HC	Date:	1650) c	Composite Grab	DIV GIV	Matrix Drinking Water Groundwater		
Signature:	DAT.	1		Time:	1690	Signature:					Time:		g 0	QA/QC	0	Oil		
Name: ((Q) G	8	7	Date:	1650	Name:	She	uon Ho	Privari		Date:	9/3/2	0	Other	St.	Soil Sludge		
Signature:				Time:		Signature:	-				Time:	0110			10:10*	Wastewater		

Think Quality



ATLANTIC TESTING LABORATORIES

Environmental Chain-Of-Custody Record

L 2036369 No 10543

Albany 22 Corporate Drive

hifton Park, NY 12065

518/383-9144 (T/

518/383-9166 (F)

Binghamton 126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)

Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F)

Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F)

Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)

Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6098 (T) 845/691-6099 (F)

Rochester 3445 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)

Syracuse 6085 Court Street Road Syracuse, NY 13206 315/699-5281 (T) 315/699-3374 (F)

Utica 301 St. Anthony Street Utica, NY 13501 315/735-3309 (T) 315/735-0742 (F)

Watertown 26581 NYS Route 283 Watertown, NY 13601 315/786-7887 (T) 315/786-2022 (F)

				W -			
Project No.	Client Name	QA/QC	Code	ZIE Z	Parameters	Repe	ort Distribution
AV5586 Page 2 of 2	McFacland Solvon		□ SW-846 □ CLP	Se Se	The	Dates Required:	Standard
Project Contact:	C. Dash za	Project L	ocation	350	metal.	Send Report To:	Laby CTEN
Project Name:	Beacon Island	Glerm	ent hi	2000	7 00 200	E-mail Results:	MOVES INO S
Date Time	Field Sample Sample Location No.	Sample Type	No. of Containers	口回	广要 第	Notes	Laboratory Sample ID No.
9/2/20 -	- Dupol	C 52	4	NAX	S S S S		
9/2/20 -	- Ms/ma	C,50	4	DO DO	XXX		
Samplers Name:	Timothy tarket Date: 2/2/2	Received fo	r Name:			Date:	Shipment Rec'd Intact?
Samplers Signature:	Time: 1615	Laboratory	Signature:			Time:	☐ YES ☐ NO
	Samples Relinquished By:	Samples I	Received By:	111		mple Type Code Key:	Laboratory Remarks
Name:	natural Date: 7/2/2 Name:	4)/87	21	H Date:	Description	74 m 1 m m m m m m m m 1 1 1 1 1 1 1 1 1	
Signature:	Time: 1650 Signature:		8.6	Time:	G Grab Q QA/QC	GW Groundwater O Oil	
Name:	Date: 16D Name:	& Sha	work offer	Er Date:	9/3/20 0 Other	S Soil SL Sludge	
Signature:	Time: Signature:	1		Time:	0110	WW Wastewater	

APPENDIX D

LABORATORY REPORTS AND SAMPLE CUSTODY DOCUMENTATION (JUNE 2019 SAMPLES)



ANALYTICAL REPORT

Lab Number: L1925812

Client: Atlantic Testing Laboratories, Limited

6431 US Highway 11

PO Box 29

Canton, NY 13617

ATTN: Tim S. Parker Phone: (315) 386-4578

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644
Report Date: 07/12/19

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812 **Report Date:** 07/12/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1925812-01	B-1	SEDIMENT	PORT OF ALBANY	06/13/19 15:10	06/14/19
L1925812-02	B-2	SEDIMENT	PORT OF ALBANY	06/13/19 15:40	06/14/19
L1925812-03	B-3	SEDIMENT	PORT OF ALBANY	06/13/19 16:15	06/14/19
L1925812-04	B-4	SEDIMENT	PORT OF ALBANY	06/13/19 16:45	06/14/19
L1925812-05	B-5	SEDIMENT	PORT OF ALBANY	06/13/19 17:10	06/14/19



Project Name:BEACON ISLAND PROJECTLab Number:L1925812Project Number:CD4644Report Date:07/12/19

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.	



Project Name:BEACON ISLAND PROJECTLab Number:L1925812Project Number:CD4644Report Date:07/12/19

Case Narrative (continued)

Report Submission

July 12, 2019: This final report includes the results of all requested analyses.

July 08, 2019: This is a preliminary report.

July 02, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Pesticides

L1925812-01 through -05: The samples were frozen upon receipt in order to arrest the holding time.

Total Metals

L1925812-01 through -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of target and non-target elements.

Cyanide, Total

The WG1249185-2 LCS recovery (74%), associated with L1925812-02 through -04, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1249186-2 LCS recovery (74%), associated with L1925812-01 and -05, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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:

Title: Technical Director/Representative Date: 07/12/19

Melissa Sturgis Melissa Sturgis

ALPHA

ORGANICS



VOLATILES



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8260C
Analytical Date: 06/26/19 14:11

Analyst: JC Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - V	Vestborough Lab						
Benzene	ND		ug/kg	0.73	0.24	1	
Toluene	ND		ug/kg	1.5	0.80	1	
Ethylbenzene	ND		ug/kg	1.5	0.21	1	
p/m-Xylene	ND		ug/kg	2.9	0.82	1	
o-Xylene	ND		ug/kg	1.5	0.43	1	

Surrogate	% Recovery	Acceptar Qualifier Criteri	
1,2-Dichloroethane-d4	105	70-13	30
Toluene-d8	103	70-13	30
4-Bromofluorobenzene	103	70-13	30
Dibromofluoromethane	101	70-13	30



Project Name: Lab Number: BEACON ISLAND PROJECT L1925812

Project Number: Report Date: CD4644 07/12/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/13/19 15:40 L1925812-02

Client ID: B-2

Date Received: 06/14/19 Field Prep: Sample Location: PORT OF ALBANY Not Specified

Sample Depth:

Matrix: Sediment Analytical Method: 1,8260C Analytical Date: 06/26/19 11:33

Analyst: JC 73% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS -	Westborough Lab						
Benzene	ND		ug/kg	0.52	0.17	1	
Toluene	ND		ug/kg	1.0	0.56	1	
Ethylbenzene	ND		ug/kg	1.0	0.15	1	
p/m-Xylene	ND		ug/kg	2.1	0.58	1	
o-Xylene	ND		ug/kg	1.0	0.30	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	107	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	100	70-130	



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8260C
Analytical Date: 06/26/19 12:13

Analyst: JC Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboroug	gh Lab						
Benzene	ND		ug/kg	0.55	0.18	1	
Toluene	ND		ug/kg	1.1	0.60	1	
Ethylbenzene	ND		ug/kg	1.1	0.16	1	
p/m-Xylene	ND		ug/kg	2.2	0.62	1	
o-Xylene	ND		ug/kg	1.1	0.32	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	103	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	102	70-130	



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8260C
Analytical Date: 06/26/19 12:52

Analyst: JC Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - V	Vestborough Lab					
Benzene	ND		ug/kg	0.62	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
p/m-Xylene	ND		ug/kg	2.5	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	110	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	103	70-130	
Dibromofluoromethane	103	70-130	



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8260C
Analytical Date: 06/26/19 13:31

Analyst: JC Percent Solids: 61%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - V	Vestborough Lab					
Benzene	ND		ug/kg	0.66	0.22	1
Toluene	ND		ug/kg	1.3	0.72	1
Ethylbenzene	ND		ug/kg	1.3	0.19	1
p/m-Xylene	ND		ug/kg	2.6	0.74	1
o-Xylene	ND		ug/kg	1.3	0.38	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	106	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	107	70-130	
Dibromofluoromethane	103	70-130	



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/26/19 09:35

Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low	- Westbord	ough Lab fo	r sample(s):	01-05	Batch: WG1253412-5
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29

		A	Acceptance
Surrogate	%Recovery	Qualifier	Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1925812

07/12/19

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbo	orough Lab Asso	ciated sample	e(s): 01-05 Ba	atch: WG12	253412-3 WG125	3412-4		
Benzene	100		103		70-130	3		30
Toluene	97		98		70-130	1		30
Ethylbenzene	101		104		70-130	3		30
p/m-Xylene	100		103		70-130	3		30
o-Xylene	101		104		70-130	3		30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105	102	70-130
Toluene-d8	103	103	70-130
4-Bromofluorobenzene	98	99	70-130
Dibromofluoromethane	97	99	70-130

SEMIVOLATILES



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

OAMII EE NEOOE

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: B-1 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8270D-SIM Extraction Date: 06/24/19 10:37
Analytical Date: 06/26/19 15:02 Cleanup Method: EPA 3630

Analytical Date: 06/26/19 15:02 Cleanup Method: EPA 3630
Analyst: PS Cleanup Date: 06/25/19
Percent Solids: 78%

PAHs by GC/MS-SIM - Mansfield Lab						
Naphthalene	ND		ug/kg	4.97	1.95	1
1,4-Dichlorobenzene	ND		ug/kg	4.97	2.54	1
Acenaphthylene	ND		ug/kg	4.97	1.95	1
Acenaphthene	ND		ug/kg	4.97	1.93	1
Fluorene	ND		ug/kg	4.97	2.94	1
Phenanthrene	ND		ug/kg	4.97	3.20	1
Anthracene	ND		ug/kg	4.97	3.40	1
Fluoranthene	2.83	J	ug/kg	4.97	2.29	1
Pyrene	ND		ug/kg	4.97	2.74	1
Benz(a)anthracene	ND		ug/kg	4.97	2.44	1
Chrysene	ND		ug/kg	4.97	1.80	1
Benzo(b)fluoranthene	ND		ug/kg	4.97	2.38	1
Benzo(k)fluoranthene	ND		ug/kg	4.97	1.42	1
Benzo(e)Pyrene	ND		ug/kg	4.97	2.73	1
Benzo(a)pyrene	ND		ug/kg	4.97	1.44	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	4.97	1.42	1
Dibenz(a,h)anthracene	ND		ug/kg	4.97	2.94	1
Benzo(ghi)perylene	ND		ug/kg	4.97	3.20	1
2-Methylnaphthalene	ND		ug/kg	4.97	2.16	1
1-Methylnaphthalene	ND		ug/kg	4.97	2.24	1
Dibenzothiophene	ND		ug/kg	4.97	1.56	1
2-Chloronaphthalene	ND		ug/kg	4.97	1.81	1
Biphenyl	ND		ug/kg	4.97	1.74	1
2,6-Dimethylnaphthalene	ND		ug/kg	4.97	1.86	1
2,3,5-Trimethylnaphthalene	ND		ug/kg	4.97	1.77	1
1-Methylphenanthrene	ND		ug/kg	4.97	2.05	1
Perylene	25.9		ug/kg	4.97	1.68	1



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: B-1 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

PAHs by GC/MS-SIM - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Methylnaphthalene-d10	51		30-130	
Pyrene-d10	57		30-130	
Benzo(b)fluoranthene-d12	52		30-130	



Project Name: Lab Number: BEACON ISLAND PROJECT L1925812

Report Date: **Project Number:** CD4644 07/12/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/13/19 15:40 L1925812-02

Date Received: Client ID: B-2 06/14/19

PORT OF ALBANY Sample Location: Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3570 Matrix: Sediment **Extraction Date:** 06/24/19 10:37 Analytical Method: 1,8270D-SIM Cleanup Method: EPA 3630

Analytical Date: 06/26/19 15:37 Cleanup Date: 06/25/19 Analyst: PS

73% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
PAHs by GC/MS-SIM - Mansfield La	ab						
Naphthalene	8.93		ug/kg	5.13	2.01	1	
1,4-Dichlorobenzene	ND		ug/kg	5.13	2.63	1	
Acenaphthylene	5.70		ug/kg	5.13	2.01	1	
Acenaphthene	6.92		ug/kg	5.13	2.00	1	
Fluorene	9.52		ug/kg	5.13	3.03	1	
Phenanthrene	55.9		ug/kg	5.13	3.31	1	
Anthracene	13.9		ug/kg	5.13	3.51	1	
Fluoranthene	126		ug/kg	5.13	2.37	1	
Pyrene	102		ug/kg	5.13	2.83	1	
Benz(a)anthracene	52.5		ug/kg	5.13	2.53	1	
Chrysene	73.1		ug/kg	5.13	1.86	1	
Benzo(b)fluoranthene	61.1		ug/kg	5.13	2.46	1	
Benzo(k)fluoranthene	51.2		ug/kg	5.13	1.47	1	
Benzo(e)Pyrene	50.8		ug/kg	5.13	2.82	1	
Benzo(a)pyrene	55.9		ug/kg	5.13	1.49	1	
Indeno(1,2,3-cd)Pyrene	50.0		ug/kg	5.13	1.46	1	
Dibenz(a,h)anthracene	11.5		ug/kg	5.13	3.04	1	
Benzo(ghi)perylene	49.9		ug/kg	5.13	3.31	1	
2-Methylnaphthalene	7.10		ug/kg	5.13	2.23	1	
1-Methylnaphthalene	4.23	J	ug/kg	5.13	2.32	1	
Dibenzothiophene	4.97	J	ug/kg	5.13	1.61	1	
2-Chloronaphthalene	ND		ug/kg	5.13	1.87	1	
Biphenyl	3.93	J	ug/kg	5.13	1.80	1	
2,6-Dimethylnaphthalene	6.67		ug/kg	5.13	1.92	1	
2,3,5-Trimethylnaphthalene	3.78	J	ug/kg	5.13	1.83	1	
1-Methylphenanthrene	5.44		ug/kg	5.13	2.12	1	
Perylene	203		ug/kg	5.13	1.74	1	



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-02 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

PAHs by GC/MS-SIM - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Methylnaphthalene-d10	43		30-130	
Pyrene-d10	50		30-130	
Benzo(b)fluoranthene-d12	49		30-130	



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8270D-SIM Extraction Date: 06/24/19 10:37
Analytical Date: 06/26/19 16:13 Cleanup Method: EPA 3630

Analytical Date: 06/26/19 16:13 Cleanup Method: EPA 3630
Analyst: PS Cleanup Date: 06/25/19
Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
PAHs by GC/MS-SIM - Mansfield Lab)						
Naphthalene	ND		ug/kg	4.67	1.83	1	
1,4-Dichlorobenzene	ND		ug/kg	4.67	2.39	1	
Acenaphthylene	ND		ug/kg	4.67	1.83	1	
Acenaphthene	ND		ug/kg	4.67	1.82	1	
Fluorene	ND		ug/kg	4.67	2.76	1	
Phenanthrene	ND		ug/kg	4.67	3.00	1	
Anthracene	ND		ug/kg	4.67	3.19	1	
Fluoranthene	ND		ug/kg	4.67	2.15	1	
Pyrene	ND		ug/kg	4.67	2.58	1	
Benz(a)anthracene	ND		ug/kg	4.67	2.30	1	
Chrysene	ND		ug/kg	4.67	1.69	1	
Benzo(b)fluoranthene	ND		ug/kg	4.67	2.24	1	
Benzo(k)fluoranthene	ND		ug/kg	4.67	1.34	1	
Benzo(e)Pyrene	ND		ug/kg	4.67	2.56	1	
Benzo(a)pyrene	ND		ug/kg	4.67	1.35	1	
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	4.67	1.33	1	
Dibenz(a,h)anthracene	ND		ug/kg	4.67	2.77	1	
Benzo(ghi)perylene	ND		ug/kg	4.67	3.00	1	
2-Methylnaphthalene	ND		ug/kg	4.67	2.03	1	
1-Methylnaphthalene	ND		ug/kg	4.67	2.11	1	
Dibenzothiophene	ND		ug/kg	4.67	1.46	1	
2-Chloronaphthalene	ND		ug/kg	4.67	1.70	1	
Biphenyl	ND		ug/kg	4.67	1.63	1	
2,6-Dimethylnaphthalene	ND		ug/kg	4.67	1.74	1	
2,3,5-Trimethylnaphthalene	ND		ug/kg	4.67	1.67	1	
1-Methylphenanthrene	ND		ug/kg	4.67	1.93	1	
Perylene	49.7		ug/kg	4.67	1.58	1	



Project Name: Lab Number: BEACON ISLAND PROJECT L1925812

Project Number: Report Date: CD4644 07/12/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/13/19 16:15 L1925812-03

Date Received: Client ID: 06/14/19 B-3 Sample Location: Field Prep: PORT OF ALBANY Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL **Dilution Factor**

PAHs by GC/MS-SIM - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Methylnaphthalene-d10	33		30-130	
Pyrene-d10	54		30-130	
Benzo(b)fluoranthene-d12	54		30-130	



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8270D-SIM Extraction Date: 06/24/19 10:37
Analytical Date: 06/26/19 16:49 Cleanup Method: EPA 3630

Analytical Date: 06/26/19 16:49 Cleanup Method: EPA 3630
Analyst: PS Cleanup Date: 06/25/19
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PAHs by GC/MS-SIM - Mansfield Lab						
Naphthalene	4.00	J	ug/kg	4.63	1.82	1
1,4-Dichlorobenzene	ND		ug/kg	4.63	2.37	1
Acenaphthylene	ND		ug/kg	4.63	1.82	1
Acenaphthene	2.16	J	ug/kg	4.63	1.80	1
Fluorene	3.49	J	ug/kg	4.63	2.74	1
Phenanthrene	5.20		ug/kg	4.63	2.98	1
Anthracene	3.63	J	ug/kg	4.63	3.17	1
Fluoranthene	8.38		ug/kg	4.63	2.14	1
Pyrene	8.32		ug/kg	4.63	2.56	1
Benz(a)anthracene	4.17	J	ug/kg	4.63	2.28	1
Chrysene	3.31	J	ug/kg	4.63	1.68	1
Benzo(b)fluoranthene	2.75	J	ug/kg	4.63	2.22	1
Benzo(k)fluoranthene	2.15	J	ug/kg	4.63	1.33	1
Benzo(e)Pyrene	ND		ug/kg	4.63	2.54	1
Benzo(a)pyrene	3.03	J	ug/kg	4.63	1.34	1
Indeno(1,2,3-cd)Pyrene	2.25	J	ug/kg	4.63	1.32	1
Dibenz(a,h)anthracene	ND		ug/kg	4.63	2.75	1
Benzo(ghi)perylene	ND		ug/kg	4.63	2.98	1
2-Methylnaphthalene	ND		ug/kg	4.63	2.02	1
1-Methylnaphthalene	ND		ug/kg	4.63	2.09	1
Dibenzothiophene	ND		ug/kg	4.63	1.45	1
2-Chloronaphthalene	ND		ug/kg	4.63	1.69	1
Biphenyl	ND		ug/kg	4.63	1.62	1
2,6-Dimethylnaphthalene	ND		ug/kg	4.63	1.73	1
2,3,5-Trimethylnaphthalene	ND		ug/kg	4.63	1.65	1
1-Methylphenanthrene	ND		ug/kg	4.63	1.91	1
Perylene	11.3		ug/kg	4.63	1.57	1



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

PAHs by GC/MS-SIM - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Methylnaphthalene-d10	38		30-130	
Pyrene-d10	54		30-130	
Benzo(b)fluoranthene-d12	49		30-130	



06/25/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8270D-SIM Extraction Date: 06/24/19 10:37
Analytical Date: 06/26/19 17:24 Cleanup Method: EPA 3630

Analyst: PS
Percent Solids: 61%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PAHs by GC/MS-SIM - Mansfield Lab						
Naphthalene	35.0		ug/kg	6.13	2.40	1
1,4-Dichlorobenzene	ND		ug/kg	6.13	3.14	1
Acenaphthylene	ND		ug/kg	6.13	2.40	1
Acenaphthene	17.8		ug/kg	6.13	2.38	1
Fluorene	28.2		ug/kg	6.13	3.62	1
Phenanthrene	51.9		ug/kg	6.13	3.95	1
Anthracene	16.6		ug/kg	6.13	4.19	1
Fluoranthene	17.7		ug/kg	6.13	2.83	1
Pyrene	19.6		ug/kg	6.13	3.38	1
Benz(a)anthracene	9.70		ug/kg	6.13	3.02	1
Chrysene	14.3		ug/kg	6.13	2.22	1
Benzo(b)fluoranthene	5.75	J	ug/kg	6.13	2.94	1
Benzo(k)fluoranthene	3.73	J	ug/kg	6.13	1.76	1
Benzo(e)Pyrene	5.56	J	ug/kg	6.13	3.36	1
Benzo(a)pyrene	5.92	J	ug/kg	6.13	1.78	1
Indeno(1,2,3-cd)Pyrene	4.00	J	ug/kg	6.13	1.75	1
Dibenz(a,h)anthracene	ND		ug/kg	6.13	3.64	1
Benzo(ghi)perylene	4.36	J	ug/kg	6.13	3.95	1
2-Methylnaphthalene	26.5		ug/kg	6.13	2.67	1
1-Methylnaphthalene	12.6		ug/kg	6.13	2.77	1
Dibenzothiophene	9.61		ug/kg	6.13	1.92	1
2-Chloronaphthalene	ND		ug/kg	6.13	2.24	1
Biphenyl	7.95		ug/kg	6.13	2.14	1
2,6-Dimethylnaphthalene	20.5		ug/kg	6.13	2.29	1
2,3,5-Trimethylnaphthalene	7.91		ug/kg	6.13	2.19	1
1-Methylphenanthrene	9.69		ug/kg	6.13	2.53	1
Perylene	134		ug/kg	6.13	2.08	1



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

PAHs by GC/MS-SIM - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Methylnaphthalene-d10	52		30-130	
Pyrene-d10	56		30-130	
Benzo(b)fluoranthene-d12	51		30-130	



L1925812

Project Name: BEACON ISLAND PROJECT Lab Number:

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 06/26/19 12:44

Analyst: PS

Extraction Method: EPA 3570
Extraction Date: 06/24/19 10:37
Cleanup Method: EPA 3630
Cleanup Date: 06/25/19

arameter	Result Qu	alifier	Units	RL	MDL	
AHs by GC/MS-SIM - Mansfie	ld Lab for sample(s)	: 01-0	5 Batch:	WG1252	2199-1	
Naphthalene	ND		ug/kg	4.00	1.57	
1,4-Dichlorobenzene	ND		ug/kg	4.00	2.05	
Acenaphthylene	ND		ug/kg	4.00	1.57	
Acenaphthene	ND		ug/kg	4.00	1.56	
Fluorene	ND		ug/kg	4.00	2.36	
Phenanthrene	ND		ug/kg	4.00	2.58	
Anthracene	ND		ug/kg	4.00	2.74	
Fluoranthene	ND		ug/kg	4.00	1.84	
Pyrene	ND		ug/kg	4.00	2.21	
Benz(a)anthracene	ND		ug/kg	4.00	1.97	
Chrysene	ND		ug/kg	4.00	1.45	
Benzo(b)fluoranthene	ND		ug/kg	4.00	1.92	
Benzo(k)fluoranthene	ND		ug/kg	4.00	1.15	
Benzo(e)Pyrene	ND		ug/kg	4.00	2.20	
Benzo(a)pyrene	ND		ug/kg	4.00	1.16	
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	4.00	1.14	
Dibenz(a,h)anthracene	ND		ug/kg	4.00	2.37	
Benzo(ghi)perylene	ND		ug/kg	4.00	2.58	
2-Methylnaphthalene	ND		ug/kg	4.00	1.74	
1-Methylnaphthalene	ND		ug/kg	4.00	1.81	
Dibenzothiophene	ND		ug/kg	4.00	1.26	
2-Chloronaphthalene	ND		ug/kg	4.00	1.46	
Biphenyl	ND		ug/kg	4.00	1.40	
2,6-Dimethylnaphthalene	ND		ug/kg	4.00	1.50	
2,3,5-Trimethylnaphthalene	ND		ug/kg	4.00	1.43	
1-Methylphenanthrene	ND		ug/kg	4.00	1.65	
Perylene	ND		ug/kg	4.00	1.36	



Project Name: Lab Number: **BEACON ISLAND PROJECT** L1925812

Project Number: Report Date: CD4644 07/12/19

> **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D-SIM Analytical Date: 06/26/19 12:44

Analyst: PS

Extraction Method: EPA 3570 06/24/19 10:37 **Extraction Date:** Cleanup Method: EPA 3630

Cleanup Date: 06/25/19

Result Qualifier **Units** RLMDL **Parameter** PAHs by GC/MS-SIM - Mansfield Lab for sample(s): 01-05 Batch: WG1252199-1

		Acc	eptance
Surrogate	%Recovery	Qualifier C	riteria
0 M at 1 at	40		
2-Methylnaphthalene-d10	46	30)-130
Pyrene-d10	57	30)-130
Benzo(b)fluoranthene-d12	54	30)-130



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812

Report Date: 07/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RF Qual Lin	
PAHs by GC/MS-SIM - Mansfield Lab Associ	ciated sample(s)	: 01-05 E	satch: WG1252199	-2 WG12	52199-3			
Naphthalene	41		46		40-140	11	3	0
1,4-Dichlorobenzene	41		48		40-140	16	3	0
Acenaphthylene	47		51		40-140	8	3	0
Acenaphthene	48		52		40-140	8	3	0
Fluorene	52		56		40-140	7	3	0
Phenanthrene	54		56		40-140	4	3	0
Anthracene	53		56		40-140	6	3	0
Fluoranthene	61		63		40-140	3	3	0
Pyrene	51		52		40-140	2	3	0
Benz(a)anthracene	58		57		40-140	2	3	0
Chrysene	56		58		40-140	4	3	0
Benzo(b)fluoranthene	62		58		40-140	7	3	0
Benzo(k)fluoranthene	44		48		40-140	9	3	0
Benzo(e)Pyrene	58		57		40-140	2	3	0
Benzo(a)pyrene	55		57		40-140	4	3	0
Indeno(1,2,3-cd)Pyrene	70		68		40-140	3	3	0
Dibenz(a,h)anthracene	66		66		40-140	0	3	0
Benzo(ghi)perylene	67		67		40-140	0	3	0
2-Methylnaphthalene	44		50		40-140	13	3	0
1-Methylnaphthalene	44		49		40-140	11	3	0
Dibenzothiophene	51		55		40-140	8	3	0
2-Chloronaphthalene	42		46		40-140	9	3	0
Biphenyl	44		48		40-140	9	3	0



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

22,10011102,11121110

Lab Number:

L1925812 07/12/19

Project Number: CD4644

Report Date:

Parameter PAHs by GC/MS-SIM - Mansfield Lab Associ	LCS %Recovery iated sample(s):	Qual 01-05	LCSD %Recovery Batch: WG1252199	Qual 9-2 WG12	%Recovery Limits 52199-3	RPD	RPD Qual Limits	
2,6-Dimethylnaphthalene	45		49		40-140	9	30	
1-Methylphenanthrene	57		58		40-140	2	30	
Perylene	53		53		40-140	0	30	

Surrogate	LCS %Recovery Q	LCSD Qual %Recovery	Acceptance Qual Criteria
2-Methylnaphthalene-d10	47	50	30-130
Pyrene-d10	56	55	30-130
Benzo(b)fluoranthene-d12	54	52	30-130



PCBS



Extraction Method: EPA 3570

Cleanup Method: EPA 3640A

06/24/19 11:27

06/25/19

Extraction Date:

Cleanup Date:

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: B-1 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment
Analytical Method: 1,8082A
Analytical Date: 07/08/19 10:58

Analyst: DP
Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by G	C - Mansfield Lab						
Aroclor 1016	ND		ug/kg	3.13	1.15	1	Α
Aroclor 1221	ND		ug/kg	3.13	1.54	1	Α
Aroclor 1232	ND		ug/kg	3.13	1.48	1	Α
Aroclor 1242	ND		ug/kg	3.13	1.06	1	Α
Aroclor 1248	ND		ug/kg	3.13	1.33	1	Α
Aroclor 1254	ND		ug/kg	3.13	1.32	1	Α
Aroclor 1260	ND		ug/kg	3.13	1.33	1	Α
Aroclor 1262	ND		ug/kg	3.13	1.21	1	Α
Aroclor 1268	ND		ug/kg	3.13	1.04	1	Α
PCBs, Total	ND		ug/kg	3.13	1.04	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	51		30-150	В
Decachlorobiphenyl	97		30-150	В
Tetrachloro-meta-Xylene	57		30-150	Α
Decachlorobiphenyl	47		30-150	Α

Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-02 D Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8082A Extraction Date: 06/24/19 11:27
Analytical Date: 07/08/19 16:34 Cleanup Method: EPA 3640A

Analyst: DP Cleanup Date: 06/25/19
Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Mans	field Lab						
Annal or 4040	ND			0.70	0.47	0	Δ.
Aroclor 1016	ND		ug/kg	6.72	2.47	2	Α
Aroclor 1221	ND		ug/kg	6.72	3.32	2	Α
Aroclor 1232	ND		ug/kg	6.72	3.17	2	Α
Aroclor 1242	151.	Р	ug/kg	6.72	2.28	2	В
Aroclor 1248	ND		ug/kg	6.72	2.85	2	Α
Aroclor 1254	ND		ug/kg	6.72	2.83	2	Α
Aroclor 1260	27.1	Р	ug/kg	6.72	2.85	2	В
Aroclor 1262	ND		ug/kg	6.72	2.60	2	Α
Aroclor 1268	ND		ug/kg	6.72	2.24	2	Α
PCBs, Total	178.		ug/kg	6.72	2.24	2	В

			Acceptance			
Surrogate	% Recovery	Qualifier	Criteria	Column		
Tetrachloro-meta-Xylene	39		30-150	В		
Decachlorobiphenyl	78		30-150	В		
Tetrachloro-meta-Xylene	44		30-150	Α		
Decachlorobiphenyl	29	Q	30-150	Α		



06/25/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8082A Extraction Date: 06/24/19 11:27
Analytical Date: 07/08/19 11:21 Cleanup Method: EPA 3640A

Analyst: DP
Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - I	Mansfield Lab						
Aroclor 1016	ND		ug/kg	3.02	1.11	1	Α
Aroclor 1221	ND		ug/kg	3.02	1.49	1	A
Aroclor 1232	ND		ug/kg	3.02	1.42	1	Α
Aroclor 1242	3.10		ug/kg	3.02	1.02	1	В
Aroclor 1248	ND		ug/kg	3.02	1.28	1	Α
Aroclor 1254	ND		ug/kg	3.02	1.27	1	А
Aroclor 1260	1.44	JP	ug/kg	3.02	1.28	1	В
Aroclor 1262	ND		ug/kg	3.02	1.17	1	А
Aroclor 1268	ND		ug/kg	3.02	1.00	1	А
PCBs, Total	4.54	J	ug/kg	3.02	1.00	1	В

			Acceptance		
Surrogate	% Recovery	Qualifier	Criteria	Column	
Tetrachloro-meta-Xylene	41		30-150	В	
Decachlorobiphenyl	81		30-150	В	
Tetrachloro-meta-Xylene	38		30-150	Α	
Decachlorobiphenyl	31		30-150	Α	



06/25/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8082A Extraction Date: 06/24/19 11:27
Analytical Date: 07/08/19 11:33 Cleanup Method: EPA 3640A

Analyst: DP Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Ma	ansfield Lab						
Aroclor 1016	ND		ug/kg	2.94	1.08	1	Α
Aroclor 1221	ND		ug/kg	2.94	1.45	1	Α
Aroclor 1232	ND		ug/kg	2.94	1.39	1	Α
Aroclor 1242	19.3	Р	ug/kg	2.94	0.995	1	В
Aroclor 1248	ND		ug/kg	2.94	1.24	1	Α
Aroclor 1254	ND		ug/kg	2.94	1.24	1	Α
Aroclor 1260	3.49	Р	ug/kg	2.94	1.24	1	В
Aroclor 1262	ND		ug/kg	2.94	1.14	1	Α
Aroclor 1268	ND		ug/kg	2.94	0.979	1	Α
PCBs, Total	22.8		ug/kg	2.94	0.979	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	48		30-150	В
Decachlorobiphenyl	94		30-150	В
Tetrachloro-meta-Xylene	50		30-150	Α
Decachlorobiphenyl	39		30-150	Α



06/25/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8082A Extraction Date: 06/24/19 11:27
Analytical Date: 07/08/19 11:45 Cleanup Method: EPA 3640A

Analyst: DP Percent Solids: 61%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Ma	ansfield Lab						
Aroclor 1016	ND		ug/kg	4.02	1.48	1	Α
Aroclor 1221	ND		ug/kg	4.02	1.98	1	A
Aroclor 1232	ND		ug/kg	4.02	1.90	1	A
Aroclor 1242	8.04		ug/kg	4.02	1.36	1	В
Aroclor 1248	ND		ug/kg	4.02	1.70	1	Α
Aroclor 1254	ND		ug/kg	4.02	1.69	1	Α
Aroclor 1260	1.99	JP	ug/kg	4.02	1.70	1	В
Aroclor 1262	ND		ug/kg	4.02	1.55	1	А
Aroclor 1268	ND		ug/kg	4.02	1.34	1	Α
PCBs, Total	10.3	J	ug/kg	4.02	1.34	1	В

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	Column
Tetrachloro-meta-Xylene	60		30-150	В
Decachlorobiphenyl	119		30-150	В
Tetrachloro-meta-Xylene	67		30-150	Α
Decachlorobiphenyl	44		30-150	Α



L1925812

Lab Number:

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 07/08/19 10:22

Analyst: DP

Extraction Method: EPA 3570
Extraction Date: 06/24/19 11:27
Cleanup Method: EPA 3640A
Cleanup Date: 06/25/19

Parameter	Result	Qualifier	Units		RL	MDL	Column
Polychlorinated Biphenyls by GC -	Mansfield La	ab for sample	e(s):	01-05	Batch:	WG1252253-	1
Aroclor 1016	ND		ug/kg		2.50	0.920	Α
Aroclor 1221	ND		ug/kg		2.50	1.23	А
Aroclor 1232	ND		ug/kg		2.50	1.18	Α
Aroclor 1242	ND		ug/kg		2.50	0.847	Α
Aroclor 1248	ND		ug/kg		2.50	1.06	Α
Aroclor 1254	ND		ug/kg		2.50	1.05	Α
Aroclor 1260	ND		ug/kg		2.50	1.06	Α
Aroclor 1262	ND		ug/kg		2.50	0.967	Α
Aroclor 1268	ND		ug/kg		2.50	0.833	Α
PCBs, Total	ND		ug/kg		2.50	0.833	Α

		Acceptance			
Surrogate	%Recovery Qualifie	r Criteria	Column		
Tetrachloro-meta-Xylene	50	30-150	В		
Decachlorobiphenyl	92	30-150	В		
Tetrachloro-meta-Xylene	47	30-150	Α		
Decachlorobiphenyl	52	30-150	Α		



Project Name: BEACON ISLAND PROJECT

Lab Number:

L1925812

07/12/19

Project Number: CD4644

Report Date:

	LCS		L	CSD	9	%Recovery			RPD	
Parameter	%Recovery	Qual	%Re	covery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Mansfield	Lab Associated	sample(s):	01-05	Batch:	WG1252253-2	WG1252253-3				
Aroclor 1016	50			60		40-140	18		50	Α
Aroclor 1260	57			68		40-140	18		50	Α

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria Column
Tetrachloro-meta-Xylene	44	51	30-150 B
Decachlorobiphenyl	81	97	30-150 B
Tetrachloro-meta-Xylene	54	62	30-150 A
Decachlorobiphenyl	47	55	30-150 A

PESTICIDES



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: B-1 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8081B Extraction Date: 07/10/19 14:49
Analytical Date: 07/12/19 11:05 Cleanup Method: EPA 3630

Analytical Date: 07/12/19 11:05 Cleanup Method: EPA 3630
Analyst: GP Cleanup Date: 07/11/19
Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Mansfield Lab						
Alpha-BHC	ND		ug/kg	0.042	0.042	1	Α
Hexachlorobenzene	ND		ug/kg	0.085	0.085	1	Α
Beta-BHC	ND		ug/kg	0.042	0.042	1	Α
gamma-BHC	ND		ug/kg	0.042	0.042	1	Α
Delta-BHC	ND		ug/kg	0.042	0.042	1	Α
Heptachlor	ND		ug/kg	0.042	0.042	1	Α
Aldrin	ND		ug/kg	0.042	0.042	1	Α
Chloropyrifos ¹	ND		ug/kg	0.042	0.042	1	Α
Heptachlor epoxide	ND		ug/kg	0.085	0.085	1	В
Oxychlordane	ND		ug/kg	0.085	0.085	1	В
trans-Chlordane	ND		ug/kg	0.042	0.042	1	Α
2,4'-DDE	ND		ug/kg	0.042	0.042	1	Α
Endosulfan I	ND		ug/kg	0.042	0.042	1	Α
cis-Chlordane	ND		ug/kg	0.042	0.042	1	Α
trans-Nonachlor	ND		ug/kg	0.042	0.042	1	Α
4,4'-DDE	ND		ug/kg	0.042	0.042	1	Α
Dieldrin	ND		ug/kg	0.042	0.042	1	Α
2,4'-DDD	ND		ug/kg	0.042	0.042	1	Α
Endrin	ND		ug/kg	0.042	0.042	1	Α
Endosulfan II	ND		ug/kg	0.042	0.042	1	Α
4,4'-DDD	ND		ug/kg	0.042	0.042	1	В
2,4'-DDT	ND		ug/kg	0.042	0.042	1	Α
cis-Nonachlor	ND		ug/kg	0.042	0.042	1	Α
Endrin aldehyde	ND		ug/kg	0.128	0.128	1	Α
Endosulfan sulfate	ND		ug/kg	0.042	0.042	1	В
4,4'-DDT	ND		ug/kg	0.042	0.042	1	В
Endrin ketone	ND		ug/kg	0.042	0.042	1	Α
Methoxychlor	ND		ug/kg	0.426	0.426	1	Α



06/13/19 15:10

Date Collected:

Project Name: Lab Number: BEACON ISLAND PROJECT L1925812

Project Number: Report Date: CD4644 07/12/19

SAMPLE RESULTS

Lab ID:

L1925812-01

Client ID: Date Received: 06/14/19 B-1

PORT OF ALBANY Sample Location: Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Mansfield Lab						
Mirex	ND		ug/kg	0.042	0.042	1	Α
Toxaphene	ND		ug/kg	2.14	2.14	1	Α
Chlordane	ND		ug/kg	2.14	2.14	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	91		30-150	Α
Decachlorobiphenyl	89		30-150	Α
Tetrachloro-meta-Xylene	83		30-150	В
Decachlorobiphenyl	87		30-150	В



Extraction Method: EPA 3570

07/11/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-02 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Matrix: Sediment

Analytical Method: 1,8081B Extraction Date: 07/10/19 14:49
Analytical Date: 07/12/19 11:39 Extraction Date: 07/10/19 14:49

Analyst: GP Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC -	Mansfield Lab						
Alpha-BHC	ND		ug/kg	0.045	0.045	1	Α
Hexachlorobenzene	ND		ug/kg	0.090	0.090	1	Α
Beta-BHC	ND		ug/kg	0.045	0.045	1	Α
gamma-BHC	ND		ug/kg	0.045	0.045	1	Α
Delta-BHC	ND		ug/kg	0.045	0.045	1	Α
Heptachlor	ND		ug/kg	0.045	0.045	1	Α
Aldrin	ND		ug/kg	0.045	0.045	1	Α
Chloropyrifos ¹	ND		ug/kg	0.045	0.045	1	Α
Heptachlor epoxide	ND		ug/kg	0.090	0.090	1	В
Oxychlordane	2.60		ug/kg	0.090	0.090	1	В
trans-Chlordane	2.51		ug/kg	0.045	0.045	1	А
2,4'-DDE	ND		ug/kg	0.045	0.045	1	А
Endosulfan I	ND		ug/kg	0.045	0.045	1	А
cis-Chlordane	0.220		ug/kg	0.045	0.045	1	В
trans-Nonachlor	ND		ug/kg	0.045	0.045	1	Α
4,4'-DDE	1.72		ug/kg	0.045	0.045	1	Α
Dieldrin	ND		ug/kg	0.045	0.045	1	Α
2,4'-DDD	0.671		ug/kg	0.045	0.045	1	Α
Endrin	ND		ug/kg	0.045	0.045	1	Α
Endosulfan II	ND		ug/kg	0.045	0.045	1	Α
4,4'-DDD	1.24		ug/kg	0.045	0.045	1	Α
2,4'-DDT	ND		ug/kg	0.045	0.045	1	Α
cis-Nonachlor	ND		ug/kg	0.045	0.045	1	Α
Endrin aldehyde	ND		ug/kg	0.135	0.135	1	Α
Endosulfan sulfate	ND		ug/kg	0.045	0.045	1	В
4,4'-DDT	ND		ug/kg	0.045	0.045	1	В
Endrin ketone	ND		ug/kg	0.045	0.045	1	Α
Methoxychlor	ND		ug/kg	0.451	0.451	1	Α



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-02 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Mansfield Lab						
Mirex	ND		ug/kg	0.045	0.045	1	Α
Toxaphene	ND		ug/kg	2.26	2.26	1	Α
Chlordane	ND		ug/kg	2.26	2.26	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	89		30-150	Α
Decachlorobiphenyl	97		30-150	Α
Tetrachloro-meta-Xylene	67		30-150	В
Decachlorobiphenyl	95		30-150	В



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570

Analytical Method: 1,8081B Extraction Date: 07/10/19 14:49

Analytical Patrix: 07/10/40 10:43

Analytical Date: 07/12/19 12:13 Cleanup Method: EPA 3630
Analyst: GP Cleanup Date: 07/11/19

Analyst: GP Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by G	C - Mansfield Lab						
Alpha-BHC	ND		ug/kg	0.041	0.041	1	Α
Hexachlorobenzene	ND		ug/kg	0.082	0.082	1	Α
Beta-BHC	ND		ug/kg	0.041	0.041	1	Α
gamma-BHC	ND		ug/kg	0.041	0.041	1	Α
Delta-BHC	ND		ug/kg	0.041	0.041	1	Α
Heptachlor	ND		ug/kg	0.041	0.041	1	А
Aldrin	ND		ug/kg	0.041	0.041	1	А
Chloropyrifos ¹	ND		ug/kg	0.041	0.041	1	Α
Heptachlor epoxide	ND		ug/kg	0.082	0.082	1	В
Oxychlordane	0.108		ug/kg	0.082	0.082	1	В
trans-Chlordane	0.074		ug/kg	0.041	0.041	1	Α
2,4'-DDE	ND		ug/kg	0.041	0.041	1	Α
Endosulfan I	ND		ug/kg	0.041	0.041	1	Α
cis-Chlordane	ND		ug/kg	0.041	0.041	1	В
trans-Nonachlor	ND		ug/kg	0.041	0.041	1	Α
4,4'-DDE	0.081		ug/kg	0.041	0.041	1	Α
Dieldrin	ND		ug/kg	0.041	0.041	1	Α
2,4'-DDD	ND		ug/kg	0.041	0.041	1	Α
Endrin	ND		ug/kg	0.041	0.041	1	Α
Endosulfan II	ND		ug/kg	0.041	0.041	1	Α
4,4'-DDD	0.086		ug/kg	0.041	0.041	1	Α
2,4'-DDT	ND		ug/kg	0.041	0.041	1	Α
cis-Nonachlor	ND		ug/kg	0.041	0.041	1	Α
Endrin aldehyde	ND		ug/kg	0.123	0.123	1	Α
Endosulfan sulfate	ND		ug/kg	0.041	0.041	1	В
4,4'-DDT	ND		ug/kg	0.041	0.041	1	В
Endrin ketone	ND		ug/kg	0.041	0.041	1	Α
Methoxychlor	ND		ug/kg	0.411	0.411	1	Α



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by G	C - Mansfield Lab						
Mirex	ND		ug/kg	0.041	0.041	1	Α
Toxaphene	ND		ug/kg	2.06	2.06	1	Α
Chlordane	ND		ug/kg	2.06	2.06	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	96		30-150	Α
Decachlorobiphenyl	96		30-150	Α
Tetrachloro-meta-Xylene	92		30-150	В
Decachlorobiphenyl	97		30-150	В



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8081B Extraction Date: 07/10/19 14:49
Analytical Date: 07/12/19 12:47 Cleanup Method: EPA 3630

Analytical Date: 07/12/19 12:47 Cleanup Method: EPA 363
Analyst: GP Cleanup Date: 07/11/19
Percent Solids: 83%

Result Qualifier Units RL MDL **Dilution Factor** Column **Parameter** Organochlorine Pesticides by GC - Mansfield Lab Alpha-BHC ND 0.039 0.039 1 Α ug/kg Hexachlorobenzene ND 0.079 0.079 Α ug/kg Beta-BHC ND ug/kg 0.039 0.039 1 Α gamma-BHC ND ug/kg 0.039 0.039 1 Α Delta-BHC ND ug/kg 0.039 0.039 1 Α Heptachlor ND ug/kg 0.039 0.039 1 Α Aldrin ND 0.039 0.039 ug/kg 1 Α Chloropyrifos1 ND 0.039 0.039 1 Α ug/kg Heptachlor epoxide ND ug/kg 0.079 0.079 1 В Oxychlordane ND 0.079 0.079 1 Α ug/kg trans-Chlordane ND 0.039 0.039 1 Α ug/kg 2,4'-DDE ND 0.039 0.039 ug/kg 1 Α 0.039 Endosulfan I ND 0.039 1 Α ug/kg cis-Chlordane ND 0.039 0.039 1 Α ug/kg trans-Nonachlor ND 0.039 0.039 1 Α ug/kg 4,4'-DDE 0.128 0.039 0.039 1 Α ug/kg Dieldrin ND 0.039 0.039 1 Α ug/kg 2,4'-DDD ND 0.039 0.039 1 Α ug/kg Endrin ND 0.039 0.039 1 Α ug/kg Endosulfan II ND 0.039 0.039 1 Α ug/kg 0.149 4,4'-DDD 0.039 0.039 Α 1 ug/kg 2,4'-DDT ND ug/kg 0.039 0.039 1 Α ND cis-Nonachlor 0.039 0.039 1 Α ug/kg Endrin aldehyde ND 0.119 0.119 1 Α ug/kg Endosulfan sulfate ND 0.039 0.039 1 В ug/kg 4,4'-DDT ND 0.039 0.039 1 ug/kg В ND 0.039 0.039 Endrin ketone 1 Α ug/kg Methoxychlor ND 0.396 0.396 1 Α ug/kg



Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by G	Pesticides by GC - Mansfield Lab ND ug/kg 0.039 0.039 1 A ND ug/kg 1.99 1.99 1 A						
Mirex	ND		ug/kg	0.039	0.039	1	Α
Toxaphene	ND		ug/kg	1.99	1.99	1	Α
Chlordane	ND		ug/kg	1.99	1.99	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	92		30-150	Α
Decachlorobiphenyl	96		30-150	Α
Tetrachloro-meta-Xylene	82		30-150	В
Decachlorobiphenyl	93		30-150	В



07/11/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3570
Analytical Method: 1,8081B Extraction Date: 07/10/19 14:49
Analytical Date: 07/12/19 13:21 Cleanup Method: EPA 3630

Analyst: GP Percent Solids: 61%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by G	C - Mansfield Lab						
Alpha-BHC	ND		ug/kg	0.054	0.054	1	Α
Hexachlorobenzene	ND		ug/kg	0.108	0.108	1	Α
Beta-BHC	ND		ug/kg	0.054	0.054	1	Α
gamma-BHC	ND		ug/kg	0.054	0.054	1	Α
Delta-BHC	ND		ug/kg	0.054	0.054	1	Α
Heptachlor	ND		ug/kg	0.054	0.054	1	Α
Aldrin	ND		ug/kg	0.054	0.054	1	Α
Chloropyrifos ¹	ND		ug/kg	0.054	0.054	1	Α
Heptachlor epoxide	ND		ug/kg	0.108	0.108	1	В
Oxychlordane	ND		ug/kg	0.108	0.108	1	Α
trans-Chlordane	ND		ug/kg	0.054	0.054	1	Α
2,4'-DDE	ND		ug/kg	0.054	0.054	1	Α
Endosulfan I	ND		ug/kg	0.054	0.054	1	Α
cis-Chlordane	ND		ug/kg	0.054	0.054	1	Α
trans-Nonachlor	ND		ug/kg	0.054	0.054	1	Α
4,4'-DDE	0.086		ug/kg	0.054	0.054	1	Α
Dieldrin	ND		ug/kg	0.054	0.054	1	Α
2,4'-DDD	0.658		ug/kg	0.054	0.054	1	Α
Endrin	ND		ug/kg	0.054	0.054	1	Α
Endosulfan II	ND		ug/kg	0.054	0.054	1	Α
4,4'-DDD	0.131		ug/kg	0.054	0.054	1	В
2,4'-DDT	ND		ug/kg	0.054	0.054	1	Α
cis-Nonachlor	ND		ug/kg	0.054	0.054	1	Α
Endrin aldehyde	ND		ug/kg	0.162	0.162	1	Α
Endosulfan sulfate	ND		ug/kg	0.054	0.054	1	В
4,4'-DDT	ND		ug/kg	0.054	0.054	1	В
Endrin ketone	ND		ug/kg	0.054	0.054	1	Α
Methoxychlor	ND		ug/kg	0.541	0.541	1	Α

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by	GC - Mansfield Lab						
Mirex	ND		ug/kg	0.054	0.054	1	Α
Toxaphene	ND		ug/kg	2.72	2.72	1	Α
Chlordane	ND		ug/kg	2.72	2.72	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
Tetrachloro-meta-Xylene	101		30-150	Α
Decachlorobiphenyl	98		30-150	Α
Tetrachloro-meta-Xylene	88		30-150	В
Decachlorobiphenyl	91		30-150	В



L1925812

Project Name: BEACON ISLAND PROJECT Lab Number:

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 07/12/19 09:22

Analyst: GP

Extraction Method: EPA 3570
Extraction Date: 07/10/19 14:49
Cleanup Method: EPA 3630
Cleanup Date: 07/11/19

arameter	Result	Qualifier	Units		RL	MDL	Column
rganochlorine Pesticides by GC	- Mansfield L	ab for sam	ple(s):	01-05	Batch:	WG125815	53-1
Alpha-BHC	ND		ug/kg	C	0.033	0.033	Α
Hexachlorobenzene	ND		ug/kg	C	0.066	0.066	Α
Beta-BHC	ND		ug/kg	C	0.033	0.033	А
gamma-BHC	ND		ug/kg	C	0.033	0.033	Α
Delta-BHC	ND		ug/kg	C	0.033	0.033	А
Heptachlor	ND		ug/kg	C	0.033	0.033	А
Aldrin	ND		ug/kg	C	0.033	0.033	А
Chloropyrifos ¹	ND		ug/kg	C	0.033	0.033	А
trans-Chlordane	ND		ug/kg	C	0.033	0.033	Α
2,4'-DDE	ND		ug/kg	C	0.033	0.033	Α
Endosulfan I	ND		ug/kg	C	0.033	0.033	Α
cis-Chlordane	ND		ug/kg	C	0.033	0.033	Α
trans-Nonachlor	ND		ug/kg	C	0.033	0.033	Α
4,4'-DDE	ND		ug/kg	C	0.033	0.033	Α
Dieldrin	ND		ug/kg	C	0.033	0.033	А
2,4'-DDD	ND		ug/kg	C	0.033	0.033	Α
Endrin	ND		ug/kg	C	0.033	0.033	Α
Endosulfan II	ND		ug/kg	C	0.033	0.033	Α
4,4'-DDD	ND		ug/kg	C	0.033	0.033	Α
2,4'-DDT	ND		ug/kg	C	0.033	0.033	Α
cis-Nonachlor	ND		ug/kg	C	0.033	0.033	А
Endrin aldehyde	ND		ug/kg	C	0.100	0.100	А
Endrin ketone	ND		ug/kg	C	0.033	0.033	Α
Methoxychlor	ND		ug/kg	C	0.333	0.333	Α
Mirex	ND		ug/kg	C	0.033	0.033	Α
Toxaphene	ND		ug/kg		1.67	1.67	А
Chlordane	ND		ug/kg		1.67	1.67	А
Heptachlor epoxide	ND		ug/kg	C	0.066	0.066	В
Oxychlordane	ND		ug/kg	C	0.066	0.066	В



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 07/12/19 09:22

Analyst: GP

Extraction Method: EPA 3570
Extraction Date: 07/10/19 14:49
Cleanup Method: EPA 3630
Cleanup Date: 07/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC	- Mansfield	Lab for samp	ole(s):	01-05 Batch:	WG1258153-	1
Endosulfan sulfate	ND		ug/kg	0.033	0.033	В
4,4'-DDT	ND		ug/kg	0.033	0.033	В

	Acceptance							
Surrogate	%Recovery Qua	alifier Criteria	Column					
Tetrachloro-meta-Xylene	86	30-150	Α					
Decachlorobiphenyl	85	30-150	Α					
Tetrachloro-meta-Xylene	79	30-150	В					
Decachlorobiphenyl	83	30-150	В					



Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
organochlorine Pesticides by GC - Mansfield	Lab Associate	d sample(s):	01-05 Batch:	WG1258153-2	2 WG1258153-3				
Alpha-BHC	93		100		40-140	7		50	Α
Hexachlorobenzene	78		87		40-140	11		50	Α
Beta-BHC	85		94		40-140	10		50	А
gamma-BHC	90		97		40-140	7		50	А
Delta-BHC	96		103		40-140	7		50	Α
Heptachlor	82		89		40-140	8		50	А
Aldrin	83		91		40-140	9		50	Α
trans-Chlordane	89		96		40-140	8		50	Α
2,4'-DDE	76		81		40-140	6		50	Α
Endosulfan I	88		94		40-140	7		50	Α
cis-Chlordane	82		88		40-140	7		50	Α
trans-Nonachlor	84		91		40-140	8		50	Α
4,4'-DDE	91		98		40-140	7		50	Α
Dieldrin	90		97		40-140	7		50	Α
2,4'-DDD	91		98		40-140	7		50	Α
Endrin	87		93		40-140	7		50	Α
Endosulfan II	85		93		40-140	9		50	Α
4,4'-DDD	95		103		40-140	8		50	Α
2,4'-DDT	91		99		40-140	8		50	Α
cis-Nonachlor	87		94		40-140	8		50	Α
Endrin aldehyde	74		82		40-140	10		50	А
Endosulfan sulfate	98		109		40-140	11		50	Α
4,4'-DDT	99		109		40-140	10		50	Α



Project Name: BEACON ISLAND PROJECT

Lab Number: L1925812

Project Number: CD4644

Parameter	LCS %Recovery	Qual		CSD covery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Mans	field Lab Associated	d sample(s):	01-05	Batch:	WG1258153-2	WG1258153-3				
Endrin ketone	96			109		40-140	13		50	Α
Methoxychlor	52			63		40-140	19		50	А
Mirex	68			74		40-140	8		50	А

	LCS	LCSD		Acceptance	
Surrogate	%Recovery	Qual %Recovery	Qual	Criteria	Column
Tetrachloro-meta-Xylene	82	94		30-150	Α
Decachlorobiphenyl	81	94		30-150	Α
Tetrachloro-meta-Xylene	75	84		30-150	В
Decachlorobiphenyl	81	93		30-150	В



Project Name: BEACON ISLAND PROJECT

CON ISLAND PROJECT

Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

	LCS		L	CSD	%	6Recovery			RPD	
Parameter	%Recovery	Qual	%Re	covery	Qual	Limits	RPD	Qual	Limits	Column
Organochlorine Pesticides by GC - Mansfield	Lab Associate	ed sample(s):	01-05	Batch:	WG1258153-2	WG1258153-3	3			
Heptachlor epoxide	85			92		40-140	8		50	В
Oxychlordane	91			99		40-140	8		50	В

	LCS	LCSD	Acceptance
Surrogate	%Recovery C	Qual %Recovery Qual	Criteria Column
Tetrachloro-meta-Xylene	82	94	30-150 A
Decachlorobiphenyl	81	94	30-150 A
Tetrachloro-meta-Xylene	75	84	30-150 B
Decachlorobiphenyl	81	93	30-150 B



METALS



06/13/19 15:10

Not Specified

06/14/19

Date Collected:

Date Received:

Field Prep:

Project Name: Lab Number: BEACON ISLAND PROJECT L1925812 **Report Date:** 07/12/19

Project Number: CD4644

SAMPLE RESULTS

Lab ID: L1925812-01

Client ID: B-1

Sample Location: PORT OF ALBANY

Sample Depth:

Matrix: Sediment

						Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Mans	field Lab										
Arsenic, Total	2.19		mg/kg	0.619	0.082	10	06/26/19 17:10	0 06/28/19 16:52	EPA 3050B	1,6020B	AM
Cadmium, Total	0.042	J	mg/kg	0.248	0.033	10	06/26/19 17:10	0 06/28/19 16:52	EPA 3050B	1,6020B	AM
Copper, Total	3.70		mg/kg	2.48	0.240	10	06/26/19 17:10	0 06/28/19 16:52	EPA 3050B	1,6020B	AM
Lead, Total	4.08		mg/kg	0.743	0.181	10	06/26/19 17:10	0 06/28/19 16:52	EPA 3050B	1,6020B	AM
Mercury, Total	0.004	J	mg/kg	0.016	0.002	5	06/26/19 13:39	9 06/27/19 11:31	EPA 7474	1,7474	CD



06/13/19 15:40

Date Collected:

Project Name: Lab Number: **BEACON ISLAND PROJECT** L1925812 **Report Date:** 07/12/19

Project Number: CD4644

SAMPLE RESULTS

Lab ID: L1925812-02

Client ID: B-2 Date Received: 06/14/19 Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Ma	nsfield Lab										
Arsenic, Total	3.96		mg/kg	0.647	0.085	10	06/26/19 17:10	0 06/28/19 16:56	EPA 3050B	1,6020B	AM
Cadmium, Total	0.306		mg/kg	0.259	0.034	10	06/26/19 17:10	0 06/28/19 16:56	EPA 3050B	1,6020B	AM
Copper, Total	17.6		mg/kg	2.59	0.251	10	06/26/19 17:10	0 06/28/19 16:56	EPA 3050B	1,6020B	AM
Lead, Total	18.9		mg/kg	0.776	0.189	10	06/26/19 17:10	0 06/28/19 16:56	EPA 3050B	1,6020B	AM
Mercury, Total	0.041		mg/kg	0.018	0.002	5	06/26/19 13:3	9 06/27/19 11:33	EPA 7474	1,7474	CD



06/13/19 16:15

Not Specified

06/14/19

Project Name: Lab Number: **BEACON ISLAND PROJECT** L1925812 **Report Date:** 07/12/19

Project Number: CD4644

SAMPLE RESULTS

Lab ID: L1925812-03

Date Collected: Client ID: B-3 Date Received: Field Prep:

Sample Location: PORT OF ALBANY

Sample Depth:

Matrix: Sediment

Foster Draward Analyzed Mathed Mothod	Percent Solids.	0070					Dilution	Date	Date	Prep	Analytical	
Arsenic, Total 4.47 mg/kg 0.587 0.078 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Cadmium, Total 0.045 J mg/kg 0.235 0.031 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Copper, Total 4.03 mg/kg 2.35 0.228 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Lead, Total 3.48 mg/kg 0.704 0.171 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM	Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	•	Method	Analyst
Cadmium, Total 0.045 J mg/kg 0.235 0.031 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Copper, Total 4.03 mg/kg 2.35 0.228 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Lead, Total 3.48 mg/kg 0.704 0.171 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM	Total Metals - Man	sfield Lab										
Copper, Total 4.03 mg/kg 2.35 0.228 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM Lead, Total 3.48 mg/kg 0.704 0.171 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM	Arsenic, Total	4.47		mg/kg	0.587	0.078	10	06/26/19 17:1	0 06/28/19 17:00	EPA 3050B	1,6020B	AM
Lead, Total 3.48 mg/kg 0.704 0.171 10 06/26/19 17:10 06/28/19 17:00 EPA 3050B 1,6020B AM	Cadmium, Total	0.045	J	mg/kg	0.235	0.031	10	06/26/19 17:1	0 06/28/19 17:00	EPA 3050B	1,6020B	AM
,	Copper, Total	4.03		mg/kg	2.35	0.228	10	06/26/19 17:1	0 06/28/19 17:00	EPA 3050B	1,6020B	AM
Mercury, Total 0.007 J mg/kg 0.018 0.002 5 06/26/19 13:39 06/27/19 11:36 EPA 7474 1,7474 CD	Lead, Total	3.48		mg/kg	0.704	0.171	10	06/26/19 17:1	0 06/28/19 17:00	EPA 3050B	1,6020B	AM
	Mercury, Total	0.007	J	mg/kg	0.018	0.002	5	06/26/19 13:3	9 06/27/19 11:36	EPA 7474	1,7474	CD



06/13/19 16:45

Date Collected:

Project Name: Lab Number: **BEACON ISLAND PROJECT** L1925812 **Project Number: Report Date:** 07/12/19

CD4644

SAMPLE RESULTS

Lab ID: L1925812-04

Client ID: B-4 Date Received: 06/14/19 Not Specified

Sample Location: PORT OF ALBANY Field Prep:

Sample Depth:

Matrix: Sediment

Percent Solids.	0370					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	ofiold Lob										
Total Metals - Man	sileid Lab										
Arsenic, Total	4.13		mg/kg	0.580	0.077	10	06/26/19 17:1	0 06/28/19 17:05	EPA 3050B	1,6020B	AM
Cadmium, Total	0.047	J	mg/kg	0.232	0.031	10	06/26/19 17:1	0 06/28/19 17:05	EPA 3050B	1,6020B	AM
Copper, Total	5.00		mg/kg	2.32	0.225	10	06/26/19 17:1	0 06/28/19 17:05	EPA 3050B	1,6020B	AM
Lead, Total	5.29		mg/kg	0.696	0.169	10	06/26/19 17:1	0 06/28/19 17:05	EPA 3050B	1,6020B	AM
Mercury, Total	0.011	J	mg/kg	0.015	0.002	5	06/26/19 13:3	9 06/27/19 11:38	EPA 7474	1,7474	CD



Project Name: Lab Number: **BEACON ISLAND PROJECT** L1925812 **Report Date:** 07/12/19

Project Number: CD4644

SAMPLE RESULTS

Lab ID: L1925812-05

Date Collected: 06/13/19 17:10 Client ID: B-5 Date Received: 06/14/19 Field Prep: Not Specified

Sample Location: PORT OF ALBANY

Sample Depth:

Matrix: Sediment

Percent Solids.	0170					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	ofiold Lob										
TOtal Metals - Mari	Sileiu Lab										
Arsenic, Total	4.75		mg/kg	0.784	0.104	10	06/26/19 17:1	0 06/28/19 17:09	EPA 3050B	1,6020B	AM
Cadmium, Total	0.091	J	mg/kg	0.314	0.041	10	06/26/19 17:1	0 06/28/19 17:09	EPA 3050B	1,6020B	AM
Copper, Total	6.52		mg/kg	3.14	0.304	10	06/26/19 17:1	0 06/28/19 17:09	EPA 3050B	1,6020B	AM
Lead, Total	5.56		mg/kg	0.941	0.229	10	06/26/19 17:1	0 06/28/19 17:09	EPA 3050B	1,6020B	AM
Mercury, Total	0.008	J	mg/kg	0.019	0.002	5	06/26/19 13:3	9 06/27/19 11:41	EPA 7474	1,7474	CD



Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1925812

Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sample(s):	01-05 Ba	atch: Wo	G12533	64-1				
Arsenic, Total	ND	mg/kg	0.500	0.066	10	06/26/19 17:10	06/28/19 15:50	1,6020B	AM
Cadmium, Total	ND	mg/kg	0.200	0.026	10	06/26/19 17:10	06/28/19 15:50	1,6020B	AM
Copper, Total	ND	mg/kg	2.00	0.194	10	06/26/19 17:10	06/28/19 15:50	1,6020B	AM
Lead, Total	ND	mg/kg	0.600	0.146	10	06/26/19 17:10	06/28/19 15:50	1,6020B	AM

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Total Metals - Mansfie	ld Lab for sample(s):	01-05 B	atch: W	G12533	66-1				
Mercury, Total	ND	mg/kg	0.013	0.002	5	06/26/19 13:39	06/27/19 10:07	1,7474	CD

Prep Information

Digestion Method: EPA 7474



Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812

Parameter	LCS %Recove	ery Qual	LCSD %Recover	y Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01-05	Batch: WG12	53364-2 SRI	M Lot Number:	D105-540			
Arsenic, Total	110		-		70-130	-		20
Cadmium, Total	109		-		75-125	-		20
Copper, Total	100		-		75-125	-		20
Lead, Total	98		-		71-128	-		20
Total Metals - Mansfield Lab Associated sampl	e(s): 01-05	Batch: WG12	53366-2 SRI	M Lot Number:	D105-540			
Mercury, Total	84		-		60-141	-		20



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery C	Recovery Qual Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab	Associated san	nple(s): 01-05	QC Bat	tch ID: WG125	3364-3	QC Sam	ple: L1925766-0	5 Client ID: M	S Sample	
Arsenic, Total	244	22.4	267	102		-	-	75-125	-	20
Cadmium, Total	15.0	9.53	25.0	105		-	-	75-125	-	20
Copper, Total	724	46.7	770	98		-	-	75-125	-	20
Lead, Total	757	95.3	874	123		-	-	75-125	-	20
otal Metals - Mansfield Lab	Associated sam	nple(s): 01-05	QC Bat	tch ID: WG125	3366-3	QC Sam	ple: L1925766-0	5 Client ID: M	S Sample	
Mercury, Total	5.44	1.37	7.37	141	Q	-	-	80-120	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1925812

arameter	Native Sample	Duplicate Sample	Units	RPD	Qual I	RPD Limits
otal Metals - Mansfield Lab Associated sample(s): 01-0	05 QC Batch ID: W	/G1253364-4 QC Sample:	L1925766-05	Client ID:	DUP Sampl	е
Arsenic, Total	244	220	mg/kg	10		20
Cadmium, Total	15.0	13.8	mg/kg	8		20
Copper, Total	724	646	mg/kg	11		20
Lead, Total	757	703	mg/kg	7		20
otal Metals - Mansfield Lab Associated sample(s): 01-0	05 QC Batch ID: W	VG1253366-4 QC Sample:	L1925766-05	Client ID:	DUP Sampl	е
Mercury, Total	5.44	5.58	mg/kg	3		20



INORGANICS & MISCELLANEOUS



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-01 Date Collected: 06/13/19 15:10

Client ID: B-1 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Cyanide, Total	ND		mg/kg	1.2	0.26	1	06/16/19 13:35	06/17/19 13:30	1,9010C/9012B	LH
General Chemistry - N	/lansfield Lab									
Solids, Total	78.1		%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-02 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment

Parameter	Result (Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	Vestborough Lab								
Cyanide, Total	ND	mg/kg	1.3	0.27	1	06/16/19 13:35	06/17/19 13:33	1,9010C/9012B	LH
General Chemistry - M	lansfield Lab								
Solids, Total	73.4	%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-03 Date Collected: 06/13/19 16:15

Client ID: B-3 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab)								
Cyanide, Total	ND		mg/kg	1.2	0.26	1	06/16/19 13:35	06/17/19 13:57	1,9010C/9012B	LH
General Chemistry - M	ansfield Lab									
Solids, Total	80.3		%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-04 Date Collected: 06/13/19 16:45

Client ID: B-4 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab									
Cyanide, Total	ND		mg/kg	1.2	0.24	1	06/16/19 13:35	06/17/19 13:35	1,9010C/9012B	LH
General Chemistry - M	ansfield Lab									
Solids, Total	82.9		%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



Project Name: BEACON ISLAND PROJECT Lab Number: L1925812

Project Number: CD4644 Report Date: 07/12/19

SAMPLE RESULTS

Lab ID: L1925812-05 Date Collected: 06/13/19 17:10

Client ID: B-5 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab)								
Cyanide, Total	ND		mg/kg	1.6	0.34	1	06/16/19 13:35	06/17/19 13:39	1,9010C/9012B	LH
General Chemistry - M	ansfield Lab									
Solids, Total	61.3		%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



L1925812

Project Name: BEACON ISLAND PROJECT Lab Number:

Project Number: CD4644 Report Date: 07/12/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab for sam	nple(s): 02	-04 Ba	atch: Wo	G1249185-	1			
Cyanide, Total	ND	mg/kg	0.86	0.18	1	06/16/19 13:35	06/17/19 13:15	1,9010C/9012	B LH
General Chemistry - W	Vestborough Lab for sam	nple(s): 01	,05 Ba	tch: W	G1249186-1	1			
Cyanide, Total	ND	mg/kg	0.86	0.18	1	06/16/19 13:35	06/17/19 13:16	1,9010C/9012	B LH



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1925812

Report Date:

07/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
General Chemistry - Westborough Lab Asso	ciated sample(s):	02-04	Batch: WG1249	185-2 W	/G1249185-3				
Cyanide, Total	74	Q	85		80-120	2		35	
General Chemistry - Westborough Lab Asso	ciated sample(s):	01,05	Batch: WG1249	186-2 W	/G1249186-3				
Cyanide, Total	74	Q	84		80-120	4		35	



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1925812

Report Date: 07/12/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Q	RPD ual Limits
General Chemistry - West Sample	borough Lab Asso	ciated samp	le(s): 02-04	QC Batch II	D: WG12	249185-4	WG1249185-5	QC Sample: L19	25787-01	Client ID: MS
Cyanide, Total	ND	10	8.9	88		9.9	98	75-125	11	35
General Chemistry - West	borough Lab Asso	ciated samp	le(s): 01,05	QC Batch II	D: WG12	249186-4	WG1249186-5	QC Sample: L19	25812-01	Client ID: B-1
Cyanide, Total	ND	12	11	92		11	90	75-125	0	35

L1925812

Lab Duplicate Analysis

Batch Quality Control

Lab Number: **Project Name: BEACON ISLAND PROJECT**

07/12/19 Project Number: CD4644 Report Date:

Parameter	Native :	Sample	Duplicate San	nple Units	s RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab	Associated sample(s): 01-05	QC Batch ID:	WG1250161-1	QC Sample:	L1925766-03	Client ID:	DUP Sample
Solids, Total	50).1	48.6	%	3		10



Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1925812 **Report Date:** 07/12/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler Custody Seal

A Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler		pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1925812-01A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-01B	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		TCN-9010(14)
L1925812-01C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-01D	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-01E	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-01F	Glass 250ml/8oz unpreserved	Α	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-01X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-01Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-01Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-02A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-02B	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		TCN-9010(14)



Lab Number: L1925812

Report Date: 07/12/19

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	•	Pres	Seal	Date/Time	Analysis(*)
L1925812-02C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-02D	Glass 120ml/4oz unpreserved	А	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-02E	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-02F	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-02X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-02Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-02Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-03A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-03B	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		TCN-9010(14)
L1925812-03C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-03D	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)



BEACON ISLAND PROJECT L1925812

Project Number: CD4644 Report Date: 07/12/19

Container Info		Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1925812-03E	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-03F	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-03X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-03Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-03Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-04A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-04B	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		TCN-9010(14)
L1925812-04C	Glass 120ml/4oz unpreserved	А	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-04D	Glass 120ml/4oz unpreserved	A	NA		3.5	Υ	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-04E	Glass 120ml/4oz unpreserved	А	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-04F	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)



Project Name:

Lab Number: L1925812

Report Date: 07/12/19

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1925812-04X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-04Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-04Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-05A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-05B	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		TCN-9010(14)
L1925812-05C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-05D	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-05E	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-05F	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		A2-PB-6020T(180),A2-HG-7474T(28),HOLD-1613(365),A2-TS(7),A2-AS-6020T(180),A2-PEST-8081-LOW(14),A2-CD-6020T(180),A2-HGPREP-AF(28),A2-PCB-8082-LOW(14),A2-PREP-3050:2T(180),A2-CU-6020T(180),A2-PAH-8270SIM-FULL(14),A2-PREP-3050:1T(180)
L1925812-05X	Vial MeOH preserved split	Α	NA		3.5	Υ	Absent		NYTCL-8260-BTEX(14)
L1925812-05Y	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)
L1925812-05Z	Vial Water preserved split	Α	NA		3.5	Υ	Absent	24-JUN-19 12:30	NYTCL-8260-BTEX(14)



Project Name:BEACON ISLAND PROJECTLab Number:L1925812Project Number:CD4644Report Date:07/12/19

GLOSSARY

Acronyms

EDL

LOD

LOQ

MS

RPD

DL - 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 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).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

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.

 - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

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.

 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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

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.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

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.

- 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.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

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

Report Format: DU Report with 'J' Qualifiers



Project Name:BEACON ISLAND PROJECTLab Number:L1925812Project Number:CD4644Report Date:07/12/19

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

Terms

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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **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.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:BEACON ISLAND PROJECTLab Number:L1925812Project Number:CD4644Report Date:07/12/19

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

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.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 12

Page 1 of 1

Published Date: 10/9/2018 4:58:19 PM

Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, 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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

Pre-Qualtrax Document ID: 08-113 Document Type: Form



ATLANTIC TESTING LABORATORIES NO: 12602

Environmental Chain-Of-Custody Record

L1925812

Albany
22 Corporate Drive
Clifton Park, NY 12065
518/383-9144 (T)
518/383-9166 (F)

Binghamton 126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F) Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F)

Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F) labs/17 @ allanti-testing on

Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F) labs*L@atlanticesting.com Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6098 (F) 845/691-6099 (F) labs/F16 attanticesting com

Rochester 3495 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F) labelT 6 attanticienting com Syracuse 6085 Court Street Road Syracuse, NY 13206 315/699-3281 (T) 315/699-3374 (F) labs5T @ atlantictering.com Utica Watertown
301 St. Anthony Street
Ulica, NY 13501
315/735-3309 (T)
315/735-0742 (F)
pbsUT © attantictesting com

Peole	ect No.				T 27/2								
	_		Client Name		QA/Q □ NYSDEC	C Code	-		Parame	ters	_	Repo	rt Distribution
CD4	640	9 MEL	irl Sohnson		□ NYSDEC	□ SW-846 □ CLP	25					Dates Required:	5-DAL TAT
Page 1			Johnson		Other	u cu	45						10-11-6
			01		- Cuici		8082-	-5	N. K	SE S	1 4	Send Report To:	tparker@
Project	Conta	act: \inother	, Pastas		Project	Location	8083 UXZ	8081 Street	e TEK		500		Labs CT(2) ×
Proje	et Nan	me: ()	-1.0	i	0 . 0	Λι.	1314	34	214	373	から	E-mail Results:	Scal
		Degeon of	- sland rojecs	†	Port of	Albany	(3)	+ 3	SIH.	- N. C. I	2 10		@atlantictesting.com
Date	Tim	ne Field Sample No.	Sample Locatio		Sample	No.of	450	- PA	24/19	315	65 F		Batiantictesting.com
			Sample Escatio		Type	Containers	m	וי עו	CHT	7: 4		Notes	Sample ID No.
6/13/16	150	10	B-1		C,5d	6	XX	_	hlu	5 b	1	1	
Vial	100	00				-	MV	20	\sim	XX	120	*	
PIKIL	154	13	B-2		C,Sd	6	الالا	6	الاط	عاط	16	1 7 3	
List					0 51		1 1	~	44	~ ~	1º	1	
112/15	161		B-3		CISU	6	DIX		الماط	2 0	10	8 3	
1210		_	8-4		1001		. 1		w.	-		150	
18/17	164	AS .	D' 4		Cisa	6	MX	20	00	2	\times	12	
0/13/19	17	141	B-5		C, Sd	1	60	00	616	مر مر	X	1 1 2 0	7
110/14	0 1	-0			0,00	6	12/14	~	\(\sigma\)	/ /	/~	150	
												150	2
					1		-	-	_	_	+	10.	
					141	(1-1
					1	V					_		10.
													16
					1								1 8,
			0	1 31 1									
Sampler	s Name	" Timothy	Date:	6/13/19	Desired	for Name:	11.	A110	KK			Date:	Shipment Rec'd Intact?
Campier	. , , , , , , , , , , , , , , , , , , ,	11001100	Date:		Received	tor Name:						APRILES.	The second secon
Sampler	Signa	ature:	Time:	1800	Laborato	ry Signature:	1	1.0	YIC	be		Time:	O O YES INO
					25.7						AY TO ME		THE RESERVE THE PROPERTY OF THE PERSON OF TH
		Samples Relinquished	By:		Sample	s Received By:					Sample Ty	pe Code Key:	Laboratory Remarks
	*	T # 66	- 6/4/16	1	///			220-700	1/111	10	Des	eciption	
Nai	ne:	Timothy Vasto	Date: Of till	Name:	Nonus	(4)		Date:	6/14/	-	omposite	Q QA/QC	
Signatu	per l		Time:	Classic	0/1					G G	rab	O Other	
J. G.B.	200	•	Ame.	Signature:	111/	/		Time:				Satrix .	
_	-	1.71		a	Halle				11:2	DW D	rinking Water	S Soil	
Nat	ne:	Al Somier	Date: 6/14/19	Manage 4	4 31				61.	(TOTAL 6/2)	roundwater	SL Sludge	
.,,,,,,	F	THE SOMETHINES	Date: 0/14/1/	Name:	10 0/10	45		Date:	114		astewater	WS Solid Waste	
Signatu	re:		Time:	Signature:	. 1	10		Time:	11.		ormwater	B Bulk	
- 10 THE S	6	d'Amini.	11.55		4.0	1 who			16:3			WP Wipe	
	-	Visiters 6-16	4-19 16:35						_		quid	1.0	

Think Quality

Distribution: White with Samples

Page 81 of 81

Yellow to Laboratory Pink to ATL Files



ANALYTICAL REPORT

Lab Number: L1931057

Client: Atlantic Testing Laboratories, Limited

6431 US Highway 11

PO Box 29

Canton, NY 13617

ATTN: Tim S. Parker Phone: (315) 386-4578

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644
Report Date: 07/29/19

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Serial_No:07291919:15

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644 Lab Number:

L1931057

Report Date:

07/29/19

Alpha Sample ID

L1931057-01

Client ID

B-2

Matrix

SEDIMENT

Sample Location

PORT OF ALBANY

Collection

Date/Time

06/13/19 15:40

Receive Date

06/14/19



Project Name:BEACON ISLAND PROJECTLab Number:L1931057Project Number:CD4644Report Date:07/29/19

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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.	



Serial_No:07291919:15

Project Name:BEACON ISLAND PROJECTLab Number:L1931057Project Number:CD4644Report Date:07/29/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Dioxins & Furans by Isotope Dilution HRMS

The WG1264033-4/-5 MS/MSD recoveries, performed on L1931057-01, are outside the acceptance criteria for ocdd (194%/167%); however, the associated LCS recoveries are within overall method allowances. No further action was required.

The WG1264033-5 MSD recovery, performed on L1931057-01, is outside the acceptance criteria for 1,2,3,7,8-pecdf (70%); however, the associated LCS recoveries are within overall method allowances. No further action was required.

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:

Luxen & Med Susan O' Neil

Title: Technical Director/Representative Date: 07/29/19

ORGANICS



SEMIVOLATILES

High Resolution Mass Spectrometry



Serial_No:07291919:15

07/26/19

Cleanup Date:

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1931057

Project Number: CD4644 Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1931057-01 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Matrix: Sediment Extraction Method: EPA 3546
Analytical Method: 132,1613B Extraction Date: 07/24/19 16:47
Analytical Date: 07/28/19 15:55 Cleanup Method: EPA 1613B

Analyst: PB Percent Solids: 73%

Parameter	Result	Qualifier	EMPC	Units	RL	MDL	Dilution Factor
Dioxins & Furans by Isotope Dil	ution HRMS - Mansfi	eld Lab					
2,3,7,8-TCDD	ND			pg/g	0.681	0.210	1
1,2,3,7,8-PeCDD	ND			pg/g	3.40	0.500	1
1,2,3,4,7,8-HxCDD	ND			pg/g	3.40	0.752	1
1,2,3,6,7,8-HxCDD	ND			pg/g	3.40	0.584	1
1,2,3,7,8,9-HxCDD	ND			pg/g	3.40	0.522	1
1,2,3,4,6,7,8-HpCDD	3.96			pg/g	3.40	0.369	1
OCDD	29.6			pg/g	6.81	0.722	1
2,3,7,8-TCDF	ND			pg/g	0.681	0.188	1
1,2,3,7,8-PeCDF	ND			pg/g	3.40	0.409	1
2,3,4,7,8-PeCDF	ND			pg/g	3.40	0.342	1
1,2,3,4,7,8-HxCDF	ND			pg/g	3.40	0.436	1
1,2,3,6,7,8-HxCDF	ND			pg/g	3.40	0.477	1
1,2,3,7,8,9-HxCDF	ND			pg/g	3.40	0.387	1
2,3,4,6,7,8-HxCDF	ND			pg/g	3.40	0.414	1
1,2,3,4,6,7,8-HpCDF	ND			pg/g	3.40	0.540	1
1,2,3,4,7,8,9-HpCDF	ND			pg/g	3.40	0.373	1
OCDF	ND			pg/g	6.81	1.15	1
Total TCDD	ND			pg/g	0.681	0.210	1
Total PeCDD	ND			pg/g	3.40	0.500	1
Total HxCDD	ND			pg/g	3.40	0.752	1
Total HpCDD	3.96			pg/g	3.40	0.369	1
Total TCDF	ND			pg/g	0.681	0.188	1
Total PeCDF	ND			pg/g	3.40	0.409	1
Total HxCDF	ND			pg/g	3.40	0.436	1
Total HpCDF	ND			pg/g	3.40	0.540	1
Total PCDD	33.6			pg/g	0.681	0.210	1
Total PCDF	ND			pg/g	0.681	0.188	1
Toxic Equivalency (TEQ)	0.049			pg/g	0.002	0.002	1



Serial_No:07291919:15

Project Name: BEACON ISLAND PROJECT **Lab Number:** L1931057

Project Number: CD4644 Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1931057-01 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19
Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier EMPC Units RL MDL Dilution Factor

Dioxins & Furans by Isotope Dilution HRMS - Mansfield Lab

Surrogate/Cleanup Standard	% Recovery	Acceptance Qualifier Criteria
13C12-2,3,7,8-TCDF	81	24-169
13C12-2,3,7,8-TCDD	89	25-164
13C12-1,2,3,7,8-PeCDF	92	24-185
13C12-2,3,4,7,8-PeCDF	91	21-178
13C12-1,2,3,7,8-PeCDD	100	25-181
13C12-1,2,3,4,7,8-HxCDF	84	26-152
13C12-1,2,3,6,7,8-HxCDF	92	26-123
13C12-2,3,4,6,7,8-HxCDF	86	28-136
13C12-1,2,3,7,8,9-HxCDF	86	29-147
13C12-1,2,3,4,7,8-HxCDD	85	32-141
13C12-1,2,3,6,7,8-HxCDD	92	28-130
13C12-1,2,3,4,6,7,8-HpCDF	89	28-143
13C12-1,2,3,4,7,8,9-HpCDF	91	26-138
13C12-1,2,3,4,6,7,8-HpCDD	91	23-140
13C12-OCDD	91	17-157
37CL4-2,3,7,8-TCDD	91	35-197



L1931057

Lab Number:

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644 Report Date: 07/29/19

> **Method Blank Analysis Batch Quality Control**

Analytical Method: 132,1613B Analytical Date: 07/28/19 10:35

Analyst: PΒ Extraction Method: EPA 3546 07/24/19 16:47 Extraction Date: EPA 1613B Cleanup Method:

Cleanup Date: 07/26/19

Parameter	Result	Qualifier	EMPC	Units	RL	MDL	
Dioxins & Furans by Isotope I	Dilution HRMS - Ma	nsfield Lab	for sample	e(s): 01	Batch: WG1	264033-1	
2,3,7,8-TCDD	ND			pg/g	0.500	0.154	
1,2,3,7,8-PeCDD	ND			pg/g	2.50	0.367	
1,2,3,4,7,8-HxCDD	ND			pg/g	2.50	0.552	
1,2,3,6,7,8-HxCDD	ND			pg/g	2.50	0.429	
1,2,3,7,8,9-HxCDD	ND			pg/g	2.50	0.383	
1,2,3,4,6,7,8-HpCDD	ND			pg/g	2.50	0.271	
OCDD	ND			pg/g	5.00	0.530	
2,3,7,8-TCDF	ND			pg/g	0.500	0.138	
1,2,3,7,8-PeCDF	ND			pg/g	2.50	0.300	
2,3,4,7,8-PeCDF	ND			pg/g	2.50	0.251	
1,2,3,4,7,8-HxCDF	ND			pg/g	2.50	0.320	
1,2,3,6,7,8-HxCDF	ND			pg/g	2.50	0.350	
1,2,3,7,8,9-HxCDF	ND			pg/g	2.50	0.284	
2,3,4,6,7,8-HxCDF	ND			pg/g	2.50	0.304	
1,2,3,4,6,7,8-HpCDF	ND			pg/g	2.50	0.396	
1,2,3,4,7,8,9-HpCDF	ND			pg/g	2.50	0.274	
OCDF	ND			pg/g	5.00	0.845	
Total TCDD	ND			pg/g	0.500	0.154	
Total PeCDD	ND			pg/g	2.50	0.367	
Total HxCDD	ND			pg/g	2.50	0.552	
Total HpCDD	ND			pg/g	2.50	0.271	
Total TCDF	ND			pg/g	0.500	0.138	
Total PeCDF	ND			pg/g	2.50	0.300	
Total HxCDF	ND			pg/g	2.50	0.320	
Total HpCDF	ND			pg/g	2.50	0.396	
Total PCDD	ND			pg/g	0.500	0.154	
Total PCDF	ND			pg/g	0.500	0.138	
Toxic Equivalency (TEQ)	ND			pg/g	0.002	0.002	



L1931057

Lab Number:

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644 **Report Date:** 07/29/19

Method Blank Analysis

Batch Quality Control

Analytical Method: 132,1613B Analytical Date: 07/28/19 10:35

Analyst: PΒ Extraction Method: EPA 3546 Extraction Date: 07/24/19 16:47 EPA 1613B Cleanup Method:

Cleanup Date: 07/26/19

Result Qualifier **EMPC** Units RLMDL **Parameter**

Dioxins & Furans by Isotope Dilution HRMS - Mansfield Lab for sample(s): 01 Batch: WG1264033-1

Surrogate/Cleanup Standard	%Recovery	Acceptance Qualifier Criteria
13C12-2,3,7,8-TCDF	76	24-169
13C12-2,3,7,8-TCDD	83	25-164
13C12-1,2,3,7,8-PeCDF	84	24-185
13C12-2,3,4,7,8-PeCDF	75	21-178
13C12-1,2,3,7,8-PeCDD	87	25-181
13C12-1,2,3,4,7,8-HxCDF	90	26-152
13C12-1,2,3,6,7,8-HxCDF	92	26-123
13C12-2,3,4,6,7,8-HxCDF	80	28-136
13C12-1,2,3,7,8,9-HxCDF	88	29-147
13C12-1,2,3,4,7,8-HxCDD	80	32-141
13C12-1,2,3,6,7,8-HxCDD	90	28-130
13C12-1,2,3,4,6,7,8-HpCDF	95	28-143
13C12-1,2,3,4,7,8,9-HpCDF	97	26-138
13C12-1,2,3,4,6,7,8-HpCDD	92	23-140
13C12-OCDD	88	17-157
37CL4-2,3,7,8-TCDD	86	35-197



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number: L1931057

Report Date: 07/29/19

Parameter	LCS %Recovery		SD overy	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Dioxins & Furans by Isotope Dilution HRMS	- Mansfield Lab	Associated sample(s)	: 01 Bat	ch: WG	1264033-2				
2,3,7,8-TCDD	92		-		67-158	-		25	
1,2,3,7,8-PeCDD	88		-		70-142	-		25	
1,2,3,4,7,8-HxCDD	100		-		70-164	-		25	
1,2,3,6,7,8-HxCDD	105		-		76-134	-		25	
1,2,3,7,8,9-HxCDD	95		-		64-162	-		25	
1,2,3,4,6,7,8-HpCDD	99		-		70-140	-		25	
OCDD	98		-		78-144	-		25	
2,3,7,8-TCDF	111		-		75-158	-		25	
1,2,3,7,8-PeCDF	88		-		80-134	-		25	
2,3,4,7,8-PeCDF	102		-		68-160	-		25	
1,2,3,4,7,8-HxCDF	107		-		72-134	-		25	
1,2,3,6,7,8-HxCDF	105		-		84-130	-		25	
1,2,3,7,8,9-HxCDF	98		-		78-130	-		25	
2,3,4,6,7,8-HxCDF	109		-		70-156	-		25	
1,2,3,4,6,7,8-HpCDF	105		-		82-122	-		25	
1,2,3,4,7,8,9-HpCDF	106		-		78-138	-		25	
OCDF	95		-		63-170	-		25	



Lab Control Sample Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Lab Number:

L1931057

Project Number: CD4644

Report Date:

07/29/19

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Dioxins & Furans by Isotope Dilution HRMS - Mansfield Lab Associated sample(s): 01 Batch: WG1264033-2

	LCS	LCSD		Acceptance
Surrogate/Cleanup Standard	%Recovery Q	ual %Recovery	Qual	Criteria
13C12-2,3,7,8-TCDF	73			24-169
13C12-2,3,7,8-TCDD	81			25-164
13C12-1,2,3,7,8-PeCDF	83			24-185
13C12-2,3,4,7,8-PeCDF	83			21-178
13C12-1,2,3,7,8-PeCDD	95			25-181
13C12-1,2,3,4,7,8-HxCDF	84			26-152
13C12-1,2,3,6,7,8-HxCDF	88			26-123
13C12-2,3,4,6,7,8-HxCDF	79			28-136
13C12-1,2,3,7,8,9-HxCDF	83			29-147
13C12-1,2,3,4,7,8-HxCDD	83			32-141
13C12-1,2,3,6,7,8-HxCDD	86			28-130
13C12-1,2,3,4,6,7,8-HpCDF	86			28-143
13C12-1,2,3,4,7,8,9-HpCDF	88			26-138
13C12-1,2,3,4,6,7,8-HpCDD	89			23-140
13C12-OCDD	88			17-157
37CL4-2,3,7,8-TCDD	85			35-197



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1931057

Report Date:

07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	RPD Qual Limits
Dioxins & Furans by Isot Client ID: B-2	ope Dilution HRMS	- Mansfield	Lab Associa	ted sample(s): ()1 QC	Batch ID: V	/G1264033-4	WG126	64033-5 QC	C Sampl	le: L1931057-01
2,3,7,8-TCDD	ND	13.6	11.1	82		9.83	73		67-158	12	25
1,2,3,7,8-PeCDD	ND	68.1	56.4	83		47.0	70		70-142	18	25
1,2,3,4,7,8-HxCDD	ND	68.1	62.0	91		53.5	80		70-164	15	25
1,2,3,6,7,8-HxCDD	ND	68.1	67.8	100		58.2	87		76-134	15	25
1,2,3,7,8,9-HxCDD	ND	68.1	58.4	86		52.5	78		64-162	11	25
1,2,3,4,6,7,8-HpCDD	3.96	68.1	80.6	113		69.7	98		70-140	15	25
OCDD	29.6	136	294	194	Q	254	167	Q	78-144	15	25
2,3,7,8-TCDF	ND	13.6	15.1	111		12.0	90		75-158	23	25
1,2,3,7,8-PeCDF	ND	68.1	55.4	81		46.7	70	Q	80-134	17	25
2,3,4,7,8-PeCDF	ND	68.1	63.9	94		57.4	86		68-160	11	25
1,2,3,4,7,8-HxCDF	ND	68.1	69.3	102		57.8	86		72-134	18	25
1,2,3,6,7,8-HxCDF	ND	68.1	66.1	97		56.5	84		84-130	16	25
1,2,3,7,8,9-HxCDF	ND	68.1	62.0	91		52.4	78		78-130	17	25
2,3,4,6,7,8-HxCDF	ND	68.1	69.3	102		61.2	91		70-156	12	25
1,2,3,4,6,7,8-HpCDF	ND	68.1	67.2	99		58.0	87		82-122	15	25
1,2,3,4,7,8,9-HpCDF	ND	68.1	68.8	101		57.6	86		78-138	18	25
OCDF	ND	136	128	94		108	81		63-170	17	25

	MS	MSD	Acceptance
Surrogate/Cleanup Standard	% Recovery Qualifier	% Recovery Qualifier	Criteria
13C12-1,2,3,4,6,7,8-HpCDD	84	82	23-140
13C12-1,2,3,4,6,7,8-HpCDF	83	82	28-143
13C12-1,2,3,4,7,8,9-HpCDF	83	83	26-138



Matrix Spike Analysis Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1931057

Report Date:

07/29/19

	Native	MS	MS	MS		MSD	MSD		Recovery	,		RPD
Parameter	Sample	Added	Found	%Recovery	Qual	Found	%Recovery	Qual	Limits	RPD	Qual	Limits

Dioxins & Furans by Isotope Dilution HRMS - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1264033-4 WG1264033-5 QC Sample: L1931057-01 Client ID: B-2

	MS	MSD	Acceptance	
Surrogate/Cleanup Standard	% Recovery Qualifier	% Recovery Qualifier	Criteria	
13C12-1,2,3,4,7,8-HxCDD	78	79	32-141	
13C12-1,2,3,4,7,8-HxCDF	77	78	26-152	
13C12-1,2,3,6,7,8-HxCDD	82	81	28-130	
13C12-1,2,3,6,7,8-HxCDF	81	82	26-123	
13C12-1,2,3,7,8,9-HxCDF	78	80	29-147	
13C12-1,2,3,7,8-PeCDD	92	96	25-181	
13C12-1,2,3,7,8-PeCDF	82	85	24-185	
13C12-2,3,4,6,7,8-HxCDF	67	74	28-136	
13C12-2,3,4,7,8-PeCDF	77	81	21-178	
13C12-2,3,7,8-TCDD	80	81	25-164	
13C12-2,3,7,8-TCDF	67	75	24-169	
13C12-OCDD	82	82	17-157	
37CL4-2,3,7,8-TCDD	93	95	35-197	



INORGANICS & MISCELLANEOUS



Serial_No:07291919:15

Project Name: BEACON ISLAND PROJECT Lab Number: L1931057

Project Number: CD4644 Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1931057-01 Date Collected: 06/13/19 15:40

Client ID: B-2 Date Received: 06/14/19

Sample Location: PORT OF ALBANY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Mansfield Lab									
Solids, Total	73.4		%	0.100	0.100	1	-	06/19/19 00:41	121,2540G	CC



Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON ISLAND PROJECT

Project Number: CD4644

Lab Number:

L1931057

Report Date:

07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD (Qual RPD Limits
General Chemistry - Mansfield Lab Associated samp	ole(s): 01 QC Batch ID:	WG1250161-1 QC Sample:	: L1925766-03	Client ID	: DUP Sample
Solids, Total	50.1	48.6	%	3	10



Serial_No:07291919:15

BEACON ISLAND PROJECT L1931057

Report Date: 07/29/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Project Number: CD4644

Project Name:

Cooler Custody Seal

A Absent

Container Information			Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	ρH	pН	deg C	Pres	s Seal	Date/Time	Analysis(*)	
L1931057-01A	Glass 120ml/4oz unpreserved	Α	NA		3.5	Υ	Absent		A2-DIOXIN-1613(365)	



Project Name:BEACON ISLAND PROJECTLab Number:L1931057Project Number:CD4644Report Date:07/29/19

GLOSSARY

Acronyms

EDL

LOQ

MS

DL - 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

- 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).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

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.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

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.

 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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

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.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

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.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

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

Report Format: DU Report with 'J' Qualifiers



Project Name:BEACON ISLAND PROJECTLab Number:L1931057Project Number:CD4644Report Date:07/29/19

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

Terms

1

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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- 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 concentrations of the analyte at less than ten times (10x) the 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Serial_No:07291919:15

Project Name:BEACON ISLAND PROJECTLab Number:L1931057Project Number:CD4644Report Date:07/29/19

REFERENCES

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

Method 1613 Revision B: Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS. USEPA Office of Water, October 1994.

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.



Alpha Analytical, Inc. Facility: Company-wide Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial_No:07291919:15

ID No.:17873 Revision 12

Published Date: 10/9/2018 4:58:19 PM

Page 1 of 1

Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, 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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

Pre-Qualtrax Document ID: 08-113 Document Type: Form



L1931057 ATLANTIC TESTING LABORATORIES

Environmental Chain-Of-Custody Record

Albany 22 Corporate Drive Cition Park, NY 12065 518/383-9144 (T) 518/383-9166 (F) IsbsAT thatlanductioning com-

.01

Binghamton 126 Park Avenue Bingnamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)

Canton 431 U.S. Highway 11 Canton, NY 13617 315/366-4576 (T) 315/366-1012 (F)

Elmira 2330 Route 352 Eimira, NY 14800 607/737-0700 (T) 607/737-0714 (F)

Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)

Poughkeepsie 251 Upper North Road Highland, NY 12528 645/691-6098 (1) 845/091-0099 (F)

3495 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)

Syracuse 6085 Court Street Road Syrapuse, NY 13206 315/699-5281 (T) 315/009-3374 (F)

Utica 301 St, Anthony Street Utics, NY 13501 315/735-3309 (T) 315/735-0742 (F)

26581 NYS Route 283 Watertown, NY 13601 \$15/765-7687 (T) 315/786-2022 (F)

Project No			Client Name		QA/QC	Code			Paran	eters			Rep	ort Distribution
CD464 Page 4 of 1		McFarla	ed Sohnson		☐ NYSDEC ☐ NYSDOH	D SW-846 D CLP	PCB		11	1		-	Dates Required:	5-DAY TAT
Project Cont	200	Vinothy	Postar		Other Project I	eration		100	2 .5	त्रक्ति १५५५	ite cu	مز	Send Report To:	tparker a
Project Na	me: (Beggin 5	Island Proje	4	0.0	Alterio	11 6	A 6081	TEXIS		S. S.	500	E-mail Results:	@atlantictesting.com
	me	Field Sample No.	Sample Loca	tion	Sample Type	No. of Containers	1	EPA	cotte	EPA	Ar.	0	Notes	Laboratory Sample ID No.
6/3/15/15	10		B-1		C,5d	6	X	(>	d d	X	20	D	*	
GINK IS			B-2		C,Sol	6	0	0	7	20	8	b	1	
2 7 7	12		B.3		CISU	6	0	0	D X	20	X	0	8 2	
K3/15 16			B-4		Cisa	G) / (of	مر ۵	X 20	X	X	X	37	
9/13/14/17	110		B-5		C, Sd	6	اط) Xo	70)	لا	×	13	
					10		_	-					12	1
	+				73			-		_	-			13
	+													1 8 ,
Samplers Nan		Timothy	Paster Date	100	Received t	for Name:		4.0	1117	a.			-	Shipment Rec'd Intact?
		Samples Relinquished		1.000		Received By:	1.12	1 1	11/	T	Si	umple Ty	pe Code Key:	Laboratory Remarks
Name:	Z	mothy Packs	Date: 6/14/1	Name:	General			Date:	6/14	-	232.74	Des posite	ecizana e QAQC	
Signature:		1	Time:	Signature:	Olk	\supset		Time:	118	20 0	Grati		O Other	
Namet	AK	Some	Date: 6/14/1	Name: 1	J. 3-110	45		Date:	1.1	1 61	V Grou	indwaler icwater	SL Sindpe WS Solid Waste	
Signature:	d	Vmm)	Time: 11.55	Signature:	4.0	lulis		Time:	16:	35 0 L	7 Store Oil Liqu	mwater	B Bulk WP Wipe A Air	
	4	HERS 4-1	4-19 16:35		Think Qu									

Distribution: White with Samples Yellow to Laboratory

Pink to ATL Files

ENV-001B pdrive:Forms\Environmental\OfficeForms\Environmental Chain-Of-Custody Record rev 4: 05/16



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY Report No.: AT5596SL-01-09-20

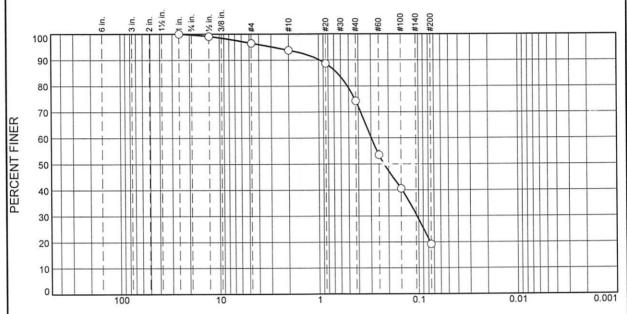
Client: McFarland Johnson Date: 09/18/20

Sample No: S-6

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm.

	% Gravel % Sand					% Fines	
% Cobbles	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	3	3	20	55	19	

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
1"	100		
1/2"	99		
#4	97		
#10	94		
#20	89		
#40	74		
#60	54		
#100	41		
#200	19		

	Soil Description	
Sediment Sampl	e	
PL=	Atterberg Limits	PI=
D ₈₅ = 0.6500 D ₃₀ = 0.1038 C _u =	Coefficients D60= 0.2975 D15= C _C =	D ₅₀ = 0.2225 D ₁₀ =
USCS= SM	Classification AASHT	O=
	Remarks	

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED-

Figure

Reviewed by: Judes amas



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

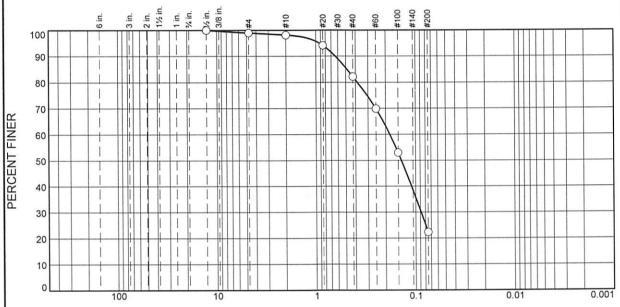
Date: 09/18/20

Sample No: S-7

Source of Sample: Sediment

Location: In-place

Elev./Depth:



			GI	RAIN SIZE -	mm.		
~ ~	% Gr	avel		% Sand		% Fin	es
% Cobbles	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	1	1	16	60	22	

	SIEVE	PERCENT	SPEC.*	OUT OF
	SIZE	FINER	PERCENT	SPEC. (X)
Ī	1/2"	100		
	#4	99		
	#10	98		
	#20	94		
	#40	82		
-	#60	70		
-	#100	53		
-	#200	22		

	Soil Description	
Sediment Samp	le	
	Atterberg Limits	
PL=	LL=	PI=
D ₈₅ = 0.4875 D ₃₀ = 0.0883 C _u =	Coefficients D60= 0.1816 D15= C _C =	D ₅₀ = 0.1391 D ₁₀ =
USCS= SM	Classification AASHT	O=
	Remarks	

(no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED

Figure

Reviewed by: Judy amas



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

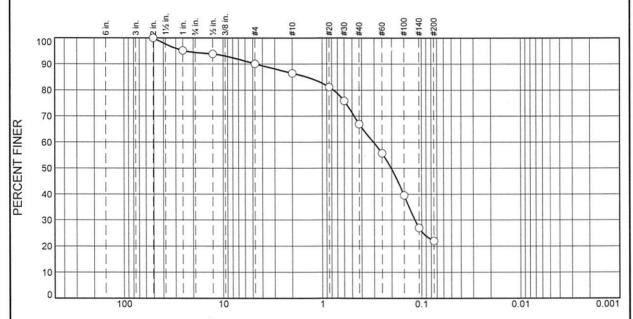
Date: 09/18/20

Sample No: S-8

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm.

% Cobbles	% Gravel		% Sand			% Fines	
% Cobbles	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	6	4	4	19	45	22	

	SIEVE	PERCENT	SPEC.*	OUT OF
	SIZE	FINER	PERCENT	SPEC. (X)
ı	2"	100		
	1"	95		
- 1	1/2"	94		
	#4	90		
	#10	86		
	#20	81		
	#30	76		
- 1	#40	67		
	#60	56		
	#100	40		
	#140	27		
	#200	22		
- 1		1	1	

Sediment Samp	Soil Description	í
•		
PL=	Atterberg Limits	PI=
D ₈₅ = 1.4361 D ₃₀ = 0.1169 C _u =	Coefficients D60= 0.3049 D15= Cc=	D ₅₀ = 0.2023 D ₁₀ =
USCS=	Classification AASHT	-O=
	Remarks	

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED-

Figure

Reviewed by: Judes amus



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY Report No.: AT5596SL-01-09-20

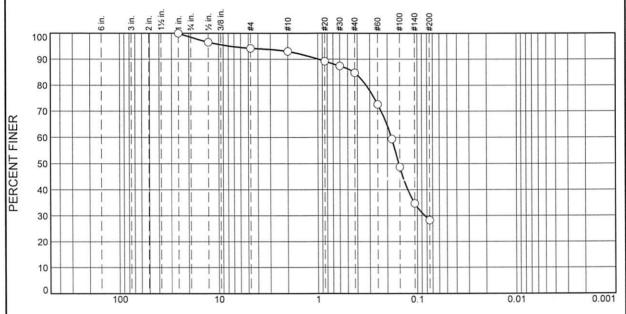
Client: McFarland Johnson Date: 09/18/20

Sample No: S-9

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm.

% Cobbles	% Gr	avel	% Sand			% Fines	
% Cobbles	Coarse	Fine	Coarse Medium Fine		Fine	Silt Clay	
0	2	4	1	8	57	28	

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
1"	100		
1/2"	97		
#4	94		
#10	93		
#20	89		
#30	87		
#40	85		
#60	73		
#80	59		
#100	49		
#140	35		
#200	28		
ľ			
1	I.	1	1

	Soil Description				
Sediment Sample					
PL=	Atterberg Limits LL=	PI=			
D ₈₅ = 0.4308 D ₃₀ = 0.0842 C _u =	Coefficients D60= 0.1820 D15= C _C =	D ₅₀ = 0.1534 D ₁₀ =			
USCS=	Classification AASHT	O=			
	Remarks				

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED

Figure

Reviewed by:

Judes amas



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

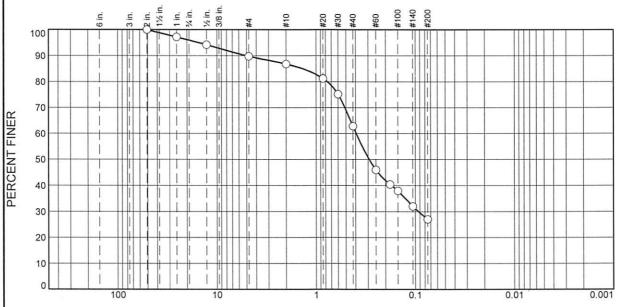
Date: 09/18/20

Sample No: S-10

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm. % Fines % Gravel % Sand % Cobbles Coarse Medium Fine Silt Clay Fine Coarse 0 24 36 27

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
2"	100		
1"	97		
1/2"	94		
#4	90		
#10	87		
#20	81		
#30	75		
#40	63		
#60	46		
#80	40		
#100	38		
#140	32		
#200	27	1	
	T.		

	Soil Description					
Sediment Sampl	Sediment Sample					
PL=	Atterberg Limits LL=	PI=				
D ₈₅ = 1.3561 D ₃₀ = 0.0927 C _u =	Coefficients D60= 0.3942 D15= C _C =	D ₅₀ = 0.2921 D ₁₀ =				
USCS=	Classification AASHT	O=				
	Remarks					

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED

Figure

Reviewed by: Jude Omes



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

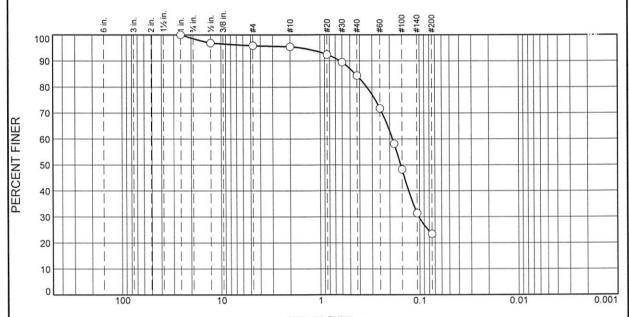
Date: 09/18/20

Sample No: S-11

Source of Sample: Sediment

Location: In-place

Elev./Depth:



			GI	RAIN SIZE -	mm.		
0/ 0-6-6-	% Gravel			% Sand		% Fines	
% Cobbles Coarse	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	1	3	1	11	61	23	

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
1"	100		
1/2"	97		
#4	96		
#10	95		
#20	92		1
#30	90		
#40	84		
#60	72		
#80	58		
#100	48		
#140	31		
#200	23		

	Soil Description	
Sediment Samp	le	
PL=	Atterberg Limits LL=	PI=
D ₈₅ = 0.4391 D ₃₀ = 0.1015 C _u =	Coefficients D ₆₀ = 0.1868 D ₁₅ = C _C =	D ₅₀ = 0.1548 D ₁₀ =
USCS=	Classification AASHT	O=
	Remarks	

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED-

Figure

Reviewed by: Jude Omes



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

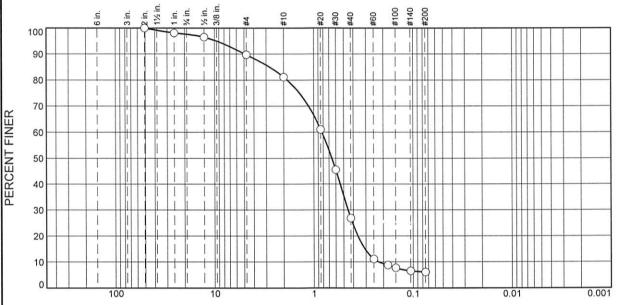
Date: 09/18/20

Sample No: S-12

Source of Sample: Sediment

Location: In-place

Elev./Depth:



 GRAIN SIZE - mm.

 % Cobbles
 % Gravel
 % Sand
 % Fines

 Coarse
 Fine
 Coarse
 Medium
 Fine
 Silt
 Clay

 0
 2
 8
 9
 54
 21
 6

SIZE FINER PERCENT SPEC. (X) 2" 100 1" 98 1/2" 96 44 90 #10 81 420 61 #30 46 440 27 #60 11 480 9 #100 8 4140 7 #200 6.1 6.1	SIEVE	PERCENT	SPEC.*	OUT OF
1" 98 1/2" 96 #4 90 #10 81 #20 61 #30 46 #40 27 #60 11 #80 9 #100 8 #140 7	SIZE	FINER	PERCENT	SPEC. (X)
1/2" 96 #4 90 #10 81 #20 61 #30 46 #40 27 #60 11 #80 9 #100 8 #140 7	2"	100		
#4 90 #10 81 #20 61 #30 46 #40 27 #60 11 #80 9 #100 8 #140 7	1"	98		
#10 81 #20 61 #30 46 #40 27 #60 11 #80 9 #100 8 #140 7	1/2"	96		
#20 61 #30 46 #40 27 #60 11 #80 9 #100 8 #140 7	#4	90		
#30	#10	81		
#40 27 #60 11 #80 9 #100 8 #140 7	#20	61		
#60	#30	46		
#80 9 #100 8 #140 7	#40	27		
#100 #140 8 7	#60	11		
#140 7	#80	9		
	#100	8		
#200 6.1	#140	7		
	#200	6.1		
			I	

Sediment Samp	Soil Description	
Scument Samp		
PL=	Atterberg Limits	PI=
D ₈₅ = 2.7783 D ₃₀ = 0.4520 C _u = 3.69	Coefficients D60= 0.8260 D15= 0.3071 C _C = 1.11	D ₅₀ = 0.6556 D ₁₀ = 0.2237
USCS=	Classification AASHT	O=
	Remarks	

(no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED

Figure

Reviewed by: Judes amou



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

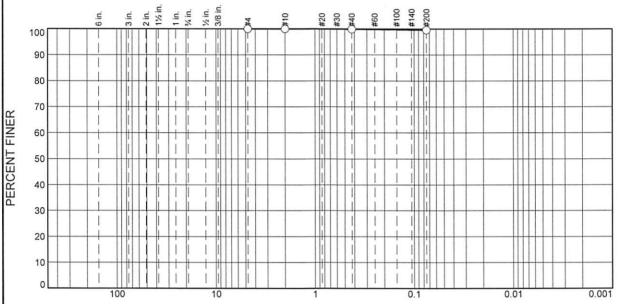
Date: 09/18/20

Sample No: S-13

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm. % Gravel % Fines % Sand % Cobbles Coarse Fine Silt Fine Coarse Medium Clay 0 100 0 0

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
#4 #10 #40 #200	100 100 100 100		

	Soil Description	1
Sediment Sar	nple	
PL=	Atterberg Limits	<u>S</u> PI=
D ₈₅ = D ₃₀ = C _u =	Coefficients D ₆₀ = D ₁₅ = C _c =	D ₅₀ = D ₁₀ =
USCS=	Classification AASH	TO=
	Remarks	

(no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED

Date: 9/18/20

Figure

Reviewed by:

2 ames



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

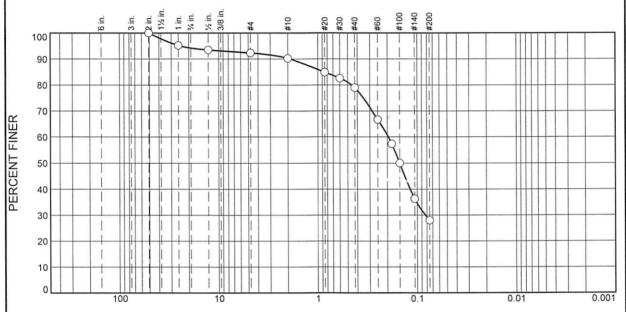
Date: 09/18/20

Sample No: S-14

Source of Sample: Sediment

Location: In-place

Elev./Depth:



			G	RAIN SIZE -	mm.		
0/ Cabbles	% Gravel			% Sand		% Fines	
% Cobbles Coars	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	6	2	2	11	51	28	

	SIEVE	PERCENT	SPEC.*	OUT OF
	SIZE	FINER	PERCENT	SPEC. (X)
Ì	2"	100		
	1"	95		
	1/2"	94		
	#4	92		
	#10	90		
1	#20	85		
	#30	83		
	#40	79		
	#60	67		
	#80	57		
	#100	50		
	#140	36		
	#200	28		

	Soil Description	
Sediment Samp	ole	
	Atterberg Limits	
PL=	LL=	PI=
D ₈₅ = 0.8635 D ₃₀ = 0.0826 C _u =	Coefficients D ₆₀ = 0.1949 D ₁₅ = C _c =	D ₅₀ = 0.1499 D ₁₀ =
USCS=	Classification AASHT	O=
	Remarks	

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED-

Figure

Reviewed by: Jude Ome



Particle Size Distribution Report

Project: Port of Albany - Beacon Island, Bethlehem, NY

Report No.: AT5596SL-01-09-20

Client: McFarland Johnson

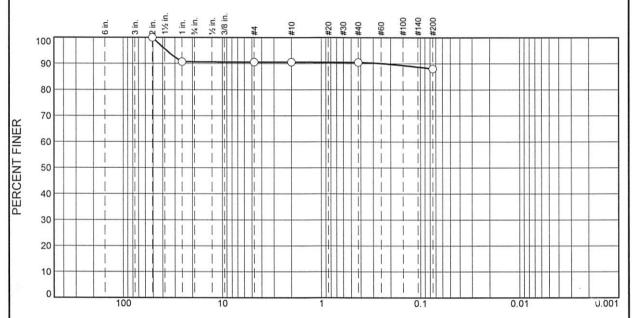
Date: 09/18/20

Sample No: S-15

Source of Sample: Sediment

Location: In-place

Elev./Depth:



GRAIN SIZE - mm.

% Cobbles	% Gı	avel		% Sand	i	% Fines		
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay	
0	9	0	0	0	3	88		

SIEVE	PERCENT	SPEC.*	OUT OF
SIZE	FINER	PERCENT	SPEC. (X)
2"	100		
1"	91		
#4	91		
#10	91		
#40	91		
#200	88		
1	1	1	1

	Soil Description	
Sediment Sar	nple	
PL=	Atterberg Limits LL=	PI=
D ₈₅ = D ₃₀ = C _u =	Coefficients D60= D15= Cc=	D ₅₀ = D ₁₀ =
USCS=	Classification AASHT	O=
	Remarks	

* (no specification provided)

ATLANTIC TESTING LABORATORIES, LIMITED-

Figure

Reviewed by: Judes amad

APPENDIX E

SUMMARY OF LABORATORY ANALYSIS RESULTS

Table E-1
Summary of Laboratory Analysis Results – Beacon Island
Sediment Samples Collected September 2, 2020

Sample Identification	S-6	S-7	S-8	S-9	S-10	S-11	S-12	S-13	S-14	S-15		EC Sediment Conreshold Value	-	6 NYCRR Part 360 Fill Material Pre- Determined Beneficial Use Criteria		
											Class A	Class B	Class C	General Fill	Restricted-	Limited-
Sample Depth*	0' – 15'	0' – 15'	0' – 10'	0' – 10'	0' – 10'	0' – 15'	0' – 10'	0' – 15'	0' – 15'	0' - 15'	0.00071	0.000 =	0.000		Use Fill	Use Fill
VOC (mg/kg)																
Acetone	0.044	0.089	0.035	0.046	0.061	0.068	0.03	ND	0.052	0.0091				0.05	0.05	0.05
Benzene	ND	ND	ND	< 0.59	0.59 - 2.16	>2.16	0.06	0.06	0.06							
2-Butanone (MEK)	0.0057	0.016	0.0049	0.0072	0.012	0.012	0.0038	ND	0.01	ND				0.12	0.12	0.12
Chlorobenzene	ND	0.00033	ND				1.1	1.1	1.1							
Total Dichlorobenzene	ND	0.0046	ND	0.0015												
Toluene	ND	ND	ND				0.7	0.7	0.7							
p-isopropyltoluene	ND	0.00042	ND	ND				10	10	10						
Naphthalene	ND	0.00083	ND	ND				12	12	12						
1,2,4-trichlorobenzene	ND	0.00097	ND	ND				3.4	3.4	3.4						
Ethylbenzene	0.00018	ND	ND	ND				1	1	1						
Total Xylenes	ND	ND	ND				1.6	1.6	1.6							
Total BTEX	0.00018	ND	ND	ND	< 0.96	0.96 - 5.9	>5.9									
							S	emi-VOC (m	ng/kg)							
Benzo(a)anthracene	0.049	ND	ND	ND	ND	0.056	ND	ND	0.058	ND				1	See BAPE	See BAPE
Benzo(b)fluoranthene	0.045	ND	ND	ND	ND	0.063	ND	ND	0.051	ND				1	See BAPE	See BAPE
Fluoranthene	0.054	ND	ND	ND	0.027	0.074	ND	ND	0.072	ND				100	100	100
Pyrene	0.051	ND	ND	ND	0.027	0.074	ND	ND	0.066	ND				100	100	100
Chrysene	0.039	ND	ND	ND	ND	0.045	ND	ND	0.043	ND				1	See BAPE	See BAPE
Phenanthrene	ND	ND	ND	ND	ND	0.045	ND	ND	ND	ND				100	100	100
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	0.028	ND	ND	ND	ND				100	100	100
Total PAH	0.238	ND	ND	ND	0.056	0.385	ND	ND	0.290	ND	<4	4 – 35	>35			
All Other Target Compounds	ND	ND	ND													
BAPE**	0.0098	ND	ND	ND	ND	0.0124	ND	ND	0.0113	ND					3	3
		1	ı		ı	ı	To	otal PCB (m	ıg/kg)	ı	11					
Total PCB	0.11	0.0175	ND	ND	0.455	1.48	0.00999	ND	8.36	ND	<0.1	0.1 – 1	>1	1	1	1

NOTES:

Samples collected by representatives of Atlantic Testing Laboratories, Limited, and analyzed by Alpha Analytical (NYSDOH ELAP No. 11148).

All laboratory results are given in units stated.

*Depth in feet below top of sediment

ND = Not detected above respective laboratory method detection limit

Bold values exceed all the 6 NYCRR Part 360 Fill Material Pre-Determined Beneficial Use Criteria

Italicized values were determined to be in the Class B category according to NYSDEC TOGS 5.1.9 Sediment Quality Threshold Values.

Italicized and Underlined values were determined to be in the Class C category according to NYSDEC TOGS 5.1.9 Sediment Quality Threshold Values.

**Benzo(a)pyrene equivalent (BAPE) is calculated using the following formula (all compounds listed representative of concentrations in mg/kg or ppm, dry weight):

BAPE = [1 x Benzo(a)pyrene] + [0.1 x (Benzo(a)anthracene+Benzo(b)fluoranthene+benzo(k)fluoranthene+dibenzo(a,h)anthracene+Indeno(1,2,3-cd)pyrene)] + [0.01 x Chrysene]

Table E-1 (Continued)

Sample Identification	S-6	S-7	S-8	S-9	S-10	S-11	NYSDEC Sediment Quality Threshold 6 NYCRR Part 360 Fill Material Pre-D S-12 S-13 S-14 S-15 Values Beneficial Use Criteria									
identification											Class A	Class B	Class C	General	Restricted-Use	Limited-Use Fill
Sample Depth*	0' – 15'	0' – 15'	0' – 10'	0' – 10'	0' – 10'	0' – 15'	0' – 10'	0' – 15'	0' – 15'	0' – 15'	Class A	Class D	Class C	Fill	Fill	Lillited-OSe I III
	TAL Metals (mg/kg)															
Aluminum	4,200	6,050	6,460	5,490	6,060	4,840	5,060	11,400	6,240	11,100				NA	NA	NA
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				NA	NA	NA
Arsenic	3.26	2.13	3.2	3.1	2.89	3.27	4.05	7.58	4.26	20	<14	14 - 53	>53	16	16	16
Barium	26.8	25.6	41.5	29.7	48.1	33.8	18.3	70.7	81.4	73.9				350	350	400
Beryllium	0.258	0.258	0.322	0.23	0.294	0.258	0.244	0.538	0.31	0.465				14	14	590
Cadmium	0.155	0.2	0.252	0.199	0.83	1.10	0.138	0.381	3.01	0.356	<1.2	1.2 – 9.5	>9.5	2.5	2.5	9.3
Calcium	3,240	3,480	12,700	7,930	5,070	3,800	1,450	26,200	5,270	21,300				NA	NA	NA
Chromium	9.19	10.7	10.1	8.67	31.5	31.4	7.42	18	86	17.2				36-Cr(III) 19-Cr(VI)	36-Cr(III) 19-Cr(VI)	1,500-Cr(III) 400-Cr(VI)
Cobalt	5.37	6.32	7.28	6.69	6.35	5.84	5.62	13.5	6.3	12.9				30	30	NA` ´
Copper	6.62	6.14	10.4	7.58	22.5	17.8	4.35	29.2	55	25	<33	33 – 207	>207	270	270	270
Iron	10,800	15,300	18,300	14,600	15,300	16,100	13,600	27,800	15,300	29,000				2,000	2,000	NA
Lead	6.85	8.19	6.99	5.58	38.8	33.1	4.7	15.9	117	12.3	<33	33 – 166	>166	400	400	1,000
Magnesium	2,540	3,450	4,480	4,670	3,520	3,160	3,370	9,780	3,660	9,220				NA	NA	NA
Manganese	160	200	386	206	290	177	159	581	212	696				2,000	2,000	10,000
Mercury	ND	ND	ND	ND	0.167	0.14	ND	ND	0.776	ND	<0.17	0.17 – 1.6	>1.6	0.73	0.73	2.8
Nickel	10.6	13.7	15.2	12.8	13.4	13.7	11.3	29.5	15.5	26.6				130	130	310
Potassium	324	476	510	533	408	391	380	1,140	466	1,180				NA	NA	NA
Selenium	ND	ND	0.352	0.576	ND	ND	0.392	0.342	ND	0.722				4	4	1,500
Silver	ND	ND	ND	ND	ND	ND	ND	ND	1.12	ND				8.3	8.3	1,500
Sodium	39.0	43.2	54.4	48.4	49	84.2	67.1	156	107	167				NA	NA	NA
Thallium	ND	ND	ND	ND	ND	ND	ND	0.665	ND	0.802				NA	NA	NA
Vanadium	9.68	10.4	15.1	13.2	14.5	11	10.7	21.3	14.6	21.7				100	100	NA
Zinc	34.2	47.1	41.5	37.3	80.1	83.7	32.6	67.1	218	63.2				2,200	2,200	10,000
								Pestic	ides (mg/kg	J)						
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	0.11 – 0.48	>0.48			
4,4'-DDD	ND	0.000928	ND	ND	ND	ND	ND	ND	ND	ND				2.6	2.6	2.6
Sum of 4,4'-																
DDE+4,4'-DDD+4,4'- DDT	ND	0.000928	ND	ND	ND	ND	ND	ND	ND	ND	<0.003	0.003 - 0.03	>0.03			
Mirex	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.0014	0.0014 - 0.014	>0.014			
Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.003	0.003 - 0.036	>0.036			
							To	tal Organi	Carbon (T	OC) (%)						
TOC	0.78	0.894	0.68	0.972	0.928	0.64	0.156	1.04	1.98	0.43						
NOTES:					•								•		•	•

Samples collected by representatives of Atlantic Testing Laboratories, Limited, and analyzed by Alpha Analytical (NYSDOH ELAP No. 11148).

All laboratory results are given in units stated.

Bold values exceed all the 6 NYCRR Part 360 Fill Material Pre-Determined Beneficial Use Criteria

Italicized values were determined to be in the Class B category according to NYSDEC TOGS 5.1.9 Sediment Quality Threshold Values.

Italicized and Underlined values were determined to be in the Class C category according to NYSDEC TOGS 5.1.9 Sediment Quality Threshold Values.

^{*}Depth in feet below top of sediment

ND = Not detected above respective method detection limit

Table E-2
Summary of Laboratory Analysis Results – Beacon Island
Sediment Samples Collected September 2, 2020

Sample Identification	DUP01	MS/MSD		
Sample Type	Field Duplicate of S-8	Matrix Spike of S-9		
	VOC (mg/kg)			
Acetone	0.048	*		
2-Butanone (MEK)	0.0072	*		
Benzene	ND	*		
Toluene	ND	*		
Ethylbenzene	ND	*		
Total Xylenes	ND	*		
Total BTEX	ND	*		
	Semi-VOC (mg/kg)			
All Target Compounds	ND	*		
	TAL Metals (mg/kg)			
Aluminum	4,330	*		
Antimony	ND	*		
Arsenic	1.68	*		
Barium	21.7	*		
Beryllium	0.208	*		
Cadmium	0.161	*		
Calcium	9,290	*		
Chromium	6.77	*		
Cobalt	5.33	*		
Copper	5.98	*		
Iron	11,600	*		
Lead	4.78	*		
Magnesium	4,690	*		
Manganese	164	*		
Mercury	ND	*		
Nickel	10.9	*		
Potassium	335	*		
Selenium	ND	*		
Silver	ND	*		
Sodium	57.2	*		
Thallium	ND	*		
Vanadium	9.97	*		
Zinc	32.5	*		
·	Total PCB (mg/kg)			
Total PCB	ND	*		
	Pesticides (mg/kg)			
All Target Compounds	ND	*		

NOTES

Samples collected by representatives of Atlantic Testing Laboratories, Limited, and analyzed by Pace Analytical, or Greenburg, Pennsylvania (NYSDOH ELAP No. 10888).

All laboratory results are given in units stated.

ND = Not detected above respective method detection limit

NA = Sample not analyzed for parameter

* See Laboratory Analysis Report for results of Matrix Spike and Matrix Spike Duplicate

Table E-3
Summary of Data from Sediment Sampling on June 13, 2019

Sample Number	B-1	B-2	B-3	B-4	B-5	NYSDEC TOGS 5.1.9 Sediment Quality Threshold Values							
Core Number	C-1	C-2	C-3	C-4	C-5								
Depth of Sample	0-10'	0-10'	0-10'	0-10'	0-10'	quanty		uiuoo					
Date Collected	06/13/19	06/13/19	06/13/19	06/13/19	06/13/19	Class A	Class B	Class C					
Metals (mg/kg)													
Arsenic	2.19	3.96	4.47	4.13	4.75	<14	14 - 53	>53					
Cadmium	0.042	0.306	0.045	0.047	0.091	<1.2	1.2 - 9.5	>9.5					
Copper	3.70	17.6	4.03	5.00	6.52	<33	33 - 207	>207					
Lead	4.08	18.9	3.48	5.29	5.56	<33	33 - 166	>166					
Mercury	0.004	0.041	0.007	0.011	0.008	<0.17	0.17 - 1.6	>1.6					
	PAH and Petroleum-Related Compounds (mg/kg)												
Benzene	<0.00024	<0.00017	<0.00018	<0.00020	<0.00022	<0.59	0.59 - 2.16	>2.16					
Total BTX	ND	ND	ND	ND	ND	<0.96	0.96 - 5.9	>5.9					
Total PAH	0.0287	1.024	0.0497	00641	0.469	<4	4 - 35	>35					
			Pesticides	(mg/kg)									
Sum of DDT+DDE+DDD	<0.000042	0.00363	0.000167	0.000277	0.000875	<0.003	0.003 - 0.03	>0.03					
Dieldrin	<0.000042	<0.000045	<0.000041	<0.000039	<0.000054	<0.11	0.11 - 0.48	>0.48					
Mirex	<0.000042	<0.000045	<0.000041	<0.000039	<0.000054	<0.0014	0.0014 - 0.014	>0.014					
Chlordane	<0.00214	<0.00226	<0.00206	<0.00199	<0.00272		0.003 -						
Sum of Chlordane Isomers	ND	0.00533	0.000182	ND	ND	<0.003	0.036	>0.036					
			PCB (m	ıg/kg)									
PCB (sum of aroclors)	<0.00104	0.178	0.00454	0.028	0.0103	<0.1	0.1 - 1	>1					
			Cyanide	(mg/kg)									
Cyanide	<0.00026	<0.00027	<0.00026	<0.00024	<0.00034								
			Dioxins/Fur	ans (pg/g)									
TEQ	NA	0.049	NA	NA	NA	<4.5	4.5 - 50	>50					

Notes: Samples collected by representatives of ATL and analyzed by Alpha Analytical (NYSDOH No. 11148).

Laboratory reports and sample custody documentation are contained in Appendix C.

All laboratory results are expressed in units indicated.

ND = Not detected above the laboratory method detection limit

NA = Not Analyzed

NYSDEC = New York State Department of Environmental Conservation

TOGS 5.1.9 = Technical and Operation Guidance Series 5.1.9, "In-Water and Riparian Management of Sediment and Dredged Material"