

# **Periodic Review Report**

Coral Island Shopping Center 1650 Richmond Avenue Staten Island, New York NYSDEC BCP Number: C243033

April 29, 2024

Prepared for:

**WWP Associates LLP** 6616 Six Forks Road Raleigh, North Carolina 27615

Prepared by:

Roux Environmental Engineering and Geology, D.P.C. 209 Shafter Street Islandia, New York 11749

# **Table of Contents**

Ce	ertification	
1.	Introduction	1
2.	Site Overview	2
	2.1 Site Description	2
	2.2 Site History	
	2.3 Site Remediation Goals	
	2.4 Site Remedial History	3
	2.5 Engineering and Institutional Controls	3
3.	Remedy Performance and Effectiveness	5
	3.1 Monitoring Plan Requirements	
	3.1.1 Composite Cover System Monitoring	
	3.1.2 Groundwater Remediation and Monitoring	5
	3.1.3 Groundwater Monitoring Well Maintenance	5
	3.2. Monitoring Plan Results	5
	3.2.1 Composite Cover System Monitoring Results	
	3.3 Soil Management Plan – Sewer Repair Oversight	6
	3.4 IC/EC Certification	6
4.	Conclusions	7
	4.1 Conclusions	

# Figures

- 1. Site Location Map
- 2. Site Plan

# **Appendices**

- A. Site Inspection Checklists
- B. Sewer Repair Oversight
- C. IC/EC Certification Form
- D. Electronic Database

# Certification

For each institutional or engineering control identified for the site, I, Brian Morrissey, P.E., certify that all of the following statements are true:

- a) the institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by DER;
- b) nothing has occurred that would impair the ability of such control to protect public health and the environment;
- c) nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control; and
- d) access to the site will continue to be provided to DER to evaluate the remedy, including access to evaluate the continued maintenance of this control.

		70 10 062611 HE
Brian P. Morrissey, P.E.	April 29, 2024	ROFESSIONAL
NYS Professional Engineer #062617	Date	Signature

### 1. Introduction

This Periodic Review Report ("PRR") documents post-remediation activities performed at the Coral Island Shopping Center located at 1650 Richmond Avenue, Staten Island, Richmond County, New York (hereafter referred to as the "Site" or "Controlled Property," Figure 1). The Site is managed under the New York State ("NYS") Brownfield Cleanup Program ("BCP") administered by New York State Department of Environmental Conservation ("NYSDEC") and was remediated in accordance with the Brownfield Cleanup Agreement ("BCA") Index #W2-1040-05-01, Site #C243033, which was issued March 2005.

The Site contains residual contamination left after completion of the Remedial Action performed under the BCP. Engineering Controls ("ECs") have been incorporated into the Site remedy to provide proper management of residual contamination in the future to ensure protection of public health and the environment. A Site-specific Environmental Easement has been recorded with the Richmond County Clerk that provides an enforceable means to ensure the continued and proper management of residual contamination and protection of public health and the environment.

Site Management activities, reporting, and EC/IC certification are scheduled on a certification period basis. The certification period for this PRR is March 2, 2023 to April 1, 2024.

### 2. Site Overview

This section includes a brief description of the Site and its history. A complete description of the Site's history, Remedial Investigation findings, and Remedial Action is presented in the following documents:

- Remedial Investigation Work Plan, April 18, 2005; Roux Associates, Inc.
- Remedial Investigation Report, February 23, 2007; Roux Associates, Inc.
- Alternatives Analysis Report/ Remedial Action Work Plan, August 16, 2007;
   Remedial Engineering, P.C.
- Final Engineering Report, February 2008; Remedial Engineering, P.C.

### 2.1 Site Description

The Coral Island Shopping Center (the "Site") is defined, for the purposes of the BCP, as the area within the limits of the property boundary as shown on Figure 2. The Site is located at 1650 Richmond Avenue, Staten Island, Richmond County, New York (Figure 1). The Site is defined as Block 2236, Lot 125, at latitude 40° 36' 27" north and longitude 74° 9' 47" west. The Coral Island Shopping Center consists of two single-story buildings, each with multiple tenants and a parking lot (Figure 2). The building at the north end of the Site includes the Charming Cleaners ("Dry Cleaner"), the focus of the remediation. The areas of contamination exceeding unrestricted use soil cleanup objectives ("SCO") are located under the parking lot, behind the southern building, and behind the Dry Cleaner. The area behind the Dry Cleaner is gravel-covered (over landscaping fabric) and is approximately 15 feet wide, with the building to the south and a chain link fence on the property line to the north.

### 2.2 Site History

The Site was a residential property as early as 1917; however, the property was vacant between 1937 and 1949, when it was reportedly used as a parking lot. A bowling alley was constructed on the northern portion of the Site sometime between 1955 and 1958. In 1974, the bowling alley was converted into a strip mall-type shopping center. The building was expanded to its current configuration and a separate building was constructed in the southern portion of the Site in 1995 (Figure 2).

Dry cleaning operations reportedly commenced at the Site in 1975. All dry-cleaning operations were performed in the same tenant space since 1975, and no other occupants of any building at the Site that would potentially use PCEs were identified.

#### 2.3 Site Remediation Goals

As stated in the Final Engineering Report, the overall goals of the remedial action were to:

- 1. Obtain mass reductions of VOCs in on-Site groundwater;
- Mitigate off-Site impacts to NYSDEC Water Quality Standards for Class GA groundwater, to the extent practicable;
- 3. Prevent ingestion/direct contact with contaminated soil;
- 4. Prevent migration of contaminants that would result in groundwater or surface water contamination;
- 5. Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain; and

6. Prevent inhalation of or exposure to contaminants volatilizing from contaminated soil or groundwater.

### 2.4 Site Remedial History

Below is a description of the Remedial Action as described in the NYSDEC-approved Remedial Action Work Plan, Final Engineering Report, and October 15, 2020 Summary of Molasses Injection.

- 1. On-Site soils impacted with tetrachloroethene ("PCE") and degradation products were excavated from four areas and disposed of off-Site. At each area, the upper two to five feet of fill was excavated. Post-excavation samples were collected and additional excavation was conducted until Restricted Commercial Use Soil Cleanup Objectives ("SCOs") were met or to the extent feasible based on the water table and lateral limitations of underground utilities, building foundations, and a nearby transformer. Excavations were backfilled with clean soil that meets 6 NYCRR Subpart 375-6 Track 1 Unrestricted Use SCOs.
- Off-Site soils impacted with PCE and degradation products were excavated from one area and disposed of off-Site. Initially, the upper five feet of soil was excavated. Post-excavation samples were collected and additional excavation was conducted until Unrestricted Use SCOs were met. Excavations were backfilled with clean soil that meets 6 NYCRR Subpart 375-6 Track 1 Unrestricted Use SCOs.
- 3. Prior to backfilling, Enhanced Reductive Dechlorination ("ERD") substrates were applied to the bottom of the open on-Site and off-Site excavations created during the removal of impacted soils.
- 4. One round of off-Site ERD injections was conducted in the area of the leading edge of groundwater contamination with 10,000 micrograms per liter of total VOCs. The ERD substrate was injected every five feet as a row of injections. The depth of ERD injection was extended from approximately 4 feet to 8 feet below land surface into the groundwater (depth to groundwater is approximately 4 feet below land surface).
- 5. One round of ERD injections was conducted in an area surrounding monitoring well MW-101S in September 2020.
- 6. To assess the performance of the ERD injections, periodic groundwater monitoring was conducted.

#### 2.5 Engineering and Institutional Controls

Since contaminated soil, groundwater, and soil vapor remain beneath the Site, Engineering Controls ("ECs") and Institutional Controls ("ICs") are required to protect human health and the environment.

The Controlled Property has two primary Engineering Controls, as follows:

- Composite Cover System; and
- Monitored Enhanced Natural Attenuation.

A series of Institutional Controls are in place to implement, maintain, and monitor the Engineering Controls. An Environmental Easement is in place and requires compliance with these Institutional Controls. These Institutional Controls consist of the following:

- All Engineering Controls must be operated and maintained as specified in the Site Management Plan ("SMP").
- All Engineering Controls must be inspected and certified at a frequency and in a manner defined in the SMP.
- Groundwater, soil vapor, and other environmental or public health monitoring must be performed as
  defined in the SMP.

- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP.
- On-Site environmental monitoring devices, including, but not limited to, groundwater monitoring wells
  and soil vapor probes, must be protected and replaced as necessary to ensure continued functioning
  in the manner specified in the SMP.
- Compliance with the Environmental Easement by the Grantor and the Grantor's successors and assigns with all elements of the SMP.
- Engineering Controls may not be discontinued without an amendment or the extinguishment of this Environmental Easement.
- The Controlled Property may be used for commercial use, as described within 6 NYCRR Part 375-1.8(g)(2)(iii), as long as the long-term Engineering Controls are employed and the land use restrictions are adhered to.
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for the intended use.

# Remedy Performance and Effectiveness

This section details the Monitoring Plan activities currently implemented to evaluate the performance and effectiveness of the ECs in reducing or mitigating contamination at the Site.

### 3.1 Monitoring Plan Requirements

The table below outlines the Monitoring Plan components, as detailed in the SMP, which was revised in accordance with a July 26, 2022 letter from NYSDEC. Groundwater monitoring beginning in 2022 was modified as described in Section 3.1.2.

#### **Monitoring / Inspection Schedule**

Monitoring Program	Frequency	Matrix	Analysis
Composite Cover System	Annually	_	None
Groundwater	Five Quarters	Groundwater	VOCs

#### 3.1.1 Composite Cover System Monitoring

Several covers exist on the Site that include landscaped areas, gravel-covered landscaped areas, asphalt, and building foundations. These covers limit exposure to residual contaminated soil/fill. The composite cover system is a permanent control and the existence, quality, and integrity of this system will be inspected annually.

The composite cover system was monitored on August 9, 2023, during oversight of Soil Management Plan activities and April 1, 2024, during a Site inspection in accordance with the inspection schedule presented above, respectively.

#### 3.1.2 Groundwater Remediation and Monitoring

No groundwater monitoring was conducted during this reporting period. Additional groundwater monitoring will be conducted during the next reporting period.

#### 3.1.3 Groundwater Monitoring Well Maintenance

If biofouling or silt accumulation has occurred in the on-Site and/or off-Site monitoring wells, as determined by significant changes in well production or depth to bottom measurements, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced if an event renders the wells unusable.

### 3.2. Monitoring Plan Results

The following sections describe the results of the Monitoring Program for the certification period.

#### 3.2.1 Composite Cover System Monitoring Results

The composite cover system was monitored on August 9, 2023 and April 1, 2024. Site Inspection Checklists are included as Appendix A. No issues were identified and all landscaped areas, gravel-covered landscaped areas, asphalt parking areas, and building foundations appeared to be in good condition.

### 3.3 Soil Management Plan - Sewer Repair Oversight

On or about July 6, 2023, the property management firm for the Site was notified by an adjacent property tenant (McDonald's) that they were experiencing a sanitary sewer system issue that had required replacement of approximately 40<sup>+</sup> feet of 6-inch cast iron sewer pipe on the McDonald's property. That repair had not rectified the situation and therefore McDonald's wanted to immediately replace an additional 40<sup>+/-</sup> feet of the sewer pipe on the Coral Island property that was an extension of their sanitary sewer. Roux was notified and McDonald's was not allowed to self-perform the work due to the SMP. Roux notified the NYSDEC on July 19<sup>th</sup> that intrusive work was being planned and that the start date was uncertain.

Between August 7, 2023 and August 18, 2023, 38 feet of sanitary sewer pipe was replaced that was servicing the McDonald's property. This repair generated a little over 20 cubic yards of soil. In addition, 51 feet of storm sewer pipe was replaced that was servicing a catch basin near the Site's garbage compactors. The storm sewer repair generated a little over 12 cubic yards of soil. This work required the characterization and disposal of soil and Community Air Monitoring following the April 2013 Site Management Plan and the 2009 Soil Management Plan. Waste characterization showed no exceedances of NYSDEC 375 Unrestricted Use standards (for PCBs) and NYSDEC Part 371 and Title 40 CFR Part 261 (for TCLP analyses). In total, 52.17 tons of soil were transported from the Site and disposed of at Conestoga Landfill, Morgantown, PA. Community Air Monitoring included dust and VOCs with no exceedances of action levels for either. A more detailed summary of the sewer line repair oversight is presented as Appendix B.

#### 3.4 IC/EC Certification

Institutional and engineering controls (IC/ECs) established for the Site in accordance with the SMP include a composite cover system and an environmental easement. The cover system includes landscaped areas, gravel-covered landscaped areas, asphalt, and building foundations. These covers are currently in place and protective of public health and the environment. An IC/EC Certification Form for the controls that are currently in place is included as Appendix C.

The following information is presented as an Electronic Database in Appendix D in an electronic database format:

- a Site summary;
- the name of the current Site owner and/or the remedial party implementing the SMP for the Site;
- the location of the Site;
- · the current status of Site remedial activity;
- a copy of the Environmental Easement; and
- a contact name and phone number of a person knowledgeable about the Environmental Easement's requirements, in order for NYSDEC to obtain additional information, as necessary.

# 4. Conclusions

The following sections present conclusions from inspections and monitoring activities and recommendations.

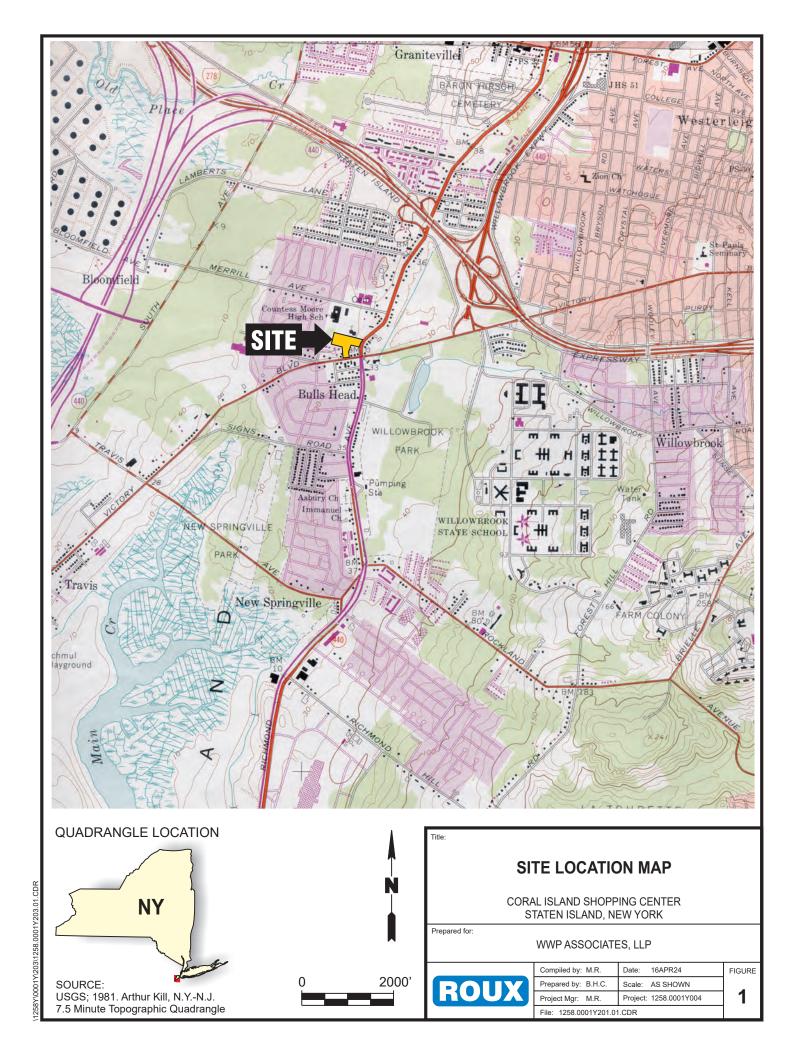
### 4.1 Conclusions

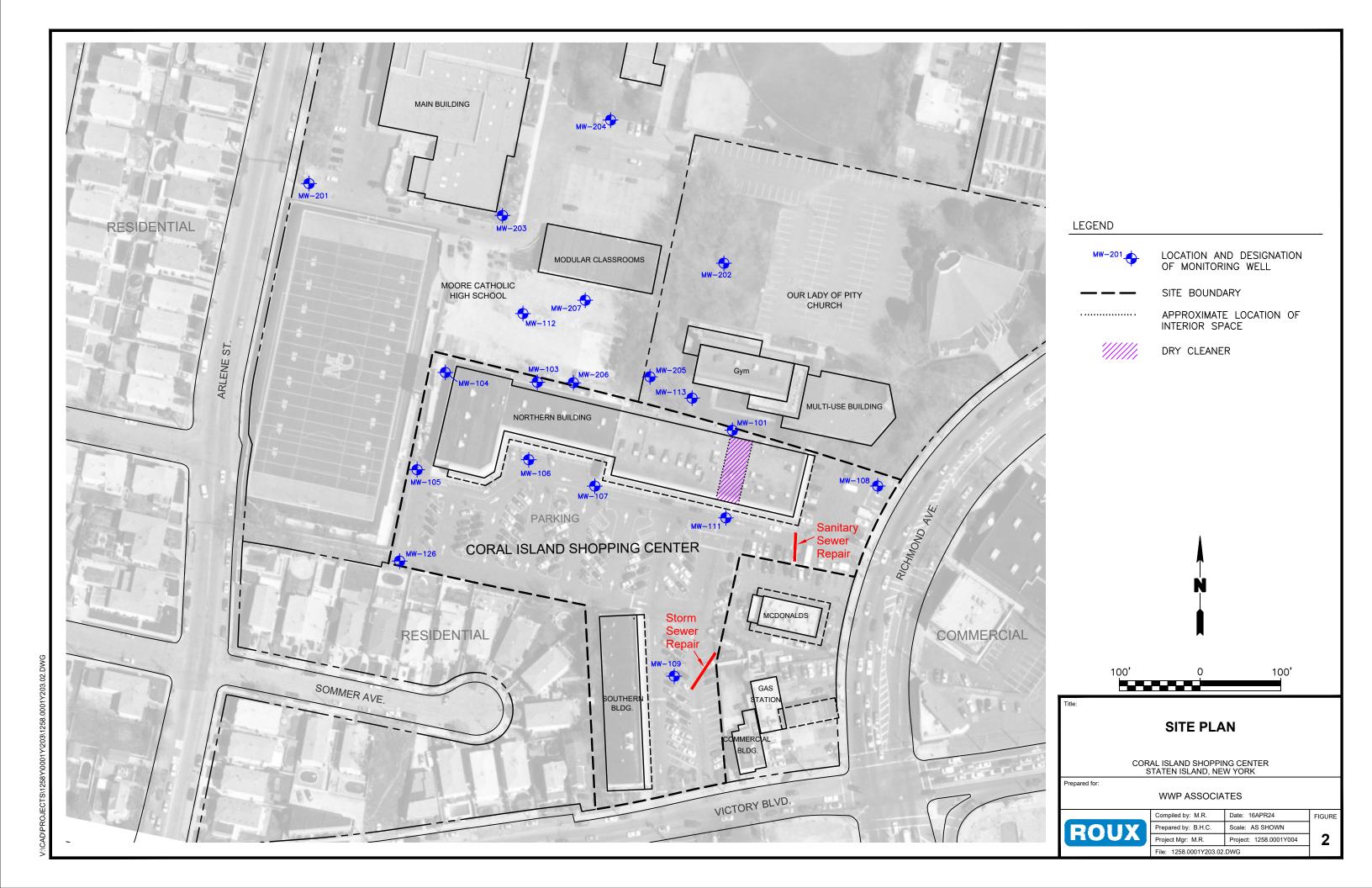
- 1. Landscaped areas, gravel-covered landscaped areas, asphalt parking lots, and building foundations appeared to be in good condition and are performing as designed.
- 2. An Environmental Easement is in place and requires compliance with Institutional Controls.
- 3. The engineering controls are performing as designed and are effective.

# Periodic Review Report Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

### **FIGURES**

- 1. Site Location Map
- 2. Site Plan





# Periodic Review Report Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

### **APPENDICES**

- A. Site Inspection Checklists
- B. Sewer Repair Oversight
- C. IC/EC Certification Form
- D. Electronic Database

# **APPENDIX A**

Site Inspection Checklists

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM

	Client	WWP Associates, LLP	Inspector: Michael Roux
Site: Coral Island Shopping Center		Coral Island Shopping Center	Inspection Date: Aug 9, 2023
DEC S	Site No.	C243033	Roux Project Number: <u>1258.0001Y004</u>
L	ocation	1650 Richmond Avenue	
_		Staten Island, New York	
Reaso	n for In	spection: Periodic Inspection	
	Р	eriodic [X] Annual [ ] Emergency [ ]* O	nsite for Sewer Repair Oversight
		Other [ ]	
		* - Period	c monitoring required following non-annual onsite event
			y following natural disaster or an unforeseen cap failure.
		f Compliance with Institutional Controls:	
Yes	No	Oite Hee Ohen and from Develope here stime	(O
[]	[X]	Site Use Changed from Previous Inspection	
[]	[X]	On-Site Engineering Controls Changed from	
[X]	[]		est Realty, 500 Seaview Ave # 235, NY 10305)
[]	[X]	Changes or needed changes to monitoring	system.
		\all_0==== 0====	
Yes	No	Soil, Gravel, and Grass Cover:	
[]	F)/1		
[]	[X]	Significant rills or gullies observed?	
	[X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed?	
[]	[X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed?	
[]	[X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed?	
[]	[X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed?	
[] [] []	[X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed?	
[ ] [ ] [ ] nspect	[X] [X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed?	
[] [] [] Inspect Yes	[X] [X] [X] [X] [X] [X] No	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps:	
[ ] [ ] [ ] [nspect Yes	[X] [X] [X] [X] [X] [No of A	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed?	
[ ]   [ ]   [ ]   nspect   Yes   [ ]	[X] [X] [X] [X] [X] [X] ion of A No [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed?	
[ ]   [ ]   [ ]   nspect   Yes   [ ]   [ ]	[X] [X] [X] [X] [X] [X]  ion of <i>I</i> No [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed?	
[ ]   [ ]   [ ]   [ ]   [ ]   [ ]   [ ]   [ ]	[X] [X] [X] [X] [X] [No [X] [X] [X] [X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed?	
[] [] Inspect Yes [] [] [] Inspect	[X] [X] [X] [X] ion of D  No [X] [X] ion of O  No	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed? Concrete Caps:	
[ ]   [ ]   [ ]   Inspect   Yes   [ ]   [ ]   Inspect   Yes   [ ]	[X] [X] [X] [X] [X] ion of (I) [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed? Concrete Caps:	
[ ] [ ] Inspect Yes [ ] [ ] [ ] Inspect Yes	[X] [X] [X] [X] ion of D  No [X] [X] ion of O  No	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed? Concrete Caps:	



Page 1 of 3 1258.0001Y004.204/APA

		SITE MONITORING AND IN	
		WWP Associates, LLP	Inspector: Michael Roux
Site: Coral Island Shopping Center			Inspection Date: Aug 9, 2023
		1050 Biologoud Avenue	Roux Project Number: <u>1258.0001Y004</u>
L	ocalion	: 1650 Richmond Avenue Staten Island, New York	
Reaso	n for In	spection: Periodic Inspection	
rouna Yes	water i No	Monitoring:	
103	110	Monitoring Wells	
[]	[]	Cover and J-plug intact? Well in good condition?	
[]	[]	Water Elevation Measured?	
[]	[]	Water Quality Parameters Collected?	
[]	[X]	Monitoring Well Sampled?	



Page 2 of 3 1258.0001Y004.204/APA

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM

Client: WWP Associates, LLP	Inspector: Michael Roux	
Site: Coral Island Shopping Center	Inspection Date: Aug 9, 2023	
DEC Site No.: <b>C243033</b>	Roux Project Number: 1258.0001Y004	
Location: 1650 Richmond Avenue	100ATTOJOCHAMBOI.	
Ctates Island New York		
Reason for Inspection: Periodic Inspection		
Totale inspection		
Periodic [X] Annual [ ] Emergency [ ]		
SS. [1_		
Additional Comments or Clarification Where Corrective	Actions May Be Beguired	
Additional Comments of Clarification where Corrective	Actions may be Required.	
All landscaped areas, gravel covered landscaped areas, as		
appeared to be in good condition.		



Page 3 of 3 1258.0001Y004.204/APA

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM

	•	:: WWP Associates, LLP	Inspector: Michael Roux
Site: Coral Island Shopping Center		Coral Island Shopping Center	Inspection Date: Apr 1, 2024
DEC S	Site No.	: C243033	Roux Project Number: 1258.0001Y004
L	ocation	: 1650 Richmond Avenue	
		Staten Island, New York	
Reaso	n for In	spection: Annual Inspection	
	Р	eriodic [ ] Annual [X] Emergency [ ]*	
		Other [ ]	monitoring required following non-annual onsite event
			ollowing natural disaster or an unforeseen cap failure.
Assess	ment o	f Compliance with Institutional Controls:	·
Yes	No		
[]	[X]	Site Use Changed from Previous Inspection (C	commercial)?
[]	[X]	On-Site Engineering Controls Changed from P	
[X]	[]	Site Records Available (Available at Rivercrest	· , , , , , , , , , , , , , , , , , , ,
[]	[X]	Changes or needed changes to monitoring sys	•
		0 0 7	
nspect	ion of S		
Yes		Soil, Gravel, and Grass Cover:	
[]	No	Soil, Gravel, and Grass Cover:	
[]	<b>No</b> [X]	Soil, Gravel, and Grass Cover:  Significant rills or gullies observed?	
LJ			
[]	[X]	Significant rills or gullies observed?	
	[X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed?	
[]	[X] [X] [X]	Significant rills or gullies observed?  Signs of settlement/ subsidence observed?  Significant animal burrows observed?	
[]	[X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed?	
	[X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed?	
	[X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed?	
[ ] [ ] [ ] nspect	[X] [X] [X] [X] [X] [X] [X] ion of A	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed?	
[ ]   [ ]   [ ]   [ ]   mspect   Yes	[X] [X] [X] [X] [X] [X] [X] [No	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps:	
[ ]   [ ]   [ ]   [ ]   mspect   Yes   [ ]	[X] [X] [X] [X] [X] [X] [No of A	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed?	
[ ]   [ ]   [ ]   [ ]   nspect   Yes   [ ]   [ ]	[X] [X] [X] [X] [X] [X] [No [X] [X] [X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed?	
[ ]   [ ]   [ ]   [ ]   nspect   Yes   [ ]   [ ]	[X] [X] [X] [X] [X] [X] [No [X] [X] [X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed?	
[ ]   [ ]   [ ]   nspect   Yes   [ ]   [ ]   [ ]	[X] [X] [X] [X] [X] [X] ion of A  No [X] [X] [X] [X] [X] [X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed?	
[] [] [] [Mnspect Yes [] [] [] Inspect Yes	[X] [X] [X] [X] [X] [X] ion of [A] [X] [X] [X] [X] [X] [X] [X] [X] Ion of (A)	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed? Concrete Caps:	
[ ]   [ ]   [ ]   Inspect   Yes   [ ]   [ ]   Inspect   Yes   [ ]	[X]	Significant rills or gullies observed? Signs of settlement/ subsidence observed? Significant animal burrows observed? Significant bare spots observed? Woody shrubs/ trees observed? Other conditions observed? Asphalt Caps: Significant cracks observed? Signs of settlement/ subsidence observed? Other conditions observed? Concrete Caps:	



Page 1 of 5 1258.0001Y004.204/APA

		ROUX ENVIRONI SITE MONITORING AND IN	
	Client	t: WWP Associates, LLP	Inspector: Michael Roux
		Coral Island Shopping Center	Inspection Date: Apr 1, 2024
DEC S	ite No.	: C243033	Roux Project Number: <b>1258.0001Y004</b>
Location: 1650 Richmond Avenue			
		Staten Island, New York	
Reaso	n for In	spection: Annual Inspection	
	ı	Periodic [ ] Annual [X] Emergency [ ]	
		Other [ ]	
round	water l	Monitoring:	
Yes	No		
		Monitoring Wells	
[]	[]	Cover and J-plug intact? Well in good condition?	
[]	[]	Water Elevation Measured?	
[]	[]	Water Quality Parameters Collected?	
[]	[X]	Monitoring Well Sampled?	



Page 2 of 5 1258.0001Y004.204/APA

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM

Client: WWP Associates, LLP	Inspector:	Michael Roux
Site: Coral Island Shopping Center	Inspection Date:	
DEC Site No.: C243033	Roux Project Number:	
Location: 1650 Richmond Avenue	rtoux i roject rtamber.	1200.00011004
Ctaton Island Now York		
Reason for Inspection: Annual Inspection		
reason of moposion.		
Periodic [ ] Annual [X] Emergency [ ]		
Additional Comments or Clarification Where Corrective	Actions May Be Required:	
Additional Comments of Clarification Where Corrective	Actions may be required.	
All 1		
All landscaped areas, gravel covered landscaped areas, as		
appeared to be in good condition. Photographs on following	g pages.	
		_



Page 3 of 5 1258.0001Y004.204/APA

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM



Photo 1: Victory Blvd entrance and landscaped areas.



Photo 3: Richmond Avenue entrance.



Photo 2: Parking lot looking east from far west end.



Photo 4: Monitoring well cluster MW-109.



Page 4 of 5 1258.0001Y004.204/APA

# ROUX ENVIRONMENTAL SITE MONITORING AND INSPECTION FORM



Photo 5: Gravel area in rear of northern building (east).



Photo 7: Rear of southern building.



Photo 6: Gravel area in rear of northern building (west).



Photo 8: Front of northern building (looking west).



1258.0001Y004.204/APA

# Periodic Review Report Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

### **APPENDIX B**

Sewer Repair Oversight



# **Sewer Repair Oversight**

Coral Island Shopping Center 1650 Richmond Avenue Staten Island, New York NYSDEC BCP Number: C243033

April 29, 2024

Prepared for:

**WWP Associates LLP** 6616 Six Forks Road Raleigh, North Carolina 27615

Prepared by:

Roux Environmental Engineering and Geology, D.P.C. 209 Shafter Street Islandia, New York 11749

## **Table of Contents**

1.	Introduction	. 1
2.	Background	2
	Scope of Work	
	3.1 McDonald's Sanitary Sewer	
	3.2 Storm Sewer	
	3.3 Backfill Characterization	. 4
	3.4 Waste Characterization and Disposal	. 4
4.	Summary	5

# **Figures**

- 1. Site Plan Sanitary Sewer
- 2. Site Plan Storm Sewer

## **Tables**

- 1. CAMP Monitoring Data Particulate Matter
- 2. CAMP Monitoring Data Volatile Organic Compounds
- 3. Summary of Laboratory Analysis QP Backfill
- 4. Summary of Laboratory Analysis Waste Characterization

# **Appendices**

- A. Daily Status Reports
- B. Laboratory Analytical Data Quarry Process Backfill
- C. Laboratory Analytical Data Waste Characterization Sample
- D. Waste Manifests

# 1. Introduction

On behalf of WWP Associates, Roux Environmental Engineering and Geology, D.P.C. ("Roux") presents this summary of soil management conducted between August 7, 2023 and August 18, 2023 at the Coral Island Shopping Center located at 1655 Richmond Avenue, Staten Island, New York (the "Site"). The Site is managed under the New York State Brownfield Cleanup Program administered by New York State Department of Environmental Conservation ("NYSDEC", Site #C243033). This work was done in accordance with the 2009 Soil Management Plan for the Site that is attached to the April 2013 Site Management Plan ("SMP").

# 2. Background

On or about July 6, 2023, Rivercrest Realty, the property management firm for the Site, was notified by an adjacent property tenant (McDonald's) that they were experiencing a sanitary sewer system issue that had required replacement of approximately 40<sup>+</sup> feet of 6-inch cast iron sewer pipe on the McDonald's property. That repair had not rectified the situation and therefore McDonald's wanted to immediately replace an additional 40<sup>+/-</sup> feet of the sewer pipe on the Coral Island property that was an extension of their sanitary sewer. The sewer pipe in question led from the McDonald's property to a nearby manhole (Figure 1) and was part of a sewer easement McDonald's had across the Site. Rivercrest Realty contacted Roux and responded to McDonald's that despite the requested emergency schedule, McDonald's would not be allowed to self-perform this work due to the SMP.

Rivercrest Realty connected McDonald's with the Site's plumbing contractor, Carmine's Mechanical, Inc. ("CMI") to conduct the emergency sewer repair. As planning began, McDonald's urgency also began to change from day to day. It is our understanding that the McDonalds franchise needed a third-party approval before conducting the work and that approval had been delayed. McDonald's had agreed to use CMI and was now requesting that CMI conduct the work immediately following their receipt of approval. The timing remained urgent but was paused. Roux notified the NYSDEC on July 19<sup>th</sup> that intrusive work was being planned and the uncertainty of the start date.

To complicate matters, the sewer line in question is in a busy entry/exit area of the parking lot for the Coral Island Shopping Center and crosses over several large utility easements including Con Edison natural gas and a Trans Continental 26-inch, 600-psi, jet-fuel pipeline. To accommodate this work, Roux and CMI prepared to work night shifts for approximately two weeks to minimize disturbance to the shopping center and using only hand tools to eliminate potential damage to the utility pipelines.

# 3. Scope of Work

### 3.1 McDonald's Sanitary Sewer

By July 26<sup>th</sup>, work appeared imminent and CMI requested Roux coordinate roll-off container delivery and they contacted 811. Work, then scheduled to start on August 3<sup>rd</sup>, was once again postponed, this time to August 8<sup>th</sup> due to a request by Trans Continental. On the night of August 7<sup>th</sup>, Trans Continental met with CMI onsite to better understand the work involved. It is our speculation that the utility company was trying to determine if they should have full-time onsite oversight of the work. Trans Continental directed CMI to expose the bottom of the sewer pipe near the McDonald's property. Once the depth of the sewer pipe was fully understood by Trans Continental (approximately 3.5 feet below ground surface), they indicated that 1.) Their pipeline was sufficiently below this work depth and they no longer wanted to conduct their own oversight; and 2.) The plumbing contractor was authorized to use power equipment.

Roux's first day onsite was August 8<sup>th</sup>. A daily status report for August 8<sup>th</sup> is included as Appendix A. Oversight included establishing a community air monitoring plan ("CAMP") station downwind of the excavation (Figure 1). As a result of Trans Continental approving the use of power equipment, the work went smoothly and quickly, being completed on August 8<sup>th</sup> during normal working hours. The CAMP station included monitoring for both dust and volatile organic compounds ("VOCs") with the maximum concentration of the 15-minute average of dust being 0.039 milligrams per cubic meter ("mg/m3") and the maximum concentration of the 15-minute average of VOCs being 0.7 parts per million ("ppm"). There were no exceedances of action levels for either dust or VOCs. CAMP monitoring data collected on August 8<sup>th</sup> of dust and VOCs are presented in Table 1 and Table 2, respectively.

CMI wound up excavating a 38-foot-long trench, approximately 5-feet wide and 3.5-feet deep. Groundwater was not encountered. This excavation generated a little over 20 cubic yards of soil, which was placed into two 20-yard roll-off containers provided by AARCO Environmental Services Corp. of Lindenhurst, NY ("AARCO"). Observed soil lithology included primarily brown sand with varying amounts of silt and small amount of gravel. There was no evidence of odor and/or staining observed. CMI informed Roux during the planning phase of the work that they would backfill around the pipe with a washed crushed rock for drainage. Initially, the plan was for the entire excavation to be backfilled with this material; however, a decision was later made by CMI to use locally purchased washed rock as base with a quarry process ("QP" or quarter fine) above for the structural benefit of the road surface. A summary of this material is presented below in Section 3.3. CMI patched the excavation at the surface, restoring the parking lot.

### 3.2 Storm Sewer

As the sanitary sewer work was being planned, CMI was asked to inspect a storm sewer on the Coral Island Shopping Center property that wasn't functioning properly. This storm sewer was initially referred to as a zipper drain, however, it was more of a catch basin in the front of a large concrete pad used to stage garbage compactors that is connected by pipe to a second storm drain approximately 50-feet away. CMI's recommendation following inspection was for the storm sewer pipe to be replaced.

The asphalt parking lot over this storm drain was saw cut on August 8, 2023 with replacement taking place on August 9<sup>th</sup>. Roux was onsite on August 9<sup>th</sup> to oversee excavation. A daily status report for August 9<sup>th</sup> is included as Appendix A. Oversight included establishing a CAMP station downwind of the excavation (Figure 2). This work also went smoothly and quickly, being completed on August 9<sup>th</sup> during normal working

hours. The CAMP station included monitoring for both dust and VOCs with the maximum concentration of the 15-minute average of dust being 0.047 mg/m3 and the maximum concentration of the 15-minute average of VOCs being 0.8 ppm. There were no exceedances of action levels for either dust or VOCs. CAMP monitoring data collected on August 9<sup>th</sup> of dust and VOCs are presented in Table 1 and Table 2, respectively.

CMI wound up excavating a 51-foot-long trench, approximately 2.5-feet wide and 2.5-feet deep. Groundwater was not encountered. This excavation generated a little over 12 cubic yards of soil, which was placed into one 20-yard roll-off container provided by AARCO. Observed soil lithology included primarily brown sand with varying amounts of silt and small amount of gravel. There was no evidence of odor and/or staining observed. CMI used washed rock as base with QP above for the structural benefit of the parking lot (Section 3.3). CMI patched the excavation at the surface, restoring the parking lot.

#### 3.3 Backfill Characterization

As discussed above, CMI purchased washed rock for the base of both sewer pipes and a quarry process ("QP" or quarter fine) for compacting above the washed rock as a base for the asphalt roadway and parking lot. The washed rock was a 3/4-inch bluestone purchased from Kings Building Materials at 3525 Victory Boulevard, Staten Island, NY. The QP was purchased from South Shore Material & Supply at 327 Industrial Loop, Staten Island, NY. The QP was sampled by Roux on August 9th for pesticides, PCBs, semivolatile organic compounds, metals, and VOCs and submitted for analysis to Alpha Analytical of Westborough, MA (NY 11148). Laboratory analytical results of the QP sampling is presented in Appendix B and summarized in Table 3. Analytical results were compared to NYSDEC Part 375 Unrestricted Use and Restricted Commercial Use standards. Those results included two compounds (4-4'-DDT and acetone) that slightly exceed Unrestricted Use standards. There were no compounds that exceeded Restricted Commercial Use standards. It has been assumed that the acetone is a result of laboratory contamination and not an actual compound in the backfill.

### 3.4 Waste Characterization and Disposal

As described above, soil excavated during this project was placed in two 20-cubic yard roll-off containers provided by AARCO. Containers were locked and placed on top of double-lined plastic sheeting and covered with tarp. Roux collected waste characterization samples on August 9th for PCBs, TCLP metals, TCLP semivolatile organic compounds, and TCLP VOCs all as requested by AARCO. Samples were submitted to Alpha Analytical for analysis. The waste characterization sample results are included as Appendix C and summarized in Table 4. Analytical results were compared to NYSDEC 375 Unrestricted Use standards (for PCBs) and NYSDEC Part 371 and Title 40 CFR Part 261 (for TCLP analyses). There were no analytes that exceeded their respective standards. AARCO was provided with the waste characterization data collected on August 9th and subsequently approved receipt of the soil. Roll-off containers were removed from the Site on August 17th and August 18th. In total 52.17 tons of soil were received by AARCO and consolidated by Dale Transfer of West Babylon, NY for disposal at Conestoga Landfill, Morgantown, PA. Waste manifests are included as Appendix D.

# 4. Summary

Two sections of sewer pipe, one sanitary pipe 38 feet long and the other a storm pipe 51 feet long, were replaced at the Site between August 7 and August 18, 2023. This work required excavation, sampling, and disposal of just over 52 tons of soil from under the parking lot of the Site. Excavation and backfill work was conducted with oversight by Roux as described above.

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Michael Roux

Principal Hydrogeologist

Brian P. Morrissey, P.E.

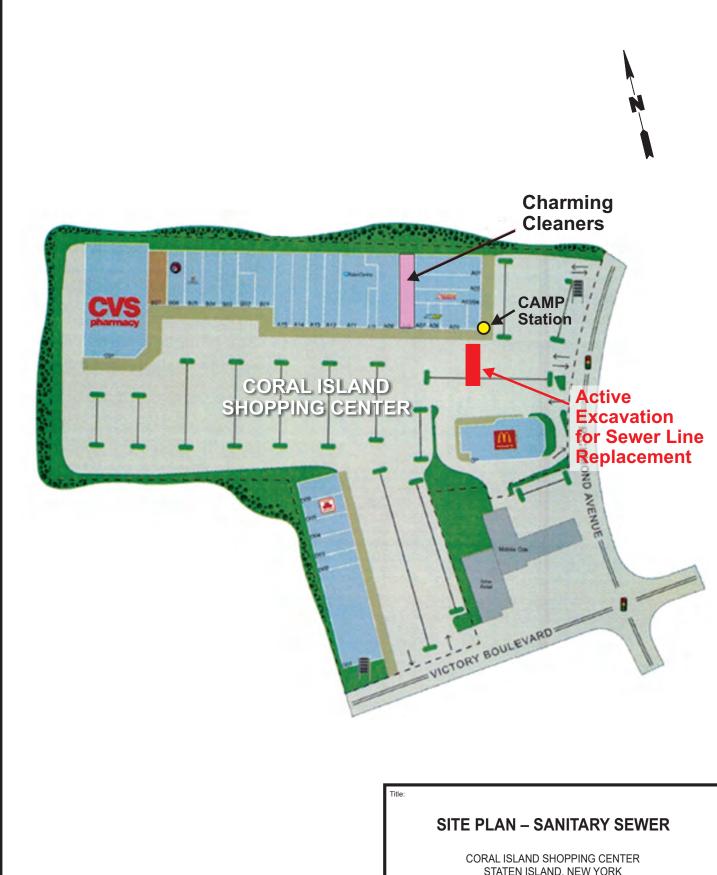
Principal Engineer

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

## **FIGURES**

- 1. Site Plan Sanitary Sewer
- 2. Site Plan Storm Sewer

1258.0001Y004.204/APB-CVRS ROUX



STATEN ISLAND, NEW YORK

Prepared for:

WWP ASSOCIATES, LLP



Compiled by: M.R.	Date: 17APR24
Prepared by: B.H.C.	Scale: AS SHOWN
Project Mgr: M.R.	Project: 1258.0001Y004
File: 1258.0001Y203.01	.CDR

FIGURE 1





Title

### SITE PLAN - STORM SEWER

CORAL ISLAND SHOPPING CENTER STATEN ISLAND, NEW YORK

Prepared for:

WWP ASSOCIATES, LLP



Compiled by: M.R.	Date: 17APR24
Prepared by: B.H.C.	Scale: AS SHOWN
Project Mgr: M.R.	Project: 1258.0001Y004
File: 1258 0001V203 01	CDR

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

### **TABLES**

- 1. CAMP Monitoring Data Particulate Matter
- 2. CAMP Monitoring Data Volatile Organic Compounds
- 3. Summary of Laboratory Analysis QP Backfill
- 4. Summary of Laboratory Analysis Waste Characterization

1258.0001Y004.204/APB-CVRS ROUX

Project: Coral Island
Project Number: 1258.0001Y004

Location 1650 Richmond Ave. Staten Island, NY 13014

Date:	Tuesday, August 8, 2023
Downwind Station	8530182505
Time	15-min Average (mg/m³)
6:40:01 AM	0.025
6:55:01 AM	0.023
7:10:01 AM	0.021
7:25:01 AM	0.025
7:40:01 AM	0.039
7:55:01 AM	0.028
8:10:01 AM	0.026
8:25:01 AM	0.023
8:40:01 AM	0.022
8:55:01 AM	0.023
9:10:01 AM	0.025
9:25:01 AM	0.023
9:40:01 AM	0.026
9:55:01 AM	0.026
10:10:01 AM	0.032
10:25:01 AM	0.021
10:40:01 AM	0.029
10:55:01 AM	0.020
11:10:01 AM	0.021
11:25:01 AM	0.024
11:40:01 AM	0.036
11:55:01 AM	0.035
12:10:01 PM	0.017
12:25:01 PM	0.017
12:40:01 PM	0.014
12:55:01 PM	0.015
1:10:01 PM	0.015
1:25:01 PM	0.014
1:40:01 PM	0.014

	Wednesday, August 9, 2023
Downwind Station	8530182505
Time	15-min Average (mg/m³)
6:15:47 AM	0.036
6:30:47 AM	0.047
6:45:47 AM	0.038
7:00:47 AM	0.027
7:15:47 AM	0.023
7:30:47 AM	0.024
7:45:47 AM	0.024
8:00:47 AM	0.023
8:15:47 AM	0.025
8:30:47 AM	0.023
8:45:47 AM	0.023
9:00:47 AM	0.023
9:15:47 AM	0.024
9:30:47 AM	0.025
9:45:47 AM	0.025
10:00:47 AM	0.025
10:15:47 AM	0.026
10:30:47 AM	0.028
10:45:47 AM	0.029
11:00:47 AM	0.031
11:15:47 AM	0.033
11:30:47 AM	0.035
11:45:47 AM	0.038
12:00:47 PM	0.039
12:15:47 PM	0.040
12:30:47 PM	0.042

Legend

mg/m3 - milligrams per cubic meter

Table 2. Summary of CAMP Monitoring Data - Volatile Oganic Compounds, Coral Island Shopping Center, Staten Island, NY

Project: Coral Island
Project Number: 1258.0001Y004

Location 1650 Richmond Ave. Staten Island, NY 13014

Date:	Tuesday, August 8, 2023
Downwind Station	592-909025
Time	15-min Average (mg/m³)
6:40:57 AM	0.1
6:55:57 AM	0.2
7:10:57 AM	0.2
7:25:57 AM	0.3
7:40:57 AM	0.3
7:55:57 AM	0.3
8:10:57 AM	0.3
8:25:57 AM	0.4
8:40:57 AM	0.4
8:55:57 AM	0.4
9:10:57 AM	0.5
9:25:57 AM	0.4
9:40:57 AM	0.5
9:55:57 AM	0.5
10:10:57 AM	0.5
10:25:57 AM	0.4
10:40:57 AM	0.5
10:55:57 AM	0.6
11:10:57 AM	0.7
11:25:57 AM	0.7
11:40:57 AM	0.7
11:55:57 AM	0.7
12:10:57 PM	0.6
12:25:57 PM	0.6
12:40:57 PM	0.6
12:55:57 PM	0.6
1:10:57 PM	0.7
1:25:57 PM	0.6
1:40:57 PM	0.5

	Wednesday, August 9, 2023
Downwind Station	592-909025
Time	15-min Average (mg/m³)
6:15:24 AM	0.1
6:30:24 AM	0.3
6:45:24 AM	0.3
7:00:24 AM	0.4
7:15:24 AM	0.4
7:30:24 AM	0.5
7:45:24 AM	0.5
8:00:24 AM	0.5
8:15:24 AM	0.6
8:30:24 AM	0.7
8:45:24 AM	0.7
9:00:24 AM	0.7
9:15:24 AM	0.7
9:30:24 AM	0.7
9:45:24 AM	0.7
10:00:24 AM	0.7
10:15:24 AM	0.7
10:30:24 AM	0.7
10:45:24 AM	0.7
11:00:24 AM	0.7
11:15:24 AM	0.7
11:30:24 AM	0.7
11:45:24 AM	0.7
12:00:24 PM	0.7
12:15:24 PM	0.8
12:30:24 PM	0.8

Legend

mg/m3 - milligrams per cubic meter

Sample Designation: IS-1 Sample Date: 8/9/2023

Sample Date: 8/9/2023 Sample Type: QP Backfill

Parameter	CasNum	NY-UNRES	NY-RESC	Units	Result
General Chemistry	1	1 1	I		I
Solids, Total	NONE			%	90.1
Organochlorine Pesticides					
4,4'-DDD	72-54-8	0.0033	92	mg/kg	0.00174 U
4,4'-DDE	72-55-9	0.0033	62	mg/kg	0.00166 J
4,4'-DDT	50-29-3	0.0033	47	mg/kg	0.00384
Aldrin	309-00-2	0.005	0.68	mg/kg	0.00174 U
Alpha-BHC	319-84-6	0.02	3.4	mg/kg	0.000727 U
Beta-BHC	319-85-7	0.036	3	mg/kg	0.00174 U
Chlordane	57-74-9	0.004	0.4	mg/kg	0.0844
cis-Chlordane	5103-71-9	0.094	24	mg/kg	0.00936 IP
Delta-BHC	319-86-8 60-57-1	0.04	500	mg/kg	0.00174 U 0.00109 U
Dieldrin Endosulfan I	959-98-8	0.005 2.4	1.4 200	mg/kg	0.00109 U 0.00174 U
Endosulfan II	33213-65-9	2.4	200	mg/kg	0.00174 U
Endosulfan sulfate	1031-07-8	2.4	200	mg/kg	0.00174 U
Endrin	72-20-8	0.014	89	mg/kg	0.000727 U
Endrin aldehyde	7421-93-4	0.014	09	mg/kg mg/kg	0.000727 U
Endrin ketone	53494-70-5			mg/kg	0.00218 U
Heptachlor	76-44-8	0.042	15	mg/kg	0.000174 U
Heptachlor epoxide	1024-57-3	0.042	10	mg/kg	0.000349 31F
Lindane	58-89-9	0.1	9.2	mg/kg	0.000717 J
Methoxychlor	72-43-5	0.1	3.2	mg/kg	0.00327 U
Toxaphene	8001-35-2			mg/kg	0.0327 U
trans-Chlordane	5103-74-2			mg/kg	0.0151
trans-omordane	3103-14-Z			mg/kg	0.0101
Polychlorinated Biphenyls					
Aroclor 1016	12674-11-2	0.1	1	mg/kg	0.0544 U
Aroclor 1221	11104-28-2	0.1	1	mg/kg	0.0544 U
Aroclor 1232	11141-16-5	0.1	1	mg/kg	0.0544 U
Aroclor 1242	53469-21-9	0.1	1	mg/kg	0.0544 U
Aroclor 1248	12672-29-6	0.1	1	mg/kg	0.0544 U
Aroclor 1254	11097-69-1	0.1	1	mg/kg	0.018 J
Aroclor 1260	11096-82-5	0.1	1	mg/kg	0.0544 U
Aroclor 1262	37324-23-5	0.1	1	mg/kg	0.0544 U
Aroclor 1268	11100-14-4	0.1	1	mg/kg	0.0544 U
PCBs, Total	1336-36-3	0.1	1	mg/kg	0.018 J
					-
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene	95-94-3			mg/kg	0.18 U
1,2,4-Trichlorobenzene	120-82-1			mg/kg	0.18 U
1,2-Dichlorobenzene	95-50-1	1.1	500	mg/kg	0.18 U
1,3-Dichlorobenzene	541-73-1	2.4	280	mg/kg	0.18 U
1,4-Dichlorobenzene	106-46-7	1.8	130	mg/kg	0.18 U

Sample Designation: IS-1 Sample Date: 8/9/2023

Sample Type: QP Backfill

Parameter	CasNum	NY-UNRES	NY-RESC	Units	Result
1,4-Dioxane	123-91-1	0.1	130	mg/kg	0.027 U
2,4,5-Trichlorophenol	95-95-4			mg/kg	0.18 U
2,4,6-Trichlorophenol	88-06-2			mg/kg	0.11 U
2,4-Dichlorophenol	120-83-2			mg/kg	0.16 U
2,4-Dimethylphenol	105-67-9			mg/kg	0.18 U
2,4-Dinitrophenol	51-28-5			mg/kg	0.87 U
2,4-Dinitrotoluene	121-14-2			mg/kg	0.18 U
2,6-Dinitrotoluene	606-20-2			mg/kg	0.18 U
2-Chloronaphthalene	91-58-7			mg/kg	0.18 U
2-Chlorophenol	95-57-8			mg/kg	0.18 U
2-Methylnaphthalene	91-57-6			mg/kg	0.09 J
2-Methylphenol	95-48-7	0.33	500	mg/kg	0.18 U
2-Nitroaniline	88-74-4			mg/kg	0.18 U
2-Nitrophenol	88-75-5			mg/kg	0.39 U
3,3'-Dichlorobenzidine	91-94-1			mg/kg	0.18 U
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	500	mg/kg	0.26 U
3-Nitroaniline	99-09-2			mg/kg	0.18 U
4,6-Dinitro-o-cresol	534-52-1			mg/kg	0.47 U
4-Bromophenyl phenyl ether	101-55-3			mg/kg	0.18 U
4-Chloroaniline	106-47-8			mg/kg	0.18 U
4-Chlorophenyl phenyl ether	7005-72-3			mg/kg	0.18 U
4-Nitroaniline	100-01-6			mg/kg	0.18 U
4-Nitrophenol	100-02-7			mg/kg	0.25 U
Acenaphthene	83-32-9	20	500	mg/kg	0.12 J
Acenaphthylene	208-96-8	100	500	mg/kg	0.055 J
Acetophenone	98-86-2			mg/kg	0.18 U
Anthracene	120-12-7	100	500	mg/kg	0.32
Benzo(a)anthracene	56-55-3	1	5.6	mg/kg	0.52
Benzo(a)pyrene	50-32-8	1	1	mg/kg	0.41
Benzo(b)fluoranthene	205-99-2	1	5.6	mg/kg	0.5
Benzo(ghi)perylene	191-24-2	100	500	mg/kg	0.25
Benzo(k)fluoranthene	207-08-9	0.8	56	mg/kg	0.19
Benzoic Acid	65-85-0			mg/kg	0.59 U
Benzyl Alcohol	100-51-6			mg/kg	0.18 U
Biphenyl	92-52-4			mg/kg	0.024 J
Bis(2-chloroethoxy)methane	111-91-1			mg/kg	0.2 U
Bis(2-chloroethyl)ether	111-44-4			mg/kg	0.16 U
Bis(2-chloroisopropyl)ether	108-60-1			mg/kg	0.22 U
Bis(2-ethylhexyl)phthalate	117-81-7			mg/kg	0.082 J
Butyl benzyl phthalate	85-68-7			mg/kg	0.18 U
Carbazole	86-74-8		F.0	mg/kg	0.14 J
Chrysene	218-01-9	1	56	mg/kg	0.53
Dibenzo(a,h)anthracene	53-70-3	0.33	0.56	mg/kg	0.064 J
Dibenzofuran	132-64-9	7	350	mg/kg	0.11 J
Diethyl phthalate	84-66-2			mg/kg	0.18 U
Dimethyl phthalate	131-11-3			mg/kg	0.18 U

**Sample Designation: IS-1 Sample Date:** 8/9/2023

Sample Type: **QP Backfill** 

Parameter	CasNum	NY-UNRES	NY-RESC	Units	Result
Di-n-butylphthalate	84-74-2			mg/kg	0.18 U
Di-n-octylphthalate	117-84-0			mg/kg	0.18 U
Fluoranthene	206-44-0	100	500	mg/kg	1.2
Fluorene	86-73-7	30	500	mg/kg	0.16 J
Hexachlorobenzene	118-74-1	0.33	6	mg/kg	0.11 U
Hexachlorobutadiene	87-68-3			mg/kg	0.18 U
Hexachlorocyclopentadiene	77-47-4			mg/kg	0.52 U
Hexachloroethane	67-72-1			mg/kg	0.14 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	mg/kg	0.27
Isophorone	78-59-1			mg/kg	0.16 U
Naphthalene	91-20-3	12	500	mg/kg	0.17 J
NDPA/DPA	86-30-6			mg/kg	0.14 U
Nitrobenzene	98-95-3			mg/kg	0.16 U
n-Nitrosodi-n-propylamine	621-64-7			mg/kg	0.18 U
p-Chloro-m-cresol	59-50-7			mg/kg	0.18 U
Pentachlorophenol	87-86-5	0.8	6.7	mg/kg	0.14 U
Phenanthrene	85-01-8	100	500	mg/kg	1.1
Phenol	108-95-2	0.33	500	mg/kg	0.18 U
Pyrene	129-00-0	100	500	mg/kg	1
Total Metals					
Aluminum, Total	7429-90-5			mg/kg	7480
Antimony, Total	7440-36-0			mg/kg	1.2 J
Arsenic, Total	7440-38-2	13	16	mg/kg	4.31
Barium, Total	7440-39-3	350	400	mg/kg	53.3
Beryllium, Total	7440-41-7	7.2	590	mg/kg	0.495
Cadmium, Total	7440-43-9	2.5	9.3	mg/kg	0.108 J
Calcium, Total	7440-70-2			mg/kg	87300
Chromium, Total	7440-47-3			mg/kg	35.8
Cobalt, Total	7440-48-4			mg/kg	4.44
Copper, Total	7440-50-8	50	270	mg/kg	23.2
Iron, Total	7439-89-6			mg/kg	11100
Lead, Total	7439-92-1	63	1000	mg/kg	20.4
Magnesium, Total	7439-95-4			mg/kg	9470
Manganese, Total	7439-96-5	1600	10000	mg/kg	198
Mercury, Total	7439-97-6	0.18	2.8	mg/kg	0.077 U
Nickel, Total	7440-02-0	30	310	mg/kg	11.6
Potassium, Total	7440-09-7			mg/kg	1190
Selenium, Total	7782-49-2	3.9	1500	mg/kg	1.71 U
Silver, Total	7440-22-4	2	1500	mg/kg	0.428 U
Sodium, Total	7440-23-5			mg/kg	455
Thallium, Total	7440-28-0			mg/kg	1.71 U
Vanadium, Total	7440-62-2			mg/kg	21.1
Zinc, Total	7440-66-6	109	10000	mg/kg	48.9
Volatile Organics					
rolatile Organics					

Sample Designation: IS-1
Sample Date: 8/9/2023
Sample Type: QP Backfill

Parameter	CasNum	NY-UNRES	NY-RESC	Units	Result
1,1,1,2-Tetrachloroethane	630-20-6			mg/kg	0.00057 U
1,1,1-Trichloroethane	71-55-6	0.68	500	mg/kg	0.00057 U
1,1,2,2-Tetrachloroethane	79-34-5			mg/kg	0.00057 U
1,1,2-Trichloroethane	79-00-5			mg/kg	0.0011 U
1,1-Dichloroethane	75-34-3	0.27	240	mg/kg	0.0011 U
1,1-Dichloroethene	75-35-4	0.33	500	mg/kg	0.0011 U
1,1-Dichloropropene	563-58-6			mg/kg	0.00057 U
1,2,3-Trichlorobenzene	87-61-6			mg/kg	0.0023 U
1,2,3-Trichloropropane	96-18-4			mg/kg	0.0023 U
1,2,4,5-Tetramethylbenzene	95-93-2			mg/kg	0.00052 J
1,2,4-Trichlorobenzene	120-82-1			mg/kg	0.0023 U
1,2,4-Trimethylbenzene	95-63-6	3.6	190	mg/kg	0.00049 J
1,2-Dibromo-3-chloropropane	96-12-8			mg/kg	0.0034 U
1,2-Dibromoethane	106-93-4			mg/kg	0.0011 U
1,2-Dichlorobenzene	95-50-1	1.1	500	mg/kg	0.0023 U
1,2-Dichloroethane	107-06-2	0.02	30	mg/kg	0.0011 U
1,2-Dichloroethene, Total	540-59-0			mg/kg	0.0011 U
1,2-Dichloropropane	78-87-5			mg/kg	0.0011 U
1,3,5-Trimethylbenzene	108-67-8	8.4	190	mg/kg	0.0023 U
1,3-Dichlorobenzene	541-73-1	2.4	280	mg/kg	0.0023 U
1,3-Dichloropropane	142-28-9			mg/kg	0.0023 U
1,3-Dichloropropene, Total	542-75-6			mg/kg	0.00057 U
1,4-Dichlorobenzene	106-46-7	1.8	130	mg/kg	0.0023 U
1,4-Dioxane	123-91-1	0.1	130	mg/kg	0.091 U
2,2-Dichloropropane	594-20-7			mg/kg	0.0023 U
2-Butanone	78-93-3	0.12	500	mg/kg	0.0054 J
2-Hexanone	591-78-6			mg/kg	0.011 U
4-Methyl-2-pentanone	108-10-1			mg/kg	0.011 U
Acetone	67-64-1	0.05	500	mg/kg	0.057
Acrylonitrile	107-13-1			mg/kg	0.0046 U
Benzene	71-43-2	0.06	44	mg/kg	0.00057 U
Bromobenzene	108-86-1			mg/kg	0.0023 U
Bromochloromethane	74-97-5			mg/kg	0.0023 U
Bromodichloromethane	75-27-4			mg/kg	0.00057 U
Bromoform	75-25-2			mg/kg	0.0046 U
Bromomethane	74-83-9			mg/kg	0.0023 U
Carbon disulfide	75-15-0	0.70	00	mg/kg	0.011 U
Carbon tetrachloride	56-23-5	0.76	22	mg/kg	0.0011 U
Chlorobenzene	108-90-7	1.1	500	mg/kg	0.00057 U
Chloroform	75-00-3	0.07	250	mg/kg	0.0023 U
Chloroform	67-66-3	0.37	350	mg/kg	0.0017 U
Chloromethane	74-87-3	0.05	E00	mg/kg	0.0046 U
cis-1,2-Dichloroethene	156-59-2	0.25	500	mg/kg	0.0011 U
cis-1,3-Dichloropropene	10061-01-5			mg/kg	0.00057 U
Dibromochloromethane	124-48-1			mg/kg	0.0011 U
Dibromomethane	74-95-3			mg/kg	0.0023 U

Sample Designation: IS-1
Sample Date: 8/9/2023
Sample Type: QP Backfill

Parameter	CasNum	<b>NY-UNRES</b>	NY-RESC	Units	Result
Dichlorodifluoromethane	75-71-8			mg/kg	0.011 U
Ethyl ether	60-29-7			mg/kg	0.0023 U
Ethylbenzene	100-41-4	1	390	mg/kg	0.00016 J
Hexachlorobutadiene	87-68-3			mg/kg	0.0046 U
Isopropylbenzene	98-82-8			mg/kg	0.0011 U
Methyl tert butyl ether	1634-04-4	0.93	500	mg/kg	0.0023 U
Methylene chloride	75-09-2	0.05	500	mg/kg	0.0057 U
Naphthalene	91-20-3	12	500	mg/kg	0.0062
n-Butylbenzene	104-51-8	12	500	mg/kg	0.0011 U
n-Propylbenzene	103-65-1	3.9	500	mg/kg	0.0011 U
o-Chlorotoluene	95-49-8			mg/kg	0.0023 U
o-Xylene	95-47-6			mg/kg	0.0011 U
p/m-Xylene	179601-23-1			mg/kg	0.0023 U
p-Chlorotoluene	106-43-4			mg/kg	0.0023 U
p-Diethylbenzene	105-05-5			mg/kg	0.00042 J
p-Ethyltoluene	622-96-8			mg/kg	0.0023 U
p-Isopropyltoluene	99-87-6			mg/kg	0.0011 U
sec-Butylbenzene	135-98-8	11	500	mg/kg	0.0011 U
Styrene	100-42-5			mg/kg	0.0011 U
tert-Butylbenzene	98-06-6	5.9	500	mg/kg	0.0023 U
Tetrachloroethene	127-18-4	1.3	150	mg/kg	0.00057 U
Toluene	108-88-3	0.7	500	mg/kg	0.0011 U
trans-1,2-Dichloroethene	156-60-5	0.19	500	mg/kg	0.0017 U
trans-1,3-Dichloropropene	10061-02-6			mg/kg	0.0011 U
trans-1,4-Dichloro-2-butene	110-57-6			mg/kg	0.0057 U
Trichloroethene	79-01-6	0.47	200	mg/kg	0.00057 U
Trichlorofluoromethane	75-69-4			mg/kg	0.0046 U
Vinyl acetate	108-05-4			mg/kg	0.011 U
Vinyl chloride	75-01-4	0.02	13	mg/kg	0.0011 U
Xylenes, Total	1330-20-7	0.26	500	mg/kg	0.0011 U

# Legend:

Cas Num	Chemical Abstract Service Registry Number
IΡ	Interference resulting in method exceedance
J	Estimated concentration
mg/kg	Milligrams per kilogram
NY-RESC	Part 375 Commercial Criteria
<b>NY-UNRES</b>	Part 375 Unrestricted Use Criteria
shaded	Concentration exceeds NY-UNRES
U	Not detected above reported detection limit

Sample Designation: WC-1
Sample Date: 8/9/2023
Sample Type: Waste Characterization

Parameter	CasNum	EPA-TCLP	NY-UNRES	Units	Results
General Chemistry			]	ı	
Solids, Total	NONE			%	81.5
pH (H)	12408-02-5			SU	9.26
Polychlorinated Biphenyls					
Aroclor 1016	12674-11-2		0.1	mg/kg	0.0568 U
Aroclor 1221	11104-28-2		0.1	mg/kg	0.0568 U
Aroclor 1232	11141-16-5		0.1	mg/kg	0.0568 U
Aroclor 1242	53469-21-9		0.1	mg/kg	0.0568 U
Aroclor 1248	12672-29-6		0.1	mg/kg	0.0568 U
Aroclor 1254	11097-69-1		0.1	mg/kg	0.0218 J
Aroclor 1260	11096-82-5		0.1	mg/kg	0.0568 U
Aroclor 1262	37324-23-5		0.1	mg/kg	0.0568 U
Aroclor 1268	11100-14-4		0.1	mg/kg	0.0568 U
PCBs, Total	1336-36-3		0.1	mg/kg	0.0218 J
TCLP Metals					
Arsenic, TCLP	7440-38-2	5		mg/l	1 U
	7440-39-3				0.422 J
Barium, TCLP		100		mg/l	
Cadmium, TCLP Chromium, TCLP	7440-43-9 7440-47-3	5		mg/l	0.1 U 0.2 U
		5		mg/l	
Lead, TCLP	7439-92-1			mg/l	0.0742 J
Mercury, TCLP	7439-97-6	0.2		mg/l	0.001 U
Selenium, TCLP	7782-49-2	1 7		mg/l	0.5 U
Silver, TCLP	7440-22-4	5		mg/l	0.1 U
TCLP Semivolatiles					
Hexachlorobenzene	118-74-1	0.13	0.33	mg/l	0.01 U
2,4-Dinitrotoluene	121-14-2	0.13		mg/l	0.025 U
Hexachlorobutadiene	87-68-3	0.5		mg/l	0.01 U
Hexachloroethane	67-72-1	3		mg/l	0.01 U
Nitrobenzene	98-95-3	2		mg/l	0.01 U
2,4,6-Trichlorophenol	88-06-2	2		mg/l	0.025 U
Pentachlorophenol	87-86-5	100	0.8	mg/l	0.05 U
2-Methylphenol	95-48-7	200	0.33	mg/l	0.025 U
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	200	0.33	mg/l	0.025 U
2,4,5-Trichlorophenol	95-95-4	400	0.00	mg/l	0.025 U
Pyridine	110-86-1	5		mg/l	0.018 U
				g	
TCLP Volatiles					
Chloroform	67-66-3	6	0.37	mg/l	0.0075 U
Carbon tetrachloride	56-23-5	0.5	0.76	mg/l	0.005 U
Tetrachloroethene	127-18-4	0.7	1.3	mg/l	0.005 U
Chlorobenzene	108-90-7	100	1.1	mg/l	0.005 U
1,2-Dichloroethane	107-06-2	0.5	0.02	mg/l	0.005 U
Benzene	71-43-2	0.5	0.06	mg/l	0.005 U
Vinyl chloride	75-01-4	0.2	0.02	mg/l	0.01 U
1,1-Dichloroethene	75-35-4	0.7	0.33	mg/l	0.005 U
Trichloroethene	79-01-6	0.5	0.47	mg/l	0.005 U
1,4-Dichlorobenzene	106-46-7	7.5	1.8	mg/l	0.025 U

Sample Designation: WC-1 Sample Date: 8/9/2023

Sample Type: Waste Characterization

 Parameter
 CasNum
 EPA-TCLP
 NY-UNRES
 Units
 Results

 2-Butanone
 78-93-3
 200
 0.12
 mg/l
 0.05 U

Legend:	
Cas Num	Chemical Abstract Service Registry Number
EPA-TCLP	EPA Toxicity Characteristic Criteria
J	Estimated concentration
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NY-UNRES	Part 375 Unrestricted Use Criteria
shaded	Concentration exceeds NY-UNRES
U	Not detected above reported detection limit

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDICES**

- A. Daily Status Reports
- B. Laboratory Analytical Data Quarry Process Backfill
- C. Laboratory Analytical Data Waste Characterization Sample
- D. Waste Manifests

1258.0001Y004.204/APB-CVRS ROUX

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDIX A**

**Daily Status Reports** 

1258.0001Y004.204/APB-CVRS ROUX

### **DAILY STATUS REPORT**

Prepared By: Christine Mosley

,	WEATHER	Snow	Rain	Overcast	Partly Cloudy	Х	Bright Sun	
	TEMP.	< 32	32-50	50-70	70-85	X	>85	

BCP Project No.:	C243033			Date:	8/8/2023
Project Name:	Coral Island Sho	pping Center – Sewer I	Replacement		

Consultant:	Site Oversight: Christine Mosley, Roux Environmental
General Contractor:	Site Manager/ Supervisor:
Carmine's Mechanical, Inc.	Helen Vitaliano, Rivercrest Realty

### Work Activities Performed:

- Excavated a 38' x 5' x 42" trench.
- Placed excavated soil into Aarco roll-off containers.
- Place and connect the new sewer line pipe into trench.
- Backfilled with crushed rock and QP and paved trench.

Samples Collected (Since Last Report):

## Air Monitoring (Since Last Report):

CAMP was conducted from 06:40 to 14:40. The CAMP station location was chosen based on wind direction, accessibility, and safety. The CAMP station was located downwind of any subsurface, intrusive work. The maximum concentration of VOCs was 0.7 parts per million (ppm). The maximum concentration for dust was 0.039 milligrams per cubic meter (mg/m³).

Problems Encountered:

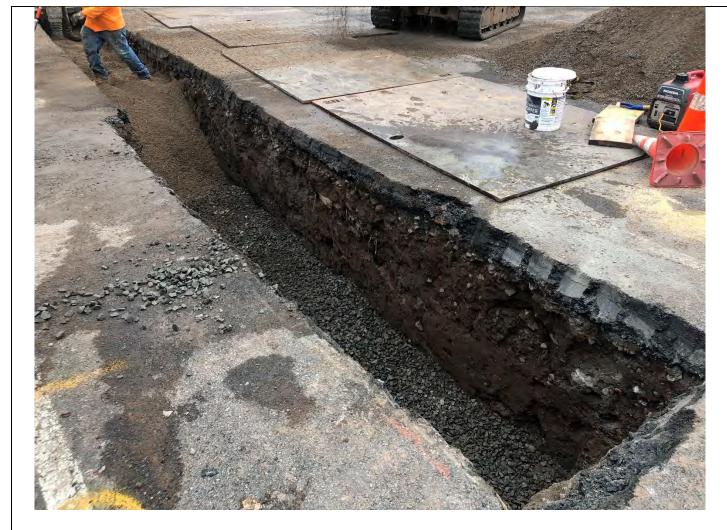
No problems encountered.

Planned Activities for the Next Day/ Week:

Remobilize to a second area where there will be a second sewer replacement.



Photo 1: Looking southwest. View of CAMP station downwind of active excavation work.



**Photo 2:** View of stone placed as bedding in trench.



**Photo 3:** Looking south. View of Carmine wet saw cutting second trench in preparation for excavation the following day.



**Photo 4:** Looking southeast. View of Carmine placing and compacting asphalt.



### **DAILY STATUS REPORT**

Prepared By: Christine Mosley

WEATHER	Snow	Rain	Overcast	Partly Cloudy	Bright Sun	X
TEMP.	< 32	32-50	50-70	70-85	>85	х

BCP Project No.:	C243033			Date:	8/9/2023
Project Name:	Coral Island Sho	pping Center – Sewer I	Replacement		

Consultant:	Site Oversight: Christine Mosley, Roux Environmental
General Contractor: Carmine's Mechanical, Inc.	Site Manager/ Supervisor: Helen Vitaliano, Rivercrest Realty
,	, , , , , , , , , , , , , , , , , , , ,

## Work Activities Performed:

- Excavated a 51' x 32" x 30" trench.
- Placed excavated soil into Aarco roll-off containers.
- Place and connect the new sewer line pipe into trench.
- Backfilled with crushed stone and QP and paved trench.

## Samples Collected (Since Last Report):

• Waste characterization samples: WC-1 and IS-1.

## Air Monitoring (Since Last Report):

CAMP was conducted from 06:15 to 12:30. The CAMP station location was chosen based on wind direction, accessibility, and safety. The CAMP station was located downwind of any subsurface, intrusive work. The maximum concentration of VOCs was 0.8 parts per million (ppm). The maximum concentration for dust was 0.047 milligrams per cubic meter (mg/m³).

### Problems Encountered:

No problems encountered.

## Planned Activities for the Next Day/ Week:

• Export roughly 40 Cubic Yards (CY) of soil off-Site.



**Photo 1:** Looking east. View of beginning of excavation for second sewer line replacement.



Photo 2: Looking east. View of new sewer line piping placed inside of trench.



**Photo 3:** Looking west. View of new sewer piping with backfilled material and workers compacting material.



**Photo 4:** Looking west. View of finished work zone.



# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDIX B**

Laboratory Analytical Data - Quarry Process Backfill

1258.0001Y004.204/APB-CVRS ROUX



### ANALYTICAL REPORT

Lab Number: L2346033

Client: Roux Env. Eng. & Geology, DPC

209 Shafter Street

Islandia, NY 11749-5074

ATTN: Stephen Loonie
Phone: (631) 630-2379
Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Report Date: 08/23/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

Alpha Sample ID Client ID Matrix Sample Location Collection Date/Time Receive Date

L2346033-01 IS-1 SOIL 1650 RICHMOND AVE. STATEN ISLAND, 08/09/23 09:30 08/09/23 NY 10314



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

#### **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:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

### **Case Narrative (continued)**

Report Submission

August 23, 2023: This final report includes the results of all requested analyses.

August 16, 2023: 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

L2346033-01: The surrogate recovery is below the acceptance criteria for dibromofluoromethane (29%), possibly due to the matrix effect caused by the high pH of the sample (>10).

L2346033-01: The sample was received in appropriate containers (encores) for the Volatile Organics by EPA Method 5035/8260 analysis; however, they could not be used for analysis. With the client's authorization, a sample aliquot was taken from an unpreserved container (jar) and preserved appropriately. 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.

### Semivolatile Organics

L2346033-01: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (5%) and 2,4,6-tribromophenol (5%); however, re-extraction achieved similar results: 2-fluorophenol (2%) and 2,4,6-tribromophenol (1%). Only the results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

#### **Total Metals**

L2346033-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

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

Leley Melf Kelly O'Neill



Date: 08/23/23

# **ORGANICS**



# **VOLATILES**



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 08/15/23 17:40

Analyst: LAC Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
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	0.16	J	ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	stborough Lab					
Trichloroethene	ND		ua/ka	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg ug/kg	2.3	0.10	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.19	1
p/m-Xylene	ND			2.3	0.64	1
o-Xylene	ND		ug/kg 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	0.10	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND			11	1.0	1
Acetone	57		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	5.4	J	ug/kg	11	2.5	1
	ND	J	ug/kg			
Vinyl acetate  4-Methyl-2-pentanone	ND ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND ND		ug/kg	2.3	0.14	1
2-Hexanone	ND ND		ug/kg	11	1.3	1
Bromochloromethane	ND ND		ug/kg	2.3	0.23	
	ND ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane			ug/kg			
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	6.2		ug/kg	4.6	0.74	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low	- Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	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	0.49	J	ug/kg	2.3	0.38	1	
1,4-Dioxane	ND		ug/kg	91	40.	1	
p-Diethylbenzene	0.42	J	ug/kg	2.3	0.20	1	
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1	
1,2,4,5-Tetramethylbenzene	0.52	J	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	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	110		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	110		70-130	
Dibromofluoromethane	29	Q	70-130	



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D Analytical Date: 08/15/23 09:57

Analyst: AJK

Parameter	Result	Qualifier	Units	RL		MDL	
olatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	01	Batch:	WG1816575-5	
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:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D Analytical Date: 08/15/23 09:57

Analyst: AJK

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035 Low	- Westboro	ough Lab for	sample(s):	01	Batch:	WG1816575-5
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



L2346033

**Project Name:** Lab Number: CORAL ISLAND **Project Number:** 1258.0001Y

Report Date: 08/23/23

# Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D Analytical Date: 08/15/23 09:57

Analyst: AJK

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	01	Batch:	WG1816575-5
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 Qua	-				
1,2-Dichloroethane-d4	107	70-130				
Toluene-d8	97	70-130				
4-Bromofluorobenzene	110	70-130				
Dibromofluoromethane	94	70-130				



# Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

**Report Date:** 08/23/23

arameter	LCS %Recovery		CSD covery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westl	oorough Lab Ass	ociated sample(s): (	01 Batch:	WG1816575-3 WG181657	75-4	
Methylene chloride	100		91	70-130	9	30
1,1-Dichloroethane	115		106	70-130	8	30
Chloroform	103		94	70-130	9	30
Carbon tetrachloride	91		85	70-130	7	30
1,2-Dichloropropane	114		104	70-130	9	30
Dibromochloromethane	96		88	70-130	9	30
1,1,2-Trichloroethane	102		93	70-130	9	30
Tetrachloroethene	84		80	70-130	5	30
Chlorobenzene	91		84	70-130	8	30
Trichlorofluoromethane	93		87	70-139	7	30
1,2-Dichloroethane	109		98	70-130	11	30
1,1,1-Trichloroethane	101		93	70-130	8	30
Bromodichloromethane	104		95	70-130	9	30
trans-1,3-Dichloropropene	98		89	70-130	10	30
cis-1,3-Dichloropropene	109		99	70-130	10	30
1,1-Dichloropropene	109		100	70-130	9	30
Bromoform	89		79	70-130	12	30
1,1,2,2-Tetrachloroethane	109		93	70-130	16	30
Benzene	106		97	70-130	9	30
Toluene	92		86	70-130	7	30
Ethylbenzene	94		88	70-130	7	30
Chloromethane	122		109	52-130	11	30
Bromomethane	100		98	57-147	2	30



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - West	tborough Lab Ass	sociated sample(s	s): 01 Batch:	WG1816575-3 WG181657	75-4	
Vinyl chloride	103		93	67-130	10	30
Chloroethane	120		111	50-151	8	30
1,1-Dichloroethene	102		95	65-135	7	30
trans-1,2-Dichloroethene	103		96	70-130	7	30
Trichloroethene	103		98	70-130	5	30
1,2-Dichlorobenzene	88		81	70-130	8	30
1,3-Dichlorobenzene	88		82	70-130	7	30
1,4-Dichlorobenzene	88		82	70-130	7	30
Methyl tert butyl ether	124		109	66-130	13	30
p/m-Xylene	90		84	70-130	7	30
o-Xylene	90		84	70-130	7	30
cis-1,2-Dichloroethene	103		94	70-130	9	30
Dibromomethane	102		92	70-130	10	30
Styrene	89		83	70-130	7	30
Dichlorodifluoromethane	86		96	30-146	11	30
Acetone	141	Q	118	54-140	18	30
Carbon disulfide	99		92	59-130	7	30
2-Butanone	145	Q	119	70-130	20	30
Vinyl acetate	117		87	70-130	29	30
4-Methyl-2-pentanone	128		110	70-130	15	30
1,2,3-Trichloropropane	106		93	68-130	13	30
2-Hexanone	135	Q	116	70-130	15	30
Bromochloromethane	103		93	70-130	10	30



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample	e(s): 01 Batch:	: WG1816575-3 WG181657	75-4	
2,2-Dichloropropane	96		88	70-130	9	30
1,2-Dibromoethane	100		89	70-130	12	30
1,3-Dichloropropane	100		91	69-130	9	30
1,1,1,2-Tetrachloroethane	92		85	70-130	8	30
Bromobenzene	87		80	70-130	8	30
n-Butylbenzene	92		86	70-130	7	30
sec-Butylbenzene	92		87	70-130	6	30
tert-Butylbenzene	91		85	70-130	7	30
o-Chlorotoluene	92		85	70-130	8	30
p-Chlorotoluene	94		88	70-130	7	30
1,2-Dibromo-3-chloropropane	93		81	68-130	14	30
Hexachlorobutadiene	84		78	67-130	7	30
Isopropylbenzene	92		86	70-130	7	30
p-Isopropyltoluene	91		85	70-130	7	30
Naphthalene	100		90	70-130	11	30
Acrylonitrile	148	Q	127	70-130	15	30
n-Propylbenzene	96		90	70-130	6	30
1,2,3-Trichlorobenzene	77		71	70-130	8	30
1,2,4-Trichlorobenzene	89		83	70-130	7	30
1,3,5-Trimethylbenzene	93		87	70-130	7	30
1,2,4-Trimethylbenzene	94		87	70-130	8	30
1,4-Dioxane	125		104	65-136	18	30
p-Diethylbenzene	92		86	70-130	7	30



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery	Qual	LCSD %Recovery	9 Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Wes	tborough Lab Asso	ciated sample	e(s): 01 Batch	: WG1816575	5-3 WG181657	75-4		
p-Ethyltoluene	96		89		70-130	8		30
1,2,4,5-Tetramethylbenzene	97		90		70-130	7		30
Ethyl ether	127		113		67-130	12		30
trans-1,4-Dichloro-2-butene	120		106		70-130	12		30

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	
1,2-Dichloroethane-d4	108	105	70-130	
Toluene-d8	97	97	70-130	
4-Bromofluorobenzene	109	110	70-130	
Dibromofluoromethane	101	99	70-130	



#### **SEMIVOLATILES**



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8270E Extraction Date: 08/11/23 08:14
Analytical Date: 08/12/23 09:31

Analyst: JG Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	stborough Lab						
Acenaphthene	120	J	ug/kg	140	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	1200		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	140	29.	1	
Isophorone	ND		ug/kg	160	24.	1	
Naphthalene	170	J	ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	140	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	82	J	ug/kg	180	63.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	ND		ug/kg	180	34.	1	
Di-n-octylphthalate	ND		ug/kg	180	62.	1	



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	520		ug/kg	110	20.	1
Benzo(a)pyrene	410		ug/kg	140	44.	1
Benzo(b)fluoranthene	500		ug/kg	110	30.	1
Benzo(k)fluoranthene	190		ug/kg	110	29.	1
Chrysene	530		ug/kg	110	19.	1
Acenaphthylene	55	J	ug/kg	140	28.	1
Anthracene	320		ug/kg	110	35.	1
Benzo(ghi)perylene	250		ug/kg	140	21.	1
Fluorene	160	J	ug/kg	180	18.	1
Phenanthrene	1100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	64	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	270		ug/kg	140	25.	1
Pyrene	1000		ug/kg	110	18.	1
Biphenyl	24	J	ug/kg	410	24.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	110	J	ug/kg	180	17.	1
2-Methylnaphthalene	90	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	140	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	5	Q	25-120
Phenol-d6	22		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	5	Q	10-136
4-Terphenyl-d14	72		18-120



**Project Name:** CORAL ISLAND **Project Number:** 

1258.0001Y

Lab Number:

Report Date:

L2346033 08/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8270E

08/10/23 21:30

Extraction Method: EPA 3546 08/10/23 09:15 **Extraction Date:** 

Analyst: CMM

arameter	Result	Qualifier Uni	its	RL	MDL
emivolatile Organics by GC/M	S - Westboroug	h Lab for samp	le(s): 01	Batch:	WG1814257-1
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	26.
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.



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number:

L2346033

**Report Date:** 08/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E Analytical Date: 08/10/23 21:30

Analyst: CMM

Extraction Method: EPA 3546
Extraction Date: 08/10/23 09:15

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	01	Batch:	WG1814257-1	
Dimethyl phthalate	ND		ug/kg		160	35.	
Benzo(a)anthracene	ND		ug/kg		99	19.	
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	26.	
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	22.	
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.	
2,4,6-Trichlorophenol	ND		ug/kg		99	31.	
p-Chloro-m-cresol	ND		ug/kg		160	25.	
2-Chlorophenol	ND		ug/kg		160	20.	
2,4-Dichlorophenol	ND		ug/kg		150	27.	
2,4-Dimethylphenol	ND		ug/kg		160	55.	
2-Nitrophenol	ND		ug/kg		360	62.	



L2346033

**Project Name: CORAL ISLAND** 

Report Date: 1258.0001Y

08/23/23

Lab Number:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E Analytical Date: 08/10/23 21:30

Analyst: CMM

**Project Number:** 

Extraction Method: EPA 3546 08/10/23 09:15 **Extraction Date:** 

arameter	Result	Qualifier	Units		RL	MDL
emivolatile Organics by GC/MS	- Westborough	Lab for sa	ımple(s):	01	Batch:	WG1814257-1
4-Nitrophenol	ND		ug/kg		230	68.
2,4-Dinitrophenol	ND		ug/kg		790	77.
4,6-Dinitro-o-cresol	ND		ug/kg		430	79.
Pentachlorophenol	ND		ug/kg		130	36.
Phenol	ND		ug/kg		160	25.
2-Methylphenol	ND		ug/kg		160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg		240	26.
2,4,5-Trichlorophenol	ND		ug/kg		160	32.
Benzoic Acid	ND		ug/kg		540	170
Benzyl Alcohol	ND		ug/kg		160	51.
Carbazole	ND		ug/kg		160	16.
1,4-Dioxane	ND		ug/kg		25	7.6

Surrogate	%Recovery Qua	Acceptance Ilifier Criteria
2-Fluorophenol	71	25-120
Phenol-d6	71	10-120
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	70	30-120
2,4,6-Tribromophenol	85	10-136
4-Terphenyl-d14	78	18-120



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS	- Westborough Lab Assoc	iated sample(s):	01 Batch:	WG1814257-2	2 WG1814257-3			
Acenaphthene	74		68		31-137	8	50	
1,2,4-Trichlorobenzene	76		69		38-107	10	50	
Hexachlorobenzene	80		74		40-140	8	50	
Bis(2-chloroethyl)ether	77		70		40-140	10	50	
2-Chloronaphthalene	79		72		40-140	9	50	
1,2-Dichlorobenzene	75		69		40-140	8	50	
1,3-Dichlorobenzene	74		69		40-140	7	50	
1,4-Dichlorobenzene	75		70		28-104	7	50	
3,3'-Dichlorobenzidine	67		60		40-140	11	50	
2,4-Dinitrotoluene	91		80		40-132	13	50	
2,6-Dinitrotoluene	88		81		40-140	8	50	
Fluoranthene	81		73		40-140	10	50	
4-Chlorophenyl phenyl ether	77		70		40-140	10	50	
4-Bromophenyl phenyl ether	79		74		40-140	7	50	
Bis(2-chloroisopropyl)ether	77		71		40-140	8	50	
Bis(2-chloroethoxy)methane	79		71		40-117	11	50	
Hexachlorobutadiene	76		69		40-140	10	50	
Hexachlorocyclopentadiene	79		71		40-140	11	50	
Hexachloroethane	74		70		40-140	6	50	
Isophorone	78		71		40-140	9	50	
Naphthalene	78		76		40-140	3	50	
Nitrobenzene	82		74		40-140	10	50	
NDPA/DPA	80		73		36-157	9	50	



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery	Qual	LCSD %Recovery		Recovery Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westb	orough Lab Associ	iated sample(s):	01 Batch:	WG1814257-2	WG1814257-3		
n-Nitrosodi-n-propylamine	79		72		32-121	9	50
Bis(2-ethylhexyl)phthalate	87		79		40-140	10	50
Butyl benzyl phthalate	92		82		40-140	11	50
Di-n-butylphthalate	85		75		40-140	13	50
Di-n-octylphthalate	91		84		40-140	8	50
Diethyl phthalate	81		73		40-140	10	50
Dimethyl phthalate	79		72		40-140	9	50
Benzo(a)anthracene	80		73		40-140	9	50
Benzo(a)pyrene	88		81		40-140	8	50
Benzo(b)fluoranthene	80		75		40-140	6	50
Benzo(k)fluoranthene	82		74		40-140	10	50
Chrysene	81		74		40-140	9	50
Acenaphthylene	80		72		40-140	11	50
Anthracene	83		73		40-140	13	50
Benzo(ghi)perylene	80		73		40-140	9	50
Fluorene	80		72		40-140	11	50
Phenanthrene	79		72		40-140	9	50
Dibenzo(a,h)anthracene	80		72		40-140	11	50
Indeno(1,2,3-cd)pyrene	81		74		40-140	9	50
Pyrene	81		73		35-142	10	50
Biphenyl	71		65		37-127	9	50
4-Chloroaniline	68		58		40-140	16	50
2-Nitroaniline	94		86		47-134	9	50



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

arameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - West	tborough Lab Associated sample	(s): 01 Batch:	WG1814257-2 WG1814257-3	3	
3-Nitroaniline	84	76	26-129	10	50
4-Nitroaniline	89	81	41-125	9	50
Dibenzofuran	80	72	40-140	11	50
2-Methylnaphthalene	81	73	40-140	10	50
1,2,4,5-Tetrachlorobenzene	71	65	40-117	9	50
Acetophenone	70	64	14-144	9	50
2,4,6-Trichlorophenol	85	78	30-130	9	50
p-Chloro-m-cresol	86	79	26-103	8	50
2-Chlorophenol	83	75	25-102	10	50
2,4-Dichlorophenol	83	76	30-130	9	50
2,4-Dimethylphenol	84	76	30-130	10	50
2-Nitrophenol	92	85	30-130	8	50
4-Nitrophenol	92	86	11-114	7	50
2,4-Dinitrophenol	75	74	4-130	1	50
4,6-Dinitro-o-cresol	89	79	10-130	12	50
Pentachlorophenol	83	75	17-109	10	50
Phenol	82	75	26-90	9	50
2-Methylphenol	82	75	30-130.	9	50
3-Methylphenol/4-Methylphenol	81	75	30-130	8	50
2,4,5-Trichlorophenol	86	78	30-130	10	50
Benzoic Acid	31	40	10-110	25	50
Benzyl Alcohol	83	75	40-140	10	50
Carbazole	82	74	54-128	10	50



**Project Name:** CORAL ISLAND

Lab Number:

L2346033

**Project Number:** 1258.0001Y Report Date:

08/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associat	ed sample(s):	01 Batch:	WG1814257-2	WG1814257-3			
1,4-Dioxane	55		54		40-140	2		50

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	75	70	25-120
Phenol-d6	75	68	10-120
Nitrobenzene-d5	76	69	23-120
2-Fluorobiphenyl	71	65	30-120
2,4,6-Tribromophenol	77	72	10-136
4-Terphenyl-d14	72	65	18-120



#### **PCBS**



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: IS-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 08/11/23 08:16

Analytical Date: 08/12/23 03:28 Cleanup Method: EPA 3665A
Analyst: MEO Cleanup Date: 08/11/23

Percent Solids: 90% Cleanup Method: EPA 3660B Cleanup Date: 08/11/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	54.4	4.83	1	Α			
Aroclor 1221	ND		ug/kg	54.4	5.45	1	Α			
Aroclor 1232	ND		ug/kg	54.4	11.5	1	Α			
Aroclor 1242	ND		ug/kg	54.4	7.33	1	А			
Aroclor 1248	ND		ug/kg	54.4	8.16	1	Α			
Aroclor 1254	18.0	J	ug/kg	54.4	5.95	1	Α			
Aroclor 1260	ND		ug/kg	54.4	10.0	1	В			
Aroclor 1262	ND		ug/kg	54.4	6.91	1	Α			
Aroclor 1268	ND		ug/kg	54.4	5.64	1	Α			
PCBs, Total	18.0	J	ug/kg	54.4	4.83	1	В			

Surragata	0/ <b>D</b> anassam	Ovelities	Acceptance	0 - 1
Surrogate	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	Α
Decachlorobiphenyl	53		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	65		30-150	В
Decachlorobiphenyl	56		30-150	В



L2346033

**Project Name: CORAL ISLAND** 

**Report Date: Project Number:** 1258.0001Y 08/23/23

Lab Number:

**Method Blank Analysis Batch Quality Control** 

Analytical Method: 1,8082A Analytical Date: 08/10/23 23:21

Analyst: ΑD

Extraction Method: EPA 3546 08/10/23 10:35 **Extraction Date:** Cleanup Method: EPA 3665A Cleanup Date: 08/10/23 Cleanup Method: EPA 3660B Cleanup Date: 08/10/23

Parameter	Result	Qualifier	Units	F	RL	MDL	Column
Polychlorinated Biphenyls by GC -	Westborougl	n Lab for s	ample(s):	01	Batch:	WG181430	3-1
Aroclor 1016	ND		ug/kg	45	5.7	4.06	А
Aroclor 1221	ND		ug/kg	45	5.7	4.58	Α
Aroclor 1232	ND		ug/kg	45	5.7	9.69	Α
Aroclor 1242	ND		ug/kg	45	5.7	6.16	А
Aroclor 1248	ND		ug/kg	45	5.7	6.86	А
Aroclor 1254	ND		ug/kg	45	5.7	5.00	А
Aroclor 1260	ND		ug/kg	45	5.7	8.45	А
Aroclor 1262	ND		ug/kg	45	5.7	5.80	Α
Aroclor 1268	ND		ug/kg	45	5.7	4.73	Α
PCBs, Total	ND		ug/kg	45	5.7	4.06	Α

		Acceptano	e
Surrogate	%Recovery Qualifie	r Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69	30-150	Α
Decachlorobiphenyl	61	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	62	30-150	В
Decachlorobiphenyl	55	30-150	В



**Project Name:** CORAL ISLAND

**Project Number:** 

1258.0001Y

Lab Number:

L2346033

Report Date:

08/23/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	% Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westbo	rough Lab Associa	ated sample(s):	01 Batch:	WG1814303-2	WG1814303-3				
Aroclor 1016	70		74		40-140	6		50	А
Aroclor 1260	66		71		40-140	7		50	Α

Surrogate	LCS %Recovery Qu	LCSD nal %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	69	74	30-150 A
Decachlorobiphenyl	61	68	30-150 A
2,4,5,6-Tetrachloro-m-xylene	63	68	30-150 B
Decachlorobiphenyl	56	62	30-150 B

#### **PESTICIDES**



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: IS-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 08/11/23 08:18

Analytical Date: 08/12/23 14:39 Cleanup Method: EPA 3620B
Analyst: AR Cleanup Date: 08/12/23

Percent Solids: 90% Cleanup Method: EPA 3660B Cleanup Date: 08/12/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - W	/estborough Lab						
Delta-BHC	ND		ug/kg	1.74	0.342	1	А
Lindane	ND		ug/kg	0.727	0.325	1	Α
Alpha-BHC	ND		ug/kg	0.727	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.661	1	Α
Heptachlor	0.549	JIP	ug/kg	0.872	0.391	1	В
Aldrin	ND		ug/kg	1.74	0.614	1	В
Heptachlor epoxide	1.17	J	ug/kg	3.27	0.981	1	Α
Endrin	ND		ug/kg	0.727	0.298	1	Α
Endrin aldehyde	ND		ug/kg	2.18	0.763	1	Α
Endrin ketone	ND		ug/kg	1.74	0.449	1	Α
Dieldrin	ND		ug/kg	1.09	0.545	1	Α
4,4'-DDE	1.66	J	ug/kg	1.74	0.403	1	Α
4,4'-DDD	ND		ug/kg	1.74	0.622	1	Α
4,4'-DDT	3.84		ug/kg	1.74	1.40	1	В
Endosulfan I	ND		ug/kg	1.74	0.412	1	Α
Endosulfan II	ND		ug/kg	1.74	0.583	1	Α
Endosulfan sulfate	ND		ug/kg	0.727	0.346	1	Α
Methoxychlor	ND		ug/kg	3.27	1.02	1	Α
Toxaphene	ND		ug/kg	32.7	9.16	1	Α
cis-Chlordane	9.36	IP	ug/kg	2.18	0.608	1	В
trans-Chlordane	15.1		ug/kg	2.18	0.576	1	Α
Chlordane	84.4		ug/kg	14.5	5.78	1	В



Project Name: CORAL ISLAND Lab Number: L2346033

**Project Number:** 1258.0001Y **Report Date:** 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	Α
Decachlorobiphenyl	64		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	65		30-150	В
Decachlorobiphenyl	92		30-150	В



L2346033

Project Name: CORAL ISLAND Lab Number:

Project Number: 1258.0001Y Report Date: 08/23/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 08/11/23 09:23

Analyst: AKM

Extraction Method: EPA 3546
Extraction Date: 08/10/23 11:30
Cleanup Method: EPA 3620B
Cleanup Date: 08/11/23
Cleanup Method: EPA 3660B
Cleanup Date: 08/11/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC	- Westboroug	h Lab for	sample(s):	01 Batch:	WG1814338	i-1
Delta-BHC	ND		ug/kg	1.54	0.301	Α
Lindane	ND		ug/kg	0.641	0.286	Α
Alpha-BHC	ND		ug/kg	0.641	0.182	Α
Beta-BHC	ND		ug/kg	1.54	0.583	Α
Heptachlor	ND		ug/kg	0.769	0.345	Α
Aldrin	ND		ug/kg	1.54	0.542	Α
Heptachlor epoxide	ND		ug/kg	2.88	0.865	Α
Endrin	ND		ug/kg	0.641	0.263	Α
Endrin aldehyde	ND		ug/kg	1.92	0.673	Α
Endrin ketone	ND		ug/kg	1.54	0.396	Α
Dieldrin	ND		ug/kg	0.962	0.481	Α
4,4'-DDE	ND		ug/kg	1.54	0.356	Α
4,4'-DDD	ND		ug/kg	1.54	0.549	Α
4,4'-DDT	ND		ug/kg	1.54	1.24	Α
Endosulfan I	ND		ug/kg	1.54	0.363	Α
Endosulfan II	ND		ug/kg	1.54	0.514	Α
Endosulfan sulfate	ND		ug/kg	0.641	0.305	Α
Methoxychlor	ND		ug/kg	2.88	0.897	Α
Toxaphene	ND		ug/kg	28.8	8.08	Α
cis-Chlordane	ND		ug/kg	1.92	0.536	Α
trans-Chlordane	ND		ug/kg	1.92	0.508	Α
Chlordane	ND		ug/kg	12.8	5.10	Α



Project Name: CORAL ISLAND Lab Number: L2346033

Project Number: 1258.0001Y Report Date: 08/23/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 08/11/23 09:23

Analyst: AKM

Extraction Method: EPA 3546
Extraction Date: 08/10/23 11:30
Cleanup Method: EPA 3620B
Cleanup Date: 08/11/23
Cleanup Method: EPA 3660B
Cleanup Date: 08/11/23

ParameterResultQualifierUnitsRLMDLColumnOrganochlorine Pesticides by GC - Westborough Lab for sample(s):01Batch:WG1814338-1

		Acceptar	ice
Surrogate	%Recovery Qua	alifier Criteria	a Column
2.4.5.6. Tatrachlara mundana	60	20.450	Δ
2,4,5,6-Tetrachloro-m-xylene	62	30-150	Α
Decachlorobiphenyl	82	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	61	30-150	В
Decachlorobiphenyl	75	30-150	В



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - We	estborough Lab Associ	ated sample(s	): 01 Batch:	WG1814338-	2 WG1814338-	3			
Delta-BHC	84		83		30-150	1		30	А
Lindane	73		72		30-150	1		30	А
Alpha-BHC	71		70		30-150	1		30	А
Beta-BHC	76		76		30-150	0		30	А
Heptachlor	78		78		30-150	0		30	А
Aldrin	74		72		30-150	3		30	А
Heptachlor epoxide	66		65		30-150	2		30	Α
Endrin	81		78		30-150	4		30	А
Endrin aldehyde	61		60		30-150	2		30	А
Endrin ketone	80		80		30-150	0		30	Α
Dieldrin	82		80		30-150	2		30	Α
4,4'-DDE	79		77		30-150	3		30	А
4,4'-DDD	85		82		30-150	4		30	А
4,4'-DDT	88		84		30-150	5		30	А
Endosulfan I	75		74		30-150	1		30	А
Endosulfan II	80		78		30-150	3		30	Α
Endosulfan sulfate	63		64		30-150	2		30	А
Methoxychlor	86		82		30-150	5		30	А
cis-Chlordane	69		66		30-150	4		30	А
trans-Chlordane	85		82		30-150	4		30	А



Project Name: CORAL ISLAND

Lab Number:

L2346033

Project Number: 1

1258.0001Y

Report Date:

08/23/23

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1814338-2 WG1814338-3

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	65	63	30-150 A
Decachlorobiphenyl	93	90	30-150 A
2,4,5,6-Tetrachloro-m-xylene	62	58	30-150 B
Decachlorobiphenyl	78	73	30-150 B



#### **METALS**



08/09/23 09:30

Date Collected:

Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

SAMPLE RESULTS

Lab ID: L2346033-01

Client ID: Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY Field Prep: Not Specified

10314

Sample Depth:

Matrix: Soil Percent Solids: 90%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 7480 mg/kg 8.56 2.31 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB J 2 1,6010D DMB Antimony, Total 1.20 mg/kg 4.28 0.325 08/11/23 00:40 08/22/23 08:57 EPA 3050B Arsenic, Total 4.31 mg/kg 0.856 0.178 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB 2 Barium, Total 53.3 0.856 0.149 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB mg/kg 0.028 2 1,6010D DMB Beryllium, Total 0.495 mg/kg 0.428 08/11/23 00:40 08/22/23 08:57 EPA 3050B J 2 0.084 1,6010D DMB Cadmium, Total 0.108 mg/kg 0.856 08/11/23 00:40 08/22/23 08:57 EPA 3050B 08/11/23 00:40 08/22/23 09:11 EPA 3050B Calcium, Total 87300 85.6 30.0 20 1,6010D mg/kg **DMB** 2 1,6010D 35.8 0.856 0.082 08/11/23 00:40 08/22/23 08:57 EPA 3050B **DMB** Chromium, Total mg/kg 2 1,6010D Cobalt, Total 4.44 mg/kg 1.71 0.142 08/11/23 00:40 08/22/23 08:57 EPA 3050B **DMB** 1,6010D Copper, Total 23.2 0.856 0.221 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B **DMB** mg/kg 2 1,6010D DMB Iron, Total 11100 4.28 0.773 08/11/23 00:40 08/22/23 08:57 EPA 3050B mg/kg 2 1,6010D Lead, Total 20.4 mg/kg 4.28 0.230 08/11/23 00:40 08/22/23 08:57 EPA 3050B **DMB** Magnesium, Total 9470 8.56 1.32 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D **DMB** mg/kg 0.856 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D **DMB** Manganese, Total 198 mg/kg 0.136 Mercury, Total ND mg/kg 0.077 0.050 1 08/11/23 02:00 08/23/23 11:57 EPA 7471B 1,7471B **MJR** Nickel, Total 11.6 0.207 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D **DMB** mg/kg 2.14 2 1,6010D **DMB** Potassium, Total 1190 mg/kg 214 12.3 08/11/23 00:40 08/22/23 08:57 EPA 3050B Selenium, Total ND mg/kg 1.71 0.221 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D **DMB** Silver, Total ND mg/kg 0.428 0.242 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D **DMB** Sodium, Total 455 mg/kg 171 2.70 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB Thallium, Total ND mg/kg 1.71 0.270 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB Vanadium, Total 2 08/11/23 00:40 08/22/23 08:57 EPA 3050B 1,6010D DMB 21.1 mg/kg 0.856 0.174 2 1,6010D 48.9 4.28 0.251 DMB Zinc, Total mg/kg 08/11/23 00:40 08/22/23 08:57 EPA 3050B



L2346033

Project Name: CORAL ISLAND
Project Number: 1258.0001Y

01Y Report Date

**Report Date:** 08/23/23

Lab Number:

# Method Blank Analysis Batch Quality Control

Parameter	Result Qualific	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sample(	s): 01 Batcl	h: WG18	314439-	1				
Aluminum, Total	ND	mg/kg	4.00	1.08	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Antimony, Total	ND	mg/kg	2.00	0.152	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Arsenic, Total	ND	mg/kg	0.400	0.083	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Barium, Total	ND	mg/kg	0.400	0.070	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Beryllium, Total	ND	mg/kg	0.200	0.013	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Cadmium, Total	ND	mg/kg	0.400	0.039	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Calcium, Total	ND	mg/kg	4.00	1.40	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Chromium, Total	ND	mg/kg	0.400	0.038	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Cobalt, Total	0.109 J	mg/kg	0.800	0.066	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Copper, Total	ND	mg/kg	0.400	0.103	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Iron, Total	ND	mg/kg	2.00	0.361	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Lead, Total	ND	mg/kg	2.00	0.107	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Magnesium, Total	ND	mg/kg	4.00	0.616	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Manganese, Total	ND	mg/kg	0.400	0.064	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Nickel, Total	ND	mg/kg	1.00	0.097	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Potassium, Total	ND	mg/kg	100	5.76	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Selenium, Total	ND	mg/kg	0.800	0.103	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Silver, Total	ND	mg/kg	0.200	0.113	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Sodium, Total	ND	mg/kg	80.0	1.26	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Thallium, Total	0.305 J	mg/kg	0.800	0.126	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Vanadium, Total	ND	mg/kg	0.400	0.081	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW
Zinc, Total	ND	mg/kg	2.00	0.117	1	08/11/23 00:40	08/14/23 19:45	1,6010D	AMW

**Prep Information** 

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	l Analyst
Total Metals - Man	nsfield Lab for sample(s)	: 01 Batch	n: WG18	314443-	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	08/11/23 02:00	08/14/23 17:04	1,7471B	MJR



**Project Name:** Lab Number: CORAL ISLAND L2346033 Project Number: 1258.0001Y

**Report Date:** 08/23/23

**Method Blank Analysis Batch Quality Control** 

**Prep Information** 

Digestion Method: EPA 7471B



Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346033

Parameter	LCS %Recovery		LCSD Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	(s): 01 Batch:	WG1814439-2	SRM Lot N	umber: D11	19-540			
Aluminum, Total	81		-		48-152	-		
Antimony, Total	119		-		10-190	-		
Arsenic, Total	105		-		83-117	-		
Barium, Total	101		-		82-118	-		
Beryllium, Total	104		-		83-117	-		
Cadmium, Total	99		-		82-117	-		
Calcium, Total	100		-		81-118	-		
Chromium, Total	108		-		82-119	-		
Cobalt, Total	105		-		83-117	-		
Copper, Total	99		-		84-116	-		
Iron, Total	103		-		60-140	-		
Lead, Total	104		-		82-118	-		
Magnesium, Total	93		-		76-124	-		
Manganese, Total	100		-		82-118	-		
Nickel, Total	104		-		82-117	-		
Potassium, Total	93		-		70-130	-		
Selenium, Total	110		-		79-121	-		
Silver, Total	102		-		80-120	-		
Sodium, Total	103		-		74-126	-		
Thallium, Total	105		-		81-119	-		
Vanadium, Total	103		-		79-121	-		

Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number:

L2346033

Report Date:

08/23/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associa	ated sample(s): 01 Batch: WG1814	1439-2 SRM Lot Number	: D119-540		
Zinc, Total	104	-	80-120	-	
Total Metals - Mansfield Lab Associa	ated sample(s): 01 Batch: WG1814	1443-2 SRM Lot Number	: D119-540		
Mercury, Total	98	-	73-127	-	



#### Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y

Lab Number: L2346033

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits		Qual	RPD Limits
Total Metals - Mansfield La	b Associated sar	nple(s): 01	QC Batch	ID: WG181443	89-3	QC Sample	: L2345162-01	Client ID: MS S	Sample		
Aluminum, Total	3530	185	5270	938	Q	-	-	75-125	-		20
Antimony, Total	ND	46.4	32.5	70	Q	-	-	75-125	-		20
Arsenic, Total	1.58	11.1	12.8	101		-	-	75-125	-		20
Barium, Total	30.3	185	209	96		-	-	75-125	-		20
Beryllium, Total	0.235J	4.64	4.55	98		-	-	75-125	-		20
Cadmium, Total	ND	4.92	4.22	86		-	-	75-125	-		20
Calcium, Total	941	927	2020	116		-	-	75-125	-		20
Chromium, Total	13.1	18.5	37.0	129	Q	-	-	75-125	-		20
Cobalt, Total	5.60	46.4	50.6	97		-	-	75-125	-		20
Copper, Total	10.8	23.2	37.6	116		-	-	75-125	-		20
Iron, Total	12900	92.7	16700	4100	Q	-	-	75-125	-		20
Lead, Total	4.80	49.2	58.3	109		-	-	75-125	-		20
Magnesium, Total	1990	927	3520	165	Q	-	-	75-125	-		20
Manganese, Total	115	46.4	179	138	Q	-	-	75-125	-		20
Nickel, Total	10.5	46.4	55.6	97		-	-	75-125	-		20
Potassium, Total	1040	927	2480	155	Q	-	-	75-125	-		20
Selenium, Total	ND	11.1	11.0	99		-	-	75-125	-		20
Silver, Total	ND	4.64	4.18	90		-	-	75-125	-		20
Sodium, Total	82.4J	927	992	107		-	-	75-125	-		20
Thallium, Total	0.450J	11.1	11.8	106		-	-	75-125	-		20
Vanadium, Total	18.8	46.4	70.4	111		-	-	75-125	-		20

#### Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y

Lab Number:

L2346033

Report Date:

08/23/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield L	_ab Associated sam	nple(s): 01	QC Batch	ID: WG1814439-3	QC Sample	: L2345162-01	Client ID: MS Sa	ample	
Zinc, Total	29.3	46.4	85.7	122	-	-	75-125	-	20
Total Metals - Mansfield L	Lab Associated sam	nple(s): 01	QC Batch	ID: WG1814443-3	QC Sample	: L2345162-01	Client ID: MS Sa	ample	
Mercury, Total	ND	1.72	1.65	96	-	-	80-120	-	20



### Lab Duplicate Analysis Batch Quality Control

**Project Name:** CORAL ISLAND **Project Number:** 1258.0001Y

Lab Number:

L2346033

Report Date:

08/23/23

Parameter	Native Sample Du	plicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1814439-4	QC Sample:	L2345162-01	Client ID: D	UP Sample	
Arsenic, Total	1.58	1.89	mg/kg	18		20
Copper, Total	10.8	11.8	mg/kg	9		20
Lead, Total	4.80	5.74	mg/kg	18		20
Zinc, Total	29.3	30.7	mg/kg	5		20
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1814443-4	4 QC Sample:	L2345162-01	Client ID: D	UP Sample	
Mercury, Total	ND	ND	mg/kg	NC		20



## INORGANICS & MISCELLANEOUS



Project Name: CORAL ISLAND Lab Number: L2346033

Project Number: 1258.0001Y Report Date: 08/23/23

**SAMPLE RESULTS** 

Lab ID: L2346033-01 Date Collected: 08/09/23 09:30

Client ID: IS-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	90.1		%	0.100	NA	1	-	08/10/23 09:38	121,2540G	ROI



Lab Duplicate Analysis

Batch Quality Control

Lab Number:

L2346033

Report Date:

08/23/23

Parameter	Native Sample	Duplicate Samp	ole Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated s	sample(s): 01 QC Batch ID:	WG1814157-1	QC Sample: L23460	)57-01 C	Client ID: D	UP Sample
Solids, Total	84.9	84.8	%	0		20



**Project Name:** 

Project Number: 1258.0001Y

**CORAL ISLAND** 

Serial\_No:08232317:51

Project Name: **CORAL ISLAND** Lab Number: L2346033 Project Number: 1258.0001Y

YES

**Report Date:** 08/23/23

### Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Custody Seal Cooler

Α Absent

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН		Pres	Seal	Date/Time	Analysis(*)
L2346033-01A	5 gram Encore Sampler	Α	NA		2.8	Υ	Absent		NYTCL-8260HLW(14)
L2346033-01B	5 gram Encore Sampler	Α	NA		2.8	Υ	Absent		NYTCL-8260HLW(14)
L2346033-01C	5 gram Encore Sampler	Α	NA		2.8	Υ	Absent		NYTCL-8260HLW(14)
L2346033-01D	Plastic 60ml unpreserved	Α	NA		2.8	Υ	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TL-TI(180),NI-TI(180),AL- TI(180),CU-TI(180),SB-TI(180),SE-TI(180),PB- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),K- TI(180),CA-TI(180),CD-TI(180),NA-TI(180)
L2346033-01E	Glass 250ml/8oz unpreserved	Α	NA		2.8	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL-8081(14),NYTCL-8082(365)
L2346033-01F	Glass 250ml/8oz unpreserved	Α	NA		2.8	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(365)
L2346033-01G	Glass 250ml/8oz unpreserved	Α	NA		2.8	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(365)
L2346033-01X	Vial MeOH preserved split	Α	NA		2.8	Υ	Absent		NYTCL-8260HLW(14)
L2346033-01Y	Vial Water preserved split	Α	NA		2.8	Υ	Absent	10-AUG-23 03:44	NYTCL-8260HLW(14)
L2346033-01Y1	Vial Water preserved split	NA	NA			Υ	Absent		NYTCL-8260HLW(14)
L2346033-01Z	Vial Water preserved split	Α	NA		2.8	Υ	Absent	10-AUG-23 03:44	NYTCL-8260HLW(14)
L2346033-01Z1	Vial Water preserved split	NA	NA			Υ	Absent		NYTCL-8260HLW(14)



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

#### **GLOSSARY**

#### **Acronyms**

**EDL** 

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.)

LOQ - 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

oniy.)

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

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

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile

Organic TIC only requests.

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.

Report Format: DU Report with 'J' Qualifiers



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

#### **Footnotes**

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

#### **Terms**

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.

Chlordane: 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.)

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: 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 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 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.
- 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.
- 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

Report Format: DU Report with 'J' Qualifiers



Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

#### **Data Qualifiers**

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- 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.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Serial\_No:08232317:51

Project Name:CORAL ISLANDLab Number:L2346033Project Number:1258.0001YReport Date:08/23/23

#### 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:08232317:51

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Published Date: 6/16/2023 4:52:28 PM

ID No.:17873

Revision 20

Page 1 of 1

#### Certification Information

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

#### Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; 4-Ethyltoluene, Az

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

#### **Mansfield Facility**

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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 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 Kieldahl-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).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

#### **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, EPA 537.1.

#### 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

Pre-Qualtrax Document ID: 08-113

ДІРНА	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitne Albany, NY 12205: 14 Walker N Tonawanda, NY 14150: 275 Co	Way	95	Pag				Rec'o	8	191	23		HA Job# 234 6033	
Westborough, MA 01581 8 Walkup Dr.	Mansfield, MA 02048 320 Forbes Blvd	Project Information					Deliv	erable	5				Billin	g Information	
TEL: 508-898-9220	TEL: 508-822-9300		9/15/an	10		10310		ASP-	A			ASP-B		Same as Client Info	
FAX: 506-898-9193	FAX: 508-822-3288	Project Location: 1/457	BICHWICH	of ANE. Cha	tewi cla	MMY		EQui	S (1 F	ile)		EQuIS (4 File	PO#		
Client Information		Project Name: COR Project Location: 1650 Project # 1259.00	WY	4 4 - 4 - 5	1-11-11-1			Other							
Client: DOVX		(Use Project name as P					_	latory	Requi	iremer	nt .		Disp	osal Site Information	
	hafferst		phenia	ume				NYTO	GS			NY Part 375	Pleas	e identify below location of	
15/gradia, n		ALPHAQuote #:						AWQ	Standa	rds		NY CP-51	applic	able disposal facilities.	
Phone: 63123	2 2600	Turn-Around Time	1000					NY Re	stricted	d Use		Other	Dispo	sal Facility:	
Fax:	2000	Standar	X	Due Date				NY U	restrict	ted Use				NJ NY	
Email: Slauwide	VANLINE TOM	Rush (only if pre approved		# of Days				NYCS	Sewer I	Dischar	ge			Other:	
	been previously analyz	ed by Alpha					ANA	LYSIS					Sam	ple Filtration	T
Other project specific	s or TAL.	nents:						-	***	Pedrided	Metals		□L Pres □L	one ab to do ervation ab to do ese Specify below)	1月1日日日1
ALPHA Lab ID		was aki	Colle	ection	Sample	Sampler's	100	3	DCAS	7	1				A
(Lab Use Only)	Sa	ample ID	Date	Time	Matrix	Initials	>	3	0	- 8	1		Samp	le Specific Comments	E E
46033-01	15-1		8/9/28	930	5	CM	×	×	×	×	又	- 1	-		
	12		10/100	100									-1		
													-		ī
													- 1		
										1					ī
										1					
									-7	1					
Preservative Code: A = None B = HCI C = HNO <sub>3</sub>	Container Code P = Plastic A = Amber Glass V = Vial	Westboro: Certification N Mansfield: Certification N			Cor	ntainer Type		6	4	4	5		an no	ease print clearly, legibly d completely. Samples ca t be logged in and	
D = H <sub>2</sub> SO <sub>4</sub>	G = Glass				F	reservative	A	A	A	A	A			naround time clock will no art until any ambiguities as	
E = NaOH F = MeOH	B = Bacteria Cup C = Cube	Relinquished	Bur	Date	Time		Receip	Zd Bu				Date/Time		solved. BY EXECUTING	d
G = NaHSO <sub>4</sub>	O = Other	Reiniquisited	(up	10/10/2	3 300	-	1	- A	-	N.	7-2	3 130		IS COC, THE CLIENT	
$H = Na_2S_2O_3$ K/E = Zn Ac/NaOH	E = Encore D = BOD Bottle	1.11.00	10/	1.9.33	1415	-	00	nt	/	0	20	123/16	CAMIL	S READ AND AGREES BE BOUND BY ALPHA'	9
0 = Other		Tout way	feet (	10/22	111)	Par	in	0	300	20	1	3/2/0		RMS & CONDITIONS.	3
age 57: of:25740 (rev. 3		(a-num	Of the	140	236	Wars	4 4	1-	-	3	19/3		10.	ee reverse side.)	

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

### **APPENDIX C**

Laboratory Analytical Data – Waste Characterization Sample

1258.0001Y004.204/APB-CVRS ROUX



#### ANALYTICAL REPORT

Lab Number: L2346036

Client: Roux Env. Eng. & Geology, DPC

209 Shafter Street

Islandia, NY 11749-5074

ATTN: Stephen Loonie
Phone: (631) 630-2379
Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Report Date: 08/14/23

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-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

Alpha Sample ID Client ID Matrix Sample Location Collection Date/Time Receive Date

L2346036-01 WC-1 SOIL 1650 RICHMOND AVE. STATEN ISLAND, 08/09/23 08:00 08/09/23 NY 10314



Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

#### **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:08142312:31

Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

#### **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.

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.

Leley Mell Kelly O'Neill

Authorized Signature:

Title: Technical Director/Representative

Date: 08/14/23



### **ORGANICS**



### **VOLATILES**



Serial\_No:08142312:31

Project Name: CORAL ISLAND Lab Number: L2346036

**Project Number:** 1258.0001Y **Report Date:** 08/14/23

**SAMPLE RESULTS** 

Lab ID: L2346036-01 Date Collected: 08/09/23 08:00

Client ID: WC-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 08/11/23 06:12

Analyst: MCM Percent Solids: 82%

TCLP/SPLP Ext. Date: 08/10/23 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough	Lab					
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	109	70-130	
Toluene-d8	94	70-130	
4-Bromofluorobenzene	102	70-130	
dibromofluoromethane	110	70-130	

Project Name: CORAL ISLAND Lab Number: L2346036

Project Number: 1258.0001Y Report Date: 08/14/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D

Analytical Date: 08/11/23 05:23 Extraction Date: 08/10/23 08:16

Analyst: MCM

TCLP/SPLP Extraction Date: 08/10/23 08:16

Parameter	Result Q	ualifier Units	RL	MDL
ΓCLP Volatiles by EPA 1311 - W	estborough Lab fo	or sample(s): 01	Batch:	WG1814695-5
Chloroform	ND	ug/l	7.5	2.2
Carbon tetrachloride	ND	ug/l	5.0	1.3
Tetrachloroethene	ND	ug/l	5.0	1.8
Chlorobenzene	ND	ug/l	5.0	1.8
1,2-Dichloroethane	ND	ug/l	5.0	1.3
Benzene	ND	ug/l	5.0	1.6
Vinyl chloride	ND	ug/l	10	0.71
1,1-Dichloroethene	ND	ug/l	5.0	1.7
Trichloroethene	ND	ug/l	5.0	1.8
1,4-Dichlorobenzene	ND	ug/l	25	1.9
2-Butanone	ND	ug/l	50	19.

Surrogate	%Recovery Qua	Acceptance lifier Criteria
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	101	70-130
dibromofluoromethane	111	70-130



# Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346036

arameter	LCS %Recovery	Qual		CSD ecovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CLP Volatiles by EPA 1311 - Westborough L	ab Associated	d sample(s):	01 B	atch: WG	S1814695-3	WG1814695-4			
Chloroform	100			100		70-130	0		20
Carbon tetrachloride	110			100		63-132	10		20
Tetrachloroethene	90			90		70-130	0		20
Chlorobenzene	90			88		75-130	2		25
1,2-Dichloroethane	100			100		70-130	0		20
Benzene	110			100		70-130	10		25
Vinyl chloride	72			73		55-140	1		20
1,1-Dichloroethene	100			100		61-145	0		25
Trichloroethene	92			92		70-130	0		25
1,4-Dichlorobenzene	83			83		70-130	0		20
2-Butanone	99			100		63-138	1		20

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qu	Acceptance ral Criteria
1,2-Dichloroethane-d4	105	105	70-130
Toluene-d8	99	97	70-130
4-Bromofluorobenzene	100	100	70-130
dibromofluoromethane	108	107	70-130



### **SEMIVOLATILES**



Serial\_No:08142312:31

Project Name: CORAL ISLAND Lab Number: L2346036

**Project Number:** 1258.0001Y **Report Date:** 08/14/23

**SAMPLE RESULTS** 

Lab ID: L2346036-01 Date Collected: 08/09/23 08:00

Client ID: WC-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3510C
Analytical Method: 1,8270E Extraction Date: 08/11/23 15:10

Analytical Date: 08/12/23 15:21

Analyst: CMM
Percent Solids: 82%

TCLP/SPLP Ext. Date: 08/10/23 13:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westbord	ough Lab					
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	73	21-120	
Phenol-d6	67	10-120	
Nitrobenzene-d5	75	23-120	
2-Fluorobiphenyl	76	15-120	
2,4,6-Tribromophenol	92	10-120	
4-Terphenyl-d14	86	33-120	



Lab Number:

Project Name: CORAL ISLAND

**Project Number:** 1258.0001Y **Report Date:** 08/14/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E Analytical Date: 08/12/23 09:45

Analyst: CMM

TCLP/SPLP Extraction Date: 08/10/23 13:39

Extraction Method: EPA 3510C Extraction Date: 08/11/23 15:10

L2346036

Parameter	Result	Qualifier	Units	RL	-	MDL	
TCLP Semivolatiles by EPA 1311	· Westboroug	h Lab for	sample(s):	01	Batch:	WG181492	1-1
Hexachlorobenzene	ND		ug/l	10	)	3.4	
2,4-Dinitrotoluene	ND		ug/l	25	,	1.9	
Hexachlorobutadiene	ND		ug/l	10	)	3.0	
Hexachloroethane	ND		ug/l	10		2.2	
Nitrobenzene	ND		ug/l	10		3.3	
2,4,6-Trichlorophenol	ND		ug/l	25		2.5	
Pentachlorophenol	ND		ug/l	50		9.8	
2-Methylphenol	ND		ug/l	25	i	5.5	
3-Methylphenol/4-Methylphenol	ND		ug/l	25	i	2.8	
2,4,5-Trichlorophenol	ND		ug/l	25	i	1.9	
Pyridine	ND		ug/l	18	1	4.5	

Surrogate	%Recovery Qua	Acceptance lifier Criteria
2-Fluorophenol	73	21-120
Phenol-d6	65	10-120
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	75	15-120
2,4,6-Tribromophenol	86	10-120
4-Terphenyl-d14	79	33-120



# Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346036

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CLP Semivolatiles by EPA 1311 - Wes	tborough Lab Associa	ated sample(s)	: 01 Batch:	WG1814921-	2 WG1814921-	3		
Hexachlorobenzene	76		76		40-140	0		30
2,4-Dinitrotoluene	87		84		40-132	4		30
Hexachlorobutadiene	74		70		28-111	6		30
Hexachloroethane	67		66		21-105	2		30
Nitrobenzene	78		76		40-140	3		30
2,4,6-Trichlorophenol	87		81		30-130	7		30
Pentachlorophenol	83		78		9-103	6		30
2-Methylphenol	81		76		30-130	6		30
3-Methylphenol/4-Methylphenol	87		81		30-130	7		30
2,4,5-Trichlorophenol	83		81		30-130	2		30
Pyridine	60		27		10-66	76	Q	30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	76	72	21-120
Phenol-d6	69	65	10-120
Nitrobenzene-d5	77	72	23-120
2-Fluorobiphenyl	76	71	15-120
2,4,6-Tribromophenol	84	81	10-120
4-Terphenyl-d14	76	72	33-120



### **PCBS**



Serial\_No:08142312:31

Project Name: CORAL ISLAND Lab Number: L2346036

**Project Number:** 1258.0001Y **Report Date:** 08/14/23

**SAMPLE RESULTS** 

Lab ID: L2346036-01 Date Collected: 08/09/23 08:00

Client ID: WC-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 08/10/23 10:35
Analytical Date: 08/10/23 23:11 Cleanup Method: EPA 3665A

Analytical Date: 08/10/23 23:11 Cleanup Method: EPA 3665A
Analyst: AD Cleanup Date: 08/10/23
Percent Solids: 82% Cleanup Method: EPA 3660B
Cleanup Date: 08/10/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - W	estborough Lab						
Aroclor 1016	ND		ug/kg	56.8	5.05	1	Α
Aroclor 1221	ND		ug/kg	56.8	5.70	1	Α
Aroclor 1232	ND		ug/kg	56.8	12.0	1	Α
Aroclor 1242	ND		ug/kg	56.8	7.66	1	Α
Aroclor 1248	ND		ug/kg	56.8	8.53	1	А
Aroclor 1254	21.8	J	ug/kg	56.8	6.22	1	А
Aroclor 1260	ND		ug/kg	56.8	10.5	1	В
Aroclor 1262	ND		ug/kg	56.8	7.22	1	Α
Aroclor 1268	ND		ug/kg	56.8	5.89	1	Α
PCBs, Total	21.8	J	ug/kg	56.8	5.05	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	Α
Decachlorobiphenyl	57		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	61		30-150	В
Decachlorobiphenyl	59		30-150	В

L2346036

Project Name: CORAL ISLAND Lab Number:

Project Number: 1258.0001Y Report Date: 08/14/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 08/10/23 23:21

Analyst: AD

Extraction Method: EPA 3546
Extraction Date: 08/10/23 10:35
Cleanup Method: EPA 3665A
Cleanup Date: 08/10/23
Cleanup Method: EPA 3660B
Cleanup Date: 08/10/23

Parameter	Result	Qualifier	Units		RL	MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	n Lab for sa	ample(s):	01	Batch:	WG1814303-	-1
Aroclor 1016	ND		ug/kg		45.7	4.06	Α
Aroclor 1221	ND		ug/kg		45.7	4.58	Α
Aroclor 1232	ND		ug/kg		45.7	9.69	Α
Aroclor 1242	ND		ug/kg		45.7	6.16	Α
Aroclor 1248	ND		ug/kg		45.7	6.86	Α
Aroclor 1254	ND		ug/kg		45.7	5.00	Α
Aroclor 1260	ND		ug/kg		45.7	8.45	Α
Aroclor 1262	ND		ug/kg		45.7	5.80	А
Aroclor 1268	ND		ug/kg		45.7	4.73	Α
PCBs, Total	ND		ug/kg		45.7	4.06	Α

		Acceptance			
Surrogate	%Recovery Qualifie	r Criteria	Column		
2,4,5,6-Tetrachloro-m-xylene	69	30-150	Α		
Decachlorobiphenyl	61	30-150	Α		
2,4,5,6-Tetrachloro-m-xylene	62	30-150	В		
Decachlorobiphenyl	55	30-150	В		



# Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND

AL ISLAND

Lab Number:

L2346036

08/14/23

Project Number: 1258.0001Y

Report Date:

Parameter	LCS %Recovery	Qual	_	SD covery	% Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westbo	rough Lab Associa	ated sample(s):	: 01	Batch:	WG1814303-2	WG1814303-3				
Aroclor 1016	70			74		40-140	6		50	Α
Aroclor 1260	66			71		40-140	7		50	Α

Surrogate	LCS %Recovery Qu	LCSD nal %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	69	74	30-150 A
Decachlorobiphenyl	61	68	30-150 A
2,4,5,6-Tetrachloro-m-xylene	63	68	30-150 B
Decachlorobiphenyl	56	62	30-150 B

### **METALS**



**Project Name:** Lab Number: CORAL ISLAND L2346036 **Project Number: Report Date:** 1258.0001Y 08/14/23

SAMPLE RESULTS

Lab ID: L2346036-01

Date Collected: 08/09/23 08:00 Client ID: WC-1 Date Received: 08/09/23

1650 RICHMOND AVE. STATEN ISLAND, NY Field Prep: Sample Location: Not Specified

10314

Sample Depth: TCLP/SPLP Ext. Date: 08/10/23 13:39

Matrix: Soil 82% Percent Solids:

Percent Solids:	0270					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
TOLD M	24.404.4										
TCLP Metals by El	PA 1311 -	Mansfield	Lab								
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Barium, TCLP	0.422	J	mg/l	0.500	0.0210	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Lead, TCLP	0.0742	J	mg/l	0.500	0.0270	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	08/11/23 22:18	3 08/13/23 15:35	EPA 7470A	1,7470A	TAA
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF
Silver, TCLP	ND		mg/l	0.100	0.0280	1	08/11/23 22:13	3 08/12/23 08:51	EPA 3015	1,6010D	JMF



Serial\_No:08142312:31

**Project Name:** Lab Number: CORAL ISLAND L2346036 Project Number: 1258.0001Y

**Report Date:** 08/14/23

### **Method Blank Analysis Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1	311 - Mansfield Lab	for sample	e(s): 01	Batch:	WG18148	67-1			
Arsenic, TCLP	ND	mg/l	1.00	0.0190	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Barium, TCLP	ND	mg/l	0.500	0.0210	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Cadmium, TCLP	ND	mg/l	0.100	0.0100	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Chromium, TCLP	ND	mg/l	0.200	0.0210	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Lead, TCLP	ND	mg/l	0.500	0.0270	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Selenium, TCLP	ND	mg/l	0.500	0.0350	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF
Silver, TCLP	ND	mg/l	0.100	0.0280	1	08/11/23 22:13	08/12/23 08:09	1,6010D	JMF

### **Prep Information**

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 08/10/23 13:39

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared		Analytica Method	
TCLP Metals by EPA	1311 - Mansfield Lab	for sample	e(s): 01	Batch:	WG18148	69-1			
Mercury, TCLP	ND	mg/l	0.0010	0.0005	1	08/11/23 22:18	08/13/23 15:15	1,7470A	TAA

### **Prep Information**

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 08/10/23 13:39



# Lab Control Sample Analysis Batch Quality Control

Project Name: CORAL ISLAND

Project Number: 1258.0001Y

Lab Number: L2346036

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Asset	ociated sample(s	): 01 B	atch: WG1814867-2					
Arsenic, TCLP	104		-		75-125	-		20
Barium, TCLP	96		-		75-125	-		20
Cadmium, TCLP	98		-		75-125	-		20
Chromium, TCLP	106		-		75-125	-		20
Lead, TCLP	98		-		75-125	-		20
Selenium, TCLP	100		-		75-125	-		20
Silver, TCLP	94		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Asso	ociated sample(s	): 01 B	atch: WG1814869-2					
Mercury, TCLP	87		-		80-120	-		



### Matrix Spike Analysis Batch Quality Control

Project Name: CORAL ISLAND
Project Number: 1258.0001Y

Lab Number: L2346036

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recove Qual Limits	•	RPD Qual Limits
TCLP Metals by EPA 1311 -	Mansfield Lab	Associated	sample(s): 01	QC Batch	ID: WG1814867-3	QC Sample:	: L2346164-10	Client ID:	MS Sample
Arsenic, TCLP	ND	1.2	1.23	102	-	-	75-125	-	20
Barium, TCLP	0.280J	20	21.2	106	-	-	75-125	-	20
Cadmium, TCLP	ND	0.53	0.523	99	-	-	75-125	-	20
Chromium, TCLP	ND	2	2.16	108	-	-	75-125	-	20
Lead, TCLP	ND	5.3	5.22	98	-	-	75-125	-	20
Selenium, TCLP	ND	1.2	1.24	103	-	-	75-125	-	20
Silver, TCLP	ND	0.5	0.477	95	-	-	75-125	-	20
TCLP Metals by EPA 1311 -	Mansfield Lab	Associated :	sample(s): 01	QC Batch	ID: WG1814869-3	QC Sample	: L2346164-10	Client ID:	MS Sample
Mercury, TCLP	ND	0.025	0.0242	97	-	-	75-125	-	20

# Lab Duplicate Analysis Batch Quality Control

**Project Name:** CORAL ISLAND **Project Number:** 1258.0001Y

Lab Number: L2346036

Parameter	Native Samp	ole Duplicate Sample	Units	RPD	Qual	RPD Limits
CLP Metals by EPA 1311 - Mansfield Lab	Associated sample(s): 01	QC Batch ID: WG1814867-4	QC Sample:	L2346164-10	Client ID:	DUP Sample
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.280J	0.311J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
CLP Metals by EPA 1311 - Mansfield Lab	Associated sample(s): 01	QC Batch ID: WG1814869-4	QC Sample:	L2346164-10	Client ID:	DUP Sample
Mercury, TCLP	ND	ND	mg/l	NC		20



# INORGANICS & MISCELLANEOUS



Serial\_No:08142312:31

Project Name: CORAL ISLAND

Lab Number: L2346036

Project Name: CORAL ISLAND

Report Pote: 00/44/03

Project Number: 1258.0001Y Report Date: 08/14/23

**SAMPLE RESULTS** 

Lab ID: L2346036-01 Date Collected: 08/09/23 08:00

Client ID: WC-1 Date Received: 08/09/23

Sample Location: 1650 RICHMOND AVE. STATEN ISLAND, NY 10314 Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab									
Solids, Total	81.5		%	0.100	NA	1	-	08/10/23 09:53	121,2540G	ROI
pH (H)	9.26		SU	-	NA	1	-	08/11/23 17:41	1,9045D	AAS



# Lab Control Sample Analysis Batch Quality Control

Lab Number: L2346036

Project Number:	1258.0001Y	Repo	rt Date:	08/14/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab As	ssociated sample(s):	01 B	Batch: WG1814967-	1				
рН	100		-		99-101	-		



**Project Name:** 

**CORAL ISLAND** 

# Lab Duplicate Analysis Batch Quality Control

**Project Name:** CORAL ISLAND **Project Number:** 1258.0001Y

Lab Number:

L2346036

Report Date:

08/14/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Asso	ociated sample(s): 01 QC Batch ID:	WG1814163-1 QC	C Sample: L23459	72-01(	Client ID: I	DUP Sample
Solids, Total	72.0	71.2	%	1		20
General Chemistry - Westborough Lab Asso	ociated sample(s): 01 QC Batch ID:	WG1814967-2 QC	C Sample: L23439	88-01 (	Client ID: I	DUP Sample
рН	10.4	10.3	SU	1		5



Serial\_No:08142312:31

**Lab Number:** L2346036

**Report Date:** 08/14/23

## Sample Receipt and Container Information

Were project specific reporting limits specified?

**CORAL ISLAND** 

**Cooler Information** 

Project Name:

Cooler Custody Seal

A Absent

Project Number: 1258.0001Y

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2346036-01A	Vial Large Septa unpreserved (4oz)	Α	NA		2.8	Υ	Absent		TCLP-EXT-ZHE(14)
L2346036-01B	Glass 500ml/16oz unpreserved	Α	NA		2.8	Υ	Absent		TS(7),PH-9045(1),NYTCL-8082(365)
L2346036-01W	Plastic 120ml HNO3 preserved Extracts	Α	NA		2.8	Υ	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG- C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG- CI(180)
L2346036-01X	Amber 1000ml unpreserved Extracts	Α	NA		2.8	Υ	Absent		TCLP-8270(14)
L2346036-01X9	Tumble Vessel	Α	NA		2.8	Υ	Absent		-
L2346036-01Y	Vial unpreserved Extracts	Α	NA		2.8	Υ	Absent		TCLP-VOA(14)
L2346036-01Z	Vial unpreserved Extracts	Α	NA		2.8	Υ	Absent		TCLP-VOA(14)



Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

#### **GLOSSARY**

#### **Acronyms**

**EDL** 

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.

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.

 NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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.

Report Format: DU Report with 'J' Qualifiers



Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

#### **Footnotes**

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

#### **Terms**

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.

Chlordane: 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.)

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'. Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: 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 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 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.
- 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.
- 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

Report Format: DU Report with 'J' Qualifiers



Project Name:CORAL ISLANDLab Number:L2346036Project Number:1258.0001YReport Date:08/14/23

#### **Data Qualifiers**

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- 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.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Serial\_No:08142312:31

Project Name: CORAL ISLAND Lab Number: L2346036
Project Number: 1258.0001Y Report Date: 08/14/23

#### **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:08142312:31

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 20

Published Date: 6/16/2023 4:52:28 PM

Page 1 of 1

#### Certification Information

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

#### Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; 4-Ethyltoluene, Az

EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

### **Mansfield Facility**

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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 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 Kieldahl-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).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

#### **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, EPA 537.1.

#### 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

Pre-Qualtrax Document ID: 08-113

Westborough, MA 91593   Wasshald, MA 9248   Sample Filtration   Project Information	36	
TEL. 508-869-9200 FAX: 508-869-9103 FAX: 508-869		
Project # 125 % COUNTY   Client Pour # Project #	Info	
Client   20 \( \frac{1}{2} \)		
Client: 20 V		
APHAQuote #:   APHA	ition	
APHAQuote #:   APHA	ation of	
Standard   Due Date: 48-Musts   NY Cawer Discharge   Cotter: Sample Filtration   NY Cawer Discharge   Cotter: NY Cawer Discharge	lies.	
Standard   Due Date: 48-Must   NY Cawer Discharge   Content of Days: 48-Must   NY Cawer Discharge   Content of Content of Days: 48-Must   NY Cawer Discharge   Content of Content of Days: 48-Must   NY Cawer Discharge   Content of Content		
Email: Sloni@Govinc.com Rush (only if pre approved) # of Days: # o	NY	
These samples have been previously analyzed by Alpha  Other project specific requirements/comments:  Please specify Metals or TAL.  ALPHA Lab ID (Lab Use Only)  Sample ID  Collection Date Time Matrix Initials  Alendary Sample Sample Sample Sample Sample Sample Sample Sample Sample Specific Com  Preservalive Code: Container Code Weethors: Certification No. MA935		
Other project specific requirements/comments:    Done   Lab to do   Preservation   Lab to do   Preserv	T	
Please specify Metals or TAL.    Collection   Sample   Sa	0	
ALPHA Lab ID (Lab Use Only)  Sample ID  Sample ID  Date Time Matrix Initials Initial	a ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
Preservative Code: Container Code Wasthorn: Cartification No. MAR35	- 1	
Preservative Code: Container Code Westborn: Cartification No. MAQ35	ents e	
Preservative Code: Container Code Weethors: Cartification No. MAG35		
	-:-	
	1	
B = HCI A = Amber Glass Mansfield: Certification No: MA015	mples can	
C = HNO <sub>3</sub> V = Vial D = H <sub>2</sub> SO <sub>4</sub> G = Glass E = NaOH B = Bacteria Cup  rot be logged in a turnaround time of start until any amb	ck will not	
F = MeOH C = Cube Religrarished By: Date/Time Recoved By: Date/Time resolved. BY EXE		
G = NaHSO, O = Other THIS COC, THE	THIS COC, THE CLIENT	
H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH  D = BOD Bottle  HAS READ AND TO BE BOUND B		
0 = Other Paul Mospella \$19/23 (Remain 89/25 2700 TERMS & CONDI		
See reverse side (See reverse side ) 11.25 HC (rev. 30-Sept-2013) (See reverse side )		

# Sewer Repair Oversight Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDIX D**

**Waste Manifests** 

1258.0001Y004.204/APB-CVRS ROUX

(Fo	in decided for use on elle (12-pitch) typewriter.)						
A	NON-HAZARDOUS WASTE MANIFEST  1. Generator ID Number	2. Page 1 of	3. Emergency Respons	se Phone	4. Waste Tr	acking Numl	1 3 3 · A
	5. Generator's Name and Mailing Address		Generator's Site Addres	ss (if different	than mailing addr	ess)	
	ROUN ASSOCIATOR		Shopping 1150 Rich	center			
		T	1150 R.CV	n mon d	Ave		
	Generator's Phone: 6. Transporter 1 Company Name		Stotes	15/100	d IIO EDA ID	Marie	
	0. Hansporter Company Name				U.S. EPA ID		72/
	7. Transporter 2 Company Name				U.S. EPA ID		JO- 1
ł							
	8. Designated Facility Name and Site Address				U.S. EPA ID	Number	
	Dole transfer 139 Onle St						
	Facility's Phone: WCa Dobylen My 11764				Ĭ		
			10. Cont	tainers	11. Total	12. Unit	
	Waste Shipping Name and Description		No.	Туре	Quantity	Wt./Vol.	
RO	1.						
GENERATOR	Non-Regulated Moderial	16:1)	061	IN	nu 20	V	
ENE	2.	10:11	061	CIC	JI) 50	1	
0							
	3.						
	4.						
	Special Handling Instructions and Additional Information						
	506#27-219689						
	R 679						
	14. GENERATOR'S CERTIFICATION: I certify the materials described above on this ma	anifest are not subject	to federal regulations for	r reporting pro	ner disposal of H	azardous Was	ste.
	Generator's/Offeror's Printed/Typed Name	Sign	ature			7	Month Day Year
V	Begge Begge						108 17 80
INT.'L	15. International Shipments Import to U.S.	Export from V					
	Transporter Signature (for exports only):  16. Transporter Acknowledgment of Receipt of Materials		Date leav	ring U.S.:			
TRANSPORTER	Transporter 1 Printed/Typęd Name	Sign	ature	1			Month Day Year
SPO	Lobert MirtiNec		hed M	Enter	p		108 117 12)
RAN	Transporter 2 Printed/Typed Name	Sign	ature				Month Day Year
	17. Discrepancy						
	17a. Discrepancy Indication Space Quantity Type	1	Residue		Partial Reje	ection	Full Rejection
			ricsiduc		r arriar rieje	CHOIT	ii dii Nejedilon
	17b. Alternate Facility (or Generator)		Manifest Reference	Number:	U.S. EPA ID I	Numbor	
ILIT	The American Country (of Contrator)				0.3. EFA ID I	vumber	
FAC	Facility's Phone:				I		
TED	17c. Signature of Alternate Facility (or Generator)	7					Month Day Year
GNA						•	
DESIGNATED FACILITY							
1	Western State of the Control of the		Zan ar adalah	**			
1	18. Designated Facility Owner or Operator: Certification of receipt of materials covered by			1	<del></del>		
1	Printed/Typed Name  Time of Sanno	Signa	ature	1			Month Day Year
	Printed in USA by GC Labels			X	Reorder	Parit	VIANIFEST-CONHW
	1-800-997-6966 DESIGNATED	FACILITY 1	TO GENERAT	OR		913-8	897-6966

B-TEK SCALES, LLC.

TIME: 8/17/2023 10:26:18 AM

TRUCK: 679

DRIVER ID: ROBERT MANIFEST: 081723A LICENSE PLATE: MARTINEZ

TOTAL AXLE WEIGHT: 89400 AXLE 1: 35420 AXLE 2: 34000 AXLE 3: 17980

THANK YOU!

DALE TRANSFER CORP	
1611 195-2382	
Ticket No. 58375	Truck No. 2019 mack rolloff
	ligtweigtht tiket 35840
Date: 3/20/2019	with 20cy box
ienerator:	Truck License Plate No. 70307PC
ontract No.	Non Hazardous Manifest No.
ransport AARCO	Facility Approval No.
auler Permit No.	Material Received:
uantity Received:	Facility Operator Signature: ARMANDO

Pie	ase punt or type	Tabak kanagaran										
A	NON-HAZARDOUS WASTE MANIFEST	Generator ID Number		2. Page 1 of	3. Emerge	ncy Respons	se Phone	4. Waste Tr	acking Nun		relegio peròli	
	5. Generator's Name and Maili	4°			Generator'	s Site Addre	ss (if different t	han mailing addre	ess)			
	ROUT ASS	o ciates			Sh	OPP:	-5 C	cente				
	Consented Dhone			İ	16	SOR:	chmin	LAVE CHARA	. 101	NIN	4 107	HIL
	Generator's Phone: 6. Transporter 1 Company Nar	me						U.S. EPA ID	Number		1103	1
	ARRLO								W COC	1073	7(	
	7. Transporter 2 Company Nar	me						U.S. EPA ID	Number			
	Designated Facility Name are	nd Site Address						U.S. EPA ID	Number			
Ш		ifer station										
	129 Onte 5.	1.	UNTELL					1				
		W. Bobylon	, 11104			10. Con	tainers	11. Total	12. Unit			
	9. Waste Shipping Name	e and Description				No.	Туре	Quantity	Wt./Vol.			
H.	1.											
GENERATOR	SI CIL	equiated mat	201 / C	5. ()	,	100	cm	20	Y			
ENE	2.	0 1012101 10107	6/121 636	3, 1				00	-			
9												
	3.											
	100											
	4.											
	10. Capaiel Headling Instruction	and Additional Information	-									- 4
	13. Special Handling Instruction											
		519189-5.										
	R670	1		0	-	1						
	Ren	tal conta	i'ver 2	.80	60	do		7				
	14. GENERATOR'S CERTIFIC	ATION: I certify the materials des		t are not subject	to federal r		or reporting pro	per dispos <del>al o</del> H	azardous W			
1	Generator's/Offeror's Printed/Ty	1)		Sign	nature		1			Month   68		Year
7	15. International Shipments	Import to U.S.		Export from U	0 /	Port of	entry/exit:			\	10	0)
INT'L	Transporter Signature (for expo	orts only):		_ Export from 0	.5.		ving U.S.:			)		
TRANSPORTER	16. Transporter Acknowledgme Transporter 1 Printed/Typed Na			Oies.	ature					Month	h Day	Year
POR	Transporter i Filineo/Tuped No	had Mer	tine-	Sign	L.O.	1 M	m /2 0=			100 P	1 R	3
ANS	Transporter 2 Printed/Typed Na		1111	Sign	ature	100				Month	h Day	Year
1	47 8											
1	17. Discrepancy 17a. Discrepancy Indication Spa	ace 🖂	П-		П.			П	Ve.		1	
		Quantity	Туре		LIF	Residue		Partial Rej	ection		Full Rejecti	ion
	17h Altomata Facility (as Cause				Manifes	t Reference	Number:	11.0 EDA ID	NI I			
ILITY	17b. Alternate Facility (or Gener	raior)						U.S. EPA ID	Number			
FAC	Facility's Phone:							1				
DESIGNATED FACILITY	17c. Signature of Alternate Faci	lity (or Generator)		Ť						Month	n Day	Year
IGN/												
DES												
	10 Designated Facility Co.	0-1-1-0	1			han in						
	18. Designated Facility Owner of Printed/Typed Name	r Operator: Certification of receipt	1		as noted in ature	Item 17a	0			Month	n Day	Year
*	Armoneto	Sour	hu	1		d	for			18	118	27
	Printed in USA by		DESIGNATED	AOII ITA	TO 05	ALED AT	TOP	Reorde		MANIFE		VÎNV
	1-800-997-6	966	DESIGNATED F	ACILITY	IU GE	NEKAT	OR		313	897-696	5-1-1	

A STATE OF THE STA

B-TEK SCALES, LLC.

TIME: 8/18/2023 9:14:51 AM

TRUCK: ROBRT

DRIVER ID: ROBERT MANIFEST: MARTINEZ LIGENSE PLATE: TUTURU

TOTAL AXLE WEIGHT: 86420 AXLE 1: 32920 AXLE 2: 34660 AXLE 3: 18840

THANK YOU!

B-TEK SCALES, LLC.

TIME: 8/18/2023 9:38:51 AM TRUCK: ROBRT

GROSS: 86420 TARE: 49160 NET: 0

DRIVER ID: ROBERT MANIFEST: MARTINEZ LICENSE PLATE: TUTURU

TOTAL AXLE WEIGHT: 86420.00000 AXLE 1: 18120 AXLE 2: 31040

THANK YOU!



## **NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

2857287

If waste is asbestos waste, complete Sections I, II, III and IV If waste is  ${\color{red} {\rm NOT}}$  asbestos waste, complete Sections I, II and III

I. GENERATOR (Genera	tor completes la-r	)						
a. Generator's US EPA ID Number		. Manifest Docu	ment Number		c. Page	1 of		
d. Generator's Name and Location: Dale Trans 129 Dale Str f. Phoney. Babylon, NY 11704		e. Generator's Mailing Address:  Dale Transfer  129 Dale Street  g. Phone:  W. Babylon, NY 11704						
If owner of the generating facility differs from the generator, provide:								
h. Owner's Name:			i. Owner's Phone No.:					
j. Waste Profile #	k. Exp. Date	I. Waste Ship Description	pping Name and	m. Cor No.	Type	n. Total Quantity	o. Unit Wt/Vol	
5081196455	3/1/2024	Cons	olidated NH Soils	01	DT	2040	els	
						,		
,								
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.								
p. Generator Authorized Agent Name (Print) q. Signature r. Date								
p. Generator Authorized Agent Name (F		<u> </u>		1	r. Date			
a. Transporter's Name and Address:    A								
c. Driver Name (Print)  d. Signature  e. Date								
			ation Site completes I	IIId-a)				
a. Disposal Facility and Site Address:  Conestoga Landfill 420 Quarry Road b. Morgantown, PA 19543 610-273-6600  Conestoga Landfill 420 Representation Site completes IIId-g)  Conestoga Landfill 420 Representation Space:  PA0000015867  PA0000015867  I hereby certify that the above named material has been accepted and to the best of my/knowledge the foregoing is true and accurate.								
i nereby certify that the above named m	atenai nas been accep	ned and to the b	est of my/knowledge the fo	regoing is ti	ue and ac	curate.		
1 Vitte 8/21/23								
e. Name of Authorized Agent (Print) f. Signature g. Date g. Date								
IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)								
a. Operator's Name and Address:  c. Responsible Agency Name and Address:								
b. Phone:  e. Special Handling Instructions and Additional Information:  d. Phone:								
f. ☐ Friable ☐ Non-Friable ☐ Bo	th % Friat	ole	% Non-Friable		1			
OPERATOR'S CERTIFICATION: I here and are classified, packaged, marked a national governmental regulations.	by declare that the con	tents of this con	signment are fully and accu	or transport	ribed abov according	re by the proper s to applicable inter	hipping name national and	
				100				
g. Operator's Name and Title (Print)	h. Signatu	re		i. Date				
*Operator refers to the company which renovation operation or both	owns, leases, operates	, controls, or sup	pervises the facility being de	emolished o	r renovate	d, or the demolitic	on or	



## **NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

2857288

If waste is asbestos waste, complete Sections I, II, III and IV If waste is <u>NOT</u> asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes la-r)									
a. Generator's US EPA ID Number	b. Manifest Docur	ument Number c. Page 1 of							
d. Generator's Name and Location: Dale Trans 129 Dale St f. Phone. Babylon, NY 1170		e. Generator's Mailing Address:  Dale Transfer  129 Dale Street  g. Phone:  W. Babylon, NY 11704							
If owner of the generating facility differs	from the generator,	provide:							
h. Owner's Name: i. Owner's Phone No.:									
j. Waste Profile # k. Exp. Date I. Waste Shipping Name and m. Containers n. Total o. Ur							o. Unit		
							Wt/Vol		
5081196455	1196455 3/1/2024 Cons			osolidated NH Soils					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.									
Fimoul Souther (5) 8/21-2023									
p. Generator Authorized Agent Name (Print) q. Signature r. Date									
II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)									
a. Transporter's Name and Address:  VALIANT CONTRACTING  b. Phone:  TK 276 AU 919 Z									
WAVIER E. DIAZ SA	2 8	12		08	1.21.2	. 3			
c. Driver Name (Print)	d. Sign			e. Date					
III. DESTINATION (Gener	ator complete III				12				
a. Disposal Facility and Site Address: Conestoga Landfill 420 Quarry Road b. Morgantown, PA 19543 610-273-6600  C. US EPA Number d. Discrepancy Indication Space:  PA0000015867									
I hereby certify that the above named in	naterial has been acc	cepted and to the b	est of my knowledge the for	regoing is tr	17		-		
A Harrison of A		8/71/73							
e. Name of Authorized Agent (Print)   f. Signature   g. Date  IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)									
IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)  a. Operator's Name and Address:  c. Responsible Agency Name and Address:									
b. Phone: d. Phone:									
b. Phone:  e. Special Handling Instructions and Additional Information:  d. Phone:									
f. Friable Non-Friable Bo		riable	% Non-Friable						
OPERATOR'S CERTIFICATION: I here and are classified, packaged, marked a national governmental regulations.	by declare that the ond labeled/placarded	contents of this con d, and are in all res	signment are fully and accu pects in proper condition for	rately desc r transport	ribed abov according t	te by the proper si to applicable inter	hipping name national and		
g. Operator's Name and Title (Print)	h. Sign	ature	angices the facility being de	i. Date	r renovata	d or the demolitie	n or		
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both									



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

2857289

If waste is asbestos waste, complete Sections I, II, III and IV If waste is NOT asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes la-r)								
a. Generator's US EPA ID Number		b. Manifest Docum	nent Number		c. Page	1 of		
d. Generator's Name and Location:  Dale Transfer  129 Dale Street  f. Phoney. Babylon, NY 11704 631-393-2882  e. Generator's Mailing Address:  Dale Transfer  129 Dale Street  g. Phone:  W. Babylon, NY 11704								
If owner of the generating facility differs from the generator, provide:								
h. Owner's Name:			i. Owner's Phone No.:	l m Co	ntoinore	n Total	o Unit	
j. Waste Profile # I. Waste Shipping Name and Description   I. Waste Shipping Name and Description   I. Waste Shipping Name and No.   Type   Ouantity   Ou								
5081196455	3/1/2024	Cons	olidated NH Soils	0/	DT	20 you	ds	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.								
Amouro Souther VI 8-21-2023								
p. Generator Authorized Agent Name (Print) q. Signature r. Date								
II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)  a. Transporter's Name and Address:  b. Phone:								
MAN M A 12023								
c. Driver Name (Print)			ntion Site completes II	_				
III. DESTINATION (General a. Disposal Facility and Site Address:		c. US EPA Nur		ation Spa	ce:			
Conestoga Landfill 420 Quarry Road  b. Morgantown, PA 19543 610-273-6600  PA0000015867								
I hereby certify that the above named ma	terial has been acc	cepted and to the b	est of my knowledge the for	egoing is	true and a	courate.		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.								
e. Name of Authorized Agent (Print) f. Signature g. Date								
IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)								
a. Operator's Name and Address:  c. Responsible Agency Name and Address:								
b. Phone:  e. Special Handling Instructions and Additional Information:  d. Phone:								
f.   Friable   Non-Friable   Bott	% F	riable	% Non-Friable					
OPERATOR'S CERTIFICATION: I hereb and are classified, packaged, marked an national governmental regulations.	v declare that the	contents of this cor	signment are fully and accu	rately des	cribed abo according	ve by the proper s to applicable inter	hipping name rnational and	
g. Operator's Name and Title (Print)	h. Sign	ature	and and the feelite bales de	i. Date	or repovet	ed or the demolitie	on or	
*Operator refers to the company which or renovation operation or both	*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or							

# Periodic Review Report Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDIX C**

IC/EC Certification Form

1258.0001Y204/CVRS ROUX



# Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site	e No.	C243033	Site	Details		Box 1	
Site	e Name Co	ral Island Shopping C	enter				
City Cou	e Address: //Town: Sta unty: Richmo e Acreage:	ond	e Zip	Code: 10314			
Rep	porting Perio	od: March 02, 2023 to	March 02,	2024			
	Reporting	g Period March 2, 2023	to April 1,	2024		YES	NO
1.	Is the infor	mation above correct?					X
	If NO, inclu	de handwritten above d	or on a sep	parate sheet.			
2.		or all of the site propert nendment during this R			ed, or undergone a		X
3.		peen any change of use RR 375-1.11(d))?	e at the site	e during this Reporti	ng Period		X
4.		ederal, state, and/or loo e property during this R			narge) been issued		X
		wered YES to question mentation has been pi					
5.	Is the site of	currently undergoing de	velopmen	t?			X
						Box 2	
						YES	NO
6.		ent site use consistent v al and Industrial	vith the us	e(s) listed below?		X	
7.	Are all ICs	in place and functioning	g as desig	ned?		X	
	IF TI	HE ANSWER TO EITHE DO NOT COMPLETE 1			_	ınd	
A C	orrective M	easures Work Plan mu	st be subr	mitted along with thi	is form to address th	nese iss	ues.
Sigi	nature of Ow	ner, Remedial Party or I	Designated	Representative	 Date		

		Box 2	A					
_		YES	NO					
8.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		X					
	If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.							
9.	X							
	If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.							
SITE NO. C243033 Box 3								
Description of Institutional Controls								

Parcel	Owner	Institutional Control
2236-125	WWP Associates	
		Ground Water Use Restriction
		Soil Management Plan
		Site Management Plan
		Landuse Restriction
		Monitoring Plan
		O&M Plan
		IC/EC Plan

Institutional Controls ("ICs") Components

The ICs are required under the RAWP to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination; and, (3) restrict the use of the Site to restricted commercial uses only. Adherence to these ICs on the Site is required under the Environmental Easement and will be implemented under this SMP. A copy of the Environmental Easement is presented as Appendix D.

The following are the ICs for the Site:

- 1. The Grantor and the Grantor's successors must comply with the Environmental Easement and with all elements of this SMP.
- 2. All ECs must be operated and maintained as specified in the SMP.
- 3. All ECs on the Site must be inspected and certified at a frequency and in a manner defined in the SMP.
- 4. Groundwater, and other environmental or public health monitoring must be performed as defined in the SMP.
- 5. On-Site environmental monitoring devices, including but not limited to, groundwater monitor wells must be protected and replaced as necessary to ensure continued functioning in the manner specified in the SMP.
- 6. ECs may not be discontinued without an amendment or the extinguishment of the Environmental Easement for the Site.
- 7. The following Site Restrictions apply to the Site:
- Use of groundwater underlying the Site is prohibited without treatment rendering it safe for the intended use.
- Vegetable gardens and farming on the Site are prohibited.
- All future activities on the Site that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in this SMP (Appendix C).
- The Site may be used for restricted commercial use only provided the long-term EC/ICs included in the SMP remain in use. The Site may not be used for a higher level of use, such as restricted residential use without an amendment or the extinguishment of this Environmental Easement.
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

<u>Parcel</u>

**Engineering Control** 

2236-125

Cover System

The ECs include: (1) a composite cover system and, (2) monitoring enhanced natural attenuation of groundwater on and off the Site.

Composite Cover System

Exposure to residual contaminated soil/fill exceeding restricted commercial use SCOs at the Site will be prevented by a cover. The current cover system is comprised of asphalt, building foundations, landscaped areas, and gravel covered landscaped areas. A Soil Management Plan that outlines the procedures required in the event the composite cover system and underlying residual contamination are disturbed is presented as Appendix C. The monitoring and maintenance of this cover are provided in the Monitoring Plan included in Section 3 of this SMP. A figure showing the location and cross section of each cover system is presented as Plate 3.

Monitored Enhanced Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will continue, as determined by NYSDOH and NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or have become asymptotic over an extended period. Monitoring will continue until permission to discontinue is granted in writing by NYSDEC and NYSDOH. The monitoring activities are outlined in the Monitoring Plan included in Section 3 of this SMP.

	Periodic Review Report (PRR) Certification Statements					
1.	I certify by checking "YES" below that:					
	a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;					
	b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted					
	engineering practices; and the information presented is accurate and compete.  YES NO					
	$\mathbf{X}$					
2.	For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:					
	(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;					
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;					
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;					
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and					
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.					
	YES NO					
	<b>X</b> □					
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.					
A Corrective Measures Work Plan must be submitted along with this form to address these issues.						
	Signature of Owner, Remedial Party or Designated Representative Date					

# IC CERTIFICATIONS SITE NO. C243033

Box 6

### SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

l Michael Roux	at	209 Shafter Street, Islandia	, NY 11749			
print name		print business address				
am certifying as Remdial Party			(Owner or Remedial Party)			
for the Site named in the Site Details Section of this form.						
and Ric			April 29, 2024			
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification  Date						

#### **EC CERTIFICATIONS**

Box 7

## **Professional Engineer Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

l Brian Morrissey at	209 Shafter Street, Islandia, NY 11749
print name	print business address
am certifying as a Professional Engineer for the	Remedial Party
, ,	(Owner or Remedial Party)
Brian P. Mornisey	April 29, 2024
Signature of Professional Engineer, for the Own	ner or Stamp Date (Required for PE)
Remedial Party, Rendering Certification	(Required for PE)

# Periodic Review Report Coral Island Shopping Center 1650 Richmond Avenue, Staten Island, NY

# **APPENDIX D**

**Electronic Database** 

1258.0001Y204/CVRS ROUX

**SITE SUMMARY** 

The Coral Island Shopping Center is an approximately 3.9 acre property located at 1650

Richmond Avenue, Staten Island, Richmond County, New York (hereafter referred to as the

"Site").

The Site Owner, WWP Associates, LLP ("WWP") entered into a Brownfield Cleanup

Agreement ("BCA" Index #W2-1040-05-01, Site #C243033, issued March 2005) under the New

York State Brownfield Cleanup Program administered by New York State Department of

Environmental Conservation ("NYSDEC").

The BCA required WWP to address an area of impacted soil and groundwater that resulted from

historic releases associated with a dry cleaner at the Site. The Site was remediated in accordance

with the BCA and is currently being monitored.

The contact name for the Site is currently:

Mr. Hans Huang WWP Associates 8816 Six Forks Road, Suite 201 Raleigh, NC 27615 919-846-4046