



April 28, 2025

Mr. Stephen E. Catalfamo, P.G., CHMM
NYSDEC, Division of Environmental Remediation, Region 7
1679 NYS Route 11
Kirkwood, NY 13795

Reference: 2025 Periodic Review Report
TCMF Hillcrest Facility
4 Nowlan Road
Binghamton, New York
BCP Site No. C704045

Dear Mr. Catalfamo:

Introduction

This report provides the basis for review and certification of the institutional and engineering controls (ICs/ECs) implemented at Site No. C704045. The signed Institutional and Engineering Controls Certification Form is included in Appendix A.

The Site is currently owned by Binghamton Realty, Inc. and this Periodic Review Report (PRR) is prepared and submitted at the direction of Binghamton Realty, Inc., consistent with the Site's remedial program as approved by the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH). The reporting period for this PRR is April 20, 2024 to April 20, 2025.

A Brownfield Cleanup Agreement (BCA) between Binghamton Realty, Inc. and the NYSDEC was implemented on December 6, 2004 for the Triple Cities Metal Finishing Corporation (TCMF) Hillcrest Facility (Site). The Site is located at 4 Nowlan Road in the Town of Fenton, County of Broome and State of New York.

The Final Engineering Report (FER) was accepted and the Certificate of Completion (COC) was issued by the NYSDEC to Binghamton Realty, Inc. on December 20, 2016. The COC required the implementation of the NYSDEC-approved Site Management Plan (SMP). The original SMP was submitted to NYSDEC on November 2, 2016 and approved by the NYSDEC on November 3, 2016. The original SMP has been modified multiple times, see Site Management Plan Compliance below for details.

Site Overview

The Site consists of two contiguous parcels and encompasses approximately 0.95 acres. The Site is bordered on the south by Beckwith Avenue, on the east by the B. W. Elliot Manufacturing Company (NYSDEC Site No. 704015 - C.A.E. Electronics), on the west by two commercial properties and a residence and on the north by Nowlan Road. North of Nowlan Road are residences and a gas station. Further south, west and north are residential properties.

In response to sub-slab vapor samples collected at the Site that exceeded Matrix 1 Action Levels set in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, a sub-slab depressurization system (SSDS) was installed within the occupied spaces of the industrial building. The SSDS has been in operation since January 2006 and has been expanded twice, once in 2012 and once in 2014.

A Maintenance & Monitoring Plan for the SSDS was submitted to NYSDEC in May 2007. Annual Interim Maintenance & Monitoring Reports have been submitted to the NYSDEC since 2009. Beginning in 2018, the annual PRR replaced the Annual Interim Maintenance & Monitoring Report.

The contaminants of concern, identified at the Site, were cadmium, chromium, lead and nickel. The chlorinated volatile organic compounds detected in the soil vapor and groundwater at the Site appear to be associated with the adjacent C.A.E. Electronics facility. Remediation, including excavation of source areas and application of a soil stabilization amendment, was completed at the Site in 2015 and 2016.

Site Management Plan Compliance

The original SMP was submitted to NYSDEC on November 2, 2016 and approved by the NYSDEC on November 3, 2016. The Site can be used for commercial or industrial purposes. There is a prohibition on the use of groundwater at the Site, and any site activities must be in compliance with the SMP.

The Site currently has the following institutional controls and engineering controls:

- Ground Water Use Restrictions,
- Vapor Mitigation via the SSDS,
- Cover System (includes the Asphalt Pavement and the Site Building),
- Land Use Restrictions,
- Site Management Plan (includes a Soil Management Plan, O&M Plan and ICs/ECs Plan),
- Monitoring Plan.

The monitoring requirements for the Site are listed in Section 4 of the SMP (Monitoring and Sampling Plan) and originally included the following:

- Annual review of site cover,
- Annual review of the SSDS,
- Semi-annual groundwater monitoring of wells MW-3, MW-3HA, MW-4, MW-5R, MW-6, MW-7R, MW-8 and MW-9 for the analyses of volatile organic compounds (VOCs) on the Target Compound List (TCL) by EPA Method 8260 and for cadmium and chromium by EPA Methods 6010 and for hexavalent chromium by Method SM3500.

On May 15, 2017, GeoLogic submitted a request to modify the SMP by eliminating the requirement to analyze groundwater samples for VOCs on the TCL. The NYSDEC approved this modification on May 23, 2017. The SMP was revised to reflect this modification and was submitted to the NYSDEC on July 10, 2017. Future groundwater monitoring will include the collection of samples, on a semi-annual basis, to be analyzed for cadmium, chromium and hexavalent chromium.

On May 21, 2018, the NYSDEC approved GeoLogic's request to modify the SMP by eliminating monitoring wells MW-4, MW-5R, MW-6 and MW-7R from the groundwater sampling program. The SMP was revised to reflect this modification and Revision No. 2 to the SMP was submitted to the NYSDEC on June 12, 2018. Future groundwater monitoring events will include the collection of samples from MW-3, MW-3HA, MW-8 and MW-9 on a semi-annual basis. The groundwater samples will be analyzed for cadmium, chromium and hexavalent chromium.

On December 21, 2018, GeoLogic decommissioned two monitoring wells (MW-4 and MW-6) that were no longer needed for evaluating groundwater quality at the Site. The well decommissioning procedures were selected based upon the Site's SMP and the NYSDEC's CP-43: Groundwater Monitoring Well Decommissioning Policy, dated November 3, 2009.

During the May 2019 groundwater sampling event, GeoLogic observed that monitoring well MW-3HA has been destroyed. This well was located off-site on the parcel that adjoins the Site to the west. The owner of the adjoining property stated that the well was destroyed during the winter of 2018-2019 by snow plowing operations. Future groundwater monitoring events will include the collection of samples from MW-3, MW-8 and MW-9 on a semi-annual basis.

During the November 9, 2021 groundwater sampling event, GeoLogic observed that monitoring well MW-7R appeared to have been abandoned. It is noted that this is an off-site well and was not part of the groundwater sampling program for the Site. GeoLogic utilized this well in the past to collect water levels.

On June 10, 2022, the NYSDEC approved GeoLogic's request to modify the SMP to reduce the groundwater monitoring frequency from twice per year to once per year. The SMP was revised to reflect this modification and Revision No. 3 to the SMP was submitted to the NYSDEC on August 4, 2022. Future groundwater monitoring events will include the collection of samples from MW-3, MW-8 and MW-9 on an annual basis.

During the April 13, 2023 groundwater sampling event, GeoLogic observed that monitoring well MW-3 appeared to have been abandoned. It is noted that this was an off-site well and was not installed or maintained by GeoLogic or the owner of the Site. Future groundwater monitoring events will include the collection of samples from MW-8 and MW-9 on an annual basis.

On June 13, 2024, the NYSDEC approved GeoLogic's request to modify the SMP by eliminating the requirement to analyze groundwater samples for Hexavalent Chromium. The SMP was revised to reflect this modification and was submitted to the NYSDEC on August 1, 2024. Future groundwater monitoring will include the collection of samples from MW-8 and MW-9, on an annual basis, to be analyzed for total cadmium and total chromium.

The project management team is as follows:

Property Owner:	Binghamton Realty, Inc.
Tenants:	Multiple Commercial Tenants.
Consultant:	GeoLogic NY, P.C. (GeoLogic)

Site Conditions Summary

The asphalt areas that experienced excavation activities in 2016 have been restored. No changes to the building footprint have occurred since the issuance of the COC.

There have been no changes to the building or to the HVAC system, during this reporting period, which would change or impact air exchange pathways or the operation/efficiency of the SSDS.

During GeoLogic's April 15, 2025 site visit, the building was occupied. The current tenants at the Site are summarized below:

- Roll N Vac. – assemble and sell modified shop-vac type vacuums;
- Proforma Printing – storage space.

Sub-Slab Depressurization System - Monitoring & Maintenance

The SSDS currently consists of seventeen extraction points connected to two roof-mounted blowers (see Figure No. 1). No changes to the SSDS have occurred during this reporting period.

The current tenants have been instructed to contact the Site owner, Mr. George P. Morgan of Binghamton Realty, Inc., if the system is not operating, or if the system becomes damaged (ex. breakage of extraction piping). To ensure that proper notification is in place in case of new employee(s), the following information has been provided to the tenants:

- Schematic of SSDS and the location of the system components;
- Labeling of components accessible to occupant(s); and
- Contact information for George P. Morgan and GeoLogic.

NYSDEC and NYSDOH are to be notified within 24 hours of failure of the SSDS.

Monitoring of the SSDS, for this reporting period, by GeoLogic included the following:

- A visual inspection of the SSDS components and building was completed by GeoLogic on April 15, 2025. Airflow readings and PID measurements were collected from within the accessible extraction pipes during the inspection. All PID readings have been 0 ppm, except where indicated otherwise in the tables below. During the April 15, 2025 site visit, the background PID reading was 0 ppm.

Summary Table - Vapor Mitigation System Air Flow Readings

Date	Extraction Point, Air Flow (feet-per-minute)													Effluent (PID (ppm))
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1/14/2009	140	100	100	220	250	320	300	100	250					0
8/28/2009	100	100	150	250	NA	400	400	75	200					0
12/11/2009	100	70	180	200	180	250	300	120	75					0
6/03/2010	60	160	140	150	NA	240	390	70	165					0
10/25/2010	100	250	250	250	NA	250	450	190	295					0
5/19/2011	80/0	220	200	NA	NA	NA	420	200	150					NM
10/17/2011	100	180	NA	220	200	280	400	160	180					0
5/04/2012	113	115	160	172	260	250	341	50	144	47	30	53	53	NM
9/28/2012	67	108	102	108	NA	210	312	74	86	102	61	54	34	0
3/15/2013	NA	166	204	NA	245	235	326	98	49	140	49	41	91	NM

Date	Extraction Point, Air Flow (feet-per-minute)													Effluent (PID (ppm))
	1	2	3	4	5	6	7	8	9	10	11	12	13	
9/20/2013	196	259	293	321	382	357	NA	212	192	277	150	150	233	0
2/20/2014	101	NA	196	179	NA	261	115	49	57	147	48	72	68	NM
10/22/2014	122	68	NA	122	NA	186	343	99	94	161	45	92	72	0
2/19/2015	345	351	366	302	297	431	535	162	162	310	10	220	245	NM
8/19/2015	102	79	166	147	NA	203	370	88	77	166	35	57	245	0
3/17/2016	69	102	268	292	301	366	428	211	192	277	86	216	227	0
9/21/2016	75	111	215	307	283	310	389	251	165	228	103	184	236	NM
5/3/2017	107	72	161	139	NA	NA	283	89	186	159	36	161	NA	NM
5/24/2018	113	78	210	185	119	205	315	120	62	137	30	79	62	0
5/23/2019	197	80	226	149	403	246	373	110	66	217	156	150	43	0
6/8/2020	No air flow - blower not working													
6/3/2021	130	162	132	153	142	266 [0.1]	463 [0.3]	96 [0.2]	95 [0.1]	131 [0.1]	53	21	76 [0.1]	0.2
5/3/2022	154 [0.3]	148 [0.4]	246 [0.3]	196 [0.3]	339 [0.3]	253 [0.1]	392 [0.1]	103 [0.1]	169	123	28	42	83	0.1
4/13/2023	122	105	250	124	329	248	384	96	127	119	41	41	82	0
4/9/2024	178 [0.6]	107	265	158	331	276	307	81	139	110	44	27	101	0
4/15/2025	161	128	253	180	339	262	347	99	164 [0.2]	115	32	26	95	0
Notes: NA – Not Accessible – blocked by inventory, shelving; NM – Not measured. [0.1] = PID reading in ppm.														

Summary Table, continued

Vapor Mitigation System Air Flow Readings

Extraction Point, Air Flow (feet-per-minute)					Effluent (PID Reading)
Date	14	15	16	17	
10/22/2014	105	210	696	513	0
2/19/2015	243	384	1279	788	NM
8/19/2015	112	1010	760	581	0
3/17/2016	132	980	622	702	0
9/21/2016	127	869	732	765	NM
5/3/2017	105	147	679	679	NM
5/24/2018	62	196	1960	980	0
5/23/2019	30	259	1179	778	0
6/8/2020	36	218	984	532	0

Extraction Point, Air Flow (feet-per-minute)					Effluent (PID Reading)
Date	14	15	16	17	
6/3/2021	417 [0.1]	878 [0.1]	478 [0.6]	241 [0.3]	0.1
5/3/2022	829	248	480	93	0
4/13/2023	770	527	454	97	0
4/9/2024	614	486	414	127	0
4/15/2025	754	310	448	101	0

No interruptions to the operation of the SSDS were reported to GeoLogic during this reporting period, except for power outages.

No damage was observed to the SSDS's piping or surface seals during the annual system inspection.

Groundwater Monitoring Summary

As required under the SMP, Revision No. 4, the annual groundwater monitoring event for monitoring wells MW-8 and MW-9 was completed on April 15, 2025.

The depth to groundwater was measured at each well and the data was used to develop the Water Table Elevations for the April 15, 2025 monitoring event (See Figure No. 2 and Table 1). Note: without data from MW-7R, it is not possible to determine the direction of groundwater flow. However, the direction of groundwater flow has been historically consistent, to the west.

The groundwater samples collected during the April 15, 2025 sampling event were analyzed for total cadmium and total chromium.

Field parameters (temperature, conductivity, dissolved oxygen (DO), pH, oxidation-reduction potential (ORP) and turbidity) were measured during purging procedures to ensure that stability was achieved prior to groundwater sample collection (see Table 2). Note: Starting in 2020, turbidity was added to the field parameters.

Post-remediation, cadmium concentrations in groundwater have ranged from not-detected to 130 µg/L. The highest concentration was observed at MW-8 which is adjacent to the remediation excavation and injection areas. It is noted that the highest concentration was observed in the November 14, 2018 sample and that the concentrations in the 2019 through 2025 samples from MW-8 were one order of magnitude lower. NYS Water Quality Standard for cadmium is 5 µg/L (See Table 3).

Post-remediation, total chromium concentrations in groundwater have ranged from 19.6 µg/L to 495 µg/L. The highest concentration was observed at MW-8 in the November 14, 2018 sample. The concentrations in the 2019 through 2025 samples from MW-8 were lower. The NYS Water Quality Standard for chromium is 50 µg/L (See Table 3).

Results from future monitoring events will continue to be utilized to monitor contaminant concentrations.

Recommendations

No changes to the monitoring program or maintenance requirements are recommended by GeoLogic at this time.

If you have any questions, or additional information is required, please contact the undersigned.

Prepared by,

GeoLogic NY, P.C.



Christopher T. Gabriel
Project Manager



Forrest C. Earl, P.G.
President/Principal Hydrogeologist

Enc: Appendix A Institutional and Engineering Controls Certification Form
 Appendix B Figures
 Appendix C Tables
 Appendix D Laboratory Analysis Report

cc via e-mail: G.P. Morgan, TCMF
 M. Schuck, NYSDOH
 C. Coddington, BCHD

cc: Fenton Public Library (paper copy only)

File: P:\PROJECTS\1999\99011A\REPORT\2025 Periodic Review Report\2025 PRR for Site No. C704045 TCMF - April 2025.doc

APPENDIX A

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM



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



Site Details

Box 1

Site No. **C704045**

Site Name TCMF Hillcrest Facility

Site Address: 4 Nowlan Road Zip Code: 13904
City/Town: Binghamton
County: Broome
Site Acreage: 0.953

Reporting Period: April 20, 2024 to April 20, 2025

YES NO

1. Is the information above correct? **X** ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? ☐ **X**

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? ☐ **X**

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? ☐ **X**

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development? ☐ **X**

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below? **X** ☐
Commercial and Industrial

7. Are all ICs in place and functioning as designed? **X** ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 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

Box 2A

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. Are the assumptions in the Qualitative Exposure Assessment still valid? **X** ☐
(The Qualitative Exposure Assessment must be certified every five years)

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. C704045**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**129.05-4-2**

Binghamton Realty Inc.

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

- The Controlled Property may be used for Commercial and Industrial.
- Prohibition on the use of groundwater.
- Site activities (i.e., monitoring and soil management) in compliance with the SMP.
- Evaluation of vapor intrusion for newly developed buildings.

129.05-4-5

Binghamton Realty Inc.

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

- The Controlled Property may be used for Commercial and Industrial.
- Prohibition on the use of groundwater.
- Site activities (i.e., monitoring and soil management) in compliance with the SMP.
- Evaluation of vapor intrusion for newly occupied or developed buildings.

Box 4**Description of Engineering Controls**ParcelEngineering Control**129.05-4-2**

Vapor Mitigation
Cover System

- Sub-Slab Depressurization Systems with the Site building.
- Site Cover System.

129.05-4-5

Cover System

- Site Cover System.

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 complete.

YES NO

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

X ☐

**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. C704045**

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.

I George Morgan at 349 industrial park dr Binghamton NY 13904,
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

G.P. Morgan
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

4-23-2025
Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional 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.

I Forrest C. Earl, P.G. at GeoLogic NY, P.C.
print name print business address
P.O. Box 350, Homer, NY 13077

am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)



Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp
(Required for PE)



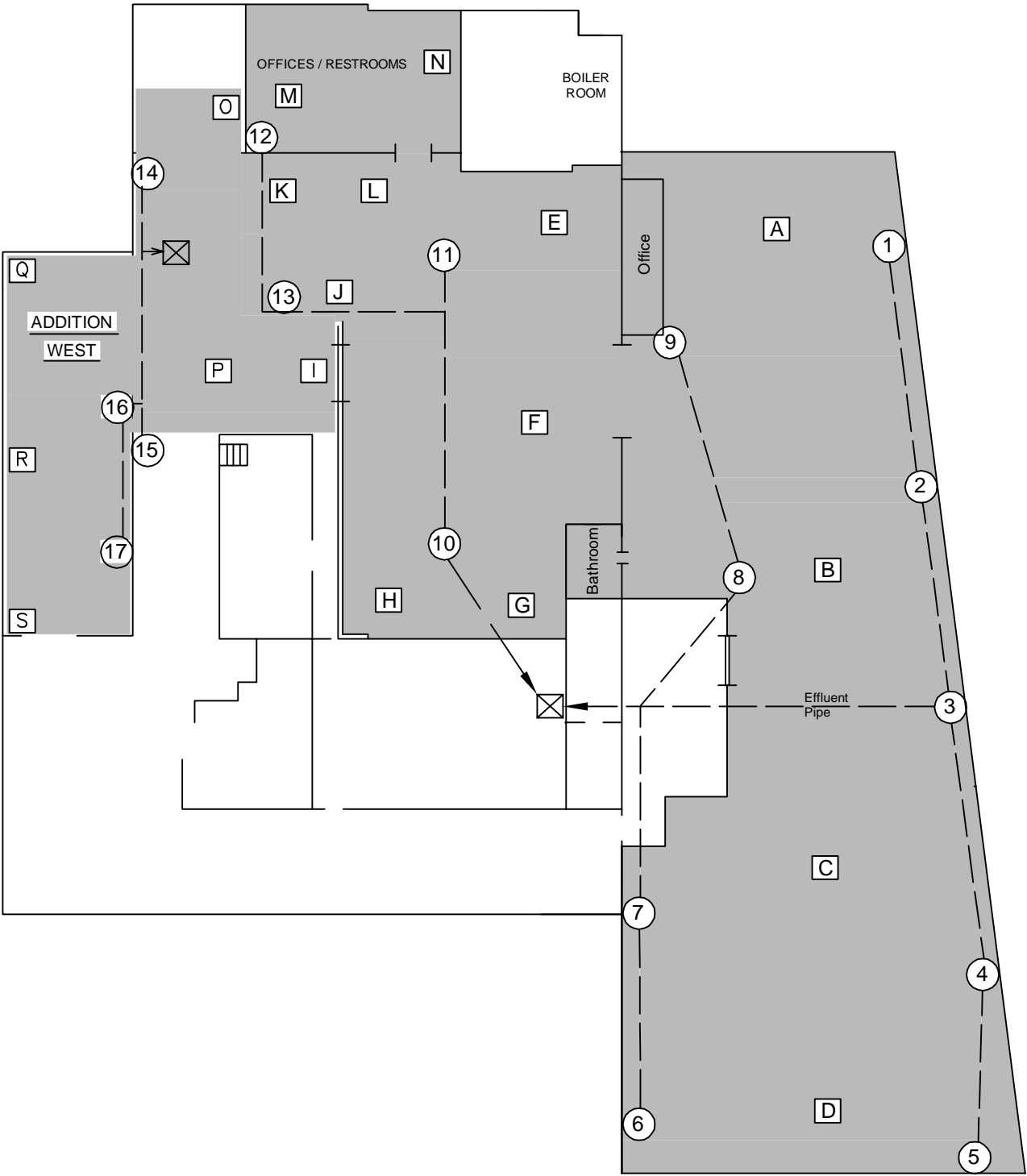
4-24-25

Date

APPENDIX B


FIGURES

NOWLAN ROAD



LEGEND:

- ① EXTRACTION POINT-4" DIAMETER PVC PIPING
- A PILOT POINT
- ⊗ ROTRON 404 AND 505 BLOWER
- OCCUPIED AREA



GeoLogic NY, P.C., Homer, New York

SSD SYSTEM LOCATION MAP
Triple Cities Metal Finishing
Binghamton, New York
Site No. C704045

DRAWN BY: SMC/SDW	SCALE: NTS	PROJECT NO.: 99011A
REVIEWED BY: KT	DATE: JUN. 2020	FIGURE NO.: 1



GeoLogic
GeoLogic NY, P.C.

WATER TABLE ELEVATIONS – APRIL 2025
TRIPLE CITIES METAL FINISHING
BINGHAMTON, NEW YORK
BCP SITE NO. 704045

DRAWN BY: CTG	SCALE: Not To Scale	PROJECT NO: 99011A
REVIEWED BY: FCE	DATE: APRIL 2025	FIGURE NO: 2

APPENDIX C

TABLES

TABLE 1
GROUNDWATER ELEVATIONS

Well	MW-3		MW-3HA		MW-4		MW-5R		MW-6		MW-7R		MW-8		MW-9	
Top of Well Screen Elevation	869.3		872.5		871.0		873.3		872.2		877.4		872.5		874.6	
Bottom of Well Casing Elevation	859.3		862.5		861.0		863.3		862.2		857.4		862.5		864.6	
TOC Reference Elevation	899.30		901.53		899.01		898.27		897.21		896.40		899.47		898.64	
DATE	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.	DtoW	Elev.
10/29/2015	30.75	868.55	NA		33.22	865.79	NA		28.58	868.63	22.75	873.65	NA		NA	
4/11/2016	29.92	869.38	32.00	869.53	32.88	866.13	28.58	869.69	27.70	869.51	21.37	875.03	29.98	869.49	29.11	869.53
10/25/2016	30.93	868.37	32.99	868.54	33.37	865.64	29.81	868.46	28.66	868.55	23.50	872.90	31.01	868.46	30.27	868.37
1/4/2017	30.24	869.06	32.40	869.13	32.98	866.03	28.94	869.33	28.01	869.20	22.79	873.61	NA		29.51	869.13
5/3/2017	29.05	870.25	31.21	870.32	32.77	866.24	27.56	870.71	NA		18.06	878.34	29.14	870.33	28.25	870.39
11/16/2017	30.30	869.00	32.47	869.06	33.10	865.91	29.17	869.10	28.12	869.09	22.33	874.07	30.40	869.07	29.56	869.08
5/24/2018	29.40	869.90	31.55	869.98	NC		NC		NC		NC		29.50	869.97	28.64	870.00
11/14/2018	28.97	870.33	31.18	870.35	32.65	866.36	27.88	870.39	NA		18.57	877.83	29.07	870.40	28.20	870.44
5/23/2019	29.16	870.14	Destroyed during winter of 2018		Abandoned in December 2018		28.05	870.22	Abandoned in December 2018		19.09	877.31	29.26	870.21	28.40	870.24
11/13/2019	29.57	869.73					28.45	869.82			20.60	875.80	29.68	869.79	28.85	869.79
6/8/2020	29.62	869.68					28.52	869.75			20.27	876.13	29.79	869.68	28.91	869.73
11/10/2020	30.45	868.85					29.30	868.97			22.77	873.63	30.53	868.94	29.75	868.89
6/3/2021	29.50	869.80					NA				19.78	876.62	29.60	869.87	28.77	869.87
11/9/2021	31.46	867.84					30.38	867.89			Abandoned		31.64	867.83	30.91	867.73
5/3/2022	29.15	870.15					28.05	870.22					29.25	870.22	28.40	870.24
4/13/2023	Abandoned						24.48	873.79					29.70	869.77	28.90	869.74
4/9/2024	Abandoned						28.05	870.22					29.31	870.16	28.47	870.17
4/15/2025	Abandoned										28.46	869.81			29.78	869.69
Notes:																
TOC - Top of Casing			DtoW - TOC Depth to Water					Elev. - Elevation								
NA - Not Accessible or Not Installed Yet.			NC - Not collected due to miscommunication with field personnel.													
Destroyed = Well destroyed.			Abandoned = Well decommissioned.													

TABLE 2
FIELD PARAMETERS

Well	Date	Temp. (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP	Turbidity (NTU)
MW-3	10/29/2015	14.48	0.788	4.93	7.58	219.2	
	4/11/2016	12.64	0.807	13.29	8.01	157.6	
	10/25/2016	14.41	0.767	3.17	8.18	271.1	
	1/4/2017	13.92	1.023	7.26	8.08	63.3	
	5/3/2017	12.35	1.431	7.56	7.63	260.5	
	11/16/2017	8.19	0.951	9.58	7.61	2.0	
	5/24/2018	12.62	0.980	8.55	7.62	246.8	
	11/14/2018	14.59	0.871	10.37	7.62	252.7	
	5/23/2019	12.64	0.908	15.14	7.73	286.4	
	11/13/2019	14.95	0.917	7.69	7.56	250.2	
	6/8/2020	12.80	0.741	8.78	7.74	190.5	386.1
	11/10/2020	13.81	0.960	10.01	7.06	313.0	752.0
	6/3/2021	12.90	0.414	8.33	7.53	178.7	289.0
	11/9/2021	14.10	1.044	8.00	7.61	190.2	324.0
	5/3/2022	12.90	1.447	8.63	7.79	56.1	273.8
	4/13/2023	Abandoned					
	4/9/2024						
	4/15/2025						
MW-8	4/11/2016	12.44	0.569	4.01	8.29	-143.9	
	10/25/2016	13.94	0.755	7.71	8.45	228.9	
	1/4/2017	NS					
	5/3/2017	12.31	1.375	10.01	7.71	252.8	
	11/16/2017	8.21	1.009	10.26	7.92	12.8	
	5/24/2018	12.60	0.904	9.35	7.69	255.1	
	11/14/2018	14.01	0.838	9.18	7.71	252.4	
	5/23/2019	12.97	0.793	15.56	7.75	287.3	
	11/13/2019	14.04	0.853	7.93	7.53	299.2	
	6/8/2020	12.70	0.732	9.57	7.79	181.1	2,168.0
	11/10/2020	13.02	0.952	6.56	7.10	297.0	>1,000
	6/3/2021	12.80	0.383	8.90	7.50	165.3	1,920.4
	11/9/2021	14.00	0.997	8.51	7.63	258.6	2,784.0
	5/3/2022	13.10	1.174	9.46	7.87	94.6	3,595.3
	4/13/2023	13.50	0.946	8.97	7.72	233.5	2,110.0
	4/9/2024	12.20	0.664	9.72	7.57	259.5	NA
	4/15/2025	13.00	0.992	9.56	7.58	245.3	1,382.3
MW-9	4/11/2016	12.90	0.870	7.24	8.29	51.1	
	10/25/2016	14.88	0.705	10.16	8.63	230.6	
	1/4/2017	14.69	1.230	10.60	8.29	168.5	
	5/3/2017	11.99	1.294	10.78	7.83	238.6	
	11/16/2017	8.05	0.949	11.69	7.83	25.1	
	5/24/2018	12.36	0.778	10.22	7.80	243.9	
	11/14/2018	14.69	0.786	9.44	7.74	181.0	
	5/23/2019	11.87	0.690	16.96	7.81	281.7	
	11/13/2019	14.37	0.853	8.90	7.54	262.4	
	6/8/2020	12.10	0.671	10.00	7.80	183.5	139.6
	11/10/2020	12.79	1.100	10.04	7.06	323.0	>1,000
	6/3/2021	12.30	0.345	9.52	7.54	180.3	403.2
	11/9/2021	13.60	0.854	9.04	7.70	217.7	854.0
	5/3/2022	11.90	1.106	9.70	7.81	63.7	299.0
	4/13/2023	13.20	0.735	9.28	7.77	214.4	1,039.0
	4/9/2024	12.30	0.825	9.46	7.19	306.3	383.4
	4/15/2025	13.10	0.957	8.78	7.51	248.5	2,693.8
Notes: Turbidity added to field parameters in June 2020.							
2024 Turbidity at MW-8 not available (NA) due to equipment malfunction.							

TABLE 3
SUMMARY OF 2016 - 2025 GROUNDWATER METALS ANALYTICAL RESULTS

Well	Date	Cadmium	Chromium	Hexavalent Chromium
MW-3	4/11/2016	10.5	161	#N/A
	10/25/2016	18.9	279	#N/A
	1/4/2017	13.2	210	#N/A
	5/3/2017	8.1	88.2	50
	11/16/2017	5.6	110	120
	5/24/2018	17.2	183	130
	11/14/2018	13.2	166	85
	5/23/2019	7.5	125	110
	11/13/2019	16.8	313	320
	6/8/2020	8.0	106	92
	11/10/2020	8.8	206	180
	6/3/2021	3.5	147	130
	11/9/2021	6.0	152	140
	5/3/2022	<2.5 ND	115	84
Abandoned				
MW-3HA	4/11/2016	7.1	19.6	#N/A
	10/25/2016	18.8	57.8	#N/A
	1/4/2017	7.4	26.4	#N/A
	5/3/2017	11.7	54.4	43
	11/16/2017	8.2	28.9	22
	5/24/2018	16.8	34.3	22
	11/14/2018	18.7	63.6	47
Well Destroyed Winter 2018				
MW-8	4/11/2016	<3 U	54.8	#N/A
	10/25/2016	7.9	254	#N/A
	1/4/2017	Not Accessible		
	5/3/2017	10.3	133	100
	11/16/2017	3.1	96.0	76
	5/24/2018	17.0	254	240
	11/14/2018	130	495	280
	5/23/2019	12.9	267	250
	11/13/2019	17.3	279	270
	6/8/2020	15.8	301	300
	11/10/2020	18.3	339	310
	6/3/2021	17.4	284	250
	11/9/2021	18.2	271	270
	5/3/2022	18.4	332	310
	4/13/2023	27.0	250	240
	4/9/2024	20	220	180
	4/15/2025	19	280	#N/A
MW-9	4/11/2016	4.8	74.6	#N/A
	10/25/2016	7.5	24.4	#N/A
	1/4/2017	7.7	152	#N/A
	5/3/2017	6.5	48.0	43
	11/16/2017	5.0	70.3	50
	5/24/2018	14.9	90.4	87
	11/14/2018	11.0	65.4	53
	5/23/2019	11.9	82.8	75
	11/13/2019	16.2	89.0	75
	6/8/2020	7.7	64.9	53
	11/10/2020	10.2	110	94
	6/3/2021	7.3	80.3	61
	11/9/2021	6.3	65.1	60
	5/3/2022	6.2	85.2	75
	4/13/2023	8.5	79	76
	4/9/2024	5.5	69	59
	4/15/2025	7.4	110	#N/A
NYS Standard		5	50	50
Notes: #N/A = Not analyzed.				
All concentrations in micrograms per liter (µg/L) = parts per billion (ppb).				
Highlight value exceed TOG 1.1.1 Water Quality Standards and/or Guidances for Class GA waters.				
Monitoring requirement for VOCs was terminated in May 2017. See past reports for VOC results.				
Monitoring requirement for Cr+6 was terminated in June 2024.				

APPENDIX D
LABORATORY ANALYSIS REPORT

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Christopher T Gabriel
Geologic NY Inc
PO BOX 350
37 Copeland Ave
Homer, New York 13077

Generated 4/18/2025 4:48:54 PM

JOB DESCRIPTION

GeoLogic Metals Analysis - 99011A

JOB NUMBER

480-228743-1

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
4/18/2025 4:48:54 PM

Authorized for release by
Joshua Velez, Project Management Assistant I
Joshua.Velez@et.eurofinsus.com
Designee for
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
QC Sample Results	8
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Method Summary	12
Sample Summary	13
Chain of Custody	14
Receipt Checklists	15



Definitions/Glossary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Geologic NY Inc
Project: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Job ID: 480-228743-1

Eurofins Buffalo

Job Narrative 480-228743-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/16/2025 9:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Buffalo

Detection Summary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Client Sample ID: MW-8

Lab Sample ID: 480-228743-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.019		0.0020	0.00050	mg/L	1		6010D	Total/NA
Chromium	0.28		0.0040	0.0010	mg/L	1		6010D	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 480-228743-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0074		0.0020	0.00050	mg/L	1		6010D	Total/NA
Chromium	0.11		0.0040	0.0010	mg/L	1		6010D	Total/NA

Client Sample ID: DUPE

Lab Sample ID: 480-228743-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.0069		0.0020	0.00050	mg/L	1		6010D	Total/NA
Chromium	0.11		0.0040	0.0010	mg/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample Results

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Client Sample ID: MW-8

Date Collected: 04/15/25 11:00

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-1

Matrix: Water

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.019		0.0020	0.00050	mg/L		04/17/25 08:30	04/17/25 15:28	1
Chromium	0.28		0.0040	0.0010	mg/L		04/17/25 08:30	04/17/25 15:28	1

Client Sample ID: MW-9

Date Collected: 04/15/25 14:15

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-2

Matrix: Water

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0074		0.0020	0.00050	mg/L		04/17/25 08:30	04/17/25 15:37	1
Chromium	0.11		0.0040	0.0010	mg/L		04/17/25 08:30	04/17/25 15:37	1

Client Sample ID: DUPE

Date Collected: 04/15/25 14:15

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-3

Matrix: Water

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0069		0.0020	0.00050	mg/L		04/17/25 08:30	04/17/25 15:39	1
Chromium	0.11		0.0040	0.0010	mg/L		04/17/25 08:30	04/17/25 15:39	1

QC Sample Results

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-743739/1-A
Matrix: Water
Analysis Batch: 743875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 743739

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020	0.00050	mg/L		04/17/25 08:30	04/17/25 15:24	1
Chromium	ND		0.0040	0.0010	mg/L		04/17/25 08:30	04/17/25 15:24	1

Lab Sample ID: LCS 480-743739/2-A
Matrix: Water
Analysis Batch: 743875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743739

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.469		mg/L		94	80 - 120
Chromium	0.500	0.510		mg/L		102	80 - 120

Lab Sample ID: 480-228743-1 MS
Matrix: Water
Analysis Batch: 743875

Client Sample ID: MW-8
Prep Type: Total/NA
Prep Batch: 743739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.019		0.500	0.509		mg/L		98	75 - 125
Chromium	0.28		0.500	0.807		mg/L		106	75 - 125

Lab Sample ID: 480-228743-1 MSD
Matrix: Water
Analysis Batch: 743875

Client Sample ID: MW-8
Prep Type: Total/NA
Prep Batch: 743739

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	0.019		0.500	0.496		mg/L		95	75 - 125	3	20
Chromium	0.28		0.500	0.793		mg/L		103	75 - 125	2	20

QC Association Summary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Metals

Prep Batch: 743739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-228743-1	MW-8	Total/NA	Water	3005A	
480-228743-2	MW-9	Total/NA	Water	3005A	
480-228743-3	DUPE	Total/NA	Water	3005A	
MB 480-743739/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-743739/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-228743-1 MS	MW-8	Total/NA	Water	3005A	
480-228743-1 MSD	MW-8	Total/NA	Water	3005A	

Analysis Batch: 743875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-228743-1	MW-8	Total/NA	Water	6010D	743739
480-228743-2	MW-9	Total/NA	Water	6010D	743739
480-228743-3	DUPE	Total/NA	Water	6010D	743739
MB 480-743739/1-A	Method Blank	Total/NA	Water	6010D	743739
LCS 480-743739/2-A	Lab Control Sample	Total/NA	Water	6010D	743739
480-228743-1 MS	MW-8	Total/NA	Water	6010D	743739
480-228743-1 MSD	MW-8	Total/NA	Water	6010D	743739

Lab Chronicle

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Client Sample ID: MW-8

Date Collected: 04/15/25 11:00

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			743739	ET	EET BUF	04/17/25 08:30
Total/NA	Analysis	6010D		1	743875	BMB	EET BUF	04/17/25 15:28

Client Sample ID: MW-9

Date Collected: 04/15/25 14:15

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			743739	ET	EET BUF	04/17/25 08:30
Total/NA	Analysis	6010D		1	743875	BMB	EET BUF	04/17/25 15:37

Client Sample ID: DUPE

Date Collected: 04/15/25 14:15

Date Received: 04/16/25 09:10

Lab Sample ID: 480-228743-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			743739	ET	EET BUF	04/17/25 08:30
Total/NA	Analysis	6010D		1	743875	BMB	EET BUF	04/17/25 15:39

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-26

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Method Summary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Geologic NY Inc
Project/Site: GeoLogic Metals Analysis - 99011A

Job ID: 480-228743-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-228743-1	MW-8	Water	04/15/25 11:00	04/16/25 09:10
480-228743-2	MW-9	Water	04/15/25 14:15	04/16/25 09:10
480-228743-3	DUPE	Water	04/15/25 14:15	04/16/25 09:10

[illegible]

Login Sample Receipt Checklist

Client: Geologic NY Inc

Job Number: 480-228743-1

Login Number: 228743

List Number: 1

Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GEOLOGIC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	