2022 Annual Monitoring Report

Colesville Landfill

Broome County, New York

Prepared for

Broome County Department of Public Works
Solid Waste Management

60 Hawley Street
Binghamton, New York 13901

January 2023

Barton&Loguidice

Colesville Landfill
286 Knapp Road
Binghamton, New York 13905
Broome County

2022 Annual Monitoring Report

January 2023

Prepared for

Broome County Department of Public Works Solid Waste Management

60 Hawley Street

Binghamton, New York 13901

Prepared by

Barton & Loguidice, D.P.C.
443 Electronics Parkway
Liverpool, New York 13088

TABLE OF CONTENTS

Section **Page**

ABBREVIATIONS

ALS	Australian Laboratory Services
B&L	Barton & Loguidiuce, D.P.C.
BPJ	Best Professional Judgment
DO	Dissolved oxygen
EC	Engineering controls
IC	Institutional controls
L	Liter
LPGAC	Liquid phase granular activated carbon
LTM	Long-term monitoring
µg	Micrograms
mg	Milligrams
NOAA	National Oceanic and Atmospheric Administration
NYSDEC	New York State Department of Environmental Conservation
O&M	Operations and Maintenance
OM&M	Operations, Maintenance, & Monitoring
SMP	Site Management Plan
SQuiRT	NOAA's Screening Quick Reference Tables
SW	Surface water
TVOC	Total volatile organic compounds
VOC	Volatile organic compounds
WQS	Water Quality Standards

1.0 INTRODUCTION

This Annual Monitoring Report (report) was prepared by Barton & Loguidice D.P.C. (B&L) on behalf of the Broome County Division of Solid Waste Management for the Colesville Landfill, located in Broome County, New York (Site) to evaluate and document long-term monitoring (LTM) activities at the Site. The Site is listed in the Registry of Inactive Hazardous Waste Disposal Sites as Class 4 and monitoring activities are being conducted pursuant to the Site Management Plan (SMP) (Broome County Division of Solid Waste Management, 2020), which was approved by the New York State Department of Environmental Conservation (NYSDEC).

This 2022 Annual Monitoring Report describes the collection and analysis of the following data:

- Surface water and spring water data collected in March and September 2022;
- SP-5 remediation system influent/effluent data collected in March and September 2022; and,
- SP-3 sediment data collected in March and September 2022;

In addition, this report includes a brief summary of groundwater and residential results from the March 2022, previously reported to NYSDEC under separate cover in June, and included by reference.

The following sections describe the sampling methodology, laboratory analytical results, a discussion of findings, and a summary of conclusions.

The following section provides a summary of the environmental monitoring for the reporting period. The site plan and monitoring locations are provided on Figures 1 and 2.

2.0 SAMPLING

2.1. Groundwater and Residential Water Monitoring

Groundwater was collected in March 2022. The details of the sampling were described in the June 2022 report titled "2022 Groundwater Monitoring Report".

2.2. Surface Water Monitoring

Surface water samples were collected at the SW-2, SW-3, SW-4, and F-6 locations during the March and September 2022 monitoring events. Surface water samples were collected as direct grab samples from the North Stream at areas collocated with the spring samples, and at a location farther downgradient of the springs (F-6) in accordance with the SMP. Surface water samples were collected and analyzed by the laboratory (ALS) for volatile organic compounds (VOCs) and metals and field-analyzed for dissolved oxygen (DO), specific conductance, pH, oxidation-reduction potential, temperature, and turbidity.

2.3. Spring Water and Sediment Monitoring

Spring water samples were collected at the SP-2, SP-3, and SP-4 locations during the March and September 2022 sampling events. No cleaning was performed at SP-3 in 2022. Spring water samples were collected as grab samples, consistent with the SMP. Spring water samples were collected and analyzed by the laboratory (ALS) for VOCs and total metals and field-analyzed for specific conductance, pH, oxidation-reduction potential, temperature, and turbidity. The spring water quality during 2022 is discussed below in the Results Section under Spring Water Quality.

Sediment samples were collected during the March and September 2022 monitoring events where the SP-3 spring exfiltrates from the large riprap area onto the stream bank. All sediment samples were submitted for laboratory analysis of total metals. Measures were taken to decant off the liquid during the sample collection with the objective of preventing analysis of samples with a high percent moisture content, which we believe has resulted in a positive bias (i.e., distorted higher than the true value) in metals concentrations in the past.

2.4. Spring Water Remediation System Performance Monitoring

SP-5 Spring Water Remediation System Operations, Maintenance, & Monitoring (OM&M) was conducted during the March and September 2022 monitoring events. System OM&M was conducted in accordance with the SMP and consisted of the collection of influent and effluent spring water samples for analysis of VOCs and metals. The influent sample was collected as a grab sample from the influent monitoring well, which is located within the SP-5 treatment unit and screened below the liquid phase granular activated carbon (LPGAC) zone. The treatment system effluent sample was collected as a grab sample from the discharge pipe cleanout prior to entering the outfall stone apron.

3.0 RESULTS

The results of the environmental effectiveness and remediation system performance monitoring for the reporting period are summarized below, by environmental medium. An electronic copy of the reporting period laboratory analytical results is included in Appendix A.

3.1. Groundwater and Residential Water Quality

The results of the March 2022 sampling were submitted to NYSDEC in June 2022 in the report titled "2022 Groundwater Monitoring Report". This report had the following conclusions:

- Iron and several Volatile Organic Compounds (VOCs) were found to be exceeding their applicable Water Quality Standards in 2022.
- Overall, total VOC concentrations in the groundwater have decreased since 2020.
- Eight instances of exceedances from 2020 are now non-detect for the same groundwater wells and VOCs.
- Three groundwater wells had exceedances of iron but not dissolved iron.
- One residential well had an exceedance of iron.
- Overall, highly anaerobic and reducing conditions continue to be observed near the injection well

3.2. Surface Water Quality

Surface water quality analytical results for March and September 2022 are summarized in Table 1. As shown in Table 1, surface water quality remained in compliance with applicable water quality standards with the exception of pH, aluminum, and iron. SW-4 exceeded the pH low threshold of 6.5 with a value of 6.46 in September 2022.

Aluminum exceeded the Class C standard of 0.1 mg/L in all four locations in each sampling event, with values ranging from 0.12 to 1.88 mg/L. Iron's Class C standard of 0.3 mg/L was exceeded at all four locations in the March 2022 sampling event, with values ranging from 1.23 to 2.05 mg/L, and in SW-3 for the September 2022 sampling event at 0.37 mg/L. Turbidity was significantly higher than the historical ranges for each surface water sampling location in March 2022, which could have caused the elevations of aluminum and iron.

Calcium has been on a decreasing trend since September 2017 for all four locations, and magnesium concentrations were either on the lower end or below the historical range at each location. All metal concentrations aside from aluminum, aluminum, and magnesium were within the normal historical range or non-detect.

The volatile organic compound concentrations at surface water sampling locations were below the limits of detection except for on J-qualified detection of trichloroethene at SW-4 (September only) of 0.2 µg/L.

The metals concentrations, many below limits of detection, at the F-6, SW-3 and SW-4 sampling locations were also consistent with the background, upgradient sample SW-2, and historical data. These data indicate that surface water quality is not being adversely impacted by the landfill.

3.3. Spring Water Quality

Spring water samples were collected at the SP-2, SP-3, and SP-4 locations during the March and September 2022 sampling events. Spring water quality analytical results are summarized in Table 2.

pH exceeded its Class C standard with a low trigger of 6.5 at SP-2 and SP-3 during both sampling events with values of 6.19 in March and 5.97 in September for SP-2, and 6.49 in March and 6.4 in September for SP-3.

In general, the concentrations of metals were below their respective NYSDEC Part 703 Water Quality Standards (WQS) for Class C fresh surface waters with the following exceptions:

- Aluminum exceeded the criteria for protection of aquatic life from chronic effects at SP-2 and SP-4 in March 2022. All of the surface water samples also showed exceedances of aluminum in both 2022 sampling events as well.
- Arsenic exceeded its standard of 0.15 mg/L at SP-2 in March 2022. All surface water samples were non-detect for arsenic.
- Iron exceeded the standard of 0.3 mg/L at SP-2 in March 2022, and SP-3 and SP-4 in both sampling events. All surface water samples exceeded their standards in March with SW-3 also exceeding in September 2022.
- Lead exceeded its standard of 0.005 mg/L at SP-2 in March 2022.
- Zinc exceeded its standard of 0.08 mg/L at SP-2 in March 2022. All surface water samples were non-detect for lead.

The metals exceedances of aluminum and iron and pH exceedances in the spring water were also exceeding their standards in the surface water. However, exceedance of these metals which are principle components of sand, clay, and other nature minerals are likely due to the high turbidity at the surface water locations as none of the other parameters that exceeded their standards in spring water locations were not also exceeding in the surface water locations.

Spring water VOC concentrations only exceeded WQS for Class C fresh surface waters for chlorobenzene at SP-3 (16 µg/L for both sampling events). Relatively low concentrations of several other VOCs were detected at all three locations and were below the applicable WQS or non-detect. Despite the presence of VOCs in the three spring water locations, only non-detect to trace concentrations of VOCs were present in the surrounding surface water (Table 1).

3.4. Sediment Quality

Sediment samples (SP-3-SED) were collected in the vicinity of SP-3 during the site visits in March and September 2022 using the sampling methodology previously described. Sediment quality analytical results are summarized in Table 3.

Both the March and September sampling activities found that arsenic and nickel fall within the Class B, NYSDEC Freshwater Sediment Screening Values, range, indicating that they are considered to be slightly to moderately contaminated. The sediment's arsenic concentration was on the lower end of the historical range. Nickel's concentration was within the range from June 2016 through the present, which are generally lower than in sampling events before June 2016.

Manganese's National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRT) value was exceeded during both sampling events, and it is significantly higher than the previous three events.

The sediment data will continue to be assessed to determine if future sediment scraping and disposal is necessary to maintain conditions that are consistent with Class A sediment (low risk to aquatic life), as described in Table 3 - Freshwater Sediment Guidance Values of the NYSDEC Screening and Assessment of Contaminated Sediment document (NYSDEC, 2014).

3.5. Groundwater Remediation System

One reagent injection was conducted during 2022. The injection was initiated on August 16 and was completed on August 17. Appendix B provides a summary of the quantity of molasses solution that was injected in each of the injection wells.

3.6. Spring Water Remediation System

The SP-5 sample location is the Spring Water Remediation System, which uses carbon adsorption to remove organics from this spring. SP-5 analytical results for this reporting period are provided in Table 4. As shown in Table 4, influent total volatile organic compound (TVOC) concentrations were 27 µg/L in March and 26 µg/L in October. Furthermore, the influent concentrations were below (or within the range of) their respective Best Professional Judgement (BPJ) limits during the reporting period. TVOC concentrations of 8.4 µg/L (March 2022) and 9.9 µg/L (September 2022) were detected in SP-5 effluent.

These results show that while TVOC levels are reduced by the system, removal is limited. However, the totals are primarily based on results with estimated values below quantitation limit (J qualifiers). This can underestimate contaminant removal if influent concentrations were reported as non-detect, but effluent concentrations were J-qualified results. On an individual compound-basis, a comparison among compounds that were detected (with or without a J qualifier) shows that the majority of the compounds were both not detected. Among the organic compounds detected, nine (all but chloroethane) decreased in the March sampling and five (all but 1,1-dichloroethane and chloroethane) were reduced in concentration. However, for chloroethane, this not detected in both influent samples (with a detection limit of 5 µg/L) but

were detected as J-qualified results at less than 1 µg/L in the effluent samples and this this may not represent an increase. The 1,1-dichloroethane concentrations in November 2022 were 4.6 J-qualified in influent and 5.5 in effluent and may be considered equivalent.

4.0 IC/EC AND O&M PLAN COMPLIANCE

Broome County personnel conducted site inspections to comply with instutional controls / engineering controls (IC/EC) requirements. The prime compliance inspection was performed in December 2022. A supplementary inspection was performed in April 2022 following a storm event. The storm impacts noted in April (primarily downed trees) were remedied prior to the end of the year. The completed Inspection and Certification Form and the April inspection photo log are provided as Appendix C. In addition, Broome County's compliance with components of the operations and Maintenance (O&M) portion of the SMP is documented in Appendix D.

5.0 CONCLUSIONS

Based on the data generated during the reporting period, B&L concludes the following:

- VOC and metals concentrations in surface water continue to be low or non-detect and consistent with historical data, despite the presence of VOCs and metals in the spring water.
- Sediment quality results during March and September of 2022 were generally consistent with sediment sample results from 2021.
- The carbon treatment system at SP-5 continues to reduce the levels of organic contaminants at this location.

6.0 PROJECT SCHEDULE

Semi-annual sampling of surface water, spring water, sediment and SP-5 influent/effluent will continue in accordance with the SMP. The next 5th quarter groundwater monitoring event is scheduled for the 2nd quarter of 2023.

Tables

TABLE 1
2022 Monitoring Results – Surface Water

Barton & Loguidice

Table 1
Broome County Colesville Landfill
2022 Monitoring Results
Surface Water

Client Sample ID:						F-6				SW-2				SW-3				SW-4			
Lab Sample ID:			Class C Ambient Water Quality Standard (TOGS 1.1.1)			R2202164-002		R2208717-002		R2202164-008		R2208717-008		R2202164-005		R2208717-005		R2202164-003		R2208717-003	
Date Sampled:						3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Field Parameters																					
pH (Field)	STL00199	SU	6.5	8.5	3	7.02		6.97		6.8		6.75		6.69		6.67		6.83		**6.46**	
Dissolved Oxygen	STL00082	MG/L	5	-	3	12.9		9.48		13		9.36		12.9		9.29		12.9		9.42	
Specific Conductivity	STL00244	UMHOS/CM				81		94		71		78		76		93		78		93	
Field EH/ORP	STL00811	MILLIVOLTS				6		92		38		11		85		24		51		112	
Temperature (Field Test)	STL00246	DEGREES C				0.5		15		0.5		15.3		0.6		15		0.3		15	
Turbidity (Field)	STL00392	NTU				12.2		1		10.4		2.6		16.9		1.8		10.2		1.1	
Metals																					
Aluminum	7429-90-5	mg/L		0.1	A(C)	**1.1**		**0.12**		**1.88**		**0.14**		**1.31**		**0.12**		**1.11**		**0.12**	
Antimony	7440-36-0	mg/L		-		0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Arsenic	7440-38-2	mg/L		0.15	A(C)d	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Barium	7440-39-3	mg/L		-		0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Beryllium	7440-41-7	mg/L		1100	A(C)e	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
Cadmium	7440-43-9	mg/L		0.002	A(C)f	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Calcium	7440-70-2	mg/L		-		6.2		8.2		4.8		5.8		5.8		7.5		5.9		7.8	
Chromium	7440-47-3	mg/L		0.086	A(C)f	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Cobalt	7440-48-4	mg/L		0.005	A(C)g	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Copper	7440-50-8	mg/L		0.009	A(C)f	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Iron	7439-89-6	mg/L		0.3	A(C)	**1.23**		0.2		**2.05**		0.25		**1.44**		**0.37**		**1.23**		0.19	
Lead	7439-92-1	mg/L		0.005	A(C)f	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Magnesium	7439-95-4	mg/L		-		2		2.2		2		1.8		2		2.1		2		2.1	
Manganese	7439-96-5	mg/L		-		0.061		0.03		0.064		0.012		0.069		0.032		0.063		0.029	
Mercury	7439-97-6	mg/L		7E-07	H(FC)	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Nickel	7440-02-0	mg/L		0.05	A(C)f	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Potassium	7440-09-7	mg/L		-		2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Selenium	7782-49-2	mg/L		0.0046	A(C)d	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Silver	7440-22-4	mg/L		0.0001	A(C)h	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Sodium	7440-23-5	mg/L		-		5		5.9		4.9		5.7		5		5.8		4.9		5.8	
Thallium	7440-28-0	mg/L		0.008	A(C)g	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Vanadium	7440-62-2	mg/L		0.014	A(C)g	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Zinc	7440-66-6	mg/L		0.08	A(C)f	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Volatile Organic Compounds																					
1,1,1-Trichloroethane	71-55-6	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	79-00-5	ug//L		40	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	75-34-3	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	75-35-4	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	120-82-1	ug//L		5	A(C)a	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	96-12-8	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	106-93-4	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	95-50-1	ug/L		5	A(C)b	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	107-06-2	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	78-87-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	541-73-1	ug/L		5	A(C)b	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	106-46-7	ug/L		5	A(C)b	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	78-93-3	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Hexanone	591-78-6	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	108-10-1	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U

Barton & Loguidice

Table 1
Broome County Colesville Landfill
2022 Monitoring Results
Surface Water

Client Sample ID:			Class C Ambient Water Quality Standard (TOGS 1.1.1)			F-6				SW-2				SW-3				SW-4			
Lab Sample ID:						R2202164-002		R2208717-002		R2202164-008		R2208717-008		R2202164-005		R2208717-005		R2202164-003		R2208717-003	
Date Sampled:						3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Acetone	67-64-1	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzene	71-43-2	ug/L		10	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	75-27-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	75-25-2	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	74-83-9	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon disulfide	75-15-0	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride	56-23-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	108-90-7	ug/L		5	A(C)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	75-00-3	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	67-66-3	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	74-87-3	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	156-59-2	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	10061-01-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Cyclohexane	110-82-7	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	124-48-1	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	75-71-8	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	100-41-4	ug/L		17	A(C)c	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	98-82-8	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Acetate	79-20-9	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methylcyclohexane	108-87-2	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	1634-04-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	75-09-2	ug/L		200	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	100-42-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	127-18-4	ug/L		1	H(FC)C	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L		6000	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	156-60-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	10061-02-6	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	79-01-6	ug/L		40	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	0.2	J
Trichlorofluoromethane	75-69-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl chloride	75-01-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Xylenes, Total	1330-20-7	ug/L		5	A(C)c	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Total Volatiles (Calculated)	*N/A*	*ug/L*				*ND*		*ND*		*ND*		*ND*		*ND*		*ND*		*ND*		*0.2*	

Key			
##	Result exceeds Class C Standard	3	6 NYCRR 703.3 based on classification as Class C trout waters (C(T)).
NS	Not Sampled		
-	Not Analyzed		
U or ND	Not Detected		
H(FC)	Health (Fish Consumption)		
A(C)	Aquatic (Chronic)		
a	Applies to sum of 1,2,3- and 1,2,4- and 1,3,5-trichlorobenzenes		
b	Applies to sum of 1,2-, 1-3, and 1,4-dichlorobenzenes		
c	TOGS 1.1.1 guidance value		
d	For dissolved form		
e	For hardness > 75 ppm		
f	Hardness-dependent standard, which is based on a default hardness of 100 mg/L		
g	Acid-soluble form		
h	For ionic silver		

TABLE 2
2022 Monitoring Results – Spring Water

Barton & Loguidice

Table 2
Broome County Colesville Landfill
2022 Monitoring Results
Spring Water

Client Sample ID:						SP-2				SP-3-WTR				SP-4			
Lab Sample ID:			Class C Ambient Water Quality Standard (TOGS 1.1.1)[2]			R2202164-009		R2208717-009		R2202164-006		R2208717-006		R2202164-004		R2208717-004	
Date Sampled:						3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Field Parameters																	
pH (Field)	STL00199	SU	6.5	8.5	3	**6.19**		**5.97**		**6.49**		**6.4**		6.7		6.54	
Dissolved Oxygen	STL00082	MG/L	5	-	3	-		-		-		-		-		-	
Specific Conductivity	STL00244	UMHOS/CM				112		101		252		272		311		365	
Field EH/ORP	STL00811	MILLIVOLTS				-		-		-		-		-		-	
Temperature (Field Test)	STL00246	DEGREES C				7.5		10.7		3.9		14.3		1.2		15.8	
Turbidity (Field)	STL00392	NTU				0.5		0.4		11		5.3		11.6		9.9	
Metals																	
Aluminum	7429-90-5	mg/L		0.1	A(C)	**0.32**		0.1	U	0.1	U	0.1	U	**2.21**		0.1	U
Antimony	7440-36-0	mg/L		-		0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Arsenic	7440-38-2	mg/L		0.15	A(C)d	**0.251**		0.01	U	0.01	U	0.01	U	0.09		0.098	
Barium	7440-39-3	mg/L		-		0.142		0.02	U	0.031		0.044		0.073		0.075	
Beryllium	7440-41-7	mg/L		1100	A(C)e	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
Cadmium	7440-43-9	mg/L		0.002	A(C)f	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Calcium	7440-70-2	mg/L		-		43.3		10.5		31.7		33.9		43.2		45.2	
Chromium	7440-47-3	mg/L		0.086	A(C)f	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Cobalt	7440-48-4	mg/L		0.005	A(C)g	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Copper	7440-50-8	mg/L		0.009	A(C)f	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Iron	7439-89-6	mg/L		0.3	A(C)	**28.2**		0.1	U	**5.96**		**12.6**		**20.3**		**17.8**	
Lead	7439-92-1	mg/L		0.005	A(C)f	**0.173**		0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Magnesium	7439-95-4	mg/L		-		10		2.9		6.7		7		9.3		9.3	
Manganese	7439-96-5	mg/L		-		6.41		0.01		3.07		4.87		3.1		4.75	
Mercury	7439-97-6	mg/L		7E-07	H(FC)	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Nickel	7440-02-0	mg/L		0.05	A(C)f	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Potassium	7440-09-7	mg/L		-		2.4		2	U	2	U	2	U	2.2		2	U
Selenium	7782-49-2	mg/L		0.0046	A(C)d	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Silver	7440-22-4	mg/L		0.0001	A(C)h	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Sodium	7440-23-5	mg/L		-		6.1		4.1		3.5		3.2		4.9		5.2	
Thallium	7440-28-0	mg/L		0.008	A(C)g	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Vanadium	7440-62-2	mg/L		0.014	A(C)g	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Zinc	7440-66-6	mg/L		0.08	A(C)f	**8.5**		0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Volatile Organic Compounds																	
1,1,1-Trichloroethane	71-55-6	ug//L		-		0.68	J	0.5	J	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	79-00-5	ug//L		40	H(FC)	5	U	5	U	0.32	J	0.43	J	5	U	5	U
1,1-Dichloroethane	75-34-3	ug//L		-		1.9	J	0.95	J	13		14		13		5	
1,1-Dichloroethene	75-35-4	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	120-82-1	ug//L		5	A(C)a	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	96-12-8	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	106-93-4	ug//L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	95-50-1	ug/L		5	A(C)b	5	U	5	U	0.24	J	0.29	J	5	U	5	U
1,2-Dichloroethane	107-06-2	ug/L		-		5	U	5	U	0.56	J	0.69	J	0.51	J	0.35	J
1,2-Dichloropropane	78-87-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	541-73-1	ug/L		5	A(C)b	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	106-46-7	ug/L		5	A(C)b	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	78-93-3	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
2-Hexanone	591-78-6	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	108-10-1	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U

Barton & Loguidice

Table 2
Broome County Colesville Landfill
2022 Monitoring Results
Spring Water

Client Sample ID:						SP-2				SP-3-WTR				SP-4			
Lab Sample ID:			Class C Ambient Water Quality Standard (TOGS 1.1.1)[2]			R2202164-009		R2208717-009		R2202164-006		R2208717-006		R2202164-004		R2208717-004	
Date Sampled:						3/10/2022		9/14/2022		3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Acetone	67-64-1	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
Benzene	71-43-2	ug/L		10	H(FC)	5	U	5	U	0.37	J	0.36	J	0.25	J	0.28	J
Bromodichloromethane	75-27-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	75-25-2	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	74-83-9	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Carbon disulfide	75-15-0	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride	56-23-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	108-90-7	ug/L		5	A(C)	5	U	5	U	**16**		**16**		2	J	3.8	J
Chloroethane	75-00-3	ug/L		-		5	U	5	U	1.5	J	2.6	J	2.5	J	0.65	J
Chloroform	67-66-3	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	74-87-3	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	156-59-2	ug/L		-		5	U	5	U	13		29		2.1	J	1.1	J
cis-1,3-Dichloropropene	10061-01-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Cyclohexane	110-82-7	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	124-48-1	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	75-71-8	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	100-41-4	ug/L		17	A(C)c	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	98-82-8	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Methyl Acetate	79-20-9	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
Methylcyclohexane	108-87-2	ug/L		-		10	U	10	U	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	1634-04-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	75-09-2	ug/L		200	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	100-42-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	127-18-4	ug/L		1	H(FC)C	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L		6000	H(FC)	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	156-60-5	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	10061-02-6	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	79-01-6	ug/L		40	H(FC)	1.6	J	1.8	J	2.5	J	23		4.3	J	1.8	J
Trichlorofluoromethane	75-69-4	ug/L		-		5	U	5	U	5	U	5	U	5	U	5	U
Vinyl chloride	75-01-4	ug/L		-		5	U	5	U	3.5	J	4.2	J	0.88	J	0.31	J
Xylenes, Total	1330-20-7	ug/L		5	A(C)c	5	U	5	U	5	U	5	U	5	U	5	U
Total Volatiles (Calculated)	*N/A*	*ug/L*				*4.18*		*3.25*		*50.99*		*90.57*		*25.54*		*13.29*	

Key	
##	Result exceeds Class C Standard
NS	Not Sampled
-	Not Analyzed
U or ND	Not Detected
H(FC)	Health (Fish Consumption)
A(C)	Aquatic (Chronic)
a	Applies to sum of 1,2,3- and 1,2,4- and 1,3,5-trichlorobenzenes
b	Applies to sum of 1,2-, 1-3, and 1,4-dichlorobenzenes
c	TOGS 1.1.1 guidance value
d	For dissolved form
e	For hardness > 75 ppm
f	Hardness-dependent standard, which is based on a default hardness of 100 mg/L
g	Acid-soluble form
h	For ionic silver

2	NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Groundwater Effluent standards, Class C, Table 1.
3	6 NYCRR 703.3 based on classification as Class C trout waters (C(T)).

TABLE 3
2022 Monitoring Results – Sediments

Barton & Loguidice

Table 3
Broome County Colesville Landfill
2022 Monitoring Results
Sediments

Client Sample ID:															SP-3-SED			
Lab Sample ID:			NYSDEC Freshwater Sediment Screening Values - Class A			NYSDEC Freshwater Sediment Screening Values - Class B			NYSDEC Freshwater Sediment Screening Values - Class C			NOAA SQuiRT Values			R2202164-007		R2208717-007	
Date Sampled:															3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	LO	HI	Basis	LO	HI	Basis	LO	HI	Basis	VALUE	Q	VALUE	Q
Turbidity (Field)	STL00392	NTU													-		-	
General Parameters																		
Total Solids (TS)	TS	%													81.2		74.5	
Metals																		
Aluminum	7429-90-5	mg/L													11800		13200	
Antimony	7440-36-0	mg/L													**7.1**	U	**7.5**	U
Arsenic	7440-38-2	mg/L	10	-	6	10	33	6	-	33	6		-		**12.2**		**12.2**	
Barium	7440-39-3	mg/L	-	-	-	-	-	-	-	-	-		-		45.6		50	
Beryllium	7440-41-7	mg/L	-	-	-	-	-	-	-	-	-		-		0.45		0.52	
Cadmium	7440-43-9	mg/L	1	-	6	1	5	6	-	5	6		-		**0.59**	U	**0.62**	U
Calcium	7440-70-2	mg/L	-	-	-	-	-	-	-	-	-		-		1110		1180	
Chromium	7440-47-3	mg/L	43	-	6	43	110	6	-	110	6		-		**15.2**		**17.6**	
Cobalt	7440-48-4	mg/L	-	-	-	-	-	-	-	-	-		50		**10.8**		**11.8**	
Copper	7440-50-8	mg/L	32	-	6	32	150	6	-	150	6		-		**20.5**		**24.8**	
Iron	7439-89-6	mg/L	-	-	-	-	-	-	-	-	-		40000		**30300**		**35500**	
Lead	7439-92-1	mg/L	36	-	6	36	130	6	-	130	6		-		**14.8**		**14.1**	
Magnesium	7439-95-4	mg/L	-	-	-	-	-	-	-	-	-		-		4270		4780	
Manganese	7439-96-5	mg/L	-	-	-	-	-	-	-	-	-		1100		**2250**		**1170**	
Mercury	7439-97-6	mg/L	0.2	-	6	0.2	1	6	-	1	6		-		**0.024**	U	**0.025**	U
Nickel	7440-02-0	mg/L	23	-	6	23	49	6	-	49	6		-		**25.6**		**28**	
Potassium	7440-09-7	mg/L	-	-	-	-	-	-	-	-	-		-		880		1160	
Selenium	7782-49-2	mg/L	-	-	-	-	-	-	-	-	-		-		**1.2**	U	**1.2**	U
Silver	7440-22-4	mg/L	1	-	6	1	2.2	6	-	2.2	6		-		**1.2**	U	**1.2**	U
Sodium	7440-23-5	mg/L	-	-	-	-	-	-	-	-	-		-		**120**	U	**120**	U
Thallium	7440-28-0	mg/L	-	-	-	-	-	-	-	-	-		-		**1.2**	U	**12**	U
Vanadium	7440-62-2	mg/L	-	-	-	-	-	-	-	-	-		-		16.1		18	
Zinc	7440-66-6	mg/L	120	-	6	120	460	6	-	460	6		-		**66.5**		**72.7**	

Key	
##	Result below Class A Standard
##	Result within Class B Standard Range
##	Result exceeds Class B Standard
##	Result within or exceeds NOAA SQuiRT values
NS	Not Sampled
-	Not Analyzed
U or ND	Not Detected

6	NYSDEC Technical Guidance for Screening Contaminated Sediments, dated June 24, 2014.
7	Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, Canada. Aug 1993. Value is LEL from Canadian Sedment Guidelines.
8	NOAA OR&R Report 08-1, Seattle, WA. Office of Response and Restoration Division, NOAA, 34 pp.)
Class A	Considered to be present little or no potential for risk to aquatic life
Class B	Considered to be slightly to moderately contaminated and additional testing required to evaluate the potential risks to aquatic life
Class C	Considered to be highly contaminated and likely to pose a risk to aquatic life

TABLE 4
2022 Monitoring Results – Spring Water Remediation System

Barton & Loguidice

Table 4
Broome County Colesville Landfill
2022 Monitoring Results
Spring Water Remediation System

Client Sample ID:						SP-5 Influent				SP-5 Effluent			
Lab Sample ID:						R2202164-011		R2208717-011		R2202164-010		R2208717-010	
			Model Technology BPJ Limits										
Date Sampled:						3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Field Parameters													
pH (Field)	STL00199	SU				6.43		6.16		6.47		6.29	
Dissolved Oxygen	STL00082	MG/L				-		-		-		-	
Specific Conductivity	STL00244	UMHOS/CM				402		428		394		409	
Field EH/ORP	STL00811	MILLIVOLTS				-		-		-		-	
Temperature (Field Test)	STL00246	DEGREES C				3.9		15		5		15.6	
Turbidity (Field)	STL00392	NTU				19.2		23.3		14.6		6.8	
Metals													
Aluminum	7429-90-5	mg/L	-	-	4,5	0.1	U	0.27		0.1	U	0.1	U
Antimony	7440-36-0	mg/L	-	-	4,5	0.06	U	0.06	U	0.06	U	0.06	U
Arsenic	7440-38-2	mg/L	-	-	4,5	0.01	U	0.285		0.057		0.122	
Barium	7440-39-3	mg/L	-	-	4,5	0.02	U	0.143		0.129		0.145	
Beryllium	7440-41-7	mg/L	-	-	4,5	0.003	U	0.003	U	0.003	U	0.003	U
Cadmium	7440-43-9	mg/L	-	-	4,5	0.005	U	0.005	U	0.005	U	0.005	U
Calcium	7440-70-2	mg/L	-	-	4,5	12.1		44.2		42.1		42.7	
Chromium	7440-47-3	mg/L	-	-	4,5	0.01	U	0.01	U	0.01	U	0.01	U
Cobalt	7440-48-4	mg/L	-	-	4,5	0.05	U	0.05	U	0.05	U	0.05	U
Copper	7440-50-8	mg/L	-	-	4,5	0.02	U	0.02	U	0.02	U	0.02	U
Iron	7439-89-6	mg/L	-	-	4,5	0.1	U	34.6		21.7		23.6	
Lead	7439-92-1	mg/L	-	-	4,5	0.005	U	0.28		0.005	U	0.005	U
Magnesium	7439-95-4	mg/L	-	-	4,5	3.2		9.8		9.7		9.9	
Manganese	7439-96-5	mg/L	-	-	4,5	0.01	U	6.26		6.01		6.29	
Mercury	7439-97-6	mg/L	-	-	4,5	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Nickel	7440-02-0	mg/L	-	-	4,5	0.04	U	0.04	U	0.04	U	0.04	U
Potassium	7440-09-7	mg/L	-	-	4,5	2	U	3		2.2		2.8	
Selenium	7782-49-2	mg/L	-	-	4,5	0.01	U	0.01	U	0.01	U	0.01	U
Silver	7440-22-4	mg/L	-	-	4,5	0.01	U	0.01	U	0.01	U	0.01	U
Sodium	7440-23-5	mg/L	-	-	4,5	4.1		6.2		5.9		6.3	
Thallium	7440-28-0	mg/L	-	-	4,5	0.01	U	0.01	U	0.01	U	0.01	U
Vanadium	7440-62-2	mg/L	-	-	4,5	0.05	U	0.05	U	0.05	U	0.05	U
Zinc	7440-66-6	mg/L	-	-	4,5	0.02	U	10.4		0.02	U	0.02	U
Volatile Organic Compounds													
1,1,1-Trichloroethane	71-55-6	ug//L	-	10	4,5	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug//L	-	50	4,5	5	U	5	U	5	U	5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug//L	-	-	4,5	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	79-00-5	ug//L	-	100	4,5	5	U	5	U	5	U	5	U
1,1-Dichloroethane	75-34-3	ug//L	-	10	4,5	4.6	J	4.4	J	3.6	J	5.5	
1,1-Dichloroethene	75-35-4	ug//L	10	100	4,5	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	120-82-1	ug//L	-	-	4,5	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	96-12-8	ug//L	-	-	4,5	5	U	5	U	5	U	5	U
1,2-Dibromoethane	106-93-4	ug//L	-	-	4,5	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	95-50-1	ug/L	10	50	4,5	5	U	5	U	5	U	5	U
1,2-Dichloroethane	107-06-2	ug/L	10	100	4,5	0.25	J	5	U	5	U	5	U
1,2-Dichloropropane	78-87-5	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	541-73-1	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	106-46-7	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
2-Butanone	78-93-3	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
2-Hexanone	591-78-6	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	108-10-1	ug/L	-	-	4,5	10	U	10	U	10	U	10	U

Barton & Loguidice

Table 4
Broome County Colesville Landfill
2022 Monitoring Results
Spring Water Remediation System

Client Sample ID:						SP-5 Influent				SP-5 Effluent			
Lab Sample ID:						R2202164-011		R2208717-011		R2202164-010		R2208717-010	
Date Sampled:			Model Technology BPJ Limits			3/10/2022		9/14/2022		3/10/2022		9/14/2022	
Parameter	CAS NO.	UNIT	LO	HI	Basis	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Acetone	67-64-1	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
Benzene	71-43-2	ug/L	-	5	4,5	0.77	J	0.98	J	5	U	5	U
Bromodichloromethane	75-27-4	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Bromoform	75-25-2	ug/L	-	50	4,5	5	U	5	U	5	U	5	U
Bromomethane	74-83-9	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
Carbon disulfide	75-15-0	ug/L	-	-	4,5	0.97	J	0.63	J	10	U	10	U
Carbon tetrachloride	56-23-5	ug/L	10	50	4,5	5	U	5	U	5	U	5	U
Chlorobenzene	108-90-7	ug/L	10	25	4,5	16		16		2.4	J	1.7	J
Chloroethane	75-00-3	ug/L	-	10	4,5	5	U	5	U	0.82	J	0.93	J
Chloroform	67-66-3	ug/L	-	100	4,5	5	U	5	U	5	U	5	U
Chloromethane	74-87-3	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	-	10	4,5	0.9	J	1.3	J	0.42	J	0.7	J
cis-1,3-Dichloropropene	10061-01-5	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Cyclohexane	110-82-7	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
Dibromochloromethane	124-48-1	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	75-71-8	ug/L	-	10	4,5	0.32	J	5	U	0.24	J	5	U
Ethylbenzene	100-41-4	ug/L	-	5	4,5	5	U	5	U	5	U	5	U
Isopropylbenzene	98-82-8	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Methyl Acetate	79-20-9	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
Methylcyclohexane	108-87-2	ug/L	-	-	4,5	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	1634-04-4	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Methylene chloride	75-09-2	ug/L	10	100	4,5	5	U	5	U	5	U	5	U
Styrene	100-42-5	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Tetrachloroethene	127-18-4	ug/L	10	50	4,5	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L	-	5	4,5	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	156-60-5	ug/L	10	100	4,5	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Trichloroethene	79-01-6	ug/L	-	10	4,5	2.5	J	2.9	J	0.57	J	0.77	J
Trichlorofluoromethane	75-69-4	ug/L	-	10	4,5	5	U	5	U	5	U	5	U
Vinyl chloride	75-01-4	ug/L	-	10	4,5	0.37	J	5	U	0.3	J	0.29	J
Xylenes, Total	1330-20-7	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Total Volatiles (Calculated)	*N/A*	*ug/L*				*26.68*		*26.21*		*8.35*		*9.89*	

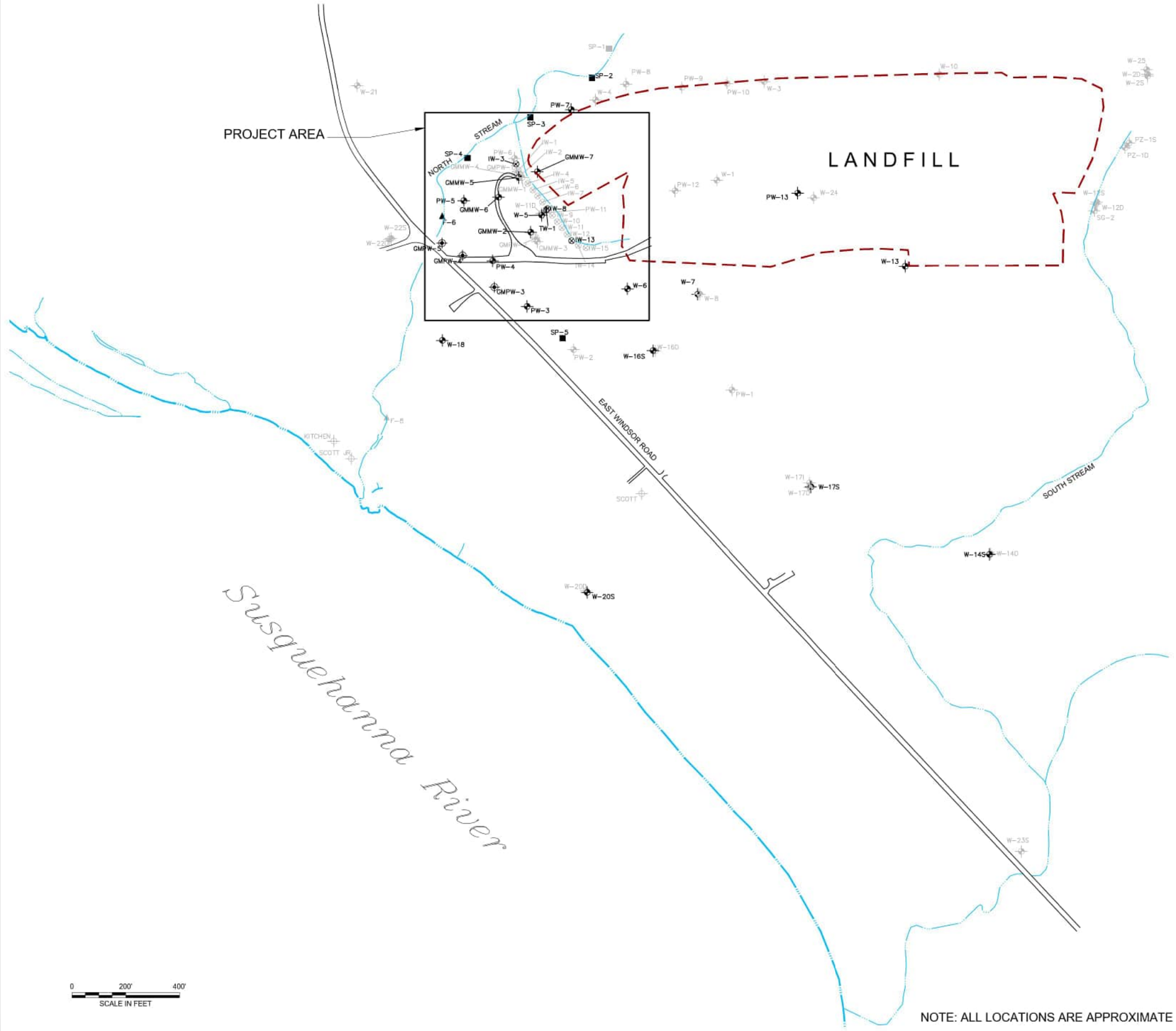
Key

##	Result exceeds BPJ Limits
NS	Not Sampled
-	Not Analyzed
U or ND	Not Detected

4	Model Technology BPJ Limits recommended for carbon adsorption with appropriate pretreatement from Attachment C of TOGS 1.2.1.
5	When a range is listed for the BPJ limit, a variation in availablereferences was found. Recommended daily maximum limits should be in this range.

Figures

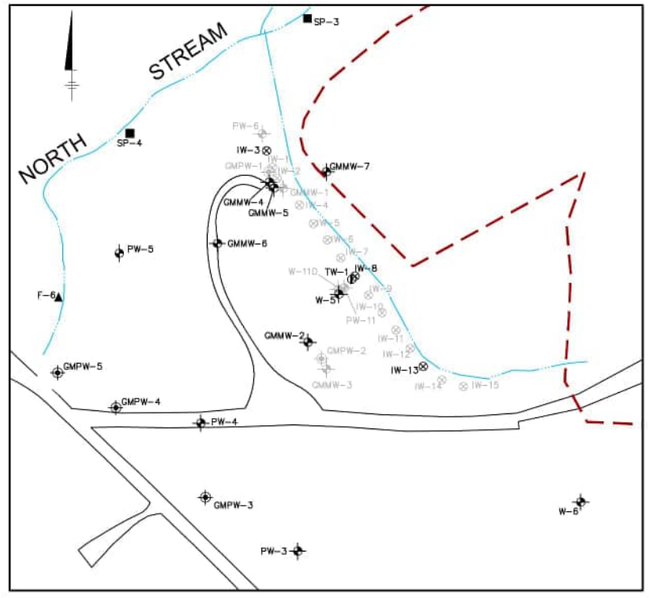
FIGURE 1
Site Plan



NOTE: ALL LOCATIONS ARE APPROXIMATE

EXPLANATION

BOLD	IN-SITU REACTIVE ZONE (IRZ) DISCONTINUATION PILOT TEST MONITORING WELL
W-24 GMMW-7	LOCATION AND DESIGNATION OF MONITORING WELL
SCOTT	LOCATION AND DESIGNATION OF EXISTING HOMEOWNER WELL
IW-2	LOCATION AND DESIGNATION OF INJECTION WELL
GMPW-3	LOCATION AND DESIGNATION OF PRODUCTION WELL
TW-1	LOCATION AND DESIGNATION OF TEST MONITORING WELL
F-6	LOCATION AND DESIGNATION OF SURFACE WATER SAMPLE
SP-2	LOCATION AND DESIGNATION OF SPRING SAMPLE AND CO-LOCATED SEDIMENT SAMPLE



SITE PLAN SHOWING PROJECT AREA

Figure based on figure prepared by Arcadis for the December 16, 2020 report "2020 Annual Monitoring Report, Colesville Landfill"

COLESVILLE LANDFILL
COLESVILLE, NEW YORK

SITE PLAN

Barton&Loguidice

FIGURE 1

FIGURE 2
Spring Water and Surface Water Sampling
Along the North Stream

F-6 LOCATED APPROXIMATELY
300-FEET DOWNSTREAM

SW-4

SP-4

NORTH STREAM

HEAVY STONE RETAINING WALL

SP-4 REMEDIATION SYSTEM
INFILTRATION BED

SW-3

NORTH STREAM

SP-3/SP-3-SED

PROPERTY LINE

TREE WITH FENCE (TYP.)

HEAVY STONE RETAINING WALL

NORTH STREAM

SW-2

SP-2

PROPERTY LINE

PW 5

BM #4

PW 6

WEIR

1032.9

TEST WELL

GM PW 1

IW 1

GM MW 4

IW 2

GM MW 5

GM MW 6

ANCHOR

BUILDING

GM MW 1

GAS VENT

GRAVEL ROAD

NLINK TE

TEST WELL

GM MW 7

PW 7

W4

PW 8

LEGEND:

- SPRING WATER AND CO-LOCATED SEDIMENT SAMPLING LOCATION (APPROXIMATE)
- SURFACE WATER SAMPLING LOCATION (APPROXIMATE)
- RIP RAP
- RETAINING WALL
- NORTH STREAM

0 50' 100'
SCALE IN FEET

Figure based on figure prepared by Arcadis for the December 16, 2020 report "2020 Annual Monitoring Report, Colesville Landfill"

COLESVILLE LANDFILL
COLESVILLE, NEW YORK

SPRING WATER AND SURFACE WATER SAMPLING LOCATIONS ALONG THE NORTH STREAM

Barton&Loguidice

FIGURE
2

Appendices

APPENDIX A
Laboratory Analytical Results

March 21, 2022 Service Request No:R2202164

Emily Giordano
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville Streams

Dear Emily,

Enclosed are the results of the sample(s) submitted to our laboratory March 10, 2022
For your reference, these analyses have been assigned our service request number **R2202164.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7471. You may also contact me via email at Brady.Kalkman@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Brady Kalkman
Project Manager

CC: Jon Sundquist

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams **Date Received:** 03/10/2022
Sample Matrix: Sediment, Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eleven sediment, water samples were received for analysis at ALS Environmental on 03/10/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 03/15/2022: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Field:

Sampling was performed by ALS personnel in accordance with ALS Field Sampling SOPs or by client specifications.

Approved by _____ Date 03/21/2022

SAMPLE DETECTION SUMMARY

CLIENT ID: F-6	Lab ID: R2202164-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	12.9			0.20	mg/L	SM 4500-O G
Conductivity, Field	81				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	6.00				mV	ASTM D1498-00
pH, Field	7.02				pH Units	SM 4500-H+ B
Temperature, Field	0.500				deg C	SM 2550 B
Turbidity, Field	12.2				NTU	180.1
Aluminum, Total	1100			100	ug/L	6010C
Calcium, Total	6200			1000	ug/L	6010C
Iron, Total	1230			100	ug/L	6010C
Magnesium, Total	2000			1000	ug/L	6010C
Manganese, Total	61			10	ug/L	6010C
Sodium, Total	5000			1000	ug/L	6010C

CLIENT ID: SW-4	Lab ID: R2202164-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	12.9			0.20	mg/L	SM 4500-O G
Conductivity, Field	78				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	51.0				mV	ASTM D1498-00
pH, Field	6.83				pH Units	SM 4500-H+ B
Temperature, Field	0.300				deg C	SM 2550 B
Turbidity, Field	10.2				NTU	180.1
Aluminum, Total	1110			100	ug/L	6010C
Calcium, Total	5900			1000	ug/L	6010C
Iron, Total	1230			100	ug/L	6010C
Magnesium, Total	2000			1000	ug/L	6010C
Manganese, Total	63			10	ug/L	6010C
Sodium, Total	4900			1000	ug/L	6010C

CLIENT ID: SP-4	Lab ID: R2202164-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	311				uMHOS/cm	120.1
pH, Field	6.70				pH Units	SM 4500-H+ B
Temperature, Field	1.20				deg C	SM 2550 B
Turbidity, Field	11.6				NTU	180.1
Aluminum, Total	2210			100	ug/L	6010C
Arsenic, Total	90			10	ug/L	6010C
Barium, Total	73			20	ug/L	6010C
Calcium, Total	43200			1000	ug/L	6010C
Iron, Total	20300			100	ug/L	6010C
Magnesium, Total	9300			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-4	Lab ID: R2202164-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Manganese, Total	3100			10	ug/L	6010C
Potassium, Total	2200			2000	ug/L	6010C
Sodium, Total	4900			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	13		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.51	J	0.20	5.0	ug/L	8260C
Benzene	0.25	J	0.20	5.0	ug/L	8260C
Chlorobenzene	2.0	J	0.20	5.0	ug/L	8260C
Chloroethane	2.5	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	4.3	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.88	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	2.1	J	0.23	5.0	ug/L	8260C

CLIENT ID: SW-3	Lab ID: R2202164-005					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	12.9			0.20	mg/L	SM 4500-O G
Conductivity, Field	76				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	85.0				mV	ASTM D1498-00
pH, Field	6.69				pH Units	SM 4500-H+ B
Temperature, Field	0.600				deg C	SM 2550 B
Turbidity, Field	16.9				NTU	180.1
Aluminum, Total	1310			100	ug/L	6010C
Calcium, Total	5800			1000	ug/L	6010C
Iron, Total	1440			100	ug/L	6010C
Magnesium, Total	2000			1000	ug/L	6010C
Manganese, Total	69			10	ug/L	6010C
Sodium, Total	5000			1000	ug/L	6010C

CLIENT ID: SP-3	Lab ID: R2202164-006					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	252				uMHOS/cm	120.1
pH, Field	6.49				pH Units	SM 4500-H+ B
Temperature, Field	3.90				deg C	SM 2550 B
Turbidity, Field	11				NTU	180.1
Barium, Total	31			20	ug/L	6010C
Calcium, Total	31700			1000	ug/L	6010C
Iron, Total	5960			100	ug/L	6010C
Magnesium, Total	6700			1000	ug/L	6010C
Manganese, Total	3070			10	ug/L	6010C
Sodium, Total	3500			1000	ug/L	6010C
1,1,2-Trichloroethane	0.32	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	13		0.20	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3			Lab ID: R2202164-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,2-Dichlorobenzene	0.24	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.56	J	0.20	5.0	ug/L	8260C
Benzene	0.37	J	0.20	5.0	ug/L	8260C
Chlorobenzene	16		0.20	5.0	ug/L	8260C
Chloroethane	1.5	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	2.5	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	3.5	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	13		0.23	5.0	ug/L	8260C

CLIENT ID: SP-3 Sediment			Lab ID: R2202164-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Total Solids	81.2				Percent	ALS SOP
Aluminum, Total	11800			24	mg/Kg	6010C
Arsenic, Total	12.2			1.2	mg/Kg	6010C
Barium, Total	45.6			2.4	mg/Kg	6010C
Beryllium, Total	0.45			0.36	mg/Kg	6010C
Calcium, Total	1110			120	mg/Kg	6010C
Chromium, Total	15.2			1.2	mg/Kg	6010C
Cobalt, Total	10.8			5.9	mg/Kg	6010C
Copper, Total	20.5			2.4	mg/Kg	6010C
Iron, Total	30300			240	mg/Kg	6010C
Lead, Total	14.8			0.59	mg/Kg	6010C
Magnesium, Total	4270			120	mg/Kg	6010C
Manganese, Total	2250			24	mg/Kg	6010C
Nickel, Total	25.6			4.7	mg/Kg	6010C
Potassium, Total	880			240	mg/Kg	6010C
Vanadium, Total	16.1			5.9	mg/Kg	6010C
Zinc, Total	66.5			2.4	mg/Kg	6010C

CLIENT ID: SW-2			Lab ID: R2202164-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	13.0			0.20	mg/L	SM 4500-O G
Conductivity, Field	71				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	38.0				mV	ASTM D1498-00
pH, Field	6.80				pH Units	SM 4500-H+ B
Temperature, Field	0.500				deg C	SM 2550 B
Turbidity, Field	10.4				NTU	180.1
Aluminum, Total	1880			100	ug/L	6010C
Calcium, Total	4800			1000	ug/L	6010C
Iron, Total	2050			100	ug/L	6010C
Magnesium, Total	2000			1000	ug/L	6010C
Manganese, Total	64			10	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SW-2			Lab ID: R2202164-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Sodium, Total	4900			1000	ug/L	6010C

CLIENT ID: SP-2			Lab ID: R2202164-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	112				uMHOS/cm	120.1
pH, Field	6.19				pH Units	SM 4500-H+ B
Temperature, Field	7.50				deg C	SM 2550 B
Turbidity, Field	0.5				NTU	180.1
Aluminum, Total	320			100	ug/L	6010C
Arsenic, Total	251			10	ug/L	6010C
Barium, Total	142			20	ug/L	6010C
Calcium, Total	43300			1000	ug/L	6010C
Iron, Total	28200			100	ug/L	6010C
Lead, Total	173			5.0	ug/L	6010C
Magnesium, Total	10000			1000	ug/L	6010C
Manganese, Total	6410			10	ug/L	6010C
Potassium, Total	2400			2000	ug/L	6010C
Sodium, Total	6100			1000	ug/L	6010C
Zinc, Total	8500			200	ug/L	6010C
1,1,1-Trichloroethane (TCA)	0.68	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	1.9	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	1.6	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-5 Effluent			Lab ID: R2202164-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	394				uMHOS/cm	120.1
pH, Field	6.47				pH Units	SM 4500-H+ B
Temperature, Field	5.00				deg C	SM 2550 B
Turbidity, Field	14.6				NTU	180.1
Arsenic, Total	57			10	ug/L	6010C
Barium, Total	129			20	ug/L	6010C
Calcium, Total	42100			1000	ug/L	6010C
Iron, Total	21700			100	ug/L	6010C
Magnesium, Total	9700			1000	ug/L	6010C
Manganese, Total	6010			10	ug/L	6010C
Potassium, Total	2200			2000	ug/L	6010C
Sodium, Total	5900			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	3.6	J	0.20	5.0	ug/L	8260C
Chlorobenzene	2.4	J	0.20	5.0	ug/L	8260C
Chloroethane	0.82	J	0.23	5.0	ug/L	8260C
Dichlorodifluoromethane (CFC 12)	0.24	J	0.21	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-5 Effluent			Lab ID: R2202164-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Trichloroethene (TCE)	0.57	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.30	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.42	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-5 Influent			Lab ID: R2202164-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	402				uMHOS/cm	120.1
pH, Field	6.43				pH Units	SM 4500-H+ B
Temperature, Field	3.90				deg C	SM 2550 B
Turbidity, Field	19.2				NTU	180.1
Calcium, Total	12100			1000	ug/L	6010C
Magnesium, Total	3200			1000	ug/L	6010C
Sodium, Total	4100			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	4.6	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.25	J	0.20	5.0	ug/L	8260C
Benzene	0.77	J	0.20	5.0	ug/L	8260C
Carbon Disulfide	0.97	J	0.42	10	ug/L	8260C
Chlorobenzene	16		0.20	5.0	ug/L	8260C
Dichlorodifluoromethane (CFC 12)	0.32	J	0.21	5.0	ug/L	8260C
Trichloroethene (TCE)	2.5	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.37	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.90	J	0.23	5.0	ug/L	8260C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:**R2202164
Project: Colesville Streams/VOA + Metals

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2202164-001	Trip Blank	3/10/2022	0755
R2202164-002	F-6	3/10/2022	0755
R2202164-003	SW-4	3/10/2022	0805
R2202164-004	SP-4	3/10/2022	0855
R2202164-005	SW-3	3/10/2022	0815
R2202164-006	SP-3	3/10/2022	0820
R2202164-007	SP-3 Sediment	3/10/2022	0830
R2202164-008	SW-2	3/10/2022	0840
R2202164-009	SP-2	3/10/2022	0845
R2202164-010	SP-5 Effluent	3/10/2022	0910
R2202164-011	SP-5 Influent	3/10/2022	0935

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

062256

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2 1 KL

Project Name: Colesville Streams	Project Number:
Project Manager: Emily Giordano	Report CC:
Company/Address: Broome County LF Knapp Rd Binghamton, NY	
Phone #: 607-778-8000	Email:
Sampler's Signature:	Sampler's Printed Name: Kyle Lee

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	% Solids	Field Parameters						REMARKS/ ALTERNATE DESCRIPTION
Trip Blank		3/10/22	0755	W	3	X														
F-6			0755	W	4	X					X			X						1
SW-4			0805	W	4	X					X			X						2
SP-4			0855	W	4	X					X			X						3
SW-3			0815	W	4	X					X			X						4
SP-3			0820	W	4	X					X			X						5
SP-3 Sediment			0830	Sed.	2						X		X							6 38 KL 3/10
SW-2			0840	W	4	X					X			X						7 6
SP-2			0845	W	4	X					X			X						7
SP-5 Effluent			0910	W	4	X					X									8
SP-5 Influent			0935	W	4	X					X									9

Preservative Key
0. NONE
1. HCl
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
____ Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Kyle Lee	Printed Name: Kelsey Foley	Printed Name: Kelsey Foley	Printed Name: Heather Mosley	Printed Name	
Firm: ALS	Firm: ALS	Firm: ALS	Firm: ALS	Firm	
Date/Time: 3/10/22	Date/Time: 3/10/22 1400	Date/Time: 3/10/22 1715	Date/Time: 3/10/22 17:15	Date/Time	

R2202164 5
Broome County Division of Solid Waste Management
Colesville Streams

Distribution: White - Lab Copy; Yellow - Return to Originator

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 1

SAMPLE POINT ID F-6

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0755 SWL —

Appearance Tan Turbid

Weather Conditions Clear 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.02	7.01
Myron 6p	Conductivity	µmhos/cm	81	81
Myron 6p	Temperature	Degrees Celsius	0.5	0.5
Myron 6p	Redox	millivolts	6	
Lamotte	Turbidity	NTU	12.2	

D.O. = 12.89

Calibration Date/Time 3/10/22 0700

OBSERVATIONS Heavy Snows yesterday Slightly Stirred up Stream

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Calesville Streams **LAB ID** 2

SAMPLE POINT ID SW-4

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0805 SWL —.

Appearance Tan turbid

Weather Conditions Clear 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.83	6.83
Myron 6p	Conductivity	µmhos/cm	78	78
Myron 6p	Temperature	Degrees Celsius	0.3	0.3
Myron 6p	Redox	millivolts	51	
Lamotte	Turbidity	NTU	10.2	

D.O. = 12.91

Calibration Date/Time 3/10/22 0700

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 3

SAMPLE POINT ID SP-4

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged -gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0855 SWL —

Appearance Rust tan tint

Weather Conditions Clear 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.70	6.70
Myron 6p	Conductivity	µmhos/cm	311	311
Myron 6p	Temperature	Degrees Celsius	1.2	1.2
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	11.6	—

Calibration Date/Time 3/10/22 0700

OBSERVATIONS Point was not flowing as well as usual

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 4

SAMPLE POINT ID SW-3

PURGE INFORMATION

Well ~~Depth (ft.)~~ _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ ~~Stop Time~~ _____

Standing Water (ft.) _____ ~~Volume Purged gal.~~ _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0815 SWL —

Appearance Turbid tan

Weather Conditions Clear 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.68	6.69
Myron 6p	Conductivity	µmhos/cm	76	76
Myron 6p	Temperature	Degrees Celsius	0.6	0.6
Myron 6p	Redox	millivolts	85	
Lamotte	Turbidity	NTU	16.9	

D.O. = 12.92

Calibration Date/Time 3/10/22 0700

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 5

SAMPLE POINT ID SP-3

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0820 SWL —

Appearance Clear

Weather Conditions Sunny 20°

Sampling Technician (Print) Kyle Lee / QK Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.49	6.49
Myron 6p	Conductivity	µmhos/cm	252	252
Myron 6p	Temperature	Degrees Celsius	3.9	3.9
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	11.0	—

Calibration Date/Time 3/10/22 0700

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams **LAB ID** 38

SAMPLE POINT ID SP-3 Sediment

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0830 SWL —

Appearance Silty Black w/ Gravel

Weather Conditions Sun 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit		
Myron 6p	Conductivity	µmhos/cm		
Myron 6p	Temperature	Degrees Celsius		
Myron 6p	Redox	millivolts		
Lamotte	Turbidity	NTU		

Calibration Date/Time ____/____/____ _____

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 6

SAMPLE POINT ID SW-2

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0840 SWL —

Appearance Turbid tan

Weather Conditions Sun 20°

Sampling Technician (Print) KyleLee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.80	6.80
Myron 6p	Conductivity	µmhos/cm	70	71
Myron 6p	Temperature	Degrees Celsius	0.5	0.5
Myron 6p	Redox	millivolts	38	
Lamotte	Turbidity	NTU	10.4	

D.O. = 12.97

Calibration Date/Time 3/10/22 0700

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams LAB ID 7

SAMPLE POINT ID SP-2

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0845 SWL —

Appearance Clear

Weather Conditions Sun 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.18	6.19
Myron 6p	Conductivity	µmhos/cm	112	112
Myron 6p	Temperature	Degrees Celsius	7.5	7.5
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	0.5	—

Calibration Date/Time 3/10/22 0700

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams **LAB ID** 8

SAMPLE POINT ID SP-5 Effluent

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 3/10/22 Time 0910 SWL —

Appearance Clear w/ Slight iron bacteria

Weather Conditions Sun 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.47	6.47
Myron 6p	Conductivity	µmhos/cm	394	394
Myron 6p	Temperature	Degrees Celsius	5.0	5.0
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	14.6	—

Calibration Date/Time 3 / 10 / 22 0700

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams **LAB ID** 9

SAMPLE POINT ID SP-5 Influent

PURGE INFORMATION

Well Depth (ft.) 4.10 Purge Date 3/10/22 Purge Method Bailer

SWL (ft.) 0.00 Start Time 0924 Stop Time 0927

Standing Water (ft.) 4.10 Volume Purged gal. 2.1 # casings 3

Well Constant (gal/ft.) 0.163 Observations Turbid rust to tan tint

Well Volume (gal.) 0.7

SAMPLING INFORMATION

Sample Method Bailer

Date 3/10/22 Time 0935 SWL 0.00

Appearance Tan w/ iron Specks

Weather Conditions Sun 20°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.43	6.42
Myron 6p	Conductivity	µmhos/cm	402	402
Myron 6p	Temperature	Degrees Celsius	3.9	3.9
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	19.2	—

Calibration Date/Time 3/10/22 0700

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

Cooler Receipt and Preservation Check Form

R2202164 5
Broome County Division of Solid Waste Management
Colesville Streams

Project/Client Colesville Folder Number

Cooler received on 3/10/22 by: MM

COURIER: (ALS) UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk, or Sulfide have sig* **bubbles**?	(Y) N NA *
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 3/10/22 Time: 17:30 ID: IR#7 (IR#11) From: (Temp Blank) (Sample Bottle)

Observed Temp (°C)	1.5	2.8	3.7	1.8	5.4		
Within 0-6°C?	(Y) N	(Y) N	(Y) N	(Y) N	(Y) N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R/602 by MM on 3/10/22 at 17:50
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 3/11/22 Time: 1419 by: @

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES (NO)
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	205320	HNO_3	✓		112108					
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**						

Bottle lot numbers: 2601, 11012-ISB, 21-12-14

Explain all Discrepancies/ Other Comments:

* Trip blank 1 vial, trip blank 1 vial, Colesville 064 1 vial, trip blank 1 vial, Colesville res 034 alk, trip blank 1 vial, Colesville res 034 1 vial sig headspace.

HPROD	BULK
HTR	FLDT
SUB	HGFB
(ALS)	LL3541

Labels secondary reviewed by: @
PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams/VOA + Metals

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
120.1	Water	Conductivity, Field
180.1	Water	Turbidity, Field
ALS SOP	Sediment	Total Solids
ASTM D1498-00	Water	Oxidation-Reduction Potential (ORP), Field
SM 2550 B	Water	Temperature, Field
SM 4500-H+ B	Water	pH, Field
SM 4500-O G	Water	Oxygen, Dissolved

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams/VOA + Metals

Sample Name: Trip Blank **Date Collected:** 03/10/22
Lab Code: R2202164-001 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: F-6 **Date Collected:** 03/10/22
Lab Code: R2202164-002 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Sample Name: SW-4 **Date Collected:** 03/10/22
Lab Code: R2202164-003 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams/VOA + Metals

Sample Name: SP-4 **Date Collected:** 03/10/22
Lab Code: R2202164-004 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SW-3 **Date Collected:** 03/10/22
Lab Code: R2202164-005 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Sample Name: SP-3 **Date Collected:** 03/10/22
Lab Code: R2202164-006 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals		

Sample Name:	SP-3	**Date Collected:**	03/10/22
Lab Code:	R2202164-006	**Date Received:**	03/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name:	SP-3 Sediment	**Date Collected:**	03/10/22
Lab Code:	R2202164-007	**Date Received:**	03/10/22
Sample Matrix:	Sediment		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	BDIAMOND	KMCLAEN
7471B	BDIAMOND	BDIAMOND
ALS SOP		KAWONG

Sample Name:	SW-2	**Date Collected:**	03/10/22
Lab Code:	R2202164-008	**Date Received:**	03/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams/VOA + Metals

Sample Name: SP-2 **Date Collected:** 03/10/22
Lab Code: R2202164-009 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SP-5 Effluent **Date Collected:** 03/10/22
Lab Code: R2202164-010 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SP-5 Influent **Date Collected:** 03/10/22
Lab Code: R2202164-011 **Date Received:** 03/10/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	BDIAMOND
8260C		FNAEGLER
SM 2550 B		JJANSON

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals		

Sample Name:	SP-5 Influent	**Date Collected:**	03/10/22
Lab Code:	R2202164-011	**Date Received:**	03/10/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 4500-H+ B		JJANSON

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2202164-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/14/22 23:33	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/14/22 23:33	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/14/22 23:33	
2-Hexanone	0.20 U	10	0.20	1	03/14/22 23:33	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/14/22 23:33	
Acetone	5.0 U	10	5.0	1	03/14/22 23:33	
Benzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
Bromoform	0.25 U	5.0	0.25	1	03/14/22 23:33	
Bromomethane	0.70 U	5.0	0.70	1	03/14/22 23:33	
Carbon Disulfide	0.42 U	10	0.42	1	03/14/22 23:33	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/14/22 23:33	
Chlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
Chloroethane	0.23 U	5.0	0.23	1	03/14/22 23:33	
Chloroform	0.24 U	5.0	0.24	1	03/14/22 23:33	
Chloromethane	0.28 U	5.0	0.28	1	03/14/22 23:33	
Cyclohexane	0.26 U	10	0.26	1	03/14/22 23:33	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/14/22 23:33	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/14/22 23:33	
Dichloromethane	0.65 U	5.0	0.65	1	03/14/22 23:33	
Ethylbenzene	0.20 U	5.0	0.20	1	03/14/22 23:33	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/14/22 23:33	
Methyl Acetate	0.33 U	10	0.33	1	03/14/22 23:33	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/14/22 23:33	
Methylcyclohexane	0.20 U	10	0.20	1	03/14/22 23:33	
Styrene	0.20 U	5.0	0.20	1	03/14/22 23:33	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/14/22 23:33	
Toluene	0.20 U	5.0	0.20	1	03/14/22 23:33	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/14/22 23:33	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/14/22 23:33	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/14/22 23:33	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2202164-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/14/22 23:33	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/14/22 23:33	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/14/22 23:33	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/14/22 23:33	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/14/22 23:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/14/22 23:33	
Dibromofluoromethane	105	80 - 116	03/14/22 23:33	
Toluene-d8	102	87 - 121	03/14/22 23:33	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2202164-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/14/22 23:55	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/14/22 23:55	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/14/22 23:55	
2-Hexanone	0.20 U	10	0.20	1	03/14/22 23:55	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/14/22 23:55	
Acetone	5.0 U	10	5.0	1	03/14/22 23:55	
Benzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
Bromoform	0.25 U	5.0	0.25	1	03/14/22 23:55	
Bromomethane	0.70 U	5.0	0.70	1	03/14/22 23:55	
Carbon Disulfide	0.42 U	10	0.42	1	03/14/22 23:55	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/14/22 23:55	
Chlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
Chloroethane	0.23 U	5.0	0.23	1	03/14/22 23:55	
Chloroform	0.24 U	5.0	0.24	1	03/14/22 23:55	
Chloromethane	0.28 U	5.0	0.28	1	03/14/22 23:55	
Cyclohexane	0.26 U	10	0.26	1	03/14/22 23:55	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/14/22 23:55	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/14/22 23:55	
Dichloromethane	0.65 U	5.0	0.65	1	03/14/22 23:55	
Ethylbenzene	0.20 U	5.0	0.20	1	03/14/22 23:55	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/14/22 23:55	
Methyl Acetate	0.33 U	10	0.33	1	03/14/22 23:55	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/14/22 23:55	
Methylcyclohexane	0.20 U	10	0.20	1	03/14/22 23:55	
Styrene	0.20 U	5.0	0.20	1	03/14/22 23:55	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/14/22 23:55	
Toluene	0.20 U	5.0	0.20	1	03/14/22 23:55	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/14/22 23:55	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/14/22 23:55	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/14/22 23:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2202164-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/14/22 23:55	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/14/22 23:55	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/14/22 23:55	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/14/22 23:55	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/14/22 23:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	03/14/22 23:55	
Dibromofluoromethane	105	80 - 116	03/14/22 23:55	
Toluene-d8	101	87 - 121	03/14/22 23:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:05
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2202164-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 00:17	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 00:17	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 00:17	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 00:17	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 00:17	
Acetone	5.0 U	10	5.0	1	03/15/22 00:17	
Benzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 00:17	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 00:17	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 00:17	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 00:17	
Chlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
Chloroethane	0.23 U	5.0	0.23	1	03/15/22 00:17	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 00:17	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 00:17	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 00:17	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 00:17	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 00:17	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 00:17	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 00:17	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 00:17	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 00:17	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 00:17	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 00:17	
Styrene	0.20 U	5.0	0.20	1	03/15/22 00:17	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 00:17	
Toluene	0.20 U	5.0	0.20	1	03/15/22 00:17	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/15/22 00:17	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 00:17	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/15/22 00:17	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:05
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2202164-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 00:17	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/15/22 00:17	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 00:17	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 00:17	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 00:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	03/15/22 00:17	
Dibromofluoromethane	106	80 - 116	03/15/22 00:17	
Toluene-d8	103	87 - 121	03/15/22 00:17	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2202164-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,1-Dichloroethane (1,1-DCA)	**13**	5.0	0.20	1	03/15/22 00:39	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 00:39	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 00:39	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,2-Dichloroethane	**0.51 J**	5.0	0.20	1	03/15/22 00:39	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:39	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 00:39	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 00:39	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 00:39	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 00:39	
Acetone	5.0 U	10	5.0	1	03/15/22 00:39	
Benzene	**0.25 J**	5.0	0.20	1	03/15/22 00:39	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 00:39	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 00:39	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 00:39	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 00:39	
Chlorobenzene	**2.0 J**	5.0	0.20	1	03/15/22 00:39	
Chloroethane	**2.5 J**	5.0	0.23	1	03/15/22 00:39	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 00:39	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 00:39	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 00:39	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 00:39	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 00:39	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 00:39	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 00:39	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 00:39	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 00:39	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 00:39	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 00:39	
Styrene	0.20 U	5.0	0.20	1	03/15/22 00:39	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 00:39	
Toluene	0.20 U	5.0	0.20	1	03/15/22 00:39	
Trichloroethene (TCE)	**4.3 J**	5.0	0.20	1	03/15/22 00:39	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 00:39	
Vinyl Chloride	**0.88 J**	5.0	0.20	1	03/15/22 00:39	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2202164-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 00:39	
cis-1,2-Dichloroethene	**2.1 J**	5.0	0.23	1	03/15/22 00:39	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 00:39	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 00:39	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 00:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	03/15/22 00:39	
Dibromofluoromethane	108	80 - 116	03/15/22 00:39	
Toluene-d8	103	87 - 121	03/15/22 00:39	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:15
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2202164-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 01:01	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 01:01	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 01:01	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 01:01	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 01:01	
Acetone	5.0 U	10	5.0	1	03/15/22 01:01	
Benzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 01:01	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 01:01	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 01:01	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 01:01	
Chlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
Chloroethane	0.23 U	5.0	0.23	1	03/15/22 01:01	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 01:01	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 01:01	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 01:01	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 01:01	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 01:01	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 01:01	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 01:01	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 01:01	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 01:01	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 01:01	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 01:01	
Styrene	0.20 U	5.0	0.20	1	03/15/22 01:01	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 01:01	
Toluene	0.20 U	5.0	0.20	1	03/15/22 01:01	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/15/22 01:01	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 01:01	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/15/22 01:01	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:15
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2202164-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 01:01	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/15/22 01:01	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 01:01	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 01:01	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 01:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	03/15/22 01:01	
Dibromofluoromethane	106	80 - 116	03/15/22 01:01	
Toluene-d8	103	87 - 121	03/15/22 01:01	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:20
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3	**Units:**	ug/L
Lab Code:	R2202164-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,1,2-Trichloroethane	**0.32 J**	5.0	0.20	1	03/15/22 01:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,1-Dichloroethane (1,1-DCA)	**13**	5.0	0.20	1	03/15/22 01:23	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 01:23	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 01:23	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,2-Dichlorobenzene	**0.24 J**	5.0	0.20	1	03/15/22 01:23	
1,2-Dichloroethane	**0.56 J**	5.0	0.20	1	03/15/22 01:23	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:23	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:23	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 01:23	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 01:23	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 01:23	
Acetone	5.0 U	10	5.0	1	03/15/22 01:23	
Benzene	**0.37 J**	5.0	0.20	1	03/15/22 01:23	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 01:23	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 01:23	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 01:23	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 01:23	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 01:23	
Chlorobenzene	**16**	5.0	0.20	1	03/15/22 01:23	
Chloroethane	**1.5 J**	5.0	0.23	1	03/15/22 01:23	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 01:23	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 01:23	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 01:23	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 01:23	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 01:23	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 01:23	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 01:23	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 01:23	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 01:23	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 01:23	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 01:23	
Styrene	0.20 U	5.0	0.20	1	03/15/22 01:23	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 01:23	
Toluene	0.20 U	5.0	0.20	1	03/15/22 01:23	
Trichloroethene (TCE)	**2.5 J**	5.0	0.20	1	03/15/22 01:23	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 01:23	
Vinyl Chloride	**3.5 J**	5.0	0.20	1	03/15/22 01:23	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:20
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3	**Units:**	ug/L
Lab Code:	R2202164-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 01:23	
cis-1,2-Dichloroethene	**13**	5.0	0.23	1	03/15/22 01:23	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 01:23	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 01:23	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 01:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/15/22 01:23	
Dibromofluoromethane	103	80 - 116	03/15/22 01:23	
Toluene-d8	99	87 - 121	03/15/22 01:23	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:40
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2202164-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 01:46	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 01:46	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 01:46	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 01:46	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 01:46	
Acetone	5.0 U	10	5.0	1	03/15/22 01:46	
Benzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 01:46	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 01:46	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 01:46	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 01:46	
Chlorobenzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
Chloroethane	0.23 U	5.0	0.23	1	03/15/22 01:46	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 01:46	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 01:46	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 01:46	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 01:46	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 01:46	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 01:46	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 01:46	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 01:46	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 01:46	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 01:46	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 01:46	
Styrene	0.20 U	5.0	0.20	1	03/15/22 01:46	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 01:46	
Toluene	0.20 U	5.0	0.20	1	03/15/22 01:46	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/15/22 01:46	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 01:46	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/15/22 01:46	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:40
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2202164-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 01:46	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/15/22 01:46	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 01:46	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 01:46	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 01:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	03/15/22 01:46	
Dibromofluoromethane	104	80 - 116	03/15/22 01:46	
Toluene-d8	102	87 - 121	03/15/22 01:46	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:45
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2202164-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.68 J**	5.0	0.20	1	03/15/22 02:08	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,1-Dichloroethane (1,1-DCA)	**1.9 J**	5.0	0.20	1	03/15/22 02:08	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 02:08	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 02:08	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 02:08	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 02:08	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 02:08	
Acetone	5.0 U	10	5.0	1	03/15/22 02:08	
Benzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 02:08	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 02:08	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 02:08	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 02:08	
Chlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
Chloroethane	0.23 U	5.0	0.23	1	03/15/22 02:08	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 02:08	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 02:08	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 02:08	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 02:08	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/15/22 02:08	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 02:08	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 02:08	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 02:08	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 02:08	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 02:08	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 02:08	
Styrene	0.20 U	5.0	0.20	1	03/15/22 02:08	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 02:08	
Toluene	0.20 U	5.0	0.20	1	03/15/22 02:08	
Trichloroethene (TCE)	**1.6 J**	5.0	0.20	1	03/15/22 02:08	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 02:08	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/15/22 02:08	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:45
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2202164-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 02:08	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/15/22 02:08	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 02:08	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 02:08	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 02:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/15/22 02:08	
Dibromofluoromethane	106	80 - 116	03/15/22 02:08	
Toluene-d8	102	87 - 121	03/15/22 02:08	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:10
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2202164-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,1-Dichloroethane (1,1-DCA)	**3.6 J**	5.0	0.20	1	03/15/22 02:30	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 02:30	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 02:30	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:30	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:30	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 02:30	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 02:30	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 02:30	
Acetone	5.0 U	10	5.0	1	03/15/22 02:30	
Benzene	0.20 U	5.0	0.20	1	03/15/22 02:30	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 02:30	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 02:30	
Carbon Disulfide	0.42 U	10	0.42	1	03/15/22 02:30	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 02:30	
Chlorobenzene	**2.4 J**	5.0	0.20	1	03/15/22 02:30	
Chloroethane	**0.82 J**	5.0	0.23	1	03/15/22 02:30	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 02:30	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 02:30	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 02:30	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 02:30	
Dichlorodifluoromethane (CFC 12)	**0.24 J**	5.0	0.21	1	03/15/22 02:30	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 02:30	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 02:30	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 02:30	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 02:30	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 02:30	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 02:30	
Styrene	0.20 U	5.0	0.20	1	03/15/22 02:30	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 02:30	
Toluene	0.20 U	5.0	0.20	1	03/15/22 02:30	
Trichloroethene (TCE)	**0.57 J**	5.0	0.20	1	03/15/22 02:30	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 02:30	
Vinyl Chloride	**0.30 J**	5.0	0.20	1	03/15/22 02:30	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:10
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2202164-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 02:30	
cis-1,2-Dichloroethene	**0.42 J**	5.0	0.23	1	03/15/22 02:30	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 02:30	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 02:30	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 02:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	03/15/22 02:30	
Dibromofluoromethane	105	80 - 116	03/15/22 02:30	
Toluene-d8	103	87 - 121	03/15/22 02:30	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:35
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2202164-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,1-Dichloroethane (1,1-DCA)	**4.6 J**	5.0	0.20	1	03/15/22 02:52	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/15/22 02:52	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/15/22 02:52	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,2-Dichloroethane	**0.25 J**	5.0	0.20	1	03/15/22 02:52	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:52	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/15/22 02:52	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/15/22 02:52	
2-Hexanone	0.20 U	10	0.20	1	03/15/22 02:52	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/15/22 02:52	
Acetone	5.0 U	10	5.0	1	03/15/22 02:52	
Benzene	**0.77 J**	5.0	0.20	1	03/15/22 02:52	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
Bromoform	0.25 U	5.0	0.25	1	03/15/22 02:52	
Bromomethane	0.70 U	5.0	0.70	1	03/15/22 02:52	
Carbon Disulfide	**0.97 J**	10	0.42	1	03/15/22 02:52	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/15/22 02:52	
Chlorobenzene	**16**	5.0	0.20	1	03/15/22 02:52	
Chloroethane	0.23 U	5.0	0.23	1	03/15/22 02:52	
Chloroform	0.24 U	5.0	0.24	1	03/15/22 02:52	
Chloromethane	0.28 U	5.0	0.28	1	03/15/22 02:52	
Cyclohexane	0.26 U	10	0.26	1	03/15/22 02:52	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/15/22 02:52	
Dichlorodifluoromethane (CFC 12)	**0.32 J**	5.0	0.21	1	03/15/22 02:52	
Dichloromethane	0.65 U	5.0	0.65	1	03/15/22 02:52	
Ethylbenzene	0.20 U	5.0	0.20	1	03/15/22 02:52	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/15/22 02:52	
Methyl Acetate	0.33 U	10	0.33	1	03/15/22 02:52	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/15/22 02:52	
Methylcyclohexane	0.20 U	10	0.20	1	03/15/22 02:52	
Styrene	0.20 U	5.0	0.20	1	03/15/22 02:52	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/15/22 02:52	
Toluene	0.20 U	5.0	0.20	1	03/15/22 02:52	
Trichloroethene (TCE)	**2.5 J**	5.0	0.20	1	03/15/22 02:52	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/15/22 02:52	
Vinyl Chloride	**0.37 J**	5.0	0.20	1	03/15/22 02:52	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:35
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2202164-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/15/22 02:52	
cis-1,2-Dichloroethene	**0.90 J**	5.0	0.23	1	03/15/22 02:52	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/15/22 02:52	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/15/22 02:52	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/15/22 02:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	03/15/22 02:52	
Dibromofluoromethane	106	80 - 116	03/15/22 02:52	
Toluene-d8	104	87 - 121	03/15/22 02:52	

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2202164-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**1100**	ug/L	100	1	03/16/22 23:43	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/16/22 23:43	03/15/22	
Arsenic, Total	6010C	10 U	ug/L	10	1	03/16/22 23:43	03/15/22	
Barium, Total	6010C	20 U	ug/L	20	1	03/16/22 23:43	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/16/22 23:43	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:43	03/15/22	
Calcium, Total	6010C	**6200**	ug/L	1000	1	03/16/22 23:43	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:43	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/16/22 23:43	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/16/22 23:43	03/15/22	
Iron, Total	6010C	**1230**	ug/L	100	1	03/16/22 23:43	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:43	03/15/22	
Magnesium, Total	6010C	**2000**	ug/L	1000	1	03/16/22 23:43	03/15/22	
Manganese, Total	6010C	**61**	ug/L	10	1	03/16/22 23:43	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:28	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/16/22 23:43	03/15/22	
Potassium, Total	6010C	2000 U	ug/L	2000	1	03/16/22 23:43	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:43	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/16/22 23:43	03/15/22	
Sodium, Total	6010C	**5000**	ug/L	1000	1	03/16/22 23:43	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:43	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/16/22 23:43	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/16/22 23:43	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:05
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2202164-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**1110**	ug/L	100	1	03/16/22 23:46	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/16/22 23:46	03/15/22	
Arsenic, Total	6010C	10 U	ug/L	10	1	03/16/22 23:46	03/15/22	
Barium, Total	6010C	20 U	ug/L	20	1	03/16/22 23:46	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/16/22 23:46	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:46	03/15/22	
Calcium, Total	6010C	**5900**	ug/L	1000	1	03/16/22 23:46	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:46	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/16/22 23:46	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/16/22 23:46	03/15/22	
Iron, Total	6010C	**1230**	ug/L	100	1	03/16/22 23:46	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:46	03/15/22	
Magnesium, Total	6010C	**2000**	ug/L	1000	1	03/16/22 23:46	03/15/22	
Manganese, Total	6010C	**63**	ug/L	10	1	03/16/22 23:46	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:34	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/16/22 23:46	03/15/22	
Potassium, Total	6010C	2000 U	ug/L	2000	1	03/16/22 23:46	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:46	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/16/22 23:46	03/15/22	
Sodium, Total	6010C	**4900**	ug/L	1000	1	03/16/22 23:46	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:46	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/16/22 23:46	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/16/22 23:46	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2202164-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**2210**	ug/L	100	1	03/16/22 23:49	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/16/22 23:49	03/15/22	
Arsenic, Total	6010C	**90**	ug/L	10	1	03/16/22 23:49	03/15/22	
Barium, Total	6010C	**73**	ug/L	20	1	03/16/22 23:49	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/16/22 23:49	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:49	03/15/22	
Calcium, Total	6010C	**43200**	ug/L	1000	1	03/16/22 23:49	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:49	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/16/22 23:49	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/16/22 23:49	03/15/22	
Iron, Total	6010C	**20300**	ug/L	100	1	03/16/22 23:49	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:49	03/15/22	
Magnesium, Total	6010C	**9300**	ug/L	1000	1	03/16/22 23:49	03/15/22	
Manganese, Total	6010C	**3100**	ug/L	10	1	03/16/22 23:49	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:36	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/16/22 23:49	03/15/22	
Potassium, Total	6010C	**2200**	ug/L	2000	1	03/16/22 23:49	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:49	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/16/22 23:49	03/15/22	
Sodium, Total	6010C	**4900**	ug/L	1000	1	03/16/22 23:49	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:49	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/16/22 23:49	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/16/22 23:49	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:15
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2202164-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**1310**		ug/L	100	1	03/16/22 23:53	03/15/22	
Antimony, Total	6010C	60	U	ug/L	60	1	03/16/22 23:53	03/15/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	03/16/22 23:53	03/15/22	
Barium, Total	6010C	20	U	ug/L	20	1	03/16/22 23:53	03/15/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	03/16/22 23:53	03/15/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	03/16/22 23:53	03/15/22	
Calcium, Total	6010C	**5800**		ug/L	1000	1	03/16/22 23:53	03/15/22	
Chromium, Total	6010C	10	U	ug/L	10	1	03/16/22 23:53	03/15/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	03/16/22 23:53	03/15/22	
Copper, Total	6010C	20	U	ug/L	20	1	03/16/22 23:53	03/15/22	
Iron, Total	6010C	**1440**		ug/L	100	1	03/16/22 23:53	03/15/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	03/16/22 23:53	03/15/22	
Magnesium, Total	6010C	**2000**		ug/L	1000	1	03/16/22 23:53	03/15/22	
Manganese, Total	6010C	**69**		ug/L	10	1	03/16/22 23:53	03/15/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	03/16/22 15:42	03/15/22	
Nickel, Total	6010C	40	U	ug/L	40	1	03/16/22 23:53	03/15/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	03/16/22 23:53	03/15/22	
Selenium, Total	6010C	10	U	ug/L	10	1	03/16/22 23:53	03/15/22	
Silver, Total	6010C	10	U	ug/L	10	1	03/16/22 23:53	03/15/22	
Sodium, Total	6010C	**5000**		ug/L	1000	1	03/16/22 23:53	03/15/22	
Thallium, Total	6010C	10	U	ug/L	10	1	03/16/22 23:53	03/15/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	03/16/22 23:53	03/15/22	
Zinc, Total	6010C	20	U	ug/L	20	1	03/16/22 23:53	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:20
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3	**Basis:**	NA
Lab Code:	R2202164-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	03/16/22 23:56	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/16/22 23:56	03/15/22	
Arsenic, Total	6010C	10 U	ug/L	10	1	03/16/22 23:56	03/15/22	
Barium, Total	6010C	**31**	ug/L	20	1	03/16/22 23:56	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/16/22 23:56	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:56	03/15/22	
Calcium, Total	6010C	**31700**	ug/L	1000	1	03/16/22 23:56	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:56	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/16/22 23:56	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/16/22 23:56	03/15/22	
Iron, Total	6010C	**5960**	ug/L	100	1	03/16/22 23:56	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:56	03/15/22	
Magnesium, Total	6010C	**6700**	ug/L	1000	1	03/16/22 23:56	03/15/22	
Manganese, Total	6010C	**3070**	ug/L	10	1	03/16/22 23:56	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:44	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/16/22 23:56	03/15/22	
Potassium, Total	6010C	2000 U	ug/L	2000	1	03/16/22 23:56	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:56	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/16/22 23:56	03/15/22	
Sodium, Total	6010C	**3500**	ug/L	1000	1	03/16/22 23:56	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:56	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/16/22 23:56	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/16/22 23:56	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:30
Sample Matrix:	Sediment	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3 Sediment	**Basis:**	Dry
Lab Code:	R2202164-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**11800**	mg/Kg	24	1	03/17/22 23:25	03/17/22	
Antimony, Total	6010C	7.1 U	mg/Kg	7.1	1	03/17/22 23:25	03/17/22	
Arsenic, Total	6010C	**12.2**	mg/Kg	1.2	1	03/17/22 23:25	03/17/22	
Barium, Total	6010C	**45.6**	mg/Kg	2.4	1	03/17/22 23:25	03/17/22	
Beryllium, Total	6010C	**0.45**	mg/Kg	0.36	1	03/17/22 23:25	03/17/22	
Cadmium, Total	6010C	0.59 U	mg/Kg	0.59	1	03/17/22 23:25	03/17/22	
Calcium, Total	6010C	**1110**	mg/Kg	120	1	03/17/22 23:25	03/17/22	
Chromium, Total	6010C	**15.2**	mg/Kg	1.2	1	03/17/22 23:25	03/17/22	
Cobalt, Total	6010C	**10.8**	mg/Kg	5.9	1	03/17/22 23:25	03/17/22	
Copper, Total	6010C	**20.5**	mg/Kg	2.4	1	03/17/22 23:25	03/17/22	
Iron, Total	6010C	**30300**	mg/Kg	240	10	03/18/22 00:23	03/17/22	
Lead, Total	6010C	**14.8**	mg/Kg	0.59	1	03/17/22 23:25	03/17/22	
Magnesium, Total	6010C	**4270**	mg/Kg	120	1	03/17/22 23:25	03/17/22	
Manganese, Total	6010C	**2250**	mg/Kg	24	10	03/18/22 00:23	03/17/22	
Mercury, Total	7471B	0.024 U	mg/Kg	0.024	1	03/18/22 12:57	03/17/22	
Nickel, Total	6010C	**25.6**	mg/Kg	4.7	1	03/17/22 23:25	03/17/22	
Potassium, Total	6010C	**880**	mg/Kg	240	1	03/17/22 23:25	03/17/22	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	1	03/17/22 23:25	03/17/22	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	1	03/17/22 23:25	03/17/22	
Sodium, Total	6010C	120 U	mg/Kg	120	1	03/17/22 23:25	03/17/22	
Thallium, Total	6010C	1.2 U	mg/Kg	1.2	1	03/17/22 23:25	03/17/22	
Vanadium, Total	6010C	**16.1**	mg/Kg	5.9	1	03/17/22 23:25	03/17/22	
Zinc, Total	6010C	**66.5**	mg/Kg	2.4	1	03/17/22 23:25	03/17/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:40
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2202164-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**1880**	ug/L	100	1	03/16/22 23:59	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/16/22 23:59	03/15/22	
Arsenic, Total	6010C	10 U	ug/L	10	1	03/16/22 23:59	03/15/22	
Barium, Total	6010C	20 U	ug/L	20	1	03/16/22 23:59	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/16/22 23:59	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:59	03/15/22	
Calcium, Total	6010C	**4800**	ug/L	1000	1	03/16/22 23:59	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:59	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/16/22 23:59	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/16/22 23:59	03/15/22	
Iron, Total	6010C	**2050**	ug/L	100	1	03/16/22 23:59	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/16/22 23:59	03/15/22	
Magnesium, Total	6010C	**2000**	ug/L	1000	1	03/16/22 23:59	03/15/22	
Manganese, Total	6010C	**64**	ug/L	10	1	03/16/22 23:59	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:46	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/16/22 23:59	03/15/22	
Potassium, Total	6010C	2000 U	ug/L	2000	1	03/16/22 23:59	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:59	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/16/22 23:59	03/15/22	
Sodium, Total	6010C	**4900**	ug/L	1000	1	03/16/22 23:59	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/16/22 23:59	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/16/22 23:59	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/16/22 23:59	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:45
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2202164-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**320**	ug/L	100	1	03/17/22 00:02	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/17/22 00:02	03/15/22	
Arsenic, Total	6010C	**251**	ug/L	10	1	03/17/22 00:02	03/15/22	
Barium, Total	6010C	**142**	ug/L	20	1	03/17/22 00:02	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/17/22 00:02	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/17/22 00:02	03/15/22	
Calcium, Total	6010C	**43300**	ug/L	1000	1	03/17/22 00:02	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:02	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/17/22 00:02	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/17/22 00:02	03/15/22	
Iron, Total	6010C	**28200**	ug/L	100	1	03/17/22 00:02	03/15/22	
Lead, Total	6010C	**173**	ug/L	5.0	1	03/17/22 00:02	03/15/22	
Magnesium, Total	6010C	**10000**	ug/L	1000	1	03/17/22 00:02	03/15/22	
Manganese, Total	6010C	**6410**	ug/L	10	1	03/17/22 00:02	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:48	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/17/22 00:02	03/15/22	
Potassium, Total	6010C	**2400**	ug/L	2000	1	03/17/22 00:02	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:02	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/17/22 00:02	03/15/22	
Sodium, Total	6010C	**6100**	ug/L	1000	1	03/17/22 00:02	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:02	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/17/22 00:02	03/15/22	
Zinc, Total	6010C	**8500**	ug/L	200	10	03/17/22 18:39	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:10
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2202164-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	03/17/22 00:06	03/15/22	
Antimony, Total	6010C	60 U	ug/L	60	1	03/17/22 00:06	03/15/22	
Arsenic, Total	6010C	**57**	ug/L	10	1	03/17/22 00:06	03/15/22	
Barium, Total	6010C	**129**	ug/L	20	1	03/17/22 00:06	03/15/22	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	03/17/22 00:06	03/15/22	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	03/17/22 00:06	03/15/22	
Calcium, Total	6010C	**42100**	ug/L	1000	1	03/17/22 00:06	03/15/22	
Chromium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:06	03/15/22	
Cobalt, Total	6010C	50 U	ug/L	50	1	03/17/22 00:06	03/15/22	
Copper, Total	6010C	20 U	ug/L	20	1	03/17/22 00:06	03/15/22	
Iron, Total	6010C	**21700**	ug/L	100	1	03/17/22 00:06	03/15/22	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	03/17/22 00:06	03/15/22	
Magnesium, Total	6010C	**9700**	ug/L	1000	1	03/17/22 00:06	03/15/22	
Manganese, Total	6010C	**6010**	ug/L	10	1	03/17/22 00:06	03/15/22	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	03/16/22 15:50	03/15/22	
Nickel, Total	6010C	40 U	ug/L	40	1	03/17/22 00:06	03/15/22	
Potassium, Total	6010C	**2200**	ug/L	2000	1	03/17/22 00:06	03/15/22	
Selenium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:06	03/15/22	
Silver, Total	6010C	10 U	ug/L	10	1	03/17/22 00:06	03/15/22	
Sodium, Total	6010C	**5900**	ug/L	1000	1	03/17/22 00:06	03/15/22	
Thallium, Total	6010C	10 U	ug/L	10	1	03/17/22 00:06	03/15/22	
Vanadium, Total	6010C	50 U	ug/L	50	1	03/17/22 00:06	03/15/22	
Zinc, Total	6010C	20 U	ug/L	20	1	03/17/22 00:06	03/15/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:35
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2202164-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	03/17/22 00:15	03/15/22	
Antimony, Total	6010C	60	U	ug/L	60	1	03/17/22 00:15	03/15/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Barium, Total	6010C	20	U	ug/L	20	1	03/17/22 00:15	03/15/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	03/17/22 00:15	03/15/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	03/17/22 00:15	03/15/22	
Calcium, Total	6010C	**12100**		ug/L	1000	1	03/17/22 00:15	03/15/22	
Chromium, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	03/17/22 00:15	03/15/22	
Copper, Total	6010C	20	U	ug/L	20	1	03/17/22 00:15	03/15/22	
Iron, Total	6010C	100	U	ug/L	100	1	03/17/22 00:15	03/15/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	03/17/22 00:15	03/15/22	
Magnesium, Total	6010C	**3200**		ug/L	1000	1	03/17/22 00:15	03/15/22	
Manganese, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	03/16/22 15:52	03/15/22	
Nickel, Total	6010C	40	U	ug/L	40	1	03/17/22 00:15	03/15/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	03/17/22 00:15	03/15/22	
Selenium, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Silver, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Sodium, Total	6010C	**4100**		ug/L	1000	1	03/17/22 00:15	03/15/22	
Thallium, Total	6010C	10	U	ug/L	10	1	03/17/22 00:15	03/15/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	03/17/22 00:15	03/15/22	
Zinc, Total	6010C	20	U	ug/L	20	1	03/17/22 00:15	03/15/22	

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:30
Sample Matrix:	Sediment	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3 Sediment	**Basis:**	As Received
Lab Code:	R2202164-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**81.2**	Percent	-	1	03/16/22 12:25	

Field Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 07:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2202164-002		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**81**	uMHOS/cm	-	1	03/10/22 07:55	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**6.00**	mV	-	1	03/10/22 07:55	
Oxygen, Dissolved	SM 4500-O G	**12.9**	mg/L	0.20	1	03/10/22 07:55	
pH, Field	SM 4500-H+ B	**7.02**	pH Units	-	1	03/10/22 07:55	
Temperature, Field	SM 2550 B	**0.500**	deg C	-	1	03/10/22 07:55	
Turbidity, Field	180.1	**12.2**	NTU	-	1	03/10/22 07:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:05
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2202164-003		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**78**	uMHOS/cm	-	1	03/10/22 08:05	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**51.0**	mV	-	1	03/10/22 08:05	
Oxygen, Dissolved	SM 4500-O G	**12.9**	mg/L	0.20	1	03/10/22 08:05	
pH, Field	SM 4500-H+ B	**6.83**	pH Units	-	1	03/10/22 08:05	
Temperature, Field	SM 2550 B	**0.300**	deg C	-	1	03/10/22 08:05	
Turbidity, Field	180.1	**10.2**	NTU	-	1	03/10/22 08:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:55
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2202164-004		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**311**	uMHOS/cm	-	1	03/10/22 08:55	
pH, Field	SM 4500-H+ B	**6.70**	pH Units	-	1	03/10/22 08:55	
Temperature, Field	SM 2550 B	**1.20**	deg C	-	1	03/10/22 08:55	
Turbidity, Field	180.1	**11.6**	NTU	-	1	03/10/22 08:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:15
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2202164-005		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**76**	uMHOS/cm	-	1	03/10/22 08:15	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**85.0**	mV	-	1	03/10/22 08:15	
Oxygen, Dissolved	SM 4500-O G	**12.9**	mg/L	0.20	1	03/10/22 08:15	
pH, Field	SM 4500-H+ B	**6.69**	pH Units	-	1	03/10/22 08:15	
Temperature, Field	SM 2550 B	**0.600**	deg C	-	1	03/10/22 08:15	
Turbidity, Field	180.1	**16.9**	NTU	-	1	03/10/22 08:15	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:20
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-3	**Basis:**	NA
Lab Code:	R2202164-006		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**252**	uMHOS/cm	-	1	03/10/22 08:20	
pH, Field	SM 4500-H+ B	**6.49**	pH Units	-	1	03/10/22 08:20	
Temperature, Field	SM 2550 B	**3.90**	deg C	-	1	03/10/22 08:20	
Turbidity, Field	180.1	**11**	NTU	-	1	03/10/22 08:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:40
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2202164-008		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**71**	uMHOS/cm	-	1	03/10/22 08:40	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**38.0**	mV	-	1	03/10/22 08:40	
Oxygen, Dissolved	SM 4500-O G	**13.0**	mg/L	0.20	1	03/10/22 08:40	
pH, Field	SM 4500-H+ B	**6.80**	pH Units	-	1	03/10/22 08:40	
Temperature, Field	SM 2550 B	**0.500**	deg C	-	1	03/10/22 08:40	
Turbidity, Field	180.1	**10.4**	NTU	-	1	03/10/22 08:40	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 08:45
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2202164-009		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**112**	uMHOS/cm	-	1	03/10/22 08:45	
pH, Field	SM 4500-H+ B	**6.19**	pH Units	-	1	03/10/22 08:45	
Temperature, Field	SM 2550 B	**7.50**	deg C	-	1	03/10/22 08:45	
Turbidity, Field	180.1	**0.5**	NTU	-	1	03/10/22 08:45	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:10
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2202164-010		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**394**	uMHOS/cm	-	1	03/10/22 09:10	
pH, Field	SM 4500-H+ B	**6.47**	pH Units	-	1	03/10/22 09:10	
Temperature, Field	SM 2550 B	**5.00**	deg C	-	1	03/10/22 09:10	
Turbidity, Field	180.1	**14.6**	NTU	-	1	03/10/22 09:10	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22 09:35
Sample Matrix:	Water	**Date Received:**	03/10/22 17:15
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2202164-011		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**402**	uMHOS/cm	-	1	03/10/22 09:35	
pH, Field	SM 4500-H+ B	**6.43**	pH Units	-	1	03/10/22 09:35	
Temperature, Field	SM 2550 B	**3.90**	deg C	-	1	03/10/22 09:35	
Turbidity, Field	180.1	**19.2**	NTU	-	1	03/10/22 09:35	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:** R2202164
Project: Colesville Streams/VOA + Metals
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Dibromofluoromethane 80-116	Toluene-d8 87-121
Trip Blank	R2202164-001	101	105	102
F-6	R2202164-002	103	105	101
SW-4	R2202164-003	105	106	103
SP-4	R2202164-004	105	108	103
SW-3	R2202164-005	106	106	103
SP-3	R2202164-006	101	103	99
SW-2	R2202164-008	103	104	102
SP-2	R2202164-009	102	106	102
SP-5 Effluent	R2202164-010	105	105	103
SP-5 Influent	R2202164-011	105	106	104
Method Blank	RQ2202499-04	104	104	101
Lab Control Sample	RQ2202499-03	104	106	103

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2202499-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	03/14/22 23:10	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	03/14/22 23:10	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
2-Butanone (MEK)	0.78 U	10	0.78	1	03/14/22 23:10	
2-Hexanone	0.20 U	10	0.20	1	03/14/22 23:10	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	03/14/22 23:10	
Acetone	5.0 U	10	5.0	1	03/14/22 23:10	
Benzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
Bromodichloromethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
Bromoform	0.25 U	5.0	0.25	1	03/14/22 23:10	
Bromomethane	0.70 U	5.0	0.70	1	03/14/22 23:10	
Carbon Disulfide	0.42 U	10	0.42	1	03/14/22 23:10	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	03/14/22 23:10	
Chlorobenzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
Chloroethane	0.23 U	5.0	0.23	1	03/14/22 23:10	
Chloroform	0.24 U	5.0	0.24	1	03/14/22 23:10	
Chloromethane	0.28 U	5.0	0.28	1	03/14/22 23:10	
Cyclohexane	0.26 U	10	0.26	1	03/14/22 23:10	
Dibromochloromethane	0.20 U	5.0	0.20	1	03/14/22 23:10	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	03/14/22 23:10	
Dichloromethane	0.65 U	5.0	0.65	1	03/14/22 23:10	
Ethylbenzene	0.20 U	5.0	0.20	1	03/14/22 23:10	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	03/14/22 23:10	
Methyl Acetate	0.33 U	10	0.33	1	03/14/22 23:10	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	03/14/22 23:10	
Methylcyclohexane	0.20 U	10	0.20	1	03/14/22 23:10	
Styrene	0.20 U	5.0	0.20	1	03/14/22 23:10	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	03/14/22 23:10	
Toluene	0.20 U	5.0	0.20	1	03/14/22 23:10	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	03/14/22 23:10	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	03/14/22 23:10	
Vinyl Chloride	0.20 U	5.0	0.20	1	03/14/22 23:10	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2202499-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	03/14/22 23:10	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	03/14/22 23:10	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	03/14/22 23:10	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	03/14/22 23:10	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	03/14/22 23:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	03/14/22 23:10	
Dibromofluoromethane	104	80 - 116	03/14/22 23:10	
Toluene-d8	101	87 - 121	03/14/22 23:10	

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams/VOA + Metals
Sample Matrix: Water

Service Request: R2202164
Date Analyzed: 03/14/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2202499-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.9	20.0	100	75-125
1,1,2,2-Tetrachloroethane	8260C	18.0	20.0	90	78-126
1,1,2-Trichloroethane	8260C	18.9	20.0	95	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.1	20.0	90	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	17.8	20.0	89	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.3	20.0	92	71-118
1,2,4-Trichlorobenzene	8260C	19.9	20.0	100	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	19.5	20.0	98	55-136
1,2-Dibromoethane	8260C	19.5	20.0	98	82-127
1,2-Dichlorobenzene	8260C	19.5	20.0	97	80-119
1,2-Dichloroethane	8260C	19.6	20.0	98	71-127
1,2-Dichloropropane	8260C	17.7	20.0	89	80-119
1,3-Dichlorobenzene	8260C	19.5	20.0	98	83-121
1,4-Dichlorobenzene	8260C	18.9	20.0	94	79-119
2-Butanone (MEK)	8260C	15.4	20.0	77	61-137
2-Hexanone	8260C	17.5	20.0	87	63-124
4-Methyl-2-pentanone	8260C	17.4	20.0	87	66-124
Acetone	8260C	17.5	20.0	88	40-161
Benzene	8260C	18.4	20.0	92	79-119
Bromodichloromethane	8260C	20.3	20.0	101	81-123
Bromoform	8260C	20.6	20.0	103	65-146
Bromomethane	8260C	16.2	20.0	81	42-166
Carbon Disulfide	8260C	17.7	20.0	88	66-128
Carbon Tetrachloride	8260C	21.6	20.0	108	70-127
Chlorobenzene	8260C	19.5	20.0	97	80-121
Chloroethane	8260C	21.4	20.0	107	62-131
Chloroform	8260C	18.3	20.0	92	79-120
Chloromethane	8260C	19.5	20.0	97	65-135
Cyclohexane	8260C	18.1	20.0	90	69-120
Dibromochloromethane	8260C	21.0	20.0	105	72-128
Dichlorodifluoromethane (CFC 12)	8260C	18.3	20.0	92	59-155
Dichloromethane	8260C	16.7	20.0	83	73-122
Ethylbenzene	8260C	19.6	20.0	98	76-120

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams/VOA + Metals
Sample Matrix: Water

Service Request: R2202164
Date Analyzed: 03/14/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2202499-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	19.8	20.0	99	77-128
Methyl Acetate	8260C	12.3	20.0	61	61-133
Methyl tert-Butyl Ether	8260C	17.1	20.0	85	75-118
Methylcyclohexane	8260C	17.0	20.0	85	51-129
Styrene	8260C	19.1	20.0	96	80-124
Tetrachloroethene (PCE)	8260C	21.2	20.0	106	72-125
Toluene	8260C	18.9	20.0	95	79-119
Trichloroethene (TCE)	8260C	20.6	20.0	103	74-122
Trichlorofluoromethane (CFC 11)	8260C	21.5	20.0	107	71-136
Vinyl Chloride	8260C	19.4	20.0	97	74-159
cis-1,2-Dichloroethene	8260C	18.9	20.0	95	80-121
cis-1,3-Dichloropropene	8260C	19.6	20.0	98	77-122
trans-1,2-Dichloroethene	8260C	18.5	20.0	92	73-118
trans-1,3-Dichloropropene	8260C	19.9	20.0	100	71-133

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R2202164-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	20 U	mg/Kg	20	1	03/17/22 22:56	03/17/22	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	1	03/17/22 22:56	03/17/22	
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	03/17/22 22:56	03/17/22	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	03/17/22 22:56	03/17/22	
Beryllium, Total	6010C	0.30 U	mg/Kg	0.30	1	03/17/22 22:56	03/17/22	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	03/17/22 22:56	03/17/22	
Calcium, Total	6010C	100 U	mg/Kg	100	1	03/17/22 22:56	03/17/22	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	03/17/22 22:56	03/17/22	
Cobalt, Total	6010C	5.0 U	mg/Kg	5.0	1	03/17/22 22:56	03/17/22	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	03/17/22 22:56	03/17/22	
Iron, Total	6010C	20 U	mg/Kg	20	1	03/17/22 22:56	03/17/22	
Lead, Total	6010C	0.50 U	mg/Kg	0.50	1	03/17/22 22:56	03/17/22	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	03/17/22 22:56	03/17/22	
Manganese, Total	6010C	2.0 U	mg/Kg	2.0	1	03/17/22 22:56	03/17/22	
Mercury, Total	7471B	0.020 U	mg/Kg	0.020	1	03/18/22 12:34	03/17/22	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	03/17/22 22:56	03/17/22	
Potassium, Total	6010C	200 U	mg/Kg	200	1	03/17/22 22:56	03/17/22	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	03/17/22 22:56	03/17/22	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	1	03/17/22 22:56	03/17/22	
Sodium, Total	6010C	100 U	mg/Kg	100	1	03/17/22 22:56	03/17/22	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	1	03/17/22 22:56	03/17/22	
Vanadium, Total	6010C	5.0 U	mg/Kg	5.0	1	03/17/22 22:56	03/17/22	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	03/17/22 22:56	03/17/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2202164-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	03/16/22 22:57	03/15/22	
Antimony, Total	6010C	60	U	ug/L	60	1	03/16/22 22:57	03/15/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Barium, Total	6010C	20	U	ug/L	20	1	03/16/22 22:57	03/15/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	03/16/22 22:57	03/15/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	03/16/22 22:57	03/15/22	
Calcium, Total	6010C	1000	U	ug/L	1000	1	03/16/22 22:57	03/15/22	
Chromium, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	03/16/22 22:57	03/15/22	
Copper, Total	6010C	20	U	ug/L	20	1	03/16/22 22:57	03/15/22	
Iron, Total	6010C	100	U	ug/L	100	1	03/16/22 22:57	03/15/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	03/16/22 22:57	03/15/22	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	03/16/22 22:57	03/15/22	
Manganese, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	03/16/22 15:04	03/15/22	
Nickel, Total	6010C	40	U	ug/L	40	1	03/16/22 22:57	03/15/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	03/16/22 22:57	03/15/22	
Selenium, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Silver, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Sodium, Total	6010C	1000	U	ug/L	1000	1	03/16/22 22:57	03/15/22	
Thallium, Total	6010C	10	U	ug/L	10	1	03/16/22 22:57	03/15/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	03/16/22 22:57	03/15/22	
Zinc, Total	6010C	20	U	ug/L	20	1	03/16/22 22:57	03/15/22	

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2202164
Project:	Colesville Streams/VOA + Metals	**Date Collected:**	03/10/22
Sample Matrix:	Water	**Date Received:**	03/10/22
		Date Analyzed:	03/16/22
		Date Extracted:	03/15/22

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2202164-002	**Basis:**	NA
Analysis Method:	7470A		
Prep Method:	Method		

		Matrix Spike			Duplicate Matrix Spike					
		R2202164-002MS			R2202164-002DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Mercury, Total	0.08 U	1.05	1.00	105	1.05	1.00	105	75-125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams/VOA + Metals
Sample Matrix: Sediment

Service Request: R2202164
Date Analyzed: 03/17/22 - 03/18/22

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R2202164-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	196	200	98	80-120
Antimony, Total	6010C	45.8	50.0	92	80-120
Arsenic, Total	6010C	3.53	4.0	88	80-120
Barium, Total	6010C	203	200	102	80-120
Beryllium, Total	6010C	4.63	5.00	93	80-120
Cadmium, Total	6010C	4.95	5.00	99	80-120
Calcium, Total	6010C	205	200	103	80-120
Chromium, Total	6010C	20.0	20.0	100	80-120
Cobalt, Total	6010C	49.5	50.0	99	80-120
Copper, Total	6010C	24.6	25.0	98	80-120
Iron, Total	6010C	99.1	100	99	80-120
Lead, Total	6010C	49.2	50.0	98	80-120
Magnesium, Total	6010C	198	200	99	80-120
Manganese, Total	6010C	48.8	50.0	98	80-120
Mercury, Total	7471B	0.104	0.100	104	80-120
Nickel, Total	6010C	49.8	50.0	100	80-120
Potassium, Total	6010C	1850	2000	92	80-120
Selenium, Total	6010C	85.6	101	85	80-120
Silver, Total	6010C	4.68	5.0	94	80-120
Sodium, Total	6010C	2010	2000	101	80-120
Thallium, Total	6010C	180	200	90	80-120
Vanadium, Total	6010C	49.7	50.0	99	80-120
Zinc, Total	6010C	47.5	50.0	95	80-120

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams/VOA + Metals
Sample Matrix: Water

Service Request: R2202164
Date Analyzed: 03/16/22

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2202164-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury, Total	7470A	1.03	1.00	103	80-120

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams/VOA + Metals
Sample Matrix: Water

Service Request: R2202164
Date Analyzed: 03/16/22

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

			Lab Control Sample			Duplicate Lab Control Sample				
			R2202164-LCS2			R2202164-DLCS2				
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010C	1990	2000	100	2000	2000	100	80-120	<1	20
Antimony, Total	6010C	476	500	95	484	500	97	80-120	2	20
Arsenic, Total	6010C	39	40	97	38	40	94	80-120	3	20
Barium, Total	6010C	2060	2000	103	2070	2000	103	80-120	<1	20
Beryllium, Total	6010C	47.6	50.0	95	47.6	50.0	95	80-120	<1	20
Cadmium, Total	6010C	50.3	50.0	101	50.5	50.0	101	80-120	<1	20
Calcium, Total	6010C	2000	2000	101	2000	2000	101	80-120	<1	20
Chromium, Total	6010C	201	200	100	201	200	100	80-120	<1	20
Cobalt, Total	6010C	497	500	99	496	500	99	80-120	<1	20
Copper, Total	6010C	241	250	96	242	250	97	80-120	<1	20
Iron, Total	6010C	990	1000	99	990	1000	99	80-120	<1	20
Lead, Total	6010C	496	500	99	495	500	99	80-120	<1	20
Magnesium, Total	6010C	2000	2000	100	2000	2000	100	80-120	<1	20
Manganese, Total	6010C	489	500	98	490	500	98	80-120	<1	20
Nickel, Total	6010C	499	500	100	500	500	100	80-120	<1	20
Potassium, Total	6010C	18800	20000	94	18800	20000	94	80-120	<1	20
Selenium, Total	6010C	958	1010	95	966	1010	96	80-120	<1	20
Silver, Total	6010C	47	50	94	47	50	95	80-120	<1	20
Sodium, Total	6010C	19300	20000	96	19300	20000	97	80-120	<1	20
Thallium, Total	6010C	1830	2000	92	1840	2000	92	80-120	<1	20
Vanadium, Total	6010C	492	500	98	493	500	99	80-120	<1	20
Zinc, Total	6010C	488	500	98	486	500	97	80-120	<1	20

October 12, 2022 Service Request No:R2208717

Emily Giordano
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville Streams + Seeps

Dear Emily,

Enclosed are the results of the sample(s) submitted to our laboratory September 14, 2022
For your reference, these analyses have been assigned our service request number **R2208717.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7576. You may also contact me via email at Nicole.Mansen@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Nicole Mansen
Project Manager

CC: Jon Sundquist

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps **Date Received:** 09/14/2022
Sample Matrix: Sediment, Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eleven sediment, water samples were received for analysis at ALS Environmental on 09/14/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

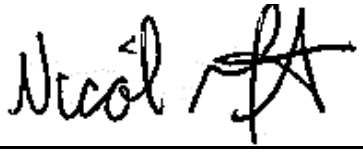
No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

Field:

No significant anomalies were noted with this analysis.

Approved by  Date 10/12/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SP-2			Lab ID: R2208717-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	0.50	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	0.95	J	0.20	5.0	ug/L	8260C
Calcium, Total	10500			1000	ug/L	6010C
Conductivity, Field	101				uMHOS/cm	120.1
Magnesium, Total	2900			1000	ug/L	6010C
Manganese, Total	10			10	ug/L	6010C
pH, Field	5.97				pH Units	SM 4500-H+ B
Sodium, Total	4100			1000	ug/L	6010C
Temperature, Field	10.7				deg C	SM 2550 B
Trichloroethene (TCE)	1.8	J	0.20	5.0	ug/L	8260C
Turbidity, Field	0.4				NTU	180.1

CLIENT ID: SP-3			Lab ID: R2208717-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,2-Trichloroethane	0.43	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	14		0.20	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.29	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.69	J	0.20	5.0	ug/L	8260C
Barium, Total	44			20	ug/L	6010C
Benzene	0.36	J	0.20	5.0	ug/L	8260C
Calcium, Total	33900			1000	ug/L	6010C
Chlorobenzene	16		0.20	5.0	ug/L	8260C
Chloroethane	2.6	J	0.23	5.0	ug/L	8260C
cis-1,2-Dichloroethene	29		0.23	5.0	ug/L	8260C
Conductivity, Field	272				uMHOS/cm	120.1
Iron, Total	12600			100	ug/L	6010C
Magnesium, Total	7000			1000	ug/L	6010C
Manganese, Total	4870			10	ug/L	6010C
pH, Field	6.40				pH Units	SM 4500-H+ B
Sodium, Total	3200			1000	ug/L	6010C
Temperature, Field	14.3				deg C	SM 2550 B
Trichloroethene (TCE)	23		0.20	5.0	ug/L	8260C
Turbidity, Field	5.3				NTU	180.1
Vinyl Chloride	4.2	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-4			Lab ID: R2208717-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethane (1,1-DCA)	5.0		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.35	J	0.20	5.0	ug/L	8260C
Arsenic, Total	98			10	ug/L	6010C

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SP-4			Lab ID: R2208717-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Barium, Total	75			20	ug/L	6010C
Benzene	0.28	J	0.20	5.0	ug/L	8260C
Calcium, Total	45200			1000	ug/L	6010C
Chlorobenzene	3.8	J	0.20	5.0	ug/L	8260C
Chloroethane	0.65	J	0.23	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.1	J	0.23	5.0	ug/L	8260C
Conductivity, Field	365				uMHOS/cm	120.1
Iron, Total	17800			100	ug/L	6010C
Magnesium, Total	9300			1000	ug/L	6010C
Manganese, Total	4750			10	ug/L	6010C
pH, Field	6.54				pH Units	SM 4500-H+ B
Sodium, Total	5200			1000	ug/L	6010C
Temperature, Field	15.8				deg C	SM 2550 B
Trichloroethene (TCE)	1.8	J	0.20	5.0	ug/L	8260C
Turbidity, Field	9.9				NTU	180.1
Vinyl Chloride	0.31	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-5 Effluent			Lab ID: R2208717-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethane (1,1-DCA)	5.5		0.20	5.0	ug/L	8260C
Arsenic, Total	122			10	ug/L	6010C
Barium, Total	145			20	ug/L	6010C
Calcium, Total	42700			1000	ug/L	6010C
Chlorobenzene	1.7	J	0.20	5.0	ug/L	8260C
Chloroethane	0.93	J	0.23	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.70	J	0.23	5.0	ug/L	8260C
Conductivity, Field	409				uMHOS/cm	120.1
Iron, Total	23600			100	ug/L	6010C
Magnesium, Total	9900			1000	ug/L	6010C
Manganese, Total	6290			10	ug/L	6010C
pH, Field	6.29				pH Units	SM 4500-H+ B
Potassium, Total	2800			2000	ug/L	6010C
Sodium, Total	6300			1000	ug/L	6010C
Temperature, Field	15.6				deg C	SM 2550 B
Trichloroethene (TCE)	0.77	J	0.20	5.0	ug/L	8260C
Turbidity, Field	6.8				NTU	180.1
Vinyl Chloride	0.29	J	0.20	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SP-5 Influent			Lab ID: R2208717-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethane (1,1-DCA)	4.4	J	0.20	5.0	ug/L	8260C
Aluminum, Total	270			100	ug/L	6010C
Arsenic, Total	285			10	ug/L	6010C
Barium, Total	143			20	ug/L	6010C
Benzene	0.98	J	0.20	5.0	ug/L	8260C
Calcium, Total	44200			1000	ug/L	6010C
Carbon Disulfide	0.63	J	0.42	10	ug/L	8260C
Chlorobenzene	16		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.3	J	0.23	5.0	ug/L	8260C
Conductivity, Field	428				uMHOS/cm	120.1
Iron, Total	34600			100	ug/L	6010C
Lead, Total	280			5.0	ug/L	6010C
Magnesium, Total	9800			1000	ug/L	6010C
Manganese, Total	6260			10	ug/L	6010C
pH, Field	6.16				pH Units	SM 4500-H+ B
Potassium, Total	3000			2000	ug/L	6010C
Sodium, Total	6200			1000	ug/L	6010C
Temperature, Field	15.0				deg C	SM 2550 B
Trichloroethene (TCE)	2.9	J	0.20	5.0	ug/L	8260C
Turbidity, Field	23.3				NTU	180.1
Zinc, Total	10400			200	ug/L	6010C

CLIENT ID: F-6			Lab ID: R2208717-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum, Total	120			100	ug/L	6010C
Calcium, Total	8200			1000	ug/L	6010C
Conductivity, Field	94				uMHOS/cm	120.1
Iron, Total	200			100	ug/L	6010C
Magnesium, Total	2200			1000	ug/L	6010C
Manganese, Total	30			10	ug/L	6010C
Oxidation-Reduction Potential (ORP), Field	92.0				mV	ASTM D1498-00
Oxygen, Dissolved	9.48			0.20	mg/L	SM 4500-O G
pH, Field	6.97				pH Units	SM 4500-H+ B
Sodium, Total	5900			1000	ug/L	6010C
Temperature, Field	15.0				deg C	SM 2550 B
Turbidity, Field	1				NTU	180.1

CLIENT ID: SW-4			Lab ID: R2208717-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum, Total	120			100	ug/L	6010C

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SW-4			Lab ID: R2208717-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Calcium, Total	7800			1000	ug/L	6010C
Conductivity, Field	93				uMHOS/cm	120.1
Iron, Total	190			100	ug/L	6010C
Magnesium, Total	2100			1000	ug/L	6010C
Manganese, Total	29			10	ug/L	6010C
Oxidation-Reduction Potential (ORP), Field	112				mV	ASTM D1498-00
Oxygen, Dissolved	9.42			0.20	mg/L	SM 4500-O G
pH, Field	6.46				pH Units	SM 4500-H+ B
Sodium, Total	5800			1000	ug/L	6010C
Temperature, Field	15.0				deg C	SM 2550 B
Trichloroethene (TCE)	0.20	J	0.20	5.0	ug/L	8260C
Turbidity, Field	1.1				NTU	180.1

CLIENT ID: SW-3			Lab ID: R2208717-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum, Total	120			100	ug/L	6010C
Calcium, Total	7500			1000	ug/L	6010C
Conductivity, Field	93				uMHOS/cm	120.1
Iron, Total	370			100	ug/L	6010C
Magnesium, Total	2100			1000	ug/L	6010C
Manganese, Total	32			10	ug/L	6010C
Oxidation-Reduction Potential (ORP), Field	24.0				mV	ASTM D1498-00
Oxygen, Dissolved	9.29			0.20	mg/L	SM 4500-O G
pH, Field	6.67				pH Units	SM 4500-H+ B
Sodium, Total	5800			1000	ug/L	6010C
Temperature, Field	15.0				deg C	SM 2550 B
Turbidity, Field	1.8				NTU	180.1

CLIENT ID: SP-3 Sediment			Lab ID: R2208717-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum, Total	13200			25	mg/Kg	6010C
Arsenic, Total	12.2			1.2	mg/Kg	6010C
Barium, Total	50.0			2.5	mg/Kg	6010C
Beryllium, Total	0.52			0.37	mg/Kg	6010C
Calcium, Total	1180			120	mg/Kg	6010C
Chromium, Total	17.6			1.2	mg/Kg	6010C
Cobalt, Total	11.8			6.2	mg/Kg	6010C
Copper, Total	24.8			2.5	mg/Kg	6010C
Iron, Total	35500			250	mg/Kg	6010C
Lead, Total	14.1			0.62	mg/Kg	6010C

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SP-3 Sediment	Lab ID: R2208717-007					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Magnesium, Total	4780			120	mg/Kg	6010C
Manganese, Total	1170			2.5	mg/Kg	6010C
Nickel, Total	28.0			5.0	mg/Kg	6010C
Potassium, Total	1160			250	mg/Kg	6010C
Total Solids	74.5				Percent	ALS SOP
Vanadium, Total	18.0			6.2	mg/Kg	6010C
Zinc, Total	72.7			2.5	mg/Kg	6010C

CLIENT ID: SW-2	Lab ID: R2208717-008					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Aluminum, Total	140			100	ug/L	6010C
Calcium, Total	5800			1000	ug/L	6010C
Conductivity, Field	78				uMHOS/cm	120.1
Iron, Total	250			100	ug/L	6010C
Magnesium, Total	1800			1000	ug/L	6010C
Manganese, Total	12			10	ug/L	6010C
Oxidation-Reduction Potential (ORP), Field	11.0				mV	ASTM D1498-00
Oxygen, Dissolved	9.36			0.20	mg/L	SM 4500-O G
pH, Field	6.75				pH Units	SM 4500-H+ B
Sodium, Total	5700			1000	ug/L	6010C
Temperature, Field	15.3				deg C	SM 2550 B
Turbidity, Field	2.6				NTU	180.1

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:**R2208717
Project: Colesville Streams + Seeps

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2208717-001	Trip Blank	9/14/2022	1045
R2208717-002	F-6	9/14/2022	1045
R2208717-003	SW-4	9/14/2022	1055
R2208717-004	SP-4	9/14/2022	1105
R2208717-005	SW-3	9/14/2022	1120
R2208717-006	SP-3	9/14/2022	1130
R2208717-007	SP-3 Sediment	9/14/2022	1140
R2208717-008	SW-2	9/14/2022	1150
R2208717-009	SP-2	9/14/2022	1155
R2208717-010	SP-5 Effluent	9/14/2022	1220
R2208717-011	SP-5 Influent	9/14/2022	1245

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

064013

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: Colesville Streams + Seeps	Project Number:
Project Manager: Emily Giordano	Report CC:
Company/Address: Broome County Landfill Knapp Rd Binghamton, NY	
Phone #: 607-778-8000	Email:
Sampler's Signature:	Sampler's Printed Name: Kyle Lee

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ° 8260 ° 624 ° CLP	GCMS SVOAs ° 8270 ° 625	GC VOAs ° 8021 ° 601/602	PESTICIDES ° 8081 ° 608	PCBs ° 8082 ° 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	% Solids	REMARKS/ ALTERNATE DESCRIPTION
Trip Blank		9/14/22	1045	W	3	X								T.B.
F-6			1045	W	5	X					X			65
SW-4			1055	W	5	X					X			66
SP-4			1105	W	5	X					X			67
SW-3			1120	W	5	X					X			68
SP-3		1130	~~1140~~	W	5	X					X			69
SP-3 Sediment			1140	Sed	2						X		X	37
SW-2			1150	W	5	X					X			70
SP-2			1155	W	5	X					X			71
SP-5 Effluent			1220	W	5	X					X			72
SP-5 Influent		↓	1245	W	5	X					X			73

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
_____ Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Kyle Lee	Printed Name: Kelsey Foley	Printed Name: Kelsey Foley	Printed Name	Printed Name	
Firm: ARS	Firm: ARS	Firm: ARS	Firm: ARS	Firm	
Date/Time: 9/14/22	Date/Time: 9/14/22 1330	Date/Time: 9/14/22 1645	Date/Time: 9/14/22 1645	Date/Time	

R2208717 5
Broome County Division of Solid Waste Management
Colesville Streams + Seeps

Distribution: White - Lab Copy; Yellow - Return to Originator

FIELD MONITORING REPORT

PROJECT Colesville Seeps + Stream Sampling **LAB ID** 65

SAMPLE POINT ID F-6

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1045 SWL —

Appearance Clear

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.96	6.97
Myron 6p	Conductivity	µmhos/cm	94	94
Myron 6p	Temperature	Degrees Celsius	15.0	15.0
Myron 6p	Redox	millivolts	92	
Lamotte	Turbidity	NTU	1.0	

D.O. = 9.48 mg/L

Calibration Date/Time 9/14/22 1100

OBSERVATIONS ~1.5" of rain within last 48hours

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Seeps + ColeSville Stream Sampling LAB ID 660

SAMPLE POINT ID SW-4

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1055 SWL —

Appearance Clear

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.46	6.46
Myron 6p	Conductivity	µmhos/cm	92	93
Myron 6p	Temperature	Degrees Celsius	15.0	15.0
Myron 6p	Redox	millivolts	112	
Lamotte	Turbidity	NTU	1.1	

D.O. = 9.42 mg/L

Calibration Date/Time 9/14/22 1100 pH = 7.00 4.00 10.00 Conductivity = 1413 Set 1413

Turbidity = 10.0 Set 10.0 0.0 to 0.0

OBSERVATIONS

FIELD MONITORING REPORT

PROJECT Coleville Seeps + Stream Sampling LAB ID 67

SAMPLE POINT ID SP-4

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1105 SWL —

Appearance Rust Tan tint

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.54	6.54
Myron 6p	Conductivity	µmhos/cm	365	365
Myron 6p	Temperature	Degrees Celsius	15.8	15.8
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	9.9	

Calibration Date/Time 9/14/22 1100 **pH =** **Conductivity =**

Turbidity =

OBSERVATIONS

FIELD MONITORING REPORT

PROJECT Seeps + ColeSville Stream Sampling LAB ID 68

SAMPLE POINT ID SW-3

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1120 SWL —

Appearance Tan tint

Weather Conditions Cloudy 65°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.67	6.67
Myron 6p	Conductivity	µmhos/cm	93	93
Myron 6p	Temperature	Degrees Celsius	15.0	15.0
Myron 6p	Redox	millivolts	24	
Lamotte	Turbidity	NTU	1.8	

D.O. = 9.29 mg/L

Calibration Date/Time 9/14/22 1100 **pH =** **Conductivity =**

OBSERVATIONS **Turbidity =**

FIELD MONITORING REPORT

PROJECT Coleville Seeps + Stream Sampling LAB ID Water # 69 Sed # ~~67~~ 37

SAMPLE POINT ID SP-3 + Sediment

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time Water 1130 Sediment 1140 SWL —

Appearance Water: Rust tan tint | Sediment: Sandy Sediment (Grey)

Weather Conditions Cloudy 65°

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.40	6.40
Myron 6p	Conductivity	µmhos/cm	272	272
Myron 6p	Temperature	Degrees Celsius	14.3	14.3
Myron 6p	Redox	millivolts	~~-2~~	—
Lamotte	Turbidity	NTU	—	5.3

Calibration Date/Time 9/14/22 1100 pH = Conductivity =

Turbidity =

OBSERVATIONS

Point not flowing as heavy as normal. Seems to have shifted to a point further upstream

FIELD MONITORING REPORT

PROJECT Seeps + Coleville Stream Sampling LAB ID 70

SAMPLE POINT ID SW-2

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1150 SWL —

Appearance Clear

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2	
Myron 6p	pH	unit	6.75	6.75	
Myron 6p	Conductivity	µmhos/cm	78	78	
Myron 6p	Temperature	Degrees Celsius	~~10.7~~ RL	15.3	15.3
Myron 6p	Redox	millivolts	11		
Lamotte	Turbidity	NTU	2.6		

D.O. = 9.36 mg/L

Calibration Date/Time 9/14/22 1100 pH = Conductivity =

OBSERVATIONS Turbidity =

FIELD MONITORING REPORT

PROJECT Coleville Stream + Seep Sampling **LAB ID** 71

SAMPLE POINT ID SP-2

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1155 SWL —

Appearance Clear

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / GK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	5.97	5.97
Myron 6p	Conductivity	µmhos/cm	101	101
Myron 6p	Temperature	Degrees Celsius	10.7	10.7
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	0.4	

Calibration Date/Time 9/14/22 1100

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams + Seeps LAB ID 72

SAMPLE POINT ID SP-5 Effluent

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____

SWL (ft.) _____ Start Time _____ Stop Time _____

Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 9/14/22 Time 1220 SWL _____

Appearance Tan tint

Weather Conditions Cloudy 65°

Sampling Technician (Print) Kyle Lee / QS Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.29	6.29
Myron 6p	Conductivity	µmhos/cm	409	409
Myron 6p	Temperature	Degrees Celsius	15.6	15.6
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	6.8	

Calibration Date/Time 9/14/22 1100 **pH =** **Conductivity =**

OBSERVATIONS **Turbidity =**

FIELD MONITORING REPORT

PROJECT Colesville Streams + Seeps **LAB ID** 73

SAMPLE POINT ID SP-5 Influent

PURGE INFORMATION

Well Depth (ft.) 4.10 Purge Date 9/14/22 Purge Method Bailer

SWL (ft.) 0.48 Start Time 1239 Stop Time 1241

Standing Water (ft.) 3.62 Volume Purged gal. 1.8 # casings 3

Well Constant (gal/ft.) 0.163 Observations Rust tan

Well Volume (gal.) 0.6

SAMPLING INFORMATION

Sample Method Bailer

Date 9/14/22 Time 1245 SWL 0.48

Appearance Rust tan Slightly turbid

Weather Conditions Cloudy 65

Sampling Technician (Print) Kyle Lee / QK Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.16	6.16
Myron 6p	Conductivity	µmhos/cm	428	428
Myron 6p	Temperature	Degrees Celsius	15.0	15.0
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	23.3	

Calibration Date/Time 9/14/22 1100 **pH =** **Conductivity =**

OBSERVATIONS **Turbidity =**

Cooler Receipt and Preservatio

R2208717 5
Broome County Division of Solid Waste Manageme
Colesville Streams + Seeps

Project/Client Broome, Seven Mountains Folder Number

Cooler received on 9/14/22 by:

COURIER: (ALS) UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 9/14 Time: 1655 ID: IR#7 (IR#1) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	0.3	0.1					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R002 by Derek on 9/14 at 1659
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 09/15/22 Time: 1652 by: AL

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	206722	HNO_3		X	2022012457	07/23	0002	0.5mL	B280350	<2
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**						

Bottle lot numbers: 22-07-25, 062022-3AXH
Explain all Discrepancies/ Other Comments:

HCl 8260 LOT 61321 02/02/2025

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: AL
PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
120.1	Water	Conductivity, Field
180.1	Water	Turbidity, Field
ALS SOP	Sediment	Total Solids
ASTM D1498-00	Water	Oxidation-Reduction Potential (ORP), Field
SM 2550 B	Water	Temperature, Field
SM 4500-H+ B	Water	pH, Field
SM 4500-O G	Water	Oxygen, Dissolved

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps/

Sample Name: Trip Blank **Date Collected:** 09/14/22
Lab Code: R2208717-001 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: F-6 **Date Collected:** 09/14/22
Lab Code: R2208717-002 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Sample Name: SW-4 **Date Collected:** 09/14/22
Lab Code: R2208717-003 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps/

Sample Name: SW-4 **Date Collected:** 09/14/22
Lab Code: R2208717-003 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 4500-O G		JJANSON

Sample Name: SP-4 **Date Collected:** 09/14/22
Lab Code: R2208717-004 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SW-3 **Date Collected:** 09/14/22
Lab Code: R2208717-005 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	NMANSEN
6010C	CDISTEFANO	CKUTZER
7470A	CWOODS	CWOODS
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps/

Sample Name: SP-3 **Date Collected:** 09/14/22
Lab Code: R2208717-006 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	NMANSEN
6010C	CDISTEFANO	CKUTZER
7470A	CWOODS	CWOODS
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SP-3 Sediment **Date Collected:** 09/14/22
Lab Code: R2208717-007 **Date Received:** 09/14/22
Sample Matrix: Sediment

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
7471B	CWOODS	CWOODS
ALS SOP		KAWONG

Sample Name: SW-2 **Date Collected:** 09/14/22
Lab Code: R2208717-008 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps/

Sample Name: SW-2 **Date Collected:** 09/14/22
Lab Code: R2208717-008 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 4500-O G		JJANSON

Sample Name: SP-2 **Date Collected:** 09/14/22
Lab Code: R2208717-009 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SP-5 Effluent **Date Collected:** 09/14/22
Lab Code: R2208717-010 **Date Received:** 09/14/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	NMANSEN
6010C	CDISTEFANO	CKUTZER
7470A	CWOODS	CWOODS
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps/		

Sample Name:	SP-5 Influent	**Date Collected:**	09/14/22
Lab Code:	R2208717-011	**Date Received:**	09/14/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	CDISTEFANO	CKUTZER
6010C	CDISTEFANO	NMANSEN
7470A	CWOODS	CWOODS
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2208717-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 13:39	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 13:39	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 13:39	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 13:39	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 13:39	
Acetone	5.0 U	10	5.0	1	09/23/22 13:39	
Benzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 13:39	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 13:39	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 13:39	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 13:39	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 13:39	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 13:39	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 13:39	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 13:39	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 13:39	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 13:39	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 13:39	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 13:39	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 13:39	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 13:39	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 13:39	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 13:39	
Styrene	0.20 U	5.0	0.20	1	09/23/22 13:39	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 13:39	
Toluene	0.20 U	5.0	0.20	1	09/23/22 13:39	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	09/23/22 13:39	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 13:39	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 13:39	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2208717-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 13:39	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 13:39	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 13:39	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 13:39	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 13:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/23/22 13:39	
Dibromofluoromethane	101	80 - 116	09/23/22 13:39	
Toluene-d8	101	87 - 121	09/23/22 13:39	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2208717-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 14:01	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 14:01	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 14:01	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 14:01	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 14:01	
Acetone	5.0 U	10	5.0	1	09/23/22 14:01	
Benzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 14:01	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 14:01	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 14:01	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 14:01	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 14:01	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 14:01	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 14:01	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 14:01	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 14:01	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 14:01	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 14:01	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 14:01	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 14:01	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 14:01	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 14:01	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 14:01	
Styrene	0.20 U	5.0	0.20	1	09/23/22 14:01	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 14:01	
Toluene	0.20 U	5.0	0.20	1	09/23/22 14:01	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	09/23/22 14:01	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 14:01	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 14:01	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2208717-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 14:01	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 14:01	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 14:01	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 14:01	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 14:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	09/23/22 14:01	
Dibromofluoromethane	98	80 - 116	09/23/22 14:01	
Toluene-d8	98	87 - 121	09/23/22 14:01	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2208717-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 14:23	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 14:23	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 14:23	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 14:23	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 14:23	
Acetone	5.0 U	10	5.0	1	09/23/22 14:23	
Benzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 14:23	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 14:23	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 14:23	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 14:23	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 14:23	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 14:23	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 14:23	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 14:23	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 14:23	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 14:23	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 14:23	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 14:23	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 14:23	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 14:23	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 14:23	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 14:23	
Styrene	0.20 U	5.0	0.20	1	09/23/22 14:23	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 14:23	
Toluene	0.20 U	5.0	0.20	1	09/23/22 14:23	
Trichloroethene (TCE)	**0.20 J**	5.0	0.20	1	09/23/22 14:23	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 14:23	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 14:23	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2208717-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 14:23	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 14:23	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 14:23	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 14:23	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 14:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	09/23/22 14:23	
Dibromofluoromethane	98	80 - 116	09/23/22 14:23	
Toluene-d8	99	87 - 121	09/23/22 14:23	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:05
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2208717-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,1-Dichloroethane (1,1-DCA)	**5.0**	5.0	0.20	1	09/23/22 14:44	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 14:44	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 14:44	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,2-Dichloroethane	**0.35 J**	5.0	0.20	1	09/23/22 14:44	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:44	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 14:44	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 14:44	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 14:44	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 14:44	
Acetone	5.0 U	10	5.0	1	09/23/22 14:44	
Benzene	**0.28 J**	5.0	0.20	1	09/23/22 14:44	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 14:44	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 14:44	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 14:44	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 14:44	
Chlorobenzene	**3.8 J**	5.0	0.20	1	09/23/22 14:44	
Chloroethane	**0.65 J**	5.0	0.23	1	09/23/22 14:44	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 14:44	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 14:44	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 14:44	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 14:44	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 14:44	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 14:44	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 14:44	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 14:44	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 14:44	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 14:44	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 14:44	
Styrene	0.20 U	5.0	0.20	1	09/23/22 14:44	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 14:44	
Toluene	0.20 U	5.0	0.20	1	09/23/22 14:44	
Trichloroethene (TCE)	**1.8 J**	5.0	0.20	1	09/23/22 14:44	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 14:44	
Vinyl Chloride	**0.31 J**	5.0	0.20	1	09/23/22 14:44	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:05
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2208717-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 14:44	
cis-1,2-Dichloroethene	**1.1 J**	5.0	0.23	1	09/23/22 14:44	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 14:44	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 14:44	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 14:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/23/22 14:44	
Dibromofluoromethane	98	80 - 116	09/23/22 14:44	
Toluene-d8	99	87 - 121	09/23/22 14:44	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2208717-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 15:06	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 15:06	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 15:06	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 15:06	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 15:06	
Acetone	5.0 U	10	5.0	1	09/23/22 15:06	
Benzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 15:06	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 15:06	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 15:06	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 15:06	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 15:06	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 15:06	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 15:06	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 15:06	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 15:06	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 15:06	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 15:06	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 15:06	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 15:06	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 15:06	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 15:06	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 15:06	
Styrene	0.20 U	5.0	0.20	1	09/23/22 15:06	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 15:06	
Toluene	0.20 U	5.0	0.20	1	09/23/22 15:06	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	09/23/22 15:06	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 15:06	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 15:06	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2208717-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 15:06	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 15:06	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 15:06	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 15:06	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 15:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	09/23/22 15:06	
Dibromofluoromethane	99	80 - 116	09/23/22 15:06	
Toluene-d8	101	87 - 121	09/23/22 15:06	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:30
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3	**Units:**	ug/L
Lab Code:	R2208717-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,1,2-Trichloroethane	**0.43 J**	5.0	0.20	1	09/23/22 15:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,1-Dichloroethane (1,1-DCA)	**14**	5.0	0.20	1	09/23/22 15:28	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 15:28	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 15:28	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,2-Dichlorobenzene	**0.29 J**	5.0	0.20	1	09/23/22 15:28	
1,2-Dichloroethane	**0.69 J**	5.0	0.20	1	09/23/22 15:28	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:28	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:28	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 15:28	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 15:28	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 15:28	
Acetone	5.0 U	10	5.0	1	09/23/22 15:28	
Benzene	**0.36 J**	5.0	0.20	1	09/23/22 15:28	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 15:28	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 15:28	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 15:28	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 15:28	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 15:28	
Chlorobenzene	**16**	5.0	0.20	1	09/23/22 15:28	
Chloroethane	**2.6 J**	5.0	0.23	1	09/23/22 15:28	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 15:28	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 15:28	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 15:28	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 15:28	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 15:28	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 15:28	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 15:28	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 15:28	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 15:28	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 15:28	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 15:28	
Styrene	0.20 U	5.0	0.20	1	09/23/22 15:28	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 15:28	
Toluene	0.20 U	5.0	0.20	1	09/23/22 15:28	
Trichloroethene (TCE)	**23**	5.0	0.20	1	09/23/22 15:28	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 15:28	
Vinyl Chloride	**4.2 J**	5.0	0.20	1	09/23/22 15:28	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:30
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3	**Units:**	ug/L
Lab Code:	R2208717-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 15:28	
cis-1,2-Dichloroethene	**29**	5.0	0.23	1	09/23/22 15:28	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 15:28	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 15:28	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 15:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	09/23/22 15:28	
Dibromofluoromethane	98	80 - 116	09/23/22 15:28	
Toluene-d8	99	87 - 121	09/23/22 15:28	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:50
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2208717-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 15:49	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 15:49	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 15:49	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 15:49	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 15:49	
Acetone	5.0 U	10	5.0	1	09/23/22 15:49	
Benzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 15:49	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 15:49	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 15:49	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 15:49	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 15:49	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 15:49	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 15:49	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 15:49	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 15:49	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 15:49	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 15:49	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 15:49	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 15:49	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 15:49	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 15:49	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 15:49	
Styrene	0.20 U	5.0	0.20	1	09/23/22 15:49	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 15:49	
Toluene	0.20 U	5.0	0.20	1	09/23/22 15:49	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	09/23/22 15:49	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 15:49	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 15:49	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:50
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2208717-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 15:49	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 15:49	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 15:49	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 15:49	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 15:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	09/23/22 15:49	
Dibromofluoromethane	98	80 - 116	09/23/22 15:49	
Toluene-d8	99	87 - 121	09/23/22 15:49	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2208717-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.50 J**	5.0	0.20	1	09/23/22 16:11	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,1-Dichloroethane (1,1-DCA)	**0.95 J**	5.0	0.20	1	09/23/22 16:11	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 16:11	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 16:11	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 16:11	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 16:11	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 16:11	
Acetone	5.0 U	10	5.0	1	09/23/22 16:11	
Benzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 16:11	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 16:11	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 16:11	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 16:11	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 16:11	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 16:11	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 16:11	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 16:11	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 16:11	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 16:11	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 16:11	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 16:11	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 16:11	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 16:11	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 16:11	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 16:11	
Styrene	0.20 U	5.0	0.20	1	09/23/22 16:11	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 16:11	
Toluene	0.20 U	5.0	0.20	1	09/23/22 16:11	
Trichloroethene (TCE)	**1.8 J**	5.0	0.20	1	09/23/22 16:11	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 16:11	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 16:11	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2208717-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 16:11	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 16:11	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 16:11	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 16:11	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 16:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	09/23/22 16:11	
Dibromofluoromethane	100	80 - 116	09/23/22 16:11	
Toluene-d8	102	87 - 121	09/23/22 16:11	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2208717-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,1-Dichloroethane (1,1-DCA)	**5.5**	5.0	0.20	1	09/23/22 16:33	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 16:33	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 16:33	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:33	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:33	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 16:33	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 16:33	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 16:33	
Acetone	5.0 U	10	5.0	1	09/23/22 16:33	
Benzene	0.20 U	5.0	0.20	1	09/23/22 16:33	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 16:33	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 16:33	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 16:33	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 16:33	
Chlorobenzene	**1.7 J**	5.0	0.20	1	09/23/22 16:33	
Chloroethane	**0.93 J**	5.0	0.23	1	09/23/22 16:33	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 16:33	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 16:33	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 16:33	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 16:33	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 16:33	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 16:33	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 16:33	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 16:33	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 16:33	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 16:33	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 16:33	
Styrene	0.20 U	5.0	0.20	1	09/23/22 16:33	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 16:33	
Toluene	0.20 U	5.0	0.20	1	09/23/22 16:33	
Trichloroethene (TCE)	**0.77 J**	5.0	0.20	1	09/23/22 16:33	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 16:33	
Vinyl Chloride	**0.29 J**	5.0	0.20	1	09/23/22 16:33	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2208717-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 16:33	
cis-1,2-Dichloroethene	**0.70 J**	5.0	0.23	1	09/23/22 16:33	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 16:33	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 16:33	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 16:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	09/23/22 16:33	
Dibromofluoromethane	98	80 - 116	09/23/22 16:33	
Toluene-d8	100	87 - 121	09/23/22 16:33	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2208717-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,1-Dichloroethane (1,1-DCA)	**4.4 J**	5.0	0.20	1	09/23/22 16:55	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 16:55	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 16:55	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:55	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 16:55	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 16:55	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 16:55	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 16:55	
Acetone	5.0 U	10	5.0	1	09/23/22 16:55	
Benzene	**0.98 J**	5.0	0.20	1	09/23/22 16:55	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 16:55	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 16:55	
Carbon Disulfide	**0.63 J**	10	0.42	1	09/23/22 16:55	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 16:55	
Chlorobenzene	**16**	5.0	0.20	1	09/23/22 16:55	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 16:55	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 16:55	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 16:55	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 16:55	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 16:55	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 16:55	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 16:55	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 16:55	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 16:55	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 16:55	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 16:55	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 16:55	
Styrene	0.20 U	5.0	0.20	1	09/23/22 16:55	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 16:55	
Toluene	0.20 U	5.0	0.20	1	09/23/22 16:55	
Trichloroethene (TCE)	**2.9 J**	5.0	0.20	1	09/23/22 16:55	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 16:55	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 16:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2208717-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 16:55	
cis-1,2-Dichloroethene	**1.3 J**	5.0	0.23	1	09/23/22 16:55	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 16:55	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 16:55	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 16:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	09/23/22 16:55	
Dibromofluoromethane	97	80 - 116	09/23/22 16:55	
Toluene-d8	98	87 - 121	09/23/22 16:55	

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2208717-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**120**		ug/L	100	1	09/28/22 20:57	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 20:57	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 20:57	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 20:57	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 20:57	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 20:57	09/22/22	
Calcium, Total	6010C	**8200**		ug/L	1000	1	09/28/22 20:57	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 20:57	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 20:57	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 20:57	09/22/22	
Iron, Total	6010C	**200**		ug/L	100	1	09/28/22 20:57	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 20:57	09/22/22	
Magnesium, Total	6010C	**2200**		ug/L	1000	1	09/28/22 20:57	09/22/22	
Manganese, Total	6010C	**30**		ug/L	10	1	09/28/22 20:57	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:08	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 20:57	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 20:57	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:06	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 20:57	09/22/22	
Sodium, Total	6010C	**5900**		ug/L	1000	1	09/28/22 20:57	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:06	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 20:57	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 20:57	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2208717-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**120**		ug/L	100	1	09/28/22 21:00	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:00	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 21:00	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 21:00	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:00	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:00	09/22/22	
Calcium, Total	6010C	**7800**		ug/L	1000	1	09/28/22 21:00	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:00	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:00	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:00	09/22/22	
Iron, Total	6010C	**190**		ug/L	100	1	09/28/22 21:00	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:00	09/22/22	
Magnesium, Total	6010C	**2100**		ug/L	1000	1	09/28/22 21:00	09/22/22	
Manganese, Total	6010C	**29**		ug/L	10	1	09/28/22 21:00	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:10	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:00	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:00	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:09	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:00	09/22/22	
Sodium, Total	6010C	**5800**		ug/L	1000	1	09/28/22 21:00	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:09	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:00	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:00	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:05
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2208717-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	09/28/22 21:03	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:03	09/22/22	
Arsenic, Total	6010C	**98**		ug/L	10	1	09/28/22 21:03	09/22/22	
Barium, Total	6010C	**75**		ug/L	20	1	09/28/22 21:03	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:03	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:03	09/22/22	
Calcium, Total	6010C	**45200**		ug/L	1000	1	09/28/22 21:03	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:03	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:03	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:03	09/22/22	
Iron, Total	6010C	**17800**		ug/L	100	1	09/28/22 21:03	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:03	09/22/22	
Magnesium, Total	6010C	**9300**		ug/L	1000	1	09/28/22 21:03	09/22/22	
Manganese, Total	6010C	**4750**		ug/L	10	1	09/28/22 21:03	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:12	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:03	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:03	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:12	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:03	09/22/22	
Sodium, Total	6010C	**5200**		ug/L	1000	1	09/28/22 21:03	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:12	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:03	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:03	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2208717-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**120**		ug/L	100	1	09/28/22 21:06	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:06	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 21:06	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 21:06	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:06	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:06	09/22/22	
Calcium, Total	6010C	**7500**		ug/L	1000	1	09/28/22 21:06	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:06	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:06	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:06	09/22/22	
Iron, Total	6010C	**370**		ug/L	100	1	09/28/22 21:06	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:06	09/22/22	
Magnesium, Total	6010C	**2100**		ug/L	1000	1	09/28/22 21:06	09/22/22	
Manganese, Total	6010C	**32**		ug/L	10	1	09/28/22 21:06	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:14	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:06	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:06	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:16	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:06	09/22/22	
Sodium, Total	6010C	**5800**		ug/L	1000	1	09/28/22 21:06	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:16	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:06	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:06	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:30
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3	**Basis:**	NA
Lab Code:	R2208717-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	09/28/22 21:10	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:10	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 21:10	09/22/22	
Barium, Total	6010C	**44**		ug/L	20	1	09/28/22 21:10	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:10	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:10	09/22/22	
Calcium, Total	6010C	**33900**		ug/L	1000	1	09/28/22 21:10	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:10	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:10	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:10	09/22/22	
Iron, Total	6010C	**12600**		ug/L	100	1	09/28/22 21:10	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:10	09/22/22	
Magnesium, Total	6010C	**7000**		ug/L	1000	1	09/28/22 21:10	09/22/22	
Manganese, Total	6010C	**4870**		ug/L	10	1	09/28/22 21:10	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:16	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:10	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:10	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:19	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:10	09/22/22	
Sodium, Total	6010C	**3200**		ug/L	1000	1	09/28/22 21:10	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:19	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:10	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:10	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:40
Sample Matrix:	Sediment	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3 Sediment	**Basis:**	Dry
Lab Code:	R2208717-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**13200**	mg/Kg	25	1	09/26/22 12:58	09/21/22	
Antimony, Total	6010C	7.5 U	mg/Kg	7.5	1	09/26/22 12:58	09/21/22	
Arsenic, Total	6010C	**12.2**	mg/Kg	1.2	1	09/26/22 12:58	09/21/22	
Barium, Total	6010C	**50.0**	mg/Kg	2.5	1	09/26/22 12:58	09/21/22	
Beryllium, Total	6010C	**0.52**	mg/Kg	0.37	1	09/26/22 12:58	09/21/22	
Cadmium, Total	6010C	0.62 U	mg/Kg	0.62	1	09/26/22 12:58	09/21/22	
Calcium, Total	6010C	**1180**	mg/Kg	120	1	09/26/22 12:58	09/21/22	
Chromium, Total	6010C	**17.6**	mg/Kg	1.2	1	09/26/22 12:58	09/21/22	
Cobalt, Total	6010C	**11.8**	mg/Kg	6.2	1	09/26/22 12:58	09/21/22	
Copper, Total	6010C	**24.8**	mg/Kg	2.5	1	09/26/22 12:58	09/21/22	
Iron, Total	6010C	**35500**	mg/Kg	250	10	09/26/22 13:37	09/21/22	
Lead, Total	6010C	**14.1**	mg/Kg	0.62	1	09/26/22 12:58	09/21/22	
Magnesium, Total	6010C	**4780**	mg/Kg	120	1	09/26/22 12:58	09/21/22	
Manganese, Total	6010C	**1170**	mg/Kg	2.5	1	09/26/22 12:58	09/21/22	
Mercury, Total	7471B	0.025 U	mg/Kg	0.025	1	09/27/22 13:57	09/26/22	
Nickel, Total	6010C	**28.0**	mg/Kg	5.0	1	09/26/22 12:58	09/21/22	
Potassium, Total	6010C	**1160**	mg/Kg	250	1	09/26/22 12:58	09/21/22	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	1	09/26/22 12:58	09/21/22	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	1	09/26/22 12:58	09/21/22	
Sodium, Total	6010C	120 U	mg/Kg	120	1	09/26/22 12:58	09/21/22	
Thallium, Total	6010C	12 U	mg/Kg	12	10	09/26/22 13:37	09/21/22	
Vanadium, Total	6010C	**18.0**	mg/Kg	6.2	1	09/26/22 12:58	09/21/22	
Zinc, Total	6010C	**72.7**	mg/Kg	2.5	1	09/26/22 12:58	09/21/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:50
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2208717-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**140**		ug/L	100	1	09/28/22 21:13	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:13	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 21:13	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 21:13	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:13	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:13	09/22/22	
Calcium, Total	6010C	**5800**		ug/L	1000	1	09/28/22 21:13	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:13	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:13	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:13	09/22/22	
Iron, Total	6010C	**250**		ug/L	100	1	09/28/22 21:13	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:13	09/22/22	
Magnesium, Total	6010C	**1800**		ug/L	1000	1	09/28/22 21:13	09/22/22	
Manganese, Total	6010C	**12**		ug/L	10	1	09/28/22 21:13	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:18	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:13	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:13	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:22	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:13	09/22/22	
Sodium, Total	6010C	**5700**		ug/L	1000	1	09/28/22 21:13	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:22	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:13	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:13	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2208717-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	09/28/22 21:16	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:16	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 21:16	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 21:16	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:16	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:16	09/22/22	
Calcium, Total	6010C	**10500**		ug/L	1000	1	09/28/22 21:16	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:16	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:16	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:16	09/22/22	
Iron, Total	6010C	100	U	ug/L	100	1	09/28/22 21:16	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:16	09/22/22	
Magnesium, Total	6010C	**2900**		ug/L	1000	1	09/28/22 21:16	09/22/22	
Manganese, Total	6010C	**10**		ug/L	10	1	09/28/22 21:16	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:20	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:16	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 21:16	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:26	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:16	09/22/22	
Sodium, Total	6010C	**4100**		ug/L	1000	1	09/28/22 21:16	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:26	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:16	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:16	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2208717-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	09/28/22 21:19	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:19	09/22/22	
Arsenic, Total	6010C	**122**		ug/L	10	1	09/28/22 21:19	09/22/22	
Barium, Total	6010C	**145**		ug/L	20	1	09/28/22 21:19	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:19	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:19	09/22/22	
Calcium, Total	6010C	**42700**		ug/L	1000	1	09/28/22 21:19	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:19	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:19	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:19	09/22/22	
Iron, Total	6010C	**23600**		ug/L	100	1	09/28/22 21:19	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:19	09/22/22	
Magnesium, Total	6010C	**9900**		ug/L	1000	1	09/28/22 21:19	09/22/22	
Manganese, Total	6010C	**6290**		ug/L	10	1	09/28/22 21:19	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:27	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:19	09/22/22	
Potassium, Total	6010C	**2800**		ug/L	2000	1	09/28/22 21:19	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:29	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:19	09/22/22	
Sodium, Total	6010C	**6300**		ug/L	1000	1	09/28/22 21:19	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:29	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:19	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 21:19	09/22/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2208717-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**270**		ug/L	100	1	09/28/22 21:29	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 21:29	09/22/22	
Arsenic, Total	6010C	**285**		ug/L	10	1	09/28/22 21:29	09/22/22	
Barium, Total	6010C	**143**		ug/L	20	1	09/28/22 21:29	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 21:29	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 21:29	09/22/22	
Calcium, Total	6010C	**44200**		ug/L	1000	1	09/28/22 21:29	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 21:29	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 21:29	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 21:29	09/22/22	
Iron, Total	6010C	**34600**		ug/L	100	1	09/28/22 21:29	09/22/22	
Lead, Total	6010C	**280**		ug/L	5.0	1	09/28/22 21:29	09/22/22	
Magnesium, Total	6010C	**9800**		ug/L	1000	1	09/28/22 21:29	09/22/22	
Manganese, Total	6010C	**6260**		ug/L	10	1	09/28/22 21:29	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:29	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 21:29	09/22/22	
Potassium, Total	6010C	**3000**		ug/L	2000	1	09/28/22 21:29	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:39	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 21:29	09/22/22	
Sodium, Total	6010C	**6200**		ug/L	1000	1	09/28/22 21:29	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 18:39	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 21:29	09/22/22	
Zinc, Total	6010C	**10400**		ug/L	200	10	10/07/22 18:48	09/22/22	

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:40
Sample Matrix:	Sediment	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3 Sediment	**Basis:**	As Received
Lab Code:	R2208717-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**74.5**	Percent	-	1	09/23/22 09:00	

Field Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2208717-002		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**94**	uMHOS/cm	-	1	09/14/22 10:45	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**92.0**	mV	-	1	09/14/22 10:45	
Oxygen, Dissolved	SM 4500-O G	**9.48**	mg/L	0.20	1	09/14/22 10:45	
pH, Field	SM 4500-H+ B	**6.97**	pH Units	-	1	09/14/22 10:45	
Temperature, Field	SM 2550 B	**15.0**	deg C	-	1	09/14/22 10:45	
Turbidity, Field	180.1	**1**	NTU	-	1	09/14/22 10:45	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 10:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2208717-003		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**93**	uMHOS/cm	-	1	09/14/22 10:55	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**112**	mV	-	1	09/14/22 10:55	
Oxygen, Dissolved	SM 4500-O G	**9.42**	mg/L	0.20	1	09/14/22 10:55	
pH, Field	SM 4500-H+ B	**6.46**	pH Units	-	1	09/14/22 10:55	
Temperature, Field	SM 2550 B	**15.0**	deg C	-	1	09/14/22 10:55	
Turbidity, Field	180.1	**1.1**	NTU	-	1	09/14/22 10:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:05
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2208717-004		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**365**	uMHOS/cm	-	1	09/14/22 11:05	
pH, Field	SM 4500-H+ B	**6.54**	pH Units	-	1	09/14/22 11:05	
Temperature, Field	SM 2550 B	**15.8**	deg C	-	1	09/14/22 11:05	
Turbidity, Field	180.1	**9.9**	NTU	-	1	09/14/22 11:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2208717-005		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**93**	uMHOS/cm	-	1	09/14/22 11:20	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**24.0**	mV	-	1	09/14/22 11:20	
Oxygen, Dissolved	SM 4500-O G	**9.29**	mg/L	0.20	1	09/14/22 11:20	
pH, Field	SM 4500-H+ B	**6.67**	pH Units	-	1	09/14/22 11:20	
Temperature, Field	SM 2550 B	**15.0**	deg C	-	1	09/14/22 11:20	
Turbidity, Field	180.1	**1.8**	NTU	-	1	09/14/22 11:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:30
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-3	**Basis:**	NA
Lab Code:	R2208717-006		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**272**	uMHOS/cm	-	1	09/14/22 11:30	
pH, Field	SM 4500-H+ B	**6.40**	pH Units	-	1	09/14/22 11:30	
Temperature, Field	SM 2550 B	**14.3**	deg C	-	1	09/14/22 11:30	
Turbidity, Field	180.1	**5.3**	NTU	-	1	09/14/22 11:30	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:50
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2208717-008		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**78**	uMHOS/cm	-	1	09/14/22 11:50	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**11.0**	mV	-	1	09/14/22 11:50	
Oxygen, Dissolved	SM 4500-O G	**9.36**	mg/L	0.20	1	09/14/22 11:50	
pH, Field	SM 4500-H+ B	**6.75**	pH Units	-	1	09/14/22 11:50	
Temperature, Field	SM 2550 B	**15.3**	deg C	-	1	09/14/22 11:50	
Turbidity, Field	180.1	**2.6**	NTU	-	1	09/14/22 11:50	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 11:55
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2208717-009		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**101**	uMHOS/cm	-	1	09/14/22 11:55	
pH, Field	SM 4500-H+ B	**5.97**	pH Units	-	1	09/14/22 11:55	
Temperature, Field	SM 2550 B	**10.7**	deg C	-	1	09/14/22 11:55	
Turbidity, Field	180.1	**0.4**	NTU	-	1	09/14/22 11:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:20
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2208717-010		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**409**	uMHOS/cm	-	1	09/14/22 12:20	
pH, Field	SM 4500-H+ B	**6.29**	pH Units	-	1	09/14/22 12:20	
Temperature, Field	SM 2550 B	**15.6**	deg C	-	1	09/14/22 12:20	
Turbidity, Field	180.1	**6.8**	NTU	-	1	09/14/22 12:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	09/14/22 12:45
Sample Matrix:	Water	**Date Received:**	09/14/22 16:45
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2208717-011		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**428**	uMHOS/cm	-	1	09/14/22 12:45	
pH, Field	SM 4500-H+ B	**6.16**	pH Units	-	1	09/14/22 12:45	
Temperature, Field	SM 2550 B	**15.0**	deg C	-	1	09/14/22 12:45	
Turbidity, Field	180.1	**23.3**	NTU	-	1	09/14/22 12:45	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:** R2208717
Project: Colesville Streams + Seeps
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Dibromofluoromethane 80-116	Toluene-d8 87-121
Trip Blank	R2208717-001	95	101	101
F-6	R2208717-002	92	98	98
SW-4	R2208717-003	93	98	99
SP-4	R2208717-004	91	98	99
SW-3	R2208717-005	94	99	101
SP-3	R2208717-006	94	98	99
SW-2	R2208717-008	93	98	99
SP-2	R2208717-009	93	100	102
SP-5 Effluent	R2208717-010	97	98	100
SP-5 Influent	R2208717-011	94	97	98
Method Blank	RQ2211524-04	95	97	99
Lab Control Sample	RQ2211524-03	95	101	99

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2211524-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	09/23/22 12:34	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	09/23/22 12:34	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
2-Butanone (MEK)	0.78 U	10	0.78	1	09/23/22 12:34	
2-Hexanone	0.20 U	10	0.20	1	09/23/22 12:34	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	09/23/22 12:34	
Acetone	5.0 U	10	5.0	1	09/23/22 12:34	
Benzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
Bromodichloromethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
Bromoform	0.25 U	5.0	0.25	1	09/23/22 12:34	
Bromomethane	0.70 U	5.0	0.70	1	09/23/22 12:34	
Carbon Disulfide	0.42 U	10	0.42	1	09/23/22 12:34	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	09/23/22 12:34	
Chlorobenzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
Chloroethane	0.23 U	5.0	0.23	1	09/23/22 12:34	
Chloroform	0.24 U	5.0	0.24	1	09/23/22 12:34	
Chloromethane	0.28 U	5.0	0.28	1	09/23/22 12:34	
Cyclohexane	0.26 U	10	0.26	1	09/23/22 12:34	
Dibromochloromethane	0.20 U	5.0	0.20	1	09/23/22 12:34	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	09/23/22 12:34	
Dichloromethane	0.65 U	5.0	0.65	1	09/23/22 12:34	
Ethylbenzene	0.20 U	5.0	0.20	1	09/23/22 12:34	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	09/23/22 12:34	
Methyl Acetate	0.33 U	10	0.33	1	09/23/22 12:34	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	09/23/22 12:34	
Methylcyclohexane	0.20 U	10	0.20	1	09/23/22 12:34	
Styrene	0.20 U	5.0	0.20	1	09/23/22 12:34	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	09/23/22 12:34	
Toluene	0.20 U	5.0	0.20	1	09/23/22 12:34	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	09/23/22 12:34	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	09/23/22 12:34	
Vinyl Chloride	0.20 U	5.0	0.20	1	09/23/22 12:34	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2211524-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	09/23/22 12:34	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	09/23/22 12:34	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	09/23/22 12:34	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	09/23/22 12:34	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	09/23/22 12:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	09/23/22 12:34	
Dibromofluoromethane	97	80 - 116	09/23/22 12:34	
Toluene-d8	99	87 - 121	09/23/22 12:34	

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams + Seeps
Sample Matrix: Water

Service Request: R2208717
Date Analyzed: 09/23/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2211524-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	21.8	20.0	109	75-125
1,1,2,2-Tetrachloroethane	8260C	17.8	20.0	89	78-126
1,1,2-Trichloroethane	8260C	21.4	20.0	107	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	22.4	20.0	112	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	21.7	20.0	109	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	23.0	20.0	115	71-118
1,2,4-Trichlorobenzene	8260C	21.5	20.0	107	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.6	20.0	88	55-136
1,2-Dibromoethane	8260C	21.0	20.0	105	82-127
1,2-Dichlorobenzene	8260C	22.2	20.0	111	80-119
1,2-Dichloroethane	8260C	21.6	20.0	108	71-127
1,2-Dichloropropane	8260C	21.4	20.0	107	80-119
1,3-Dichlorobenzene	8260C	23.4	20.0	117	83-121
1,4-Dichlorobenzene	8260C	21.2	20.0	106	79-119
2-Butanone (MEK)	8260C	16.0	20.0	80	61-137
2-Hexanone	8260C	16.7	20.0	84	63-124
4-Methyl-2-pentanone	8260C	17.1	20.0	86	66-124
Acetone	8260C	17.9	20.0	90	40-161
Benzene	8260C	22.4	20.0	112	79-119
Bromodichloromethane	8260C	21.2	20.0	106	81-123
Bromoform	8260C	22.3	20.0	111	65-146
Bromomethane	8260C	21.5	20.0	107	42-166
Carbon Disulfide	8260C	19.8	20.0	99	66-128
Carbon Tetrachloride	8260C	23.1	20.0	115	70-127
Chlorobenzene	8260C	21.7	20.0	109	80-121
Chloroethane	8260C	17.3	20.0	87	62-131
Chloroform	8260C	21.5	20.0	107	79-120
Chloromethane	8260C	20.2	20.0	101	65-135
Cyclohexane	8260C	20.2	20.0	101	69-120
Dibromochloromethane	8260C	21.0	20.0	105	72-128
Dichlorodifluoromethane (CFC 12)	8260C	18.7	20.0	93	59-155
Dichloromethane	8260C	20.3	20.0	101	73-122
Ethylbenzene	8260C	22.6	20.0	113	76-120

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams + Seeps
Sample Matrix: Water

Service Request: R2208717
Date Analyzed: 09/23/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2211524-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	24.1	20.0	121	77-128
Methyl Acetate	8260C	15.7	20.0	79	61-133
Methyl tert-Butyl Ether	8260C	20.0	20.0	100	75-118
Methylcyclohexane	8260C	20.2	20.0	101	51-129
Styrene	8260C	23.5	20.0	118	80-124
Tetrachloroethene (PCE)	8260C	23.5	20.0	117	72-125
Toluene	8260C	21.8	20.0	109	79-119
Trichloroethene (TCE)	8260C	23.8	20.0	119	74-122
Trichlorofluoromethane (CFC 11)	8260C	22.9	20.0	114	71-136
Vinyl Chloride	8260C	19.0	20.0	95	74-159
Xylenes, Total	8260C	67.9	60.0	113	78-121
cis-1,2-Dichloroethene	8260C	21.0	20.0	105	80-121
cis-1,3-Dichloropropene	8260C	22.1	20.0	111	77-122
trans-1,2-Dichloroethene	8260C	22.0	20.0	110	73-118
trans-1,3-Dichloropropene	8260C	24.1	20.0	121	71-133

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R2208717-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	20 U	mg/Kg	20	1	09/26/22 12:51	09/21/22	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	1	09/26/22 12:51	09/21/22	
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	09/26/22 12:51	09/21/22	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	09/26/22 12:51	09/21/22	
Beryllium, Total	6010C	0.30 U	mg/Kg	0.30	1	09/26/22 12:51	09/21/22	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	09/26/22 12:51	09/21/22	
Calcium, Total	6010C	100 U	mg/Kg	100	1	09/26/22 12:51	09/21/22	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	09/26/22 12:51	09/21/22	
Cobalt, Total	6010C	5.0 U	mg/Kg	5.0	1	09/26/22 12:51	09/21/22	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	09/26/22 12:51	09/21/22	
Iron, Total	6010C	20 U	mg/Kg	20	1	09/26/22 12:51	09/21/22	
Lead, Total	6010C	0.50 U	mg/Kg	0.50	1	09/26/22 12:51	09/21/22	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	09/26/22 12:51	09/21/22	
Manganese, Total	6010C	2.0 U	mg/Kg	2.0	1	09/26/22 12:51	09/21/22	
Mercury, Total	7471B	0.020 U	mg/Kg	0.020	1	09/27/22 13:30	09/26/22	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	09/26/22 12:51	09/21/22	
Potassium, Total	6010C	200 U	mg/Kg	200	1	09/26/22 12:51	09/21/22	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	09/26/22 12:51	09/21/22	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	1	09/26/22 12:51	09/21/22	
Sodium, Total	6010C	100 U	mg/Kg	100	1	09/26/22 12:51	09/21/22	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	1	09/26/22 12:51	09/21/22	
Vanadium, Total	6010C	5.0 U	mg/Kg	5.0	1	09/26/22 12:51	09/21/22	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	09/26/22 12:51	09/21/22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project:	Colesville Streams + Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2208717-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	09/28/22 20:50	09/22/22	
Antimony, Total	6010C	60	U	ug/L	60	1	09/28/22 20:50	09/22/22	
Arsenic, Total	6010C	10	U	ug/L	10	1	09/28/22 20:50	09/22/22	
Barium, Total	6010C	20	U	ug/L	20	1	09/28/22 20:50	09/22/22	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	09/28/22 20:50	09/22/22	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 20:50	09/22/22	
Calcium, Total	6010C	1000	U	ug/L	1000	1	09/28/22 20:50	09/22/22	
Chromium, Total	6010C	10	U	ug/L	10	1	09/28/22 20:50	09/22/22	
Cobalt, Total	6010C	50	U	ug/L	50	1	09/28/22 20:50	09/22/22	
Copper, Total	6010C	20	U	ug/L	20	1	09/28/22 20:50	09/22/22	
Iron, Total	6010C	100	U	ug/L	100	1	09/28/22 20:50	09/22/22	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	09/28/22 20:50	09/22/22	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	09/28/22 20:50	09/22/22	
Manganese, Total	6010C	10	U	ug/L	10	1	09/28/22 20:50	09/22/22	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	09/25/22 15:04	09/23/22	
Nickel, Total	6010C	40	U	ug/L	40	1	09/28/22 20:50	09/22/22	
Potassium, Total	6010C	2000	U	ug/L	2000	1	09/28/22 20:50	09/22/22	
Selenium, Total	6010C	10	U	ug/L	10	1	10/07/22 17:59	09/22/22	
Silver, Total	6010C	10	U	ug/L	10	1	09/28/22 20:50	09/22/22	
Sodium, Total	6010C	1000	U	ug/L	1000	1	09/28/22 20:50	09/22/22	
Thallium, Total	6010C	10	U	ug/L	10	1	10/07/22 17:59	09/22/22	
Vanadium, Total	6010C	50	U	ug/L	50	1	09/28/22 20:50	09/22/22	
Zinc, Total	6010C	20	U	ug/L	20	1	09/28/22 20:50	09/22/22	

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams + Seeps
Sample Matrix: Sediment

Service Request: R2208717
Date Analyzed: 09/26/22 - 09/27/22

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R2208717-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	195	200	98	80-120
Antimony, Total	6010C	48.5	50.0	97	80-120
Arsenic, Total	6010C	3.4	4.0	86	80-120
Barium, Total	6010C	203	200	102	80-120
Beryllium, Total	6010C	4.65	5.00	93	80-120
Cadmium, Total	6010C	5.05	5.00	101	80-120
Calcium, Total	6010C	200	200	99	80-120
Chromium, Total	6010C	20.3	20.0	101	80-120
Cobalt, Total	6010C	50.7	50.0	101	80-120
Copper, Total	6010C	25.7	25.0	103	80-120
Iron, Total	6010C	100	100	100	80-120
Lead, Total	6010C	49.7	50.0	99	80-120
Magnesium, Total	6010C	200	200	98	80-120
Manganese, Total	6010C	49.8	50.0	100	80-120
Mercury, Total	7471B	0.0904	0.100	90	80-120
Nickel, Total	6010C	50.0	50.0	100	80-120
Potassium, Total	6010C	1800	2000	90	80-120
Selenium, Total	6010C	86.0	101	85	80-120
Silver, Total	6010C	4.8	5.0	97	80-120
Sodium, Total	6010C	1950	2000	97	80-120
Thallium, Total	6010C	181	200	90	80-120
Vanadium, Total	6010C	48.6	50.0	97	80-120
Zinc, Total	6010C	48.0	50.0	96	80-120

Client: Broome County Division of Solid Waste Management
Project: Colesville Streams + Seeps
Sample Matrix: Water

Service Request: R2208717
Date Analyzed: 09/25/22 - 10/07/22

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2208717-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	2050	2000	102	80-120
Antimony, Total	6010C	485	500	97	80-120
Arsenic, Total	6010C	39	40	96	80-120
Barium, Total	6010C	2050	2000	102	80-120
Beryllium, Total	6010C	47.2	50.0	94	80-120
Cadmium, Total	6010C	50.7	50.0	101	80-120
Calcium, Total	6010C	1990	2000	100	80-120
Chromium, Total	6010C	206	200	103	80-120
Cobalt, Total	6010C	511	500	102	80-120
Copper, Total	6010C	251	250	100	80-120
Iron, Total	6010C	972	1000	97	80-120
Lead, Total	6010C	520	500	104	80-120
Magnesium, Total	6010C	1970	2000	98	80-120
Manganese, Total	6010C	502	500	100	80-120
Mercury, Total	7470A	1.01	1.00	101	80-120
Nickel, Total	6010C	502	500	100	80-120
Potassium, Total	6010C	17800	20000	89	80-120
Selenium, Total	6010C	945	1010	94	80-120
Silver, Total	6010C	48.2	50	96	80-120
Sodium, Total	6010C	19500	20000	98	80-120
Thallium, Total	6010C	1870	2000	93	80-120
Vanadium, Total	6010C	491	500	98	80-120
Zinc, Total	6010C	488	500	98	80-120

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2208717
Project	Colesville Streams + Seeps	**Date Collected:**	09/14/22
Sample Matrix:	Sediment	**Date Received:**	09/14/22
		Date Analyzed:	09/23/22

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	SP-3 Sediment	**Units:**	Percent
Lab Code:	R2208717-007	**Basis:**	As Received

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R2208717-007DUP Result	Average	RPD	RPD Limit
Total Solids	ALS SOP	-	74.5	72.8	73.7	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

APPENDIX B
Molasses Solution Injection Volumes

Injection of Molasses Solution, August 2022
Colesville Landfill
Broome County, New York.

Annual (2022) Molasses Injection August 16-17, 2022
Colesville Landfill Site
Broome County, NY

Molasses to Water Ratio: 4%

Injection Well ID	Solution Injection Quantity (Gallons)	Notes
PW-6	114.9	*(+) 32.7 gallons of extra product/rinsate added at end of injection on 8/17
GMMW-1	660.0	
IW-1	105.0	
IW-2	112.2	
IW-3	105.0	*(+) 22.5 gallons of extra product/rinsate added at end of injection on 8/17
IW-4	1020.0	
IW-5	1020.0	
IW-6	663.3	
IW-7	106.1	
IW-8	105.4	
IW-9	108.1	
Total Gallons Injected	**4120.0**	**4175.2**

APPENDIX C
Inspection and Certification Form

COLESVILLE LANDFILL
BROOME COUNTY, NEW YORK
SITE NO. 704010

INSPECTION AND CERTIFICATION FORM

Site Addresses: Colesville Landfill, 1538 East Windsor Road, Harpursville, New York 13787

Date and Time of Inspection: 12/15/2022 12:00 PM

Inspector (Name, Title, and Affiliation): Emily McNeill, Broome Co. Solid Waste Mgmt. Specialist

Weather Conditions: 35 degrees F, cloudy/damp, small layer of snow on the ground

---

Describe inspection observations: A site-wide inspection was performed by Broome County staff Emily McNeill. In addition to the landfill facility, the surface water and springs and off-site properties were inspected and sampled. The river property was check for illegal dumping and was found to be clean.

All of the environmental easement properties were observed for any prohibited activity such as residential or groundwater use. There was no such activity.

These activities were conducted in connection with IC/EC requirements and compliance.

ATTACH PHOTOGRAPHS OF AREAS OR ITEMS INSTALLED, REPAIRED, OR REPLACED

General Site Conditions:

	Acceptable	Unacceptable
Perimeter Fence	☒	☐
Monitoring Wells	☒	☐
Methane Vents	☒	☐
Cap Vegetative Cover and Drainage	☒	☐

Site Cover System:

Any signs/evidence of soil disturbance such as, erosion, settlement, or if applicable, bare or sparsely vegetated areas?

☐ No ☒ Yes; describe: 2 areas of settlement

ATTACH PHOTOGRAPHS OF AREAS OF DISTURBANCE

Any signs/evidence of use of the Site in a manner inconsistent with the previous Site uses?

☒ No ☐ Yes; describe:

ATTACH PHOTOGRAPHS OF AREAS OF NON-COMPLIANCE

Describe any repairs, maintenance, or corrective actions required to correct observed deficiencies:

ATTACH PHOTOGRAPHS OF DEFICIENT AREAS OR ITEMS OBSERVED DURING THE INSPECTION

Inspector's Signature:

Signature: Emily E. McNeill Date: 12/15/2022

Colesville Landfill Inspection Checklist

Date: 12/15/2022 **Time:** 9:00 AM

Inspected by: Emily McNeill

Weather Conditions: 30 degrees F and cloudy/snowy

Engineering Controls

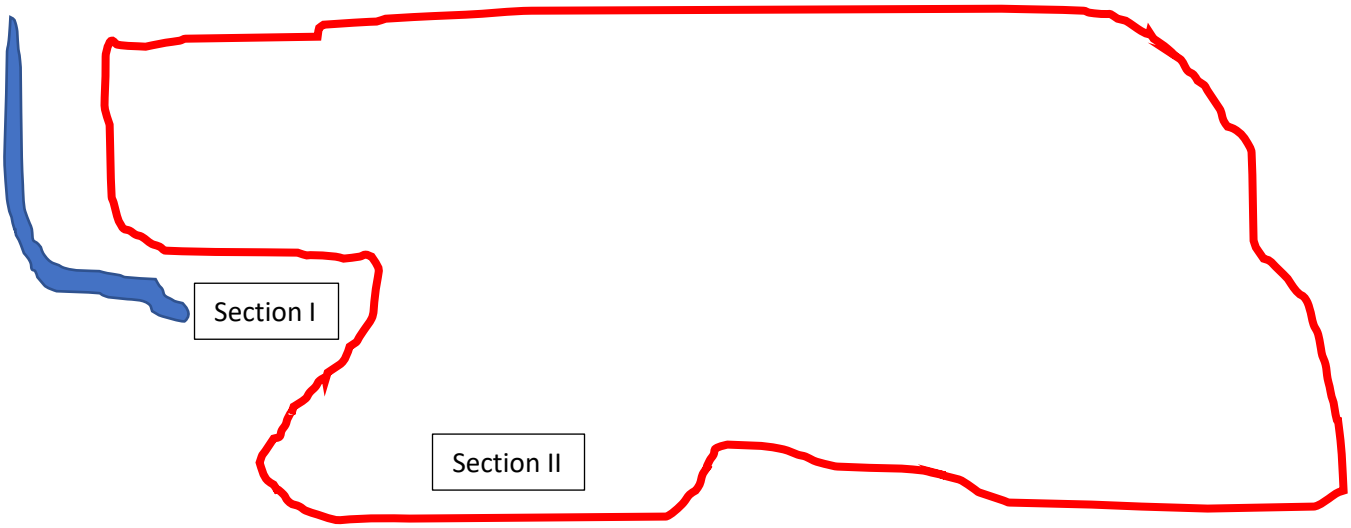
Landfill Property and Cap:	Yes	No
Is the access road stable and free of erosion?		X
Are the culverts and drainage ditches free from sediment and debris?	X	
Any visible, debris, litter, and/or waste on the site?		X
Are the gates and fences in good condition, operational and with locks?	X	
Is the vegetation providing adequate protection from erosion?	X	
Are there any woody plants growing on the cap?		X
Was the cap vegetation mowed this year?	X	
Is there any settlement, ponding, or animal burrows?	X	
Are all the groundwater monitoring wells in good condition?	X	
Is the SP-5 remedy functioning as intended?	X	
Is the SP-4 remedy intact (no stream bed erosion)?	X	
Was the SP-3 iron-stained area cleaned this year?	X	
Is the rip rap armored bank above SP-3 stable and free of erosion?	X	
Is the treatment building secure and in good condition?	X	

Institutional Controls

Surrounding Properties:	Yes	No
Are there any new or inhabited buildings on any easement properties? (Includes County and Tom Scott properties)		X

Describe any problems identified below:

- There are 2 settlement areas, that need addressing.
    - The first is located on the west end of the landfill (outside of the cap) it needs to be regraded to restore the necessary slope to direct stormwater to the ditch. See pictures and sketch below. Area is represented on sketch as Section I.
    - The second is located in the south west section of the landfill adjacent to the south fence and needs to have a drainage swale installed. See pictures and sketch below. Area is represented on sketch as Section II.



Describe inspection observations: A site-wide inspection was performed by Emily McNeill, Solid Waste Management Specialist. In addition to the landfill facility, the surface water and springs and off-site properties were inspected including the river property as sampling was done. No illegal dumping was found at the river property and everything looked normal.

All of the environmental easement properties were observed for any prohibited activity such as residential or groundwater use and there was no such activity.

Describe any repairs, maintenance, or corrective actions required to correct observed deficiencies:

PW-9 was stabilized but not replaced yet.

A work plan will be developed, submitted for approval to DEC, and implemented to repair the settled areas.

Inspector's Signature:

Inspector: Emily E. McNeill **Date:** 12/15/2022

UPDATE: Cleanup of all items in the following pages commenced throughout 2022 while services allowed.

Large tree in northwest corner of property.

Entrance to the river property. Branches hanging low.

River Property branches

Branches at the entrance to SP-5

Tree north of SP-5. If it falls it should go towards the road.

Branches around SP-5

Branches on the driveway up to the shed

Tracks after unlocking top gate

Branch down from outside of fence towards LF near pond

Open back gate near pond

Previously dammed area. Water slowly moving.

Trees on north fence that look like they’ll be down soon.

Tree split near entrance to creekbank

APPENDIX D
O&M Plan Compliance Form

COLESVILLE LANDFILL
BROOME COUNTY, NEW YORK
SITE NO. 704010

O&M PLAN COMPLIANCE FORM

Site Addresses: Colesville Landfill, 1538 East Windsor Road, Harpursville, New York 13787

Compliance Period: January 1, 2022 through December 31, 2022

Compliance Evaluator (Name, Title, and Affiliation): Emily McNeill, Broome County Solid Waste Management Specialist

---

Describe O&M Plan Compliance:

A. Components of O&M Plan

The Operation and Maintenance Plan contained in Section 5 of the Site Management Plan includes an annual molasses injection, maintenance of the SP-5 remedy, landfill cap maintenance, and removal of surficial SP-3 sediment. Descriptions of these tasks are listed below.

1. Eleven pre-existing injections wells are gravity fed a molasses solution annually. Following the injection, the equipment and tank is rinsed and stored.
2. Operational performance monitoring of the SP-5 spring remedy is conducted on a semiannual basis and includes routine visual inspection, recording system field parameters, and maintenance of system equipment as necessary, such as clearing deposited material from the discharge pipe and changing the carbon media.
3. Landfill cap maintenance includes mowing annually, and as needed: settlement repair, ditch cleaning, gas vent repair and fencing maintenance.
4. The springs along the North Stream will be checked annually, before vegetation has covered the stream bank, for iron oxide staining on the ground and in the sediments. If staining is present, the top layer of soil/sediment will be collected and taken to the Broome County Landfill for disposal.

B. Summary of O&M Completed During 2022 Period

- On 8/16/2022-8/17/2022, molasses was injected into eleven wells by personnel from Barton & Loguidice and Broome County. Following injections, all equipment was rinsed, as well as the mixing tank, to remove residual molasses solution.
- The landfill cap was mowed once in the summer of 2022.
- Beaver situation has been resolved.

C. Evaluation of Remedial Systems

Maintenance required for next year:

- Mow landfill cap
- Fix settlement locations noted along the western and southwest side by improving drainage
- Snake and clean SP-5 drainage pipe and remove deposited material at the outfall
- Remove any surface sediment containing iron staining.
- Evaluate beaver situation at pond on outskirts of landfill.

D. O&M Deficiencies

There were no deficiencies in O&M during this period.

E. Conclusions and Recommendations for Improvements

O&M activities were successfully completed on the Site and in compliance with the SMP. There is no need for improvements at this time.

Emily E. McNeill

(signed)

12/15/2022

(date)

The experience to
listen
The power to
solve℠

Barton
&Loguidice

www.bartonandloguidice.com