Barton & Loguidice

January 28, 2022

Mr. Payson Long
Remediation Bureau D
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7013

Re: 2021 Annual Monitoring Report, Colesville Landfill
Broome County, New York. (Site No. 704010)
File: 287.019.001

Dear Mr. Long:

Please find attached the Annual Monitoring Report for Colesville Landfill, located in Broome County, New York. Barton & Loguidice, D.P.C. has prepared this report on behalf of the Broome County Division of Solid Waste Management to evaluate and document long-term monitoring activities at the Site in accordance with the Site Management Plan.

If you have any questions on this report please contact me at jsundquist@bartonandloguidice.com or Emily Giordano at Emily.Giordano@BroomeCounty.US.

Respectfully,
BARTON & LOGUIDICE, D.P.C.

Jon A. Sundquist, PhD
Senior Project Manager

JAS/tmj
Enclosure

Cc: Emily Giordano (Broome County)
Jeffrey Dyber (NYSDEC)
Gary Priscott (NYSDEC)
Richard Jones (NYSDOH)
George Jacob (USEPA)

2021 Annual Monitoring Report

Colesville Landfill

Broome County, New York

Prepared for

Broome County Department of Public Works

Solid Waste Management

60 Hawley Street

Binghamton, NY

Revision 0

January 2022

Barton&Loguidice

Annual Monitoring Report
Colesville Landfill, Broome County

2021 Annual Monitoring Report

January 2022

Prepared for

Broome County Department of Public Works Solid Waste Management

60 Hawley Street

Binghamton, NY 13902

Prepared by

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

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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 2021 Annual Monitoring Report describes the collection and analysis of the following data:

- No groundwater was collected during this year. Groundwater collection is on a 15 month schedule, with the next sampling scheduled for March 2022;
- Surface water and spring water data collected in June and November 2021;
- SP-5 remediation system influent/effluent data collected in June and November 2021; and,
- SP-3 sediment data collected in June and November 2021.

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 Monitoring

No groundwater was collected during calendar year 2021.

2.2. Surface Water Monitoring

Surface water samples were collected at the SW-2, SW-3, SW-4, and F-6 locations during the June and November 2021 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 further downgradient of the springs (F-6) in accordance with the SMP. Surface water samples were collected and analyzed by the laboratory (ALS) for 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 June sampling event and from SP-3 and SP-4 in the November 2021 sampling event (SP-2 was dry in November). In June, the SP-3 location was sampled both before the annual cleaning of this location and after the annual cleaning of this location. 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 2021 is discussed below in the Results Section under Spring Water Quality. In addition to the collection and analysis of spring water samples, a spring water inspection was completed

during each sampling event to evaluate the presence and appearance/condition of existing springs.

Sediment samples were collected during the June and November 2021 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 OM&M was conducted during the June and Octoer 2021 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.

As stated above, no groundwater samples were collected in 2021 as it was an off year in the every five quarters cycle. Therefore, there are no Table 1 (VOCs in groundwater) nor Table 2 (General Chemistry, Inorganics, Field Parameters and Dissolved Gases in groundwater) in this report. To keep table numbering consistent with previous and future reports, the first table in this report will be Table 3.

3.1. Surface Water Quality

Surface water quality analytical results for June and October 2021 are summarized in Table 3. As shown in Table 3, surface water quality remained in compliance with applicable water quality standards with the exception of iron in the upgradient SW-2 location in October with a value of 0.38 mg/L slightly above the Class C standard of 0.3 mg/L. The TVOC concentration at surface water sampling locations were below the limits of detection except for trace levels of VOCs. 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.

3.2. Spring Water Quality

The embankment of the North Stream was inspected for springs during the site visits in June and October 2021. During inspection events, iron hydroxide staining was observed around the SP-2, SP-3, and SP-4 springs and the SP-5-effluent. These observations have been generally consistent with conditions observed over the past several years. During the October 2021

sampling event, there was no evidence of spring water (and little to no staining) emanating from the SP-2 area, and samples were not collected from this location. Spring water conditions at SP-3 and SP-5 were generally consistent with conditions observed in June 2021 and over the past several years.

Spring water samples were collected at the SP-2, SP-3, and SP-4 locations following the June 2021 inspection and at SP-3 and SP-4 only during the October sampling event (SP-2 was dry). Spring water quality analytical results are summarized in Table 4. Relatively low concentrations of several VOCs were detected at the SP-3 and SP-4 spring water locations during 2021, with generally consistent results observed in June and October. Despite the presence of VOCs in spring water samples collected at the SP-3 and SP-4 locations, only non-detect to trace concentrations of VOCs were present in the surrounding surface water (Table 3).

These data continue to demonstrate that VOC concentrations detected in the spring water are not adversely impacting surface water quality in the North Stream. Since the designated use of Class C waters is fishing, the standards and guidance values are protective of fish, shellfish, and wildlife propagation and survival, as well as primary and secondary contact recreation. Spring water VOC concentrations only exceeded the NYSDEC Part 703 Water Quality Standards (WQS) for Class C fresh surface waters for chlorobenzene at SP-3 (5.7 µg/L and 24 µg/L in June and October, respectively) and SP-4 only in October (5.4 µg/L). All other VOC compounds were below the applicable WQS or non-detect.

In general, the concentrations of metals were below their respective WQS with the following exceptions:

- Iron was present in all spring water samples at levels that exceeded the criteria for protection of aquatic life from chronic effects.
- Aluminum exceeded its WQS at SP-4 in both sampling events
- Arsenic exceeded its WQS at SP-4 for November, only.

However, these springs are found over a very limited area and all surface water samples were in compliance with applicable WQS.

3.3. Sediment Quality

Sediment samples (SP-3-SED) were collected in the vicinity of SP-3 during the site visits in June and October 2021 using the sampling methodology previously described. Sediment quality analytical results are summarized in Table 5.

Both the June and October sampling activities found exceedances of arsenic, lead, and silver when compared to Class A, NYSDEC Freshwater Sediment Screening Values, but these results were generally consistent with concentrations in samples collected in previous years. 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 5 - Freshwater Sediment Guidance Values of the NYSDEC Screening and Assessment of Contaminated Sediment document (NYSDEC 2014).

3.4. Groundwater Remediation System

One reagent injection was conducted during 2021. The injection was initiated on August 11 and was completed on August 12. Appendix B provides a summary of the quantity of molasses solution that was injected in each of the injection wells.

3.5. Spring Water Remediation System

During the site visits in June and October 2021, the SP-5 Spring Water Remediation System was cleaned out by ALS and did not require replacement of granulated activated carbon media. SP-5 analytical results for this reporting period are provided in Table 6. As shown in Table 6, influent TVOC concentrations were 28 µg/L in June and 13 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 15 µg/L (June 2021) and 11.8 µg/L (November 2021) 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. Looking at the individual compounds, and comparing among compounds that were detected (without or without a J qualifier in the influent shows that all compounds were reduced in concentration except chlorobenzene in October (1.8 J µg/L in the influent and 2.5 J µg/L in the effluent) and trichloroethene (0.45 J µg/L in the influent and 0.82 J µg/L in the effluent). However, these concentrations are too low make a judgment on the effectiveness of the removal.

4.0 IC/EC AND O&M PLAN COMPLIANCE

Broome County personnel conducted site inspections to comply with IC/EC requirements in October 2021. The completed Inspection and Certification Form is provided as Appendix C. In addition, Broome County's compliance with components of the 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:

- There have not been any discernible changes in the relative appearance of spring areas during 2021.
- 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 June and October of 2021 were generally consistent with sediment sample results from 2019.

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 1st quarter of 2022.

Tables

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Table 3
Broome County Colesville Landfill
2021 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:						R2105997-002		R2110897-002		R2105997-008		R2110897-008		R2105686-002		R2110897-005		R2105997-003		R2110897-003	
Date Sampled:						6/14/2021		10/18/2021		6/14/2021		10/18/2021		6/7/2021		10/18/2021		6/14/2021		10/18/2021	
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	6.74		7.13		6.6		6.57		6.83		6.74		6.68		6.87	
Dissolved Oxygen	STL00082	MG/L	5	-	3	8.76		10.3		8.63		9.86		8.8		10		8.8		10.1	
Specific Conductivity	STL00244	UMHOS/CM				145		128		107		93		106		115		136		120	
Field EH/ORP	STL00811	MILLIVOLTS				146		68		85		72		71		-59		100		70	
Temperature (Field Test)	STL00246	DEGREES C				17		11		16.8		10.8		14.3		10.9		17		11.1	
Turbidity (Field)	STL00392	NTU				3.9		2		3.4		3.8		1.8		2.2		2.3		6.1	
Metals																					
Aluminum	7429-90-5	mg/L		0.1	A(C)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	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	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		-		14.3		13.2		9.2		8.3		10.2		11.8		13.4		12.1	
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)	0.12		0.2		0.15		**0.38**		0.18		0.26		0.13		0.23	
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		-		3.4		3		2.6		2.4		2.6		2.8		3.2		2.8	
Manganese	7439-96-5	mg/L		-		0.047		0.044		0.01	U	0.029		0.035		0.054		0.057		0.06	
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		-		6.5		6.1		5.7		5.4		5.7		5.9		6.2		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		-		0.23	J	5	U	5	U	5	U	0.44	J	0.27	J	0.5	J	0.42	J
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

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Table 3
Broome County Colesville Landfill
2021 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)			R2105997-002		R2110897-002		R2105997-008		R2110897-008		R2105686-002		R2110897-005		R2105997-003		R2110897-003	
Date Sampled:						6/14/2021		10/18/2021		6/14/2021		10/18/2021		6/7/2021		10/18/2021		6/14/2021		10/18/2021	
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	0.36	BJ	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	0.25	J	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		-		0.33	J	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	5	U
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	*N/A*	*ug/L*				*0.56*		*0*		*0*		*0*		*0.8*		*0.27*		*0.75*		*0.42*	

Key	
##	Result exceeds Class C Standard
NS	Not Sampled
-	Not Analyzed
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

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Table 4
Broome County Colesville Landfill
2021 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]			R2105997-009				R2105997-006		R2110897-006		R2105997-004		R2110897-004	
Date Sampled:						6/14/2021		Dry		6/14/2021		10/18/2021		6/14/2021		10/18/2021	
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	**6.21**		-		6.67		**6.46**		6.71		6.67	
Dissolved Oxygen	STL00082	MG/L	5	-	3	-		-		-		-		-		-	
Specific Conductivity	STL00244	UMHOS/CM				138		-		223		278		323		412	
Field EH/ORP	STL00811	MILLIVOLTS				-		-				-		-		-	
Temperature (Field Test)	STL00246	DEGREES C				17		-		17.1		10.9		15.2		12.1	
Turbidity (Field)	STL00392	NTU				19.1		-		10.2		5.4		11.3		43.6	
Metals																	
Aluminum	7429-90-5	mg/L		0.1	A(C)	0.1	U	-		**0.16**		0.1	U	**0.23**		**2.59**	
Antimony	7440-36-0	mg/L		-		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	0.026		-		0.01	U	0.016		0.011		**0.84**	
Barium	7440-39-3	mg/L		-		0.039		-		0.028		0.038		0.044		0.225	
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
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
Calcium	7440-70-2	mg/L		-		10.6		-		31.3		33.6		46.8		56.1	
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
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
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
Iron	7439-89-6	mg/L		0.3	A(C)	**14.3**		-		**8.89**		**8.34**		**3.33**		**133**	
Lead	7439-92-1	mg/L		0.005	A(C)f	0.005	U	-		**0.007**		0.005	U	0.005	U	0.005	U
Magnesium	7439-95-4	mg/L		-		2.6		-		6.6		6.9		9.2		11	
Manganese	7439-96-5	mg/L		-		2.93		-		2.69		3.53		2.05		7.41	
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
Nickel	7440-02-0	mg/L		0.05	A(C)f	0.04	U	-		0.004	U	0.04	U	0.04	U	0.04	U
Potassium	7440-09-7	mg/L		-		2	U	-		2	U	2	U	2.1		2.9	
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
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
Sodium	7440-23-5	mg/L		-		5		-		3.4		3.5		5.3		6.1	
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
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
Zinc	7440-66-6	mg/L		0.08	A(C)f	0.02	U	-		0.02	U	0.02	U	0.02	U	0.029	
Volatile Organic Compounds																	
1,1,1-Trichloroethane	71-55-6	ug//L		-		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
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ug//L		-		5	U	-		5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	79-00-5	ug//L		40	H(FC)	5	U	-		0.25	J	0.36	J	5	U	5	U
1,1-Dichloroethane	75-34-3	ug//L		-		0.2	J	-		4.8	J	15		11		15	
1,1-Dichloroethene	75-35-4	ug//L		-		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
1,2-Dibromo-3-chloropropane	96-12-8	ug//L		-		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
1,2-Dichlorobenzene	95-50-1	ug/L		5	A(C)b	5	U	-		5	U	0.51	J	5	U	0.2	J
1,2-Dichloroethane	107-06-2	ug/L		-		5	U	-		0.21	J	0.66	J	0.33	J	0.77	J
1,2-Dichloropropane	78-87-5	ug/L		-		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
1,4-Dichlorobenzene	106-46-7	ug/L		5	A(C)b	5	U	-		5	U	5	U	5	U	5	U
2-Butanone	78-93-3	ug/L		-		1.2	J	-		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
4-Methyl-2-pentanone	108-10-1	ug/L		-		10	U	-		10	U	10	U	10	U	10	U

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Table 4
Broome County Colesville Landfill
2021 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]			R2105997-009				R2105997-006		R2110897-006		R2105997-004		R2110897-004	
Date Sampled:						6/14/2021		Dry		6/14/2021		10/18/2021		6/14/2021		10/18/2021	
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
Benzene	71-43-2	ug/L		10	H(FC)	5	U	-		5	U	0.4	J	5	U	0.55	J
Bromodichloromethane	75-27-4	ug/L		-		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
Bromomethane	74-83-9	ug/L		-		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
Carbon tetrachloride	56-23-5	ug/L		-		5	U	-		5	U	5	U	5	U	5	U
Chlorobenzene	108-90-7	ug/L		5	A(C)	5	U	-		1.5	J	**24**		0.72	J	**5.4**	
Chloroethane	75-00-3	ug/L		-		5	U	-		0.67	J	1.8	J	0.82	J	1.5	J
Chloroform	67-66-3	ug/L		-		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
cis-1,2-Dichloroethene	156-59-2	ug/L		-		5	U	-		1.6	J	3.9	J	1.2	J	1.2	J
cis-1,3-Dichloropropene	10061-01-5	ug/L		-		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
Dibromochloromethane	124-48-1	ug/L		-		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
Ethylbenzene	100-41-4	ug/L		17	A(C)c	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
Methyl Acetate	79-20-9	ug/L		-		0.4	J	-		10	U	10	U	10	U	10	U
Methylcyclohexane	108-87-2	ug/L		-		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
Methylene chloride	75-09-2	ug/L		200	H(FC)	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
Tetrachloroethene	127-18-4	ug/L		1	H(FC)C	5	U	-		5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L		6000	H(FC)	0.28	J	-		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	0.34	J
trans-1,3-Dichloropropene	10061-02-6	ug/L		-		5	U	-		5	U	5	U	5	U	5	U
Trichloroethene	79-01-6	ug/L		40	H(FC)	0.64	J	-		1.1	J	2.4	J	1.9	J	3	J
Trichlorofluoromethane	75-69-4	ug/L		-		5	U	-		5	U	5	U	5	U	5	U
Vinyl chloride	75-01-4	ug/L		-		5	U	-		0.29	J	2.6	J	5	U	1.4	J
Xylenes, Total	1330-20-7	ug/L		5	A(C)c	5	U	-		5	U	5	U	5	U	5	U
Total Volatiles	*N/A*	*ug/L*				*2.72*		*0*		*10.42*		*51.63*		*15.97*		*29.36*	

Key			
##	Result exceeds Class C Standard	2	NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Groundwater Effluent standards, Class C, Table 1.
NS	Not Sampled		
-	Not Analyzed		
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		

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Table 5
Broome County Colesville Landfill
2021 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			R2105997-007		R2110897-007	
Date Sampled:															6/14/2021		10/18/2021	
Parameter	CAS NO.	UNIT	LO	HI	Basis	LO	HI	Basis	LO	HI	Basis	LO	HI	Basis			VALUE	Q
General Parameters																		
Total Solids (TS)	TS	%													62.2		74.4	
Metals																		
Aluminum	7429-90-5	mg/L													10600		10500	
Antimony	7440-36-0	mg/L													9.3	U	8.1	U
Arsenic	7440-38-2	mg/L	10	-	6	10	33	6	-	33	6		-		**48.7**		**49.4**	
Barium	7440-39-3	mg/L	-	-	-	-	-	-	-	-	-		-		58.9		46.3	
Beryllium	7440-41-7	mg/L	-	-	-	-	-	-	-	-	-		-		0.46	U	0.43	
Cadmium	7440-43-9	mg/L	1	-	6	1	5	6	-	5	6		-		**0.77**	U	**0.67**	U
Calcium	7440-70-2	mg/L	-	-	-	-	-	-	-	-	-		-		810		1050	
Chromium	7440-47-3	mg/L	43	-	6	43	110	6	-	110	6		-		**14.7**		**14.2**	
Cobalt	7440-48-4	mg/L	-	-	-	-	-	-	-	-	-		50		**9.2**		**9.3**	
Copper	7440-50-8	mg/L	32	-	6	32	150	6	-	150	6		-		**18.5**		**19.7**	
Iron	7439-89-6	mg/L	-	-	-	-	-	-	-	-	-		40000		**46000**		**49000**	
Lead	7439-92-1	mg/L	36	-	6	36	130	6	-	130	6		-		**37.7**		**12.4**	
Magnesium	7439-95-4	mg/L	-	-	-	-	-	-	-	-	-		-		3600		3770	
Manganese	7439-96-5	mg/L	-	-	-	-	-	-	-	-	-		1100		**467**		**899**	
Mercury	7439-97-6	mg/L	0.2	-	6	0.2	1	6	-	1	6		-		**0.049**	U	**0.025**	U
Nickel	7440-02-0	mg/L	23	-	6	23	49	6	-	49	6		-		**21.4**		**22.7**	
Potassium	7440-09-7	mg/L	-	-	-	-	-	-	-	-	-		-		910		870	
Selenium	7782-49-2	mg/L	-	-	-	-	-	-	-	-	-		-		1.5	U	1.3	U
Silver	7440-22-4	mg/L	1	-	6	1	2.2	6	-	2.2	6		-		**1.5**	U	**1.3**	U
Sodium	7440-23-5	mg/L	-	-	-	-	-	-	-	-	-		-		150	U	130	U
Thallium	7440-28-0	mg/L	-	-	-	-	-	-	-	-	-		-		1.5	U	13	U
Vanadium	7440-62-2	mg/L	-	-	-	-	-	-	-	-	-		-		15.4		15.2	
Zinc	7440-66-6	mg/L	120	-	6	120	460	6	-	460	6		-		**99.5**		**61.2**	

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

6	NYSDEC Technical Guidance for Screening Contaminated Sediments, dated June 2
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

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Table 6
Broome County Colesville Landfill
2021 Monitoring Results
Spring Water Remediation System

Client Sample ID:						SP-5 Influent				SP-5 Effluent			
Lab Sample ID:						R2105997-011		R2110897-010		R2105997-010		R2110897-009	
Date Sampled:			Model Technology BPJ Limits			6/14/2021		10/18/2021		6/14/2021		10/18/2021	
Parameter	CAS NO.	UNIT	LO	HI	Basis			VALUE	Q			VALUE	Q
Field Parameters													
pH (Field)	STL00199	SU				**6.32**		**6.3**		**6.32**		**6.36**	
Dissolved Oxygen	STL00082	MG/L				-		-		-		-	
Specific Conductivity	STL00244	UMHOS/CM				386		415		388		401	
Field EH/ORP	STL00811	MILLIVOLTS				-		-		-		-	
Temperature (Field Test)	STL00246	DEGREES C				13.6		13.7		12.9		13.7	
Turbidity (Field)	STL00392	NTU				48.3		1.4		35.6		8.1	
Metals													
Aluminum	7429-90-5	mg/L	-	-	4,5	0.62		0.1	U	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	0.346		0.15		0.171		0.172	
Barium	7440-39-3	mg/L	-	-	4,5	0.119		0.145		0.147		0.15	
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	38.6		42.3		39.3		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	35.8		24.7		35.6		28.4	
Lead	7439-92-1	mg/L	-	-	4,5	0.242		0.005	U	0.005	U	0.005	U
Magnesium	7439-95-4	mg/L	-	-	4,5	8.5		9.6		9.1		9.8	
Manganese	7439-96-5	mg/L	-	-	4,5	5.42		6.16		5.81		6.26	
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	3		3.1		2.7		3.1	
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	5.9		6.7		6.5		6.9	
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	13.1		0.02	U	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	4.8	J	7.6		5.7		6.4	
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	5	U	0.2	J	0.23	J	0.26	J
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 6
Broome County Colesville Landfill
2021 Monitoring Results
Spring Water Remediation System

Client Sample ID:						SP-5 Influent				SP-5 Effluent			
Lab Sample ID:			Model Technology BPJ Limits			R2105997-011		R2110897-010		R2105997-010		R2110897-009	
Date Sampled:						6/14/2021		10/18/2021		6/14/2021		10/18/2021	
Parameter	CAS NO.	UNIT	LO	HI	Basis			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	0.86	J	5	U	0.32	J	0.28	J
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	6.7	J	10	U	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	12		1.8	J	4.7	J	2.5	J
Chloroethane	75-00-3	ug/L	-	10	4,5	5	U	1.4	J	1.6	J	1.1	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	0.99	J	0.54	J	0.67	J	5	U
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	5	U	5	U	5	U	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	0.36	J	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	0.45	J	1.1	J	0.82	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	5	U	0.53	J	0.4	J	0.44	J
Xylenes, Total	1330-20-7	ug/L	-	-	4,5	5	U	5	U	5	U	5	U
Total Volatiles	*N/A*	*ug/L*				*27.85*		*12.52*		*15.08*		*11.8*	

Key

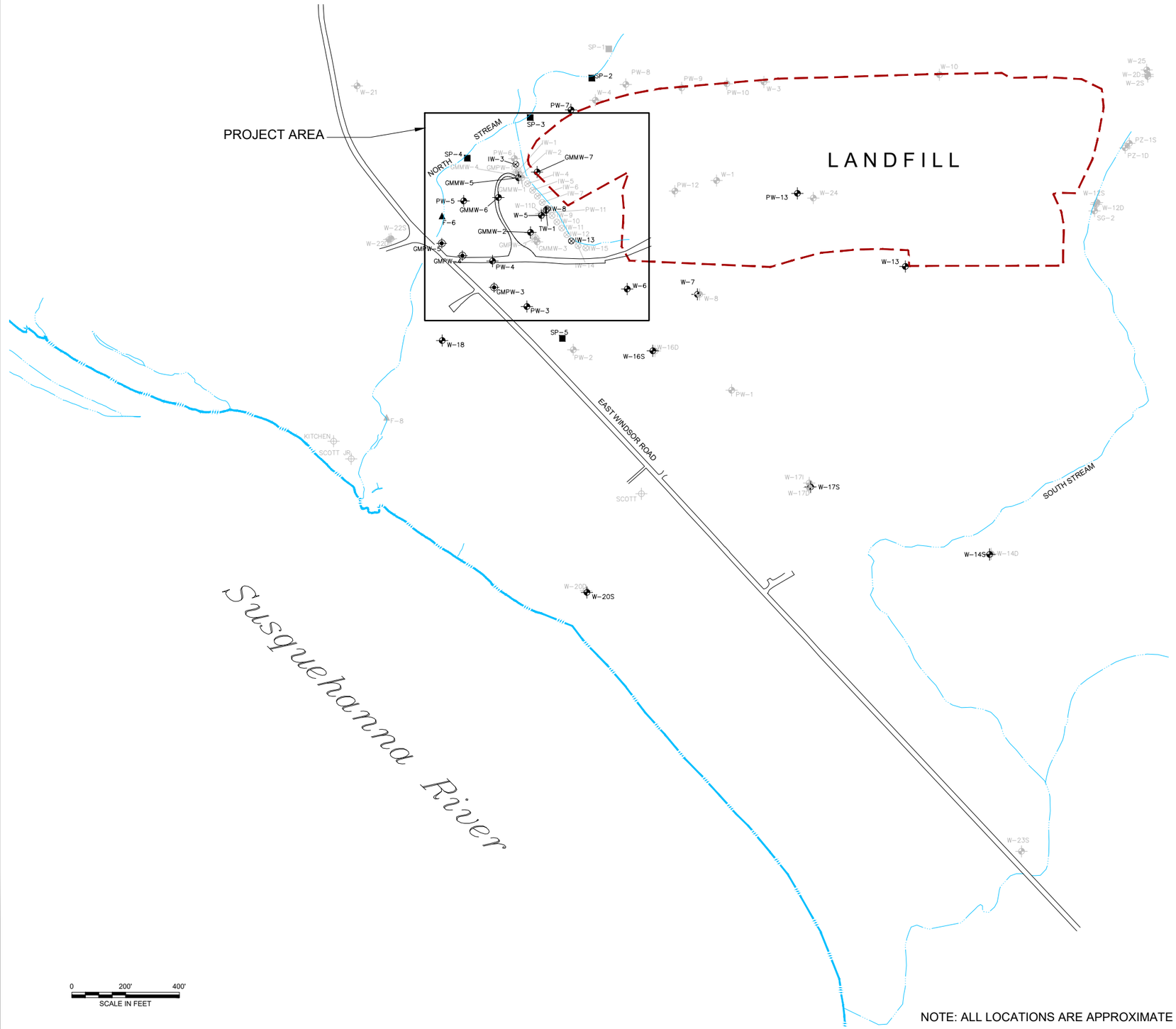
##	Result exceeds BPJ Limits
NS	Not Sampled
-	Not Analyzed

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.

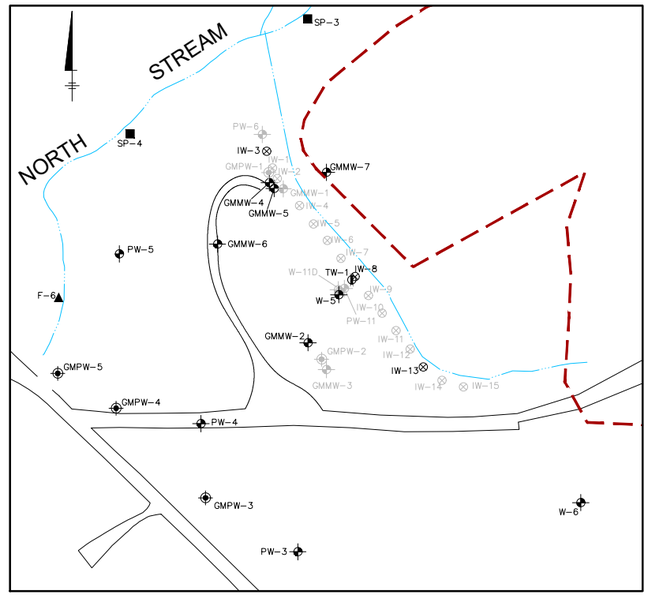
Figure 1**:**

Site Plan



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

0 100' 200'
SCALE IN FEET

NOTE: ALL LOCATIONS ARE APPROXIMATE

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

SP-3/SP-3-SED

PROPERTY LINE

TREE WITH
FENCE (TYP.)

PW 5

BM #4

PW 6

TEST
WELL

WEIR

1032.9

GM PW 1

IW 1

GM MW 4

IW 2

GM MW 5

GM MW 6

GM MW 1

ANCHOR

BUILDING

GRAVEL ROAD

GAS VENT

GM MW 7

NL INK

TEST
WELL

PW 7

W4

SW-2

SP-2

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

APPENDIX A
Laboratory Analytical Results

June 29, 2021 Service Request No:R2105686

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

Laboratory Results for: Colesville SW / Seep Precleaning

Dear Emily,

Enclosed are the results of the sample(s) submitted to our laboratory June 08, 2021
For your reference, these analyses have been assigned our service request number **R2105686.**

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:** R2105686
Project: Colesville SW / Seep Precleaning **Date Received:** 06/08/2021
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:

Four sediment, water samples were received for analysis at ALS Environmental on 06/08/2021. 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, 06/15/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 06/15/2021: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Field:

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

Approved by _____ Date 06/29/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: SW-3			Lab ID: R2105686-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	106				uMHOS/cm	120.1
pH, Field	6.83				pH Units	SM 4500-H+ B
Temperature, Field	14.3				deg C	SM 2550 B
Turbidity, Field	1.8				NTU	180.1
Calcium, Total	10200			1000	ug/L	6010C
Iron, Total	180			100	ug/L	6010C
Magnesium, Total	2600			1000	ug/L	6010C
Manganese, Total	35			10	ug/L	6010C
Sodium, Total	5700			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.44	J	0.20	5.0	ug/L	8260C
Chloromethane	0.36	BJ	0.28	5.0	ug/L	8260C

CLIENT ID: SP-3 Water			Lab ID: R2105686-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	253				uMHOS/cm	120.1
pH, Field	6.75				pH Units	SM 4500-H+ B
Temperature, Field	13.6				deg C	SM 2550 B
Turbidity, Field	20.2				NTU	180.1
Barium, Total	24			20	ug/L	6010C
Calcium, Total	34100			1000	ug/L	6010C
Iron, Total	4830			100	ug/L	6010C
Magnesium, Total	7100			1000	ug/L	6010C
Manganese, Total	2510			10	ug/L	6010C
Sodium, Total	3700			1000	ug/L	6010C
1,1,2-Trichloroethane	0.39	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	9.0		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.37	J	0.20	5.0	ug/L	8260C
Chlorobenzene	5.7		0.20	5.0	ug/L	8260C
Chloroethane	1.6	J	0.23	5.0	ug/L	8260C
Chloromethane	0.39	BJ	0.28	5.0	ug/L	8260C
Trichloroethene (TCE)	1.8	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.86	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	3.3	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-3 Sediment			Lab ID: R2105686-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Total Solids	59.4				Percent	ALS SOP
Aluminum, Total	7810			31	mg/Kg	6010C
Arsenic, Total	50.7			1.5	mg/Kg	6010C
Barium, Total	55.8			3.1	mg/Kg	6010C
Calcium, Total	780			150	mg/Kg	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3 Sediment	Lab ID: R2105686-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chromium, Total	10.1			1.5	mg/Kg	6010C
Copper, Total	14.4			3.1	mg/Kg	6010C
Iron, Total	51500			310	mg/Kg	6010C
Lead, Total	14.8			0.77	mg/Kg	6010C
Magnesium, Total	2560			150	mg/Kg	6010C
Manganese, Total	585			3.1	mg/Kg	6010C
Nickel, Total	14.4			6.1	mg/Kg	6010C
Potassium, Total	940			310	mg/Kg	6010C
Vanadium, Total	12.2			7.7	mg/Kg	6010C
Zinc, Total	45.1			3.1	mg/Kg	6010C

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:**R2105686
Project: Colesville SW / Seep Precleaning

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2105686-001	Trip Blank	6/7/2021	0920
R2105686-002	SW-3	6/7/2021	0920
R2105686-003	SP-3 Water	6/7/2021	0945
R2105686-004	SP-3 Sediment	6/7/2021	0950

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

005401

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 SW/Seep Precleaning	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	REMARKS/ ALTERNATE DESCRIPTION
TripBlank		6/7/2021	0920	W	3	X									
SW-3		↓	0920	W	4	X					X			X	
SP-3 Water			0945	W	4	X					X			X	
SP-3 Sediment			0950	W	2						X		X		

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	Signature
Printed Name: Kyle Lee	Printed Name: Quinton Kolbeck	Printed Name: Quinton Kolbeck	Printed Name: Daniel Ward	Printed Name	Printed Name
Firm: ALS	Firm: ALS	Firm: ALS	Firm: ALS	Firm	Firm
Date/Time: 6/8/2021 1010	Date/Time: 6/8/2021 1010	Date/Time: 6/8/2021 1520	Date/Time: 6/8/21 / 1520	Date/Time	Date/Time

R2105686 5
Broome County Division of Solid Waste Manageme
Colesville SW / Seep Precleaning

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

FIELD MONITORING REPORT

PROJECT Colesville LF SeepB/SedS PreCleaning LAB ID 8260, Metals

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 6/7/2021 Time 0920 SWL —

Appearance Clear

Weather Conditions Hazy 74°

Sampling Technician (Print) Kyle Lee Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.83	6.83
Myron 6p	Conductivity	µmhos/cm	106	106
Myron 6p	Temperature	Degrees Celsius	14.3	14.2
Myron 6p	Redox	millivolts	92	
Lamotte	Turbidity	NTU	1.8	

D.O. = 9.47

Calibration Date/Time 6/7/2021 0900 pH 7.00 4.00 10.00 SC 1413 Set 1413

OBSERVATIONS Sample prior to cleaning as per Emily Giordano Pictures were taken of both points

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville LF Seeps/Seds Preclanning **LAB ID** 8260, Metals

SAMPLE POINT ID SP-3 Water

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 6/7/2021 Time 0945 SWL —

Appearance Tan tint w/ suspended iron bacteria

Weather Conditions Hazy 74°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.75	6.75
Myron 6p	Conductivity	µmhos/cm	253	253
Myron 6p	Temperature	Degrees Celsius	13.6	13.6
Myron 6p	Redox	millivolts	N/A	N/A
Lamotte	Turbidity	NTU	20.2	

Calibration Date/Time 6/7/2021 0900

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville LF Seeps/Seds Precleaning **LAB ID** Metals, % Solids

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 6/7/2021 Time 0950 SWL —

Appearance Dark Grey Silty Sand w/ iron bacteria

Weather Conditions Hazy 74°

Sampling Technician (Print) Kyle Lee 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.

Cooler Receipt and Preservation Check Form

R2105686 5
Broome County Division of Solid Waste Managem
Colesville SW / Seep Precleaning

Project/Client Broome County LF Folder Number

Cooler received on 6/8/22 by: DW/GL

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~~

3. Temperature Readings Date: 6/8/22 Time: 1527 ID: IR#7 ~~IR#1~~ From: Temp Blank Sample Bottle

Observed Temp (°C)	1.4	4.4	6.6	2.3	3.9	0.9	1.6
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-07 by GL/DL on 6/8/22 at 1527
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 6/9/22 Time: 2100 by: DW

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	223419	HNO_3	✓		1120092					
≤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: 04921-ISB, 21-03-09, 2546
Explain all Discrepancies/ Other Comments:
4 9Vials. Trip Blanks

HPROD	BULK
HTR	FLDT
SUB	HGFB
~~ALS~~	LL3541

Labels secondary reviewed by: DW
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 ñNotesò 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 ñimmediateò 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 (Ó100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ 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 Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs 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:** R2105686
Project: Colesville SW / Seep Precleaning/

Sample Name: Trip Blank **Date Collected:** 06/7/21
Lab Code: R2105686-001 **Date Received:** 06/8/21
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: SW-3 **Date Collected:** 06/7/21
Lab Code: R2105686-002 **Date Received:** 06/8/21
Sample Matrix: Water

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

Sample Name: SP-3 Water **Date Collected:** 06/7/21
Lab Code: R2105686-003 **Date Received:** 06/8/21
Sample Matrix: Water

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

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning/		

Sample Name:	SP-3 Sediment	**Date Collected:**	06/7/21
Lab Code:	R2105686-004	**Date Received:**	06/8/21
Sample Matrix:	Sediment		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	NMANSEN	NMANSEN
7471B	KMCLAEN	KMCLAEN
ALS SOP		CLOI

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:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2105686-001	**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	06/15/21 03:22	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/15/21 03:22	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/15/21 03:22	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/15/21 03:22	
2-Hexanone	0.20 U	10	0.20	1	06/15/21 03:22	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/15/21 03:22	
Acetone	5.0 U	10	5.0	1	06/15/21 03:22	
Benzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
Bromoform	0.25 U	5.0	0.25	1	06/15/21 03:22	
Bromomethane	0.70 U	5.0	0.70	1	06/15/21 03:22	
Carbon Disulfide	0.42 U	10	0.42	1	06/15/21 03:22	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/15/21 03:22	
Chlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
Chloroethane	0.23 U	5.0	0.23	1	06/15/21 03:22	
Chloroform	0.24 U	5.0	0.24	1	06/15/21 03:22	
Chloromethane	0.28 U	5.0	0.28	1	06/15/21 03:22	
Cyclohexane	0.26 U	10	0.26	1	06/15/21 03:22	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/15/21 03:22	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/15/21 03:22	
Dichloromethane	0.65 U	5.0	0.65	1	06/15/21 03:22	
Ethylbenzene	0.20 U	5.0	0.20	1	06/15/21 03:22	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/15/21 03:22	
Methyl Acetate	0.33 U	10	0.33	1	06/15/21 03:22	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/15/21 03:22	
Methylcyclohexane	0.20 U	10	0.20	1	06/15/21 03:22	
Styrene	0.20 U	5.0	0.20	1	06/15/21 03:22	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/15/21 03:22	
Toluene	0.20 U	5.0	0.20	1	06/15/21 03:22	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/15/21 03:22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2105686-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/15/21 03:22	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/15/21 03:22	
Xylenes, Total	0.23 U	5.0	0.23	1	06/15/21 03:22	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/15/21 03:22	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/15/21 03:22	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/15/21 03:22	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/15/21 03:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/15/21 03:22	
Dibromofluoromethane	97	80 - 116	06/15/21 03:22	
Toluene-d8	105	87 - 121	06/15/21 03:22	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2105686-002	**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	06/15/21 03:44	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,1-Dichloroethane (1,1-DCA)	**0.44 J**	5.0	0.20	1	06/15/21 03:44	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/15/21 03:44	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/15/21 03:44	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/15/21 03:44	
2-Hexanone	0.20 U	10	0.20	1	06/15/21 03:44	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/15/21 03:44	
Acetone	5.0 U	10	5.0	1	06/15/21 03:44	
Benzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
Bromoform	0.25 U	5.0	0.25	1	06/15/21 03:44	
Bromomethane	0.70 U	5.0	0.70	1	06/15/21 03:44	
Carbon Disulfide	0.42 U	10	0.42	1	06/15/21 03:44	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/15/21 03:44	
Chlorobenzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
Chloroethane	0.23 U	5.0	0.23	1	06/15/21 03:44	
Chloroform	0.24 U	5.0	0.24	1	06/15/21 03:44	
Chloromethane	**0.36 BJ**	5.0	0.28	1	06/15/21 03:44	
Cyclohexane	0.26 U	10	0.26	1	06/15/21 03:44	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/15/21 03:44	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/15/21 03:44	
Dichloromethane	0.65 U	5.0	0.65	1	06/15/21 03:44	
Ethylbenzene	0.20 U	5.0	0.20	1	06/15/21 03:44	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/15/21 03:44	
Methyl Acetate	0.33 U	10	0.33	1	06/15/21 03:44	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/15/21 03:44	
Methylcyclohexane	0.20 U	10	0.20	1	06/15/21 03:44	
Styrene	0.20 U	5.0	0.20	1	06/15/21 03:44	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/15/21 03:44	
Toluene	0.20 U	5.0	0.20	1	06/15/21 03:44	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/15/21 03:44	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2105686-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/15/21 03:44	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/15/21 03:44	
Xylenes, Total	0.23 U	5.0	0.23	1	06/15/21 03:44	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/15/21 03:44	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/15/21 03:44	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/15/21 03:44	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/15/21 03:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/15/21 03:44	
Dibromofluoromethane	97	80 - 116	06/15/21 03:44	
Toluene-d8	104	87 - 121	06/15/21 03:44	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:45
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2105686-003	**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	06/15/21 04:07	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,1,2-Trichloroethane	**0.39 J**	5.0	0.20	1	06/15/21 04:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,1-Dichloroethane (1,1-DCA)	**9.0**	5.0	0.20	1	06/15/21 04:07	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/15/21 04:07	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/15/21 04:07	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,2-Dichloroethane	**0.37 J**	5.0	0.20	1	06/15/21 04:07	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 04:07	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/15/21 04:07	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/15/21 04:07	
2-Hexanone	0.20 U	10	0.20	1	06/15/21 04:07	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/15/21 04:07	
Acetone	5.0 U	10	5.0	1	06/15/21 04:07	
Benzene	0.20 U	5.0	0.20	1	06/15/21 04:07	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/15/21 04:07	
Bromoform	0.25 U	5.0	0.25	1	06/15/21 04:07	
Bromomethane	0.70 U	5.0	0.70	1	06/15/21 04:07	
Carbon Disulfide	0.42 U	10	0.42	1	06/15/21 04:07	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/15/21 04:07	
Chlorobenzene	**5.7**	5.0	0.20	1	06/15/21 04:07	
Chloroethane	**1.6 J**	5.0	0.23	1	06/15/21 04:07	
Chloroform	0.24 U	5.0	0.24	1	06/15/21 04:07	
Chloromethane	**0.39 BJ**	5.0	0.28	1	06/15/21 04:07	
Cyclohexane	0.26 U	10	0.26	1	06/15/21 04:07	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/15/21 04:07	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/15/21 04:07	
Dichloromethane	0.65 U	5.0	0.65	1	06/15/21 04:07	
Ethylbenzene	0.20 U	5.0	0.20	1	06/15/21 04:07	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/15/21 04:07	
Methyl Acetate	0.33 U	10	0.33	1	06/15/21 04:07	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/15/21 04:07	
Methylcyclohexane	0.20 U	10	0.20	1	06/15/21 04:07	
Styrene	0.20 U	5.0	0.20	1	06/15/21 04:07	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/15/21 04:07	
Toluene	0.20 U	5.0	0.20	1	06/15/21 04:07	
Trichloroethene (TCE)	**1.8 J**	5.0	0.20	1	06/15/21 04:07	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:45
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2105686-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/15/21 04:07	
Vinyl Chloride	**0.86**	**J**	5.0	0.20	1	06/15/21 04:07	
Xylenes, Total	0.23	U	5.0	0.23	1	06/15/21 04:07	
cis-1,2-Dichloroethene	**3.3**	**J**	5.0	0.23	1	06/15/21 04:07	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/15/21 04:07	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/15/21 04:07	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/15/21 04:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	06/15/21 04:07	
Dibromofluoromethane	97	80 - 116	06/15/21 04:07	
Toluene-d8	104	87 - 121	06/15/21 04:07	

Metals

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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2105686-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	06/15/21 16:29	06/14/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/15/21 16:29	06/14/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/15/21 16:29	06/14/21	
Barium, Total	6010C	20	U	ug/L	20	1	06/15/21 16:29	06/14/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/15/21 16:29	06/14/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 16:29	06/14/21	
Calcium, Total	6010C	**10200**		ug/L	1000	1	06/15/21 16:29	06/14/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:29	06/14/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/15/21 16:29	06/14/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/15/21 16:29	06/14/21	
Iron, Total	6010C	**180**		ug/L	100	1	06/15/21 16:29	06/14/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 16:29	06/14/21	
Magnesium, Total	6010C	**2600**		ug/L	1000	1	06/15/21 16:29	06/14/21	
Manganese, Total	6010C	**35**		ug/L	10	1	06/15/21 16:29	06/14/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/15/21 13:48	06/14/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/15/21 16:29	06/14/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/15/21 16:29	06/14/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:29	06/14/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/15/21 16:29	06/14/21	
Sodium, Total	6010C	**5700**		ug/L	1000	1	06/15/21 16:29	06/14/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:29	06/14/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/15/21 16:29	06/14/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/15/21 16:29	06/14/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:45
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2105686-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	06/15/21 16:32	06/14/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/15/21 16:32	06/14/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/15/21 16:32	06/14/21	
Barium, Total	6010C	**24**		ug/L	20	1	06/15/21 16:32	06/14/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/15/21 16:32	06/14/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 16:32	06/14/21	
Calcium, Total	6010C	**34100**		ug/L	1000	1	06/15/21 16:32	06/14/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:32	06/14/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/15/21 16:32	06/14/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/15/21 16:32	06/14/21	
Iron, Total	6010C	**4830**		ug/L	100	1	06/15/21 16:32	06/14/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 16:32	06/14/21	
Magnesium, Total	6010C	**7100**		ug/L	1000	1	06/15/21 16:32	06/14/21	
Manganese, Total	6010C	**2510**		ug/L	10	1	06/15/21 16:32	06/14/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/15/21 13:50	06/14/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/15/21 16:32	06/14/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/15/21 16:32	06/14/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:32	06/14/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/15/21 16:32	06/14/21	
Sodium, Total	6010C	**3700**		ug/L	1000	1	06/15/21 16:32	06/14/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/15/21 16:32	06/14/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/15/21 16:32	06/14/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/15/21 16:32	06/14/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:50
Sample Matrix:	Sediment	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Sediment	**Basis:**	Dry
Lab Code:	R2105686-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**7810**	mg/Kg	31	1	06/17/21 10:33	06/15/21	
Antimony, Total	6010C	9.2 U	mg/Kg	9.2	1	06/17/21 10:33	06/15/21	
Arsenic, Total	6010C	**50.7**	mg/Kg	1.5	1	06/17/21 10:33	06/15/21	
Barium, Total	6010C	**55.8**	mg/Kg	3.1	1	06/17/21 10:33	06/15/21	
Beryllium, Total	6010C	0.46 U	mg/Kg	0.46	1	06/17/21 10:33	06/15/21	
Cadmium, Total	6010C	0.77 U	mg/Kg	0.77	1	06/17/21 10:33	06/15/21	
Calcium, Total	6010C	**780**	mg/Kg	150	1	06/17/21 10:33	06/15/21	
Chromium, Total	6010C	**10.1**	mg/Kg	1.5	1	06/17/21 10:33	06/15/21	
Cobalt, Total	6010C	7.7 U	mg/Kg	7.7	1	06/17/21 10:33	06/15/21	
Copper, Total	6010C	**14.4**	mg/Kg	3.1	1	06/17/21 10:33	06/15/21	
Iron, Total	6010C	**51500**	mg/Kg	310	10	06/17/21 11:58	06/15/21	
Lead, Total	6010C	**14.8**	mg/Kg	0.77	1	06/17/21 10:33	06/15/21	
Magnesium, Total	6010C	**2560**	mg/Kg	150	1	06/17/21 10:33	06/15/21	
Manganese, Total	6010C	**585**	mg/Kg	3.1	1	06/17/21 10:33	06/15/21	
Mercury, Total	7471B	0.056 U	mg/Kg	0.056	1	06/17/21 13:42	06/16/21	
Nickel, Total	6010C	**14.4**	mg/Kg	6.1	1	06/17/21 10:33	06/15/21	
Potassium, Total	6010C	**940**	mg/Kg	310	1	06/17/21 10:33	06/15/21	
Selenium, Total	6010C	1.5 U	mg/Kg	1.5	1	06/17/21 10:33	06/15/21	
Silver, Total	6010C	1.5 U	mg/Kg	1.5	1	06/17/21 10:33	06/15/21	
Sodium, Total	6010C	150 U	mg/Kg	150	1	06/17/21 10:33	06/15/21	
Thallium, Total	6010C	15 U	mg/Kg	15	10	06/17/21 11:58	06/15/21	
Vanadium, Total	6010C	**12.2**	mg/Kg	7.7	1	06/17/21 10:33	06/15/21	
Zinc, Total	6010C	**45.1**	mg/Kg	3.1	1	06/17/21 10:33	06/15/21	

General Chemistry

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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:50
Sample Matrix:	Sediment	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Sediment	**Basis:**	As Received
Lab Code:	R2105686-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**59.4**	Percent	-	1	06/10/21 10:15	

Field Data

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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:20
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2105686-002		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**106**	uMHOS/cm	-	1	06/07/21 09:20	
pH, Field	SM 4500-H+ B	**6.83**	pH Units	-	1	06/07/21 09:20	
Temperature, Field	SM 2550 B	**14.3**	deg C	-	1	06/07/21 09:20	
Turbidity, Field	180.1	**1.8**	NTU	-	1	06/07/21 09:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	06/07/21 09:45
Sample Matrix:	Water	**Date Received:**	06/08/21 15:20
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2105686-003		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**253**	uMHOS/cm	-	1	06/07/21 09:45	
pH, Field	SM 4500-H+ B	**6.75**	pH Units	-	1	06/07/21 09:45	
Temperature, Field	SM 2550 B	**13.6**	deg C	-	1	06/07/21 09:45	
Turbidity, Field	180.1	**20.2**	NTU	-	1	06/07/21 09:45	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: Broome County Division of Solid Waste Management **Service Request:** R2105686
Project: Colesville SW / Seep Precleaning
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	R2105686-001	98	97	105
SW-3	R2105686-002	98	97	104
SP-3 Water	R2105686-003	96	97	104
Method Blank	RQ2106710-04	98	95	104
Lab Control Sample	RQ2106710-03	100	99	104

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2106710-04	**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	06/14/21 22:32	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/14/21 22:32	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/14/21 22:32	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/14/21 22:32	
2-Hexanone	0.20 U	10	0.20	1	06/14/21 22:32	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/14/21 22:32	
Acetone	5.0 U	10	5.0	1	06/14/21 22:32	
Benzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
Bromoform	0.25 U	5.0	0.25	1	06/14/21 22:32	
Bromomethane	0.70 U	5.0	0.70	1	06/14/21 22:32	
Carbon Disulfide	0.42 U	10	0.42	1	06/14/21 22:32	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/14/21 22:32	
Chlorobenzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
Chloroethane	0.23 U	5.0	0.23	1	06/14/21 22:32	
Chloroform	0.24 U	5.0	0.24	1	06/14/21 22:32	
Chloromethane	**0.30 J**	5.0	0.28	1	06/14/21 22:32	
Cyclohexane	0.26 U	10	0.26	1	06/14/21 22:32	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/14/21 22:32	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/14/21 22:32	
Dichloromethane	0.65 U	5.0	0.65	1	06/14/21 22:32	
Ethylbenzene	0.20 U	5.0	0.20	1	06/14/21 22:32	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/14/21 22:32	
Methyl Acetate	0.33 U	10	0.33	1	06/14/21 22:32	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/14/21 22:32	
Methylcyclohexane	0.20 U	10	0.20	1	06/14/21 22:32	
Styrene	0.20 U	5.0	0.20	1	06/14/21 22:32	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/14/21 22:32	
Toluene	0.20 U	5.0	0.20	1	06/14/21 22:32	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/14/21 22:32	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2106710-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/14/21 22:32	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/14/21 22:32	
Xylenes, Total	0.23 U	5.0	0.23	1	06/14/21 22:32	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/14/21 22:32	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/14/21 22:32	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/14/21 22:32	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/14/21 22:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/14/21 22:32	
Dibromofluoromethane	95	80 - 116	06/14/21 22:32	
Toluene-d8	104	87 - 121	06/14/21 22:32	

Client: Broome County Division of Solid Waste Management
Project: Colesville SW / Seep Precleaning
Sample Matrix: Water

Service Request: R2105686
Date Analyzed: 06/14/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2106710-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.7	20.0	98	75-125
1,1,2,2-Tetrachloroethane	8260C	18.0	20.0	90	78-126
1,1,2-Trichloroethane	8260C	19.3	20.0	97	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.9	20.0	95	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.9	20.0	105	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	23.8	20.0	119 *	71-118
1,2,4-Trichlorobenzene	8260C	18.4	20.0	92	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	15.1	20.0	75	55-136
1,2-Dibromoethane	8260C	18.6	20.0	93	82-127
1,2-Dichlorobenzene	8260C	18.9	20.0	94	80-119
1,2-Dichloroethane	8260C	19.4	20.0	97	71-127
1,2-Dichloropropane	8260C	20.0	20.0	100	80-119
1,3-Dichlorobenzene	8260C	18.9	20.0	94	83-121
1,4-Dichlorobenzene	8260C	18.7	20.0	93	79-119
2-Butanone (MEK)	8260C	19.7	20.0	98	61-137
2-Hexanone	8260C	19.1	20.0	96	63-124
4-Methyl-2-pentanone	8260C	19.9	20.0	99	66-124
Acetone	8260C	19.7	20.0	98	40-161
Benzene	8260C	20.0	20.0	100	79-119
Bromodichloromethane	8260C	18.6	20.0	93	81-123
Bromoform	8260C	15.5	20.0	77	65-146
Bromomethane	8260C	22.1	20.0	111	42-166
Carbon Disulfide	8260C	20.2	20.0	101	66-128
Carbon Tetrachloride	8260C	18.0	20.0	90	70-127
Chlorobenzene	8260C	18.7	20.0	94	80-121
Chloroethane	8260C	24.2	20.0	121	62-131
Chloroform	8260C	20.5	20.0	103	79-120
Chloromethane	8260C	21.9	20.0	109	65-135
Cyclohexane	8260C	21.6	20.0	108	69-120
Dibromochloromethane	8260C	17.0	20.0	85	72-128
Dichlorodifluoromethane (CFC 12)	8260C	18.3	20.0	92	59-155
Dichloromethane	8260C	18.9	20.0	94	73-122
Ethylbenzene	8260C	19.3	20.0	96	76-120

Client: Broome County Division of Solid Waste Management
Project: Colesville SW / Seep Precleaning
Sample Matrix: Water

Service Request: R2105686
Date Analyzed: 06/14/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2106710-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	18.8	20.0	94	77-128
Methyl Acetate	8260C	17.9	20.0	90	61-133
Methyl tert-Butyl Ether	8260C	18.7	20.0	94	75-118
Methylcyclohexane	8260C	21.9	20.0	110	51-129
Styrene	8260C	19.4	20.0	97	80-124
Tetrachloroethene (PCE)	8260C	18.3	20.0	91	72-125
Toluene	8260C	19.8	20.0	99	79-119
Trichloroethene (TCE)	8260C	19.8	20.0	99	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.6	20.0	103	71-136
Vinyl Chloride	8260C	20.0	20.0	100	74-159
cis-1,2-Dichloroethene	8260C	21.8	20.0	109	80-121
cis-1,3-Dichloropropene	8260C	19.2	20.0	96	77-122
trans-1,2-Dichloroethene	8260C	22.8	20.0	114	73-118
trans-1,3-Dichloropropene	8260C	18.9	20.0	95	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:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R2105686-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	06/17/21 10:17	06/15/21	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	1	06/17/21 10:17	06/15/21	
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	06/17/21 10:17	06/15/21	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	06/17/21 10:17	06/15/21	
Beryllium, Total	6010C	0.30 U	mg/Kg	0.30	1	06/17/21 10:17	06/15/21	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	06/17/21 10:17	06/15/21	
Calcium, Total	6010C	100 U	mg/Kg	100	1	06/17/21 10:17	06/15/21	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/17/21 10:17	06/15/21	
Cobalt, Total	6010C	5.0 U	mg/Kg	5.0	1	06/17/21 10:17	06/15/21	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	06/17/21 10:17	06/15/21	
Iron, Total	6010C	20 U	mg/Kg	20	1	06/17/21 10:17	06/15/21	
Lead, Total	6010C	0.50 U	mg/Kg	0.50	1	06/17/21 10:17	06/15/21	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	06/17/21 10:17	06/15/21	
Manganese, Total	6010C	2.0 U	mg/Kg	2.0	1	06/17/21 10:17	06/15/21	
Mercury, Total	7471B	0.033 U	mg/Kg	0.033	1	06/17/21 13:27	06/16/21	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	06/17/21 10:17	06/15/21	
Potassium, Total	6010C	200 U	mg/Kg	200	1	06/17/21 10:17	06/15/21	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/17/21 10:17	06/15/21	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	1	06/17/21 10:17	06/15/21	
Sodium, Total	6010C	100 U	mg/Kg	100	1	06/17/21 10:17	06/15/21	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/17/21 10:17	06/15/21	
Vanadium, Total	6010C	5.0 U	mg/Kg	5.0	1	06/17/21 10:17	06/15/21	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	06/17/21 10:17	06/15/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105686
Project:	Colesville SW / Seep Precleaning	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2105686-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	06/15/21 15:50	06/14/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/15/21 15:50	06/14/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Barium, Total	6010C	20	U	ug/L	20	1	06/15/21 15:50	06/14/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/15/21 15:50	06/14/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 15:50	06/14/21	
Calcium, Total	6010C	1000	U	ug/L	1000	1	06/15/21 15:50	06/14/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/15/21 15:50	06/14/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/15/21 15:50	06/14/21	
Iron, Total	6010C	100	U	ug/L	100	1	06/15/21 15:50	06/14/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/15/21 15:50	06/14/21	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	06/15/21 15:50	06/14/21	
Manganese, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/15/21 13:09	06/14/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/15/21 15:50	06/14/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/15/21 15:50	06/14/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Sodium, Total	6010C	1000	U	ug/L	1000	1	06/15/21 15:50	06/14/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/15/21 15:50	06/14/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/15/21 15:50	06/14/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/15/21 15:50	06/14/21	

Client: Broome County Division of Solid Waste Management
Project: Colesville SW / Seep Precleaning
Sample Matrix: Sediment

Service Request: R2105686
Date Analyzed: 06/17/21

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R2105686-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	197	200	99	80-120
Antimony, Total	6010C	47.8	50.0	96	80-120
Arsenic, Total	6010C	3.64	4.0	91	80-120
Barium, Total	6010C	207	200	103	80-120
Beryllium, Total	6010C	5.00	5.00	100	80-120
Cadmium, Total	6010C	5.15	5.00	103	80-120
Calcium, Total	6010C	200	200	102	80-120
Chromium, Total	6010C	20.6	20.0	103	80-120
Cobalt, Total	6010C	51.5	50.0	103	80-120
Copper, Total	6010C	25.5	25.0	102	80-120
Iron, Total	6010C	101	100	101	80-120
Lead, Total	6010C	50.7	50.0	101	80-120
Magnesium, Total	6010C	200	200	98	80-120
Manganese, Total	6010C	50.3	50.0	101	80-120
Mercury, Total	7471B	0.169	0.167	102	80-120
Nickel, Total	6010C	51.0	50.0	102	80-120
Potassium, Total	6010C	1920	2000	96	80-120
Selenium, Total	6010C	87.4	101	87	80-120
Silver, Total	6010C	4.85	5.0	97	80-120
Sodium, Total	6010C	1960	2000	98	80-120
Thallium, Total	6010C	187	200	93	80-120
Vanadium, Total	6010C	50.6	50.0	101	80-120
Zinc, Total	6010C	49.7	50.0	99	80-120

Client: Broome County Division of Solid Waste Management
Project: Colesville SW / Seep Precleaning
Sample Matrix: Water

Service Request: R2105686
Date Analyzed: 06/15/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2105686-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	2000	2000	100	80-120
Antimony, Total	6010C	489	500	98	80-120
Arsenic, Total	6010C	36.5	40	91	80-120
Barium, Total	6010C	2060	2000	103	80-120
Beryllium, Total	6010C	50.5	50.0	101	80-120
Cadmium, Total	6010C	51.5	50.0	103	80-120
Calcium, Total	6010C	2070	2000	103	80-120
Chromium, Total	6010C	205	200	102	80-120
Cobalt, Total	6010C	514	500	103	80-120
Copper, Total	6010C	248	250	99	80-120
Iron, Total	6010C	1010	1000	101	80-120
Lead, Total	6010C	509	500	102	80-120
Magnesium, Total	6010C	1980	2000	99	80-120
Manganese, Total	6010C	504	500	101	80-120
Mercury, Total	7470A	1.03	1.00	103	80-120
Nickel, Total	6010C	516	500	103	80-120
Potassium, Total	6010C	19400	20000	97	80-120
Selenium, Total	6010C	999	1010	99	80-120
Silver, Total	6010C	48.7	50	97	80-120
Sodium, Total	6010C	19900	20000	100	80-120
Thallium, Total	6010C	1860	2000	93	80-120
Vanadium, Total	6010C	505	500	101	80-120
Zinc, Total	6010C	509	500	102	80-120

June 29, 2021 Service Request No:R2105997

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 June 16, 2021
For your reference, these analyses have been assigned our service request number **R2105997.**

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

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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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ALS Environmental

Client: Broome County Division of Solid Waste Management **Service Request:** R2105997
Project: Colesville Streams / Seeps **Date Received:** 06/16/2021
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 06/16/2021. 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 8260: Samples are routinely tested for pH after analysis to confirm that any acid added was sufficient to reduce the pH to <2 to extend the holding time from 7 days to 14 days. The following sample(s) were analyzed beyond 7 days and were found to be insufficiently preserved: R2105997-004.

Method 8260C, 06/24/2021: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, 06/24/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, 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 06/29/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: F-6	Lab ID: R2105997-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	8.76			0.20	mg/L	SM 4500-O G
Conductivity, Field	145				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	146				mV	ASTM D1498-00
pH, Field	6.74				pH Units	SM 4500-H+ B
Temperature, Field	17.0				deg C	SM 2550 B
Turbidity, Field	3.9				NTU	180.1
Calcium, Total	14300			1000	ug/L	6010C
Iron, Total	120			100	ug/L	6010C
Magnesium, Total	3400			1000	ug/L	6010C
Manganese, Total	47			10	ug/L	6010C
Sodium, Total	6500			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.23	J	0.20	5.0	ug/L	8260C
Methyl Acetate	0.33	J	0.33	10	ug/L	8260C

CLIENT ID: SW-4	Lab ID: R2105997-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	8.80			0.20	mg/L	SM 4500-O G
Conductivity, Field	136				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	100				mV	ASTM D1498-00
pH, Field	6.68				pH Units	SM 4500-H+ B
Temperature, Field	17.0				deg C	SM 2550 B
Turbidity, Field	2.3				NTU	180.1
Calcium, Total	13400			1000	ug/L	6010C
Iron, Total	130			100	ug/L	6010C
Magnesium, Total	3200			1000	ug/L	6010C
Manganese, Total	57			10	ug/L	6010C
Sodium, Total	6200			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.50	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.25	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-4	Lab ID: R2105997-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	323				uMHOS/cm	120.1
pH, Field	6.71				pH Units	SM 4500-H+ B
Temperature, Field	15.2				deg C	SM 2550 B
Turbidity, Field	11.3				NTU	180.1
Aluminum, Total	230			100	ug/L	6010C
Arsenic, Total	11			10	ug/L	6010C
Barium, Total	44			20	ug/L	6010C
Calcium, Total	46800			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-4			Lab ID: R2105997-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Iron, Total	3330			100	ug/L	6010C
Magnesium, Total	9200			1000	ug/L	6010C
Manganese, Total	2050			10	ug/L	6010C
Potassium, Total	2100			2000	ug/L	6010C
Sodium, Total	5300			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	11		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.33	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.72	J	0.20	5.0	ug/L	8260C
Chloroethane	0.82	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	1.9	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.2	J	0.23	5.0	ug/L	8260C

CLIENT ID: SW-3			Lab ID: R2105997-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	8.80			0.20	mg/L	SM 4500-O G
Conductivity, Field	129				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	71.0				mV	ASTM D1498-00
pH, Field	6.79				pH Units	SM 4500-H+ B
Temperature, Field	16.8				deg C	SM 2550 B
Turbidity, Field	8.1				NTU	180.1
Calcium, Total	12500			1000	ug/L	6010C
Iron, Total	1400			100	ug/L	6010C
Magnesium, Total	3100			1000	ug/L	6010C
Manganese, Total	65			10	ug/L	6010C
Sodium, Total	6000			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.48	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-3 Water			Lab ID: R2105997-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	223				uMHOS/cm	120.1
pH, Field	6.67				pH Units	SM 4500-H+ B
Temperature, Field	17.1				deg C	SM 2550 B
Turbidity, Field	10.2				NTU	180.1
Aluminum, Total	160			100	ug/L	6010C
Barium, Total	28			20	ug/L	6010C
Calcium, Total	31300			1000	ug/L	6010C
Iron, Total	8890			100	ug/L	6010C
Lead, Total	7.0			5.0	ug/L	6010C
Magnesium, Total	6600			1000	ug/L	6010C
Manganese, Total	2690			10	ug/L	6010C
Sodium, Total	3400			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3 Water			Lab ID: R2105997-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,2-Trichloroethane	0.25	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	4.8	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.21	J	0.20	5.0	ug/L	8260C
Chlorobenzene	1.5	J	0.20	5.0	ug/L	8260C
Chloroethane	0.67	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	1.1	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.29	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.6	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-3 Sediment			Lab ID: R2105997-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Total Solids	62.2				Percent	ALS SOP
Aluminum, Total	10600			31	mg/Kg	6010C
Arsenic, Total	48.7			1.5	mg/Kg	6010C
Barium, Total	58.9			3.1	mg/Kg	6010C
Calcium, Total	810			150	mg/Kg	6010C
Chromium, Total	14.7			1.5	mg/Kg	6010C
Cobalt, Total	9.2			7.7	mg/Kg	6010C
Copper, Total	18.5			3.1	mg/Kg	6010C
Iron, Total	46000			310	mg/Kg	6010C
Lead, Total	37.7			0.77	mg/Kg	6010C
Magnesium, Total	3600			150	mg/Kg	6010C
Manganese, Total	467			3.1	mg/Kg	6010C
Nickel, Total	21.4			6.2	mg/Kg	6010C
Potassium, Total	910			310	mg/Kg	6010C
Vanadium, Total	15.4			7.7	mg/Kg	6010C
Zinc, Total	99.5			3.1	mg/Kg	6010C

CLIENT ID: SW-2			Lab ID: R2105997-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	8.63			0.20	mg/L	SM 4500-O G
Conductivity, Field	107				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	85.0				mV	ASTM D1498-00
pH, Field	6.60				pH Units	SM 4500-H+ B
Temperature, Field	16.8				deg C	SM 2550 B
Turbidity, Field	3.4				NTU	180.1
Calcium, Total	9200			1000	ug/L	6010C
Iron, Total	150			100	ug/L	6010C
Magnesium, Total	2600			1000	ug/L	6010C
Sodium, Total	5700			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-2			Lab ID: R2105997-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	138				uMHOS/cm	120.1
pH, Field	6.21				pH Units	SM 4500-H+ B
Temperature, Field	17.0				deg C	SM 2550 B
Turbidity, Field	19.1				NTU	180.1
Arsenic, Total	26			10	ug/L	6010C
Barium, Total	39			20	ug/L	6010C
Calcium, Total	10600			1000	ug/L	6010C
Iron, Total	14300			100	ug/L	6010C
Magnesium, Total	2600			1000	ug/L	6010C
Manganese, Total	2930			10	ug/L	6010C
Sodium, Total	5000			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.20	J	0.20	5.0	ug/L	8260C
2-Butanone (MEK)	1.2	J	0.78	10	ug/L	8260C
Methyl Acetate	0.40	J	0.33	10	ug/L	8260C
Toluene	0.28	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.64	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-5 Effluent			Lab ID: R2105997-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	388				uMHOS/cm	120.1
pH, Field	6.32				pH Units	SM 4500-H+ B
Temperature, Field	12.9				deg C	SM 2550 B
Turbidity, Field	35.6				NTU	180.1
Arsenic, Total	171			10	ug/L	6010C
Barium, Total	147			20	ug/L	6010C
Calcium, Total	39300			1000	ug/L	6010C
Iron, Total	35600			100	ug/L	6010C
Magnesium, Total	9100			1000	ug/L	6010C
Manganese, Total	5810			10	ug/L	6010C
Potassium, Total	2700			2000	ug/L	6010C
Sodium, Total	6500			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	5.7		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.23	J	0.20	5.0	ug/L	8260C
Benzene	0.32	J	0.20	5.0	ug/L	8260C
Chlorobenzene	4.7	J	0.20	5.0	ug/L	8260C
Chloroethane	1.6	J	0.23	5.0	ug/L	8260C
Methyl Acetate	0.36	J	0.33	10	ug/L	8260C
Trichloroethene (TCE)	1.1	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.40	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.67	J	0.23	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-5 Influent	Results	Flag	MDL	MRL	Units	Method
Analyte						
Conductivity, Field	386				uMHOS/cm	120.1
pH, Field	6.32				pH Units	SM 4500-H+ B
Temperature, Field	13.6				deg C	SM 2550 B
Turbidity, Field	48.3				NTU	180.1
Aluminum, Total	620			100	ug/L	6010C
Arsenic, Total	346			10	ug/L	6010C
Barium, Total	119			20	ug/L	6010C
Calcium, Total	38600			1000	ug/L	6010C
Iron, Total	35800			100	ug/L	6010C
Lead, Total	242			5.0	ug/L	6010C
Magnesium, Total	8500			1000	ug/L	6010C
Manganese, Total	5420			10	ug/L	6010C
Potassium, Total	3000			2000	ug/L	6010C
Sodium, Total	5900			1000	ug/L	6010C
Zinc, Total	13100			200	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	4.8	J	0.20	5.0	ug/L	8260C
Benzene	0.86	J	0.20	5.0	ug/L	8260C
Carbon Disulfide	6.7	J	0.42	10	ug/L	8260C
Chlorobenzene	12		0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	2.5	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.99	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:**R2105997
Project: Colesville Streams / Seeps/VOA + Metals

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2105997-001	Trip Blank	6/14/2021	1510
R2105997-002	F-6	6/14/2021	1510
R2105997-003	SW-4	6/14/2021	1520
R2105997-004	SP-4	6/14/2021	1525
R2105997-005	SW-3	6/14/2021	1540
R2105997-006	SP-3 Water	6/14/2021	1545
R2105997-007	SP-3 Sediment	6/14/2021	1550
R2105997-008	SW-2	6/14/2021	1605
R2105997-009	SP-2	6/14/2021	1615
R2105997-010	SP-5 Effluent	6/14/2021	1655
R2105997-011	SP-5 Influent	6/14/2021	1710

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

005447

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	
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	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)	Field Parameters	% Solids						REMARKS/ ALTERNATE DESCRIPTION
Trip Blank		6/14/2021	1510	W	3	X														
F-6			1510	W	4	X					X		X							101
SP-4 SW-4			1520	W	4	X					X		X							102
SP-4			1525	W	4	X					X		X							103
SW-3			1540	W	4	X					X		X							104
SP-3 Water			1545	W	4	X					X		X							105
SP-3 Sediment			1550	W	0						X			X						105
SW-2			1605	W	4	X					X		X							106
SP-2			1615	W	4	X					X		X							107
SP-5 Effluent			1655	W	4	X					X		X							108
SP-5 Influent			1710	W	4	X					X		X							109

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: Quinton Kolbeck	Printed Name: Quinton Kolbeck	Printed Name: Emily McFarlane	Printed Name	
Firm: ALS	Firm: ALS	Firm: ALS	Firm: ALS	Firm	
Date/Time: 6/16/2021 1100	Date/Time: 6/16/2021 1100	Date/Time: 6/16/2021 1500	Date/Time: 6/16/21 1500	Date/Time	

R2105997 5
Broome County Division of Solid Waste Management
Colesville Streams / Seeps

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

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps **LAB ID** 101

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 6/14/2021 Time 1510 SWL —

Appearance Clear

Weather Conditions Light Rain 72°

Sampling Technician (Print) Kyle Lee Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.74	6.74
Myron 6p	Conductivity	µmhos/cm	144	145
Myron 6p	Temperature	Degrees Celsius	17.0	17.0
Myron 6p	Redox	millivolts	146	
Lamotte	Turbidity	NTU	3.9	

D.O. = 8.76

Calibration Date/Time 6 / 14 / 2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps **LAB ID** 102

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 6/14/2021 Time 1520 SWL —

Appearance Clear

Weather Conditions Light Rain 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.68	6.68
Myron 6p	Conductivity	µmhos/cm	136	136
Myron 6p	Temperature	Degrees Celsius	17.0	17.0
Myron 6p	Redox	millivolts	100	
Lamotte	Turbidity	NTU	2.3	

D.O. = 8.80

Calibration Date/Time 6 / 14 / 2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps **LAB ID** 103

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 6/14/2021 Time 1525 SWL —

Appearance Clear w/ slight iron bacteria

Weather Conditions Rain 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.71	6.71
Myron 6p	Conductivity	µmhos/cm	323	323
Myron 6p	Temperature	Degrees Celsius	15.2	15.2
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	11.3	

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Coleville Streams/Seeps **LAB ID** 104

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 6/14/2021 Time 1540 SWL —

Appearance Clear

Weather Conditions Rain 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.79	6.79
Myron 6p	Conductivity	µmhos/cm	128	129
Myron 6p	Temperature	Degrees Celsius	16.8	16.8
Myron 6p	Redox	millivolts	71	
Lamotte	Turbidity	NTU	8.1	

D.O. = 8.80

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps **LAB ID** 105 Water + ~~Seep~~ Sed 6/14

SAMPLE POINT ID SP-3 Water / SW-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 6/14/2021 Time ~~Water~~ 1545 / Sed 1550 SWL —

Appearance Water: Clear w/ iron bacteria / Sed: Very fine Silty Sand grey w/ Fe bac.

Weather Conditions Hvy Rain 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.67	6.67
Myron 6p	Conductivity	µmhos/cm	223	223
Myron 6p	Temperature	Degrees Celsius	17.1	17.1
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	10.2	

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams | Seeps **LAB ID** 106

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 6/14/2021 Time 1605 SWL —

Appearance Clear

Weather Conditions Light Rain 70°

Sampling Technician (Print) Kyle Lee Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.59	6.60
Myron 6p	Conductivity	µmhos/cm	107	107
Myron 6p	Temperature	Degrees Celsius	16.8	16.8
Myron 6p	Redox	millivolts	85	
Lamotte	Turbidity	NTU	3.4	

DO. = 8.63

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps **LAB ID** 107

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 6/14/2021 Time 1615 SWL —

Appearance Clear w/ iron bacteria

Weather Conditions Overcast 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.21	6.21
Myron 6p	Conductivity	µmhos/cm	138	138
Myron 6p	Temperature	Degrees Celsius	17.0	17.0
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	19.1	

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Coleville Streams/Seeps **LAB ID** 108

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 6/14/2021 Time 1655 SWL —

Appearance Rust tan moderatley turbid

Weather Conditions Overcast 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.32	6.32
Myron 6p	Conductivity	µmhos/cm	388	389
Myron 6p	Temperature	Degrees Celsius	12.9	12.9
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	35.6	

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville Streams / Seeps LAB ID 109

SAMPLE POINT ID SP-5 Influent

PURGE INFORMATION

Well Depth (ft.) 4.10 Purge Date 6/14/2021 Purge Method Bailer

SWL (ft.) 0.19 Start Time 1700 Stop Time 1701

Standing Water (ft.) 3.91 Volume Purged gal. 0.6 # casings 1 to dry

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

Well Volume (gal.) 0.6

SAMPLING INFORMATION

Sample Method Bailer

Date 6/14/2021 Time 1710 SWL 0.19

Appearance Turbid Grey-tan

Weather Conditions Overcast 70°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.32	6.32
Myron 6p	Conductivity	µmhos/cm	386	386
Myron 6p	Temperature	Degrees Celsius	13.6	13.6
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	48.3	

Calibration Date/Time 6/14/2021 0800

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

Cooler Receipt and Preservation Check Form

R2105997 5
Broome County Division of Solid Waste Managem
Colesville Streams / Seeps

Project/Client _____ Folder Number _____

Cooler received on 6/16/21 by: [illegible]

COURIER: (ALS) UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)
2	**Custody papers** properly completed (ink, signed)?	(Y) N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y) N

5a	**Perchlorate** samples have required headspace?	Y N (NA)
5b	Did VOA vials, Alk, or Sulfide have sig* **bubbles**?	(Y) N NA
6	Where did the bottles originate?	(ALS/ROC) CLIENT
7	Soil VOA received as:	Bulk Encore 5035set (NA)

Temperature Readings Date: 6/16/21 Time: 1510 ID: IR#7 IR#11 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	0.3	0.7	0.4	3.4	4.1	1.1	3.0
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-002 by @ on 6/16/21 at 1517.
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 6/17/21 Time: 1331 by: @

9.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	(NO) date/time
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	223469	HNO_3	✓		1120111					
≤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	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 2596 21-04-20 0910 B-ISR

Explain all Discrepancies/ Other Comments:

Headspace: all TB's
059 (3 vials)
066 (2 vials)

1 bottle for metals/Hg

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 ñNotesò 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 ñimmediateò 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 (Ó100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ 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 Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs 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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals		

Sample Name:	Trip Blank	**Date Collected:**	06/14/21
Lab Code:	R2105997-001	**Date Received:**	06/16/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name:	F-6	**Date Collected:**	06/14/21
Lab Code:	R2105997-002	**Date Received:**	06/16/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	NMANSEN	KMCLAEN
7470A	KMCLAEN	KMCLAEN
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:**	06/14/21
Lab Code:	R2105997-003	**Date Received:**	06/16/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	NMANSEN	KMCLAEN
7470A	KMCLAEN	KMCLAEN
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:** R2105997
Project: Colesville Streams / Seeps/VOA + Metals

Sample Name: SP-4 **Date Collected:** 06/14/21
Lab Code: R2105997-004 **Date Received:** 06/16/21
Sample Matrix: Water

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

Sample Name: SW-3 **Date Collected:** 06/14/21
Lab Code: R2105997-005 **Date Received:** 06/16/21
Sample Matrix: Water

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

Sample Name: SP-3 Water **Date Collected:** 06/14/21
Lab Code: R2105997-006 **Date Received:** 06/16/21
Sample Matrix: Water

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

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals		

Sample Name:	SP-3 Water	**Date Collected:**	06/14/21
Lab Code:	R2105997-006	**Date Received:**	06/16/21
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:**	06/14/21
Lab Code:	R2105997-007	**Date Received:**	06/16/21
Sample Matrix:	Sediment		

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

Sample Name:	SW-2	**Date Collected:**	06/14/21
Lab Code:	R2105997-008	**Date Received:**	06/16/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	NMANSEN	KMCLAEN
7470A	KMCLAEN	KMCLAEN
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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals		

Sample Name:	SP-2	**Date Collected:**	06/14/21
Lab Code:	R2105997-009	**Date Received:**	06/16/21
Sample Matrix:	Water		

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

Sample Name:	SP-5 Effluent	**Date Collected:**	06/14/21
Lab Code:	R2105997-010	**Date Received:**	06/16/21
Sample Matrix:	Water		

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

Sample Name:	SP-5 Influent	**Date Collected:**	06/14/21
Lab Code:	R2105997-011	**Date Received:**	06/16/21
Sample Matrix:	Water		

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

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals		

Sample Name:	SP-5 Influent	**Date Collected:**	06/14/21
Lab Code:	R2105997-011	**Date Received:**	06/16/21
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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2105997-001	**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	06/23/21 05:27	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 05:27	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 05:27	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 05:27	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 05:27	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 05:27	
Acetone	5.0 U	10	5.0	1	06/23/21 05:27	
Benzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 05:27	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 05:27	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 05:27	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 05:27	
Chlorobenzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
Chloroethane	0.23 U	5.0	0.23	1	06/23/21 05:27	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 05:27	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 05:27	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 05:27	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 05:27	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 05:27	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 05:27	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 05:27	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 05:27	
Methyl Acetate	0.33 U	10	0.33	1	06/23/21 05:27	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 05:27	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 05:27	
Styrene	0.20 U	5.0	0.20	1	06/23/21 05:27	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 05:27	
Toluene	0.20 U	5.0	0.20	1	06/23/21 05:27	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/23/21 05:27	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2105997-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 05:27	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 05:27	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 05:27	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	06/23/21 05:27	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 05:27	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 05:27	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 05:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	06/23/21 05:27	
Dibromofluoromethane	99	80 - 116	06/23/21 05:27	
Toluene-d8	101	87 - 121	06/23/21 05:27	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2105997-002	**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	06/23/21 05:49	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,1-Dichloroethane (1,1-DCA)	**0.23**	**J**	5.0	0.20	1	06/23/21 05:49	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/23/21 05:49	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/23/21 05:49	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,2-Dichloroethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
2-Butanone (MEK)	0.78	U	10	0.78	1	06/23/21 05:49	
2-Hexanone	0.20	U	10	0.20	1	06/23/21 05:49	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/23/21 05:49	
Acetone	5.0	U	10	5.0	1	06/23/21 05:49	
Benzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
Bromoform	0.25	U	5.0	0.25	1	06/23/21 05:49	
Bromomethane	0.70	U	5.0	0.70	1	06/23/21 05:49	
Carbon Disulfide	0.42	U	10	0.42	1	06/23/21 05:49	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/23/21 05:49	
Chlorobenzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
Chloroethane	0.23	U	5.0	0.23	1	06/23/21 05:49	
Chloroform	0.24	U	5.0	0.24	1	06/23/21 05:49	
Chloromethane	0.28	U	5.0	0.28	1	06/23/21 05:49	
Cyclohexane	0.26	U	10	0.26	1	06/23/21 05:49	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/23/21 05:49	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/23/21 05:49	
Dichloromethane	0.65	U	5.0	0.65	1	06/23/21 05:49	
Ethylbenzene	0.20	U	5.0	0.20	1	06/23/21 05:49	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/23/21 05:49	
Methyl Acetate	**0.33**	**J**	10	0.33	1	06/23/21 05:49	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/23/21 05:49	
Methylcyclohexane	0.20	U	10	0.20	1	06/23/21 05:49	
Styrene	0.20	U	5.0	0.20	1	06/23/21 05:49	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/23/21 05:49	
Toluene	0.20	U	5.0	0.20	1	06/23/21 05:49	
Trichloroethene (TCE)	0.20	U	5.0	0.20	1	06/23/21 05:49	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2105997-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/23/21 05:49	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/23/21 05:49	
Xylenes, Total	0.23 U	5.0	0.23	1	06/23/21 05:49	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/23/21 05:49	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/23/21 05:49	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/23/21 05:49	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/23/21 05:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	06/23/21 05:49	
Dibromofluoromethane	99	80 - 116	06/23/21 05:49	
Toluene-d8	102	87 - 121	06/23/21 05:49	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:20
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2105997-003	**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	06/23/21 06:10	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,1-Dichloroethane (1,1-DCA)	**0.50**	**J**	5.0	0.20	1	06/23/21 06:10	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/23/21 06:10	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/23/21 06:10	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,2-Dichloroethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
2-Butanone (MEK)	0.78	U	10	0.78	1	06/23/21 06:10	
2-Hexanone	0.20	U	10	0.20	1	06/23/21 06:10	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/23/21 06:10	
Acetone	5.0	U	10	5.0	1	06/23/21 06:10	
Benzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
Bromoform	0.25	U	5.0	0.25	1	06/23/21 06:10	
Bromomethane	0.70	U	5.0	0.70	1	06/23/21 06:10	
Carbon Disulfide	0.42	U	10	0.42	1	06/23/21 06:10	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/23/21 06:10	
Chlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
Chloroethane	0.23	U	5.0	0.23	1	06/23/21 06:10	
Chloroform	0.24	U	5.0	0.24	1	06/23/21 06:10	
Chloromethane	0.28	U	5.0	0.28	1	06/23/21 06:10	
Cyclohexane	0.26	U	10	0.26	1	06/23/21 06:10	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/23/21 06:10	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/23/21 06:10	
Dichloromethane	0.65	U	5.0	0.65	1	06/23/21 06:10	
Ethylbenzene	0.20	U	5.0	0.20	1	06/23/21 06:10	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/23/21 06:10	
Methyl Acetate	0.33	U	10	0.33	1	06/23/21 06:10	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/23/21 06:10	
Methylcyclohexane	0.20	U	10	0.20	1	06/23/21 06:10	
Styrene	0.20	U	5.0	0.20	1	06/23/21 06:10	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/23/21 06:10	
Toluene	0.20	U	5.0	0.20	1	06/23/21 06:10	
Trichloroethene (TCE)	0.20	U	5.0	0.20	1	06/23/21 06:10	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:20
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2105997-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 06:10	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 06:10	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 06:10	
cis-1,2-Dichloroethene	**0.25**	**J**	5.0	0.23	1	06/23/21 06:10	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 06:10	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 06:10	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 06:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	06/23/21 06:10	
Dibromofluoromethane	101	80 - 116	06/23/21 06:10	
Toluene-d8	106	87 - 121	06/23/21 06:10	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:25
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2105997-004	**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	06/23/21 06:32	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,1-Dichloroethane (1,1-DCA)	**11**		5.0	0.20	1	06/23/21 06:32	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/23/21 06:32	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/23/21 06:32	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,2-Dichloroethane	**0.33**	**J**	5.0	0.20	1	06/23/21 06:32	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:32	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 06:32	
2-Butanone (MEK)	0.78	U	10	0.78	1	06/23/21 06:32	
2-Hexanone	0.20	U	10	0.20	1	06/23/21 06:32	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/23/21 06:32	
Acetone	5.0	U	10	5.0	1	06/23/21 06:32	
Benzene	0.20	U	5.0	0.20	1	06/23/21 06:32	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
Bromoform	0.25	U	5.0	0.25	1	06/23/21 06:32	
Bromomethane	0.70	U	5.0	0.70	1	06/23/21 06:32	
Carbon Disulfide	0.42	U	10	0.42	1	06/23/21 06:32	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/23/21 06:32	
Chlorobenzene	**0.72**	**J**	5.0	0.20	1	06/23/21 06:32	
Chloroethane	**0.82**	**J**	5.0	0.23	1	06/23/21 06:32	
Chloroform	0.24	U	5.0	0.24	1	06/23/21 06:32	
Chloromethane	0.28	U	5.0	0.28	1	06/23/21 06:32	
Cyclohexane	0.26	U	10	0.26	1	06/23/21 06:32	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/23/21 06:32	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/23/21 06:32	
Dichloromethane	0.65	U	5.0	0.65	1	06/23/21 06:32	
Ethylbenzene	0.20	U	5.0	0.20	1	06/23/21 06:32	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/23/21 06:32	
Methyl Acetate	0.33	U	10	0.33	1	06/23/21 06:32	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/23/21 06:32	
Methylcyclohexane	0.20	U	10	0.20	1	06/23/21 06:32	
Styrene	0.20	U	5.0	0.20	1	06/23/21 06:32	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/23/21 06:32	
Toluene	0.20	U	5.0	0.20	1	06/23/21 06:32	
Trichloroethene (TCE)	**1.9**	**J**	5.0	0.20	1	06/23/21 06:32	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:25
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2105997-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 06:32	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 06:32	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 06:32	
cis-1,2-Dichloroethene	**1.2**	**J**	5.0	0.23	1	06/23/21 06:32	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 06:32	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 06:32	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 06:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	06/23/21 06:32	
Dibromofluoromethane	103	80 - 116	06/23/21 06:32	
Toluene-d8	107	87 - 121	06/23/21 06:32	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:40
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2105997-005	**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	06/23/21 06:54	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,1-Dichloroethane (1,1-DCA)	**0.48 J**	5.0	0.20	1	06/23/21 06:54	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 06:54	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 06:54	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 06:54	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 06:54	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 06:54	
Acetone	5.0 U	10	5.0	1	06/23/21 06:54	
Benzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 06:54	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 06:54	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 06:54	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 06:54	
Chlorobenzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
Chloroethane	0.23 U	5.0	0.23	1	06/23/21 06:54	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 06:54	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 06:54	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 06:54	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 06:54	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 06:54	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 06:54	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 06:54	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 06:54	
Methyl Acetate	0.33 U	10	0.33	1	06/23/21 06:54	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 06:54	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 06:54	
Styrene	0.20 U	5.0	0.20	1	06/23/21 06:54	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 06:54	
Toluene	0.20 U	5.0	0.20	1	06/23/21 06:54	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/23/21 06:54	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:40
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2105997-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 06:54	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 06:54	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 06:54	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	06/23/21 06:54	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 06:54	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 06:54	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 06:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	06/23/21 06:54	
Dibromofluoromethane	102	80 - 116	06/23/21 06:54	
Toluene-d8	104	87 - 121	06/23/21 06:54	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:45
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2105997-006	**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	06/23/21 07:16	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,1,2-Trichloroethane	**0.25**	**J**	5.0	0.20	1	06/23/21 07:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,1-Dichloroethane (1,1-DCA)	**4.8**	**J**	5.0	0.20	1	06/23/21 07:16	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/23/21 07:16	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/23/21 07:16	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,2-Dichloroethane	**0.21**	**J**	5.0	0.20	1	06/23/21 07:16	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 07:16	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 07:16	
2-Butanone (MEK)	0.78	U	10	0.78	1	06/23/21 07:16	
2-Hexanone	0.20	U	10	0.20	1	06/23/21 07:16	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/23/21 07:16	
Acetone	5.0	U	10	5.0	1	06/23/21 07:16	
Benzene	0.20	U	5.0	0.20	1	06/23/21 07:16	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/23/21 07:16	
Bromoform	0.25	U	5.0	0.25	1	06/23/21 07:16	
Bromomethane	0.70	U	5.0	0.70	1	06/23/21 07:16	
Carbon Disulfide	0.42	U	10	0.42	1	06/23/21 07:16	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/23/21 07:16	
Chlorobenzene	**1.5**	**J**	5.0	0.20	1	06/23/21 07:16	
Chloroethane	**0.67**	**J**	5.0	0.23	1	06/23/21 07:16	
Chloroform	0.24	U	5.0	0.24	1	06/23/21 07:16	
Chloromethane	0.28	U	5.0	0.28	1	06/23/21 07:16	
Cyclohexane	0.26	U	10	0.26	1	06/23/21 07:16	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/23/21 07:16	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/23/21 07:16	
Dichloromethane	0.65	U	5.0	0.65	1	06/23/21 07:16	
Ethylbenzene	0.20	U	5.0	0.20	1	06/23/21 07:16	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/23/21 07:16	
Methyl Acetate	0.33	U	10	0.33	1	06/23/21 07:16	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/23/21 07:16	
Methylcyclohexane	0.20	U	10	0.20	1	06/23/21 07:16	
Styrene	0.20	U	5.0	0.20	1	06/23/21 07:16	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/23/21 07:16	
Toluene	0.20	U	5.0	0.20	1	06/23/21 07:16	
Trichloroethene (TCE)	**1.1**	**J**	5.0	0.20	1	06/23/21 07:16	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:45
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2105997-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 07:16	
Vinyl Chloride	**0.29**	**J**	5.0	0.20	1	06/23/21 07:16	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 07:16	
cis-1,2-Dichloroethene	**1.6**	**J**	5.0	0.23	1	06/23/21 07:16	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 07:16	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 07:16	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 07:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	06/23/21 07:16	
Dibromofluoromethane	101	80 - 116	06/23/21 07:16	
Toluene-d8	104	87 - 121	06/23/21 07:16	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:05
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2105997-008	**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	06/23/21 07:38	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 07:38	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 07:38	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 07:38	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 07:38	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 07:38	
Acetone	5.0 U	10	5.0	1	06/23/21 07:38	
Benzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 07:38	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 07:38	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 07:38	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 07:38	
Chlorobenzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
Chloroethane	0.23 U	5.0	0.23	1	06/23/21 07:38	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 07:38	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 07:38	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 07:38	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 07:38	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 07:38	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 07:38	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 07:38	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 07:38	
Methyl Acetate	0.33 U	10	0.33	1	06/23/21 07:38	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 07:38	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 07:38	
Styrene	0.20 U	5.0	0.20	1	06/23/21 07:38	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 07:38	
Toluene	0.20 U	5.0	0.20	1	06/23/21 07:38	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/23/21 07:38	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:05
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2105997-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 07:38	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 07:38	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 07:38	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	06/23/21 07:38	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 07:38	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 07:38	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 07:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	06/23/21 07:38	
Dibromofluoromethane	97	80 - 116	06/23/21 07:38	
Toluene-d8	102	87 - 121	06/23/21 07:38	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:15
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2105997-009	**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)	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,1-Dichloroethane (1,1-DCA)	**0.20**	**J**	5.0	0.20	1	06/23/21 08:00	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/23/21 08:00	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/23/21 08:00	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,2-Dichloroethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
2-Butanone (MEK)	**1.2**	**J**	10	0.78	1	06/23/21 08:00	
2-Hexanone	0.20	U	10	0.20	1	06/23/21 08:00	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/23/21 08:00	
Acetone	5.0	U	10	5.0	1	06/23/21 08:00	
Benzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
Bromoform	0.25	U	5.0	0.25	1	06/23/21 08:00	
Bromomethane	0.70	U	5.0	0.70	1	06/23/21 08:00	
Carbon Disulfide	0.42	U	10	0.42	1	06/23/21 08:00	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/23/21 08:00	
Chlorobenzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
Chloroethane	0.23	U	5.0	0.23	1	06/23/21 08:00	
Chloroform	0.24	U	5.0	0.24	1	06/23/21 08:00	
Chloromethane	0.28	U	5.0	0.28	1	06/23/21 08:00	
Cyclohexane	0.26	U	10	0.26	1	06/23/21 08:00	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/23/21 08:00	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/23/21 08:00	
Dichloromethane	0.65	U	5.0	0.65	1	06/23/21 08:00	
Ethylbenzene	0.20	U	5.0	0.20	1	06/23/21 08:00	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/23/21 08:00	
Methyl Acetate	**0.40**	**J**	10	0.33	1	06/23/21 08:00	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/23/21 08:00	
Methylcyclohexane	0.20	U	10	0.20	1	06/23/21 08:00	
Styrene	0.20	U	5.0	0.20	1	06/23/21 08:00	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/23/21 08:00	
Toluene	**0.28**	**J**	5.0	0.20	1	06/23/21 08:00	
Trichloroethene (TCE)	**0.64**	**J**	5.0	0.20	1	06/23/21 08:00	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:15
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-2	**Units:**	ug/L
Lab Code:	R2105997-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/23/21 08:00	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/23/21 08:00	
Xylenes, Total	0.23 U	5.0	0.23	1	06/23/21 08:00	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/23/21 08:00	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/23/21 08:00	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/23/21 08:00	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/23/21 08:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	06/23/21 08:00	
Dibromofluoromethane	102	80 - 116	06/23/21 08:00	
Toluene-d8	105	87 - 121	06/23/21 08:00	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:55
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2105997-010	**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	06/23/21 08:21	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,1-Dichloroethane (1,1-DCA)	**5.7**	5.0	0.20	1	06/23/21 08:21	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 08:21	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 08:21	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,2-Dichloroethane	**0.23 J**	5.0	0.20	1	06/23/21 08:21	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 08:21	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 08:21	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 08:21	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 08:21	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 08:21	
Acetone	5.0 U	10	5.0	1	06/23/21 08:21	
Benzene	**0.32 J**	5.0	0.20	1	06/23/21 08:21	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 08:21	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 08:21	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 08:21	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 08:21	
Chlorobenzene	**4.7 J**	5.0	0.20	1	06/23/21 08:21	
Chloroethane	**1.6 J**	5.0	0.23	1	06/23/21 08:21	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 08:21	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 08:21	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 08:21	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 08:21	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 08:21	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 08:21	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 08:21	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 08:21	
Methyl Acetate	**0.36 J**	10	0.33	1	06/23/21 08:21	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 08:21	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 08:21	
Styrene	0.20 U	5.0	0.20	1	06/23/21 08:21	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 08:21	
Toluene	0.20 U	5.0	0.20	1	06/23/21 08:21	
Trichloroethene (TCE)	**1.1 J**	5.0	0.20	1	06/23/21 08:21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:55
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2105997-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 08:21	
Vinyl Chloride	**0.40**	**J**	5.0	0.20	1	06/23/21 08:21	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 08:21	
cis-1,2-Dichloroethene	**0.67**	**J**	5.0	0.23	1	06/23/21 08:21	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 08:21	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 08:21	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 08:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	06/23/21 08:21	
Dibromofluoromethane	101	80 - 116	06/23/21 08:21	
Toluene-d8	104	87 - 121	06/23/21 08:21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 17:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2105997-011	**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	06/24/21 04:56	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,1-Dichloroethane (1,1-DCA)	**4.8**	**J**	5.0	0.20	1	06/24/21 04:56	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	06/24/21 04:56	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	06/24/21 04:56	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,2-Dichloroethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	06/24/21 04:56	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	06/24/21 04:56	
2-Butanone (MEK)	0.78	U	10	0.78	1	06/24/21 04:56	
2-Hexanone	0.20	U	10	0.20	1	06/24/21 04:56	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	06/24/21 04:56	
Acetone	5.0	U	10	5.0	1	06/24/21 04:56	
Benzene	**0.86**	**J**	5.0	0.20	1	06/24/21 04:56	
Bromodichloromethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
Bromoform	0.25	U	5.0	0.25	1	06/24/21 04:56	
Bromomethane	0.70	U	5.0	0.70	1	06/24/21 04:56	
Carbon Disulfide	**6.7**	**J**	10	0.42	1	06/24/21 04:56	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	06/24/21 04:56	
Chlorobenzene	**12**		5.0	0.20	1	06/24/21 04:56	
Chloroethane	0.23	U	5.0	0.23	1	06/24/21 04:56	
Chloroform	0.24	U	5.0	0.24	1	06/24/21 04:56	
Chloromethane	0.28	U	5.0	0.28	1	06/24/21 04:56	
Cyclohexane	0.26	U	10	0.26	1	06/24/21 04:56	
Dibromochloromethane	0.20	U	5.0	0.20	1	06/24/21 04:56	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	06/24/21 04:56	
Dichloromethane	0.65	U	5.0	0.65	1	06/24/21 04:56	
Ethylbenzene	0.20	U	5.0	0.20	1	06/24/21 04:56	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	06/24/21 04:56	
Methyl Acetate	0.33	U	10	0.33	1	06/24/21 04:56	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	06/24/21 04:56	
Methylcyclohexane	0.20	U	10	0.20	1	06/24/21 04:56	
Styrene	0.20	U	5.0	0.20	1	06/24/21 04:56	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	06/24/21 04:56	
Toluene	0.20	U	5.0	0.20	1	06/24/21 04:56	
Trichloroethene (TCE)	**2.5**	**J**	5.0	0.20	1	06/24/21 04:56	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 17:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2105997-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/24/21 04:56	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/24/21 04:56	
Xylenes, Total	0.23	U	5.0	0.23	1	06/24/21 04:56	
cis-1,2-Dichloroethene	**0.99**	**J**	5.0	0.23	1	06/24/21 04:56	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/24/21 04:56	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/24/21 04:56	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/24/21 04:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	06/24/21 04:56	
Dibromofluoromethane	102	80 - 116	06/24/21 04:56	
Toluene-d8	102	87 - 121	06/24/21 04:56	

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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2105997-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	06/22/21 18:42	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 18:42	06/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/22/21 18:42	06/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	06/22/21 18:42	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 18:42	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 18:42	06/21/21	
Calcium, Total	6010C	**14300**		ug/L	1000	1	06/22/21 18:42	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:42	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 18:42	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 18:42	06/21/21	
Iron, Total	6010C	**120**		ug/L	100	1	06/22/21 18:42	06/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 18:42	06/21/21	
Magnesium, Total	6010C	**3400**		ug/L	1000	1	06/22/21 18:42	06/21/21	
Manganese, Total	6010C	**47**		ug/L	10	1	06/22/21 18:42	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 14:31	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 18:42	06/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/22/21 18:42	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:42	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 18:42	06/21/21	
Sodium, Total	6010C	**6500**		ug/L	1000	1	06/22/21 18:42	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:42	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 18:42	06/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/22/21 18:42	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:20
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2105997-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/22/21 18:45	06/21/21	
Antimony, Total	6010C	60 U	ug/L	60	1	06/22/21 18:45	06/21/21	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/22/21 18:45	06/21/21	
Barium, Total	6010C	20 U	ug/L	20	1	06/22/21 18:45	06/21/21	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/22/21 18:45	06/21/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 18:45	06/21/21	
Calcium, Total	6010C	**13400**	ug/L	1000	1	06/22/21 18:45	06/21/21	
Chromium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:45	06/21/21	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/22/21 18:45	06/21/21	
Copper, Total	6010C	20 U	ug/L	20	1	06/22/21 18:45	06/21/21	
Iron, Total	6010C	**130**	ug/L	100	1	06/22/21 18:45	06/21/21	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 18:45	06/21/21	
Magnesium, Total	6010C	**3200**	ug/L	1000	1	06/22/21 18:45	06/21/21	
Manganese, Total	6010C	**57**	ug/L	10	1	06/22/21 18:45	06/21/21	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/22/21 14:34	06/21/21	
Nickel, Total	6010C	40 U	ug/L	40	1	06/22/21 18:45	06/21/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/22/21 18:45	06/21/21	
Selenium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:45	06/21/21	
Silver, Total	6010C	10 U	ug/L	10	1	06/22/21 18:45	06/21/21	
Sodium, Total	6010C	**6200**	ug/L	1000	1	06/22/21 18:45	06/21/21	
Thallium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:45	06/21/21	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/22/21 18:45	06/21/21	
Zinc, Total	6010C	20 U	ug/L	20	1	06/22/21 18:45	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:25
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2105997-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**230**		ug/L	100	1	06/22/21 18:48	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 18:48	06/21/21	
Arsenic, Total	6010C	**11**		ug/L	10	1	06/23/21 19:41	06/21/21	
Barium, Total	6010C	**44**		ug/L	20	1	06/22/21 18:48	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 18:48	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 18:48	06/21/21	
Calcium, Total	6010C	**46800**		ug/L	1000	1	06/22/21 18:48	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:48	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 18:48	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 18:48	06/21/21	
Iron, Total	6010C	**3330**		ug/L	100	1	06/22/21 18:48	06/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 18:48	06/21/21	
Magnesium, Total	6010C	**9200**		ug/L	1000	1	06/22/21 18:48	06/21/21	
Manganese, Total	6010C	**2050**		ug/L	10	1	06/22/21 18:48	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 14:36	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 18:48	06/21/21	
Potassium, Total	6010C	**2100**		ug/L	2000	1	06/22/21 18:48	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:48	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 18:48	06/21/21	
Sodium, Total	6010C	**5300**		ug/L	1000	1	06/22/21 18:48	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 18:48	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 18:48	06/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/22/21 18:48	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:40
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2105997-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/22/21 18:58	06/21/21	
Antimony, Total	6010C	60 U	ug/L	60	1	06/22/21 18:58	06/21/21	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/22/21 18:58	06/21/21	
Barium, Total	6010C	20 U	ug/L	20	1	06/22/21 18:58	06/21/21	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/22/21 18:58	06/21/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 18:58	06/21/21	
Calcium, Total	6010C	**12500**	ug/L	1000	1	06/22/21 18:58	06/21/21	
Chromium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:58	06/21/21	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/22/21 18:58	06/21/21	
Copper, Total	6010C	20 U	ug/L	20	1	06/22/21 18:58	06/21/21	
Iron, Total	6010C	**1400**	ug/L	100	1	06/22/21 18:58	06/21/21	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 18:58	06/21/21	
Magnesium, Total	6010C	**3100**	ug/L	1000	1	06/22/21 18:58	06/21/21	
Manganese, Total	6010C	**65**	ug/L	10	1	06/22/21 18:58	06/21/21	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/22/21 14:39	06/21/21	
Nickel, Total	6010C	40 U	ug/L	40	1	06/22/21 18:58	06/21/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/22/21 18:58	06/21/21	
Selenium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:58	06/21/21	
Silver, Total	6010C	10 U	ug/L	10	1	06/22/21 18:58	06/21/21	
Sodium, Total	6010C	**6000**	ug/L	1000	1	06/22/21 18:58	06/21/21	
Thallium, Total	6010C	10 U	ug/L	10	1	06/22/21 18:58	06/21/21	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/22/21 18:58	06/21/21	
Zinc, Total	6010C	20 U	ug/L	20	1	06/22/21 18:58	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:45
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2105997-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**160**		ug/L	100	1	06/22/21 19:01	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 19:01	06/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/22/21 19:01	06/21/21	
Barium, Total	6010C	**28**		ug/L	20	1	06/22/21 19:01	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 19:01	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 19:01	06/21/21	
Calcium, Total	6010C	**31300**		ug/L	1000	1	06/22/21 19:01	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:01	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 19:01	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 19:01	06/21/21	
Iron, Total	6010C	**8890**		ug/L	100	1	06/22/21 19:01	06/21/21	
Lead, Total	6010C	**7.0**		ug/L	5.0	1	06/22/21 19:01	06/21/21	
Magnesium, Total	6010C	**6600**		ug/L	1000	1	06/22/21 19:01	06/21/21	
Manganese, Total	6010C	**2690**		ug/L	10	1	06/22/21 19:01	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 14:41	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 19:01	06/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/22/21 19:01	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:01	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 19:01	06/21/21	
Sodium, Total	6010C	**3400**		ug/L	1000	1	06/22/21 19:01	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:01	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 19:01	06/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/22/21 19:01	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:50
Sample Matrix:	Sediment	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Sediment	**Basis:**	Dry
Lab Code:	R2105997-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**10600**	mg/Kg	31	1	06/18/21 21:12	06/18/21	
Antimony, Total	6010C	9.3 U	mg/Kg	9.3	1	06/18/21 21:12	06/18/21	
Arsenic, Total	6010C	**48.7**	mg/Kg	1.5	1	06/18/21 21:12	06/18/21	
Barium, Total	6010C	**58.9**	mg/Kg	3.1	1	06/18/21 21:12	06/18/21	
Beryllium, Total	6010C	0.46 U	mg/Kg	0.46	1	06/18/21 21:12	06/18/21	
Cadmium, Total	6010C	0.77 U	mg/Kg	0.77	1	06/18/21 21:12	06/18/21	
Calcium, Total	6010C	**810**	mg/Kg	150	1	06/18/21 21:12	06/18/21	
Chromium, Total	6010C	**14.7**	mg/Kg	1.5	1	06/18/21 21:12	06/18/21	
Cobalt, Total	6010C	**9.2**	mg/Kg	7.7	1	06/18/21 21:12	06/18/21	
Copper, Total	6010C	**18.5**	mg/Kg	3.1	1	06/18/21 21:12	06/18/21	
Iron, Total	6010C	**46000**	mg/Kg	310	10	06/18/21 22:23	06/18/21	
Lead, Total	6010C	**37.7**	mg/Kg	0.77	1	06/18/21 21:12	06/18/21	
Magnesium, Total	6010C	**3600**	mg/Kg	150	1	06/18/21 21:12	06/18/21	
Manganese, Total	6010C	**467**	mg/Kg	3.1	1	06/18/21 21:12	06/18/21	
Mercury, Total	7471B	0.049 U	mg/Kg	0.049	1	06/25/21 12:42	06/23/21	
Nickel, Total	6010C	**21.4**	mg/Kg	6.2	1	06/18/21 21:12	06/18/21	
Potassium, Total	6010C	**910**	mg/Kg	310	1	06/18/21 21:12	06/18/21	
Selenium, Total	6010C	1.5 U	mg/Kg	1.5	1	06/18/21 21:12	06/18/21	
Silver, Total	6010C	1.5 U	mg/Kg	1.5	1	06/18/21 21:12	06/18/21	
Sodium, Total	6010C	150 U	mg/Kg	150	1	06/18/21 21:12	06/18/21	
Thallium, Total	6010C	1.5 U	mg/Kg	1.5	1	06/18/21 21:12	06/18/21	
Vanadium, Total	6010C	**15.4**	mg/Kg	7.7	1	06/18/21 21:12	06/18/21	
Zinc, Total	6010C	**99.5**	mg/Kg	3.1	1	06/18/21 21:12	06/18/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:05
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2105997-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	06/22/21 19:05	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 19:05	06/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	06/22/21 19:05	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 19:05	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 19:05	06/21/21	
Calcium, Total	6010C	**9200**		ug/L	1000	1	06/22/21 19:05	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 19:05	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 19:05	06/21/21	
Iron, Total	6010C	**150**		ug/L	100	1	06/22/21 19:05	06/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 19:05	06/21/21	
Magnesium, Total	6010C	**2600**		ug/L	1000	1	06/22/21 19:05	06/21/21	
Manganese, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 14:44	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 19:05	06/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/22/21 19:05	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Sodium, Total	6010C	**5700**		ug/L	1000	1	06/22/21 19:05	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:05	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 19:05	06/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/22/21 19:05	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:15
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2105997-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/22/21 19:08	06/21/21	
Antimony, Total	6010C	60 U	ug/L	60	1	06/22/21 19:08	06/21/21	
Arsenic, Total	6010C	**26**	ug/L	10	1	06/22/21 19:08	06/21/21	
Barium, Total	6010C	**39**	ug/L	20	1	06/22/21 19:08	06/21/21	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/22/21 19:08	06/21/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 19:08	06/21/21	
Calcium, Total	6010C	**10600**	ug/L	1000	1	06/22/21 19:08	06/21/21	
Chromium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:08	06/21/21	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/22/21 19:08	06/21/21	
Copper, Total	6010C	20 U	ug/L	20	1	06/22/21 19:08	06/21/21	
Iron, Total	6010C	**14300**	ug/L	100	1	06/22/21 19:08	06/21/21	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 19:08	06/21/21	
Magnesium, Total	6010C	**2600**	ug/L	1000	1	06/22/21 19:08	06/21/21	
Manganese, Total	6010C	**2930**	ug/L	10	1	06/22/21 19:08	06/21/21	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/22/21 14:52	06/21/21	
Nickel, Total	6010C	40 U	ug/L	40	1	06/22/21 19:08	06/21/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/22/21 19:08	06/21/21	
Selenium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:08	06/21/21	
Silver, Total	6010C	10 U	ug/L	10	1	06/22/21 19:08	06/21/21	
Sodium, Total	6010C	**5000**	ug/L	1000	1	06/22/21 19:08	06/21/21	
Thallium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:08	06/21/21	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/22/21 19:08	06/21/21	
Zinc, Total	6010C	20 U	ug/L	20	1	06/22/21 19:08	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:55
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2105997-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/22/21 19:11	06/21/21	
Antimony, Total	6010C	60 U	ug/L	60	1	06/22/21 19:11	06/21/21	
Arsenic, Total	6010C	**171**	ug/L	10	1	06/22/21 19:11	06/21/21	
Barium, Total	6010C	**147**	ug/L	20	1	06/22/21 19:11	06/21/21	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/22/21 19:11	06/21/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 19:11	06/21/21	
Calcium, Total	6010C	**39300**	ug/L	1000	1	06/22/21 19:11	06/21/21	
Chromium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:11	06/21/21	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/22/21 19:11	06/21/21	
Copper, Total	6010C	20 U	ug/L	20	1	06/22/21 19:11	06/21/21	
Iron, Total	6010C	**35600**	ug/L	100	1	06/22/21 19:11	06/21/21	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/22/21 19:11	06/21/21	
Magnesium, Total	6010C	**9100**	ug/L	1000	1	06/22/21 19:11	06/21/21	
Manganese, Total	6010C	**5810**	ug/L	10	1	06/22/21 19:11	06/21/21	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/22/21 14:54	06/21/21	
Nickel, Total	6010C	40 U	ug/L	40	1	06/22/21 19:11	06/21/21	
Potassium, Total	6010C	**2700**	ug/L	2000	1	06/22/21 19:11	06/21/21	
Selenium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:11	06/21/21	
Silver, Total	6010C	10 U	ug/L	10	1	06/22/21 19:11	06/21/21	
Sodium, Total	6010C	**6500**	ug/L	1000	1	06/22/21 19:11	06/21/21	
Thallium, Total	6010C	10 U	ug/L	10	1	06/22/21 19:11	06/21/21	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/22/21 19:11	06/21/21	
Zinc, Total	6010C	20 U	ug/L	20	1	06/22/21 19:11	06/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 17:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2105997-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**620**		ug/L	100	1	06/22/21 19:14	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 19:14	06/21/21	
Arsenic, Total	6010C	**346**		ug/L	10	1	06/22/21 19:14	06/21/21	
Barium, Total	6010C	**119**		ug/L	20	1	06/22/21 19:14	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 19:14	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 19:14	06/21/21	
Calcium, Total	6010C	**38600**		ug/L	1000	1	06/22/21 19:14	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:14	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 19:14	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 19:14	06/21/21	
Iron, Total	6010C	**35800**		ug/L	100	1	06/22/21 19:14	06/21/21	
Lead, Total	6010C	**242**		ug/L	5.0	1	06/22/21 19:14	06/21/21	
Magnesium, Total	6010C	**8500**		ug/L	1000	1	06/22/21 19:14	06/21/21	
Manganese, Total	6010C	**5420**		ug/L	10	1	06/22/21 19:14	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 14:57	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 19:14	06/21/21	
Potassium, Total	6010C	**3000**		ug/L	2000	1	06/22/21 19:14	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:14	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 19:14	06/21/21	
Sodium, Total	6010C	**5900**		ug/L	1000	1	06/22/21 19:14	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 19:14	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 19:14	06/21/21	
Zinc, Total	6010C	**13100**		ug/L	200	10	06/23/21 19:44	06/21/21	

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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:50
Sample Matrix:	Sediment	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Sediment	**Basis:**	As Received
Lab Code:	R2105997-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**62.2**	Percent	-	1	06/22/21 05:55	

Field Data

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1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2105997-002		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**145**	uMHOS/cm	-	1	06/14/21 15:10	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**146**	mV	-	1	06/14/21 15:10	
Oxygen, Dissolved	SM 4500-O G	**8.76**	mg/L	0.20	1	06/14/21 15:10	
pH, Field	SM 4500-H+ B	**6.74**	pH Units	-	1	06/14/21 15:10	
Temperature, Field	SM 2550 B	**17.0**	deg C	-	1	06/14/21 15:10	
Turbidity, Field	180.1	**3.9**	NTU	-	1	06/14/21 15:10	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:20
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2105997-003		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**136**	uMHOS/cm	-	1	06/14/21 15:20	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**100**	mV	-	1	06/14/21 15:20	
Oxygen, Dissolved	SM 4500-O G	**8.80**	mg/L	0.20	1	06/14/21 15:20	
pH, Field	SM 4500-H+ B	**6.68**	pH Units	-	1	06/14/21 15:20	
Temperature, Field	SM 2550 B	**17.0**	deg C	-	1	06/14/21 15:20	
Turbidity, Field	180.1	**2.3**	NTU	-	1	06/14/21 15:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:25
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2105997-004		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**323**	uMHOS/cm	-	1	06/14/21 15:25	
pH, Field	SM 4500-H+ B	**6.71**	pH Units	-	1	06/14/21 15:25	
Temperature, Field	SM 2550 B	**15.2**	deg C	-	1	06/14/21 15:25	
Turbidity, Field	180.1	**11.3**	NTU	-	1	06/14/21 15:25	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:40
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2105997-005		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**129**	uMHOS/cm	-	1	06/14/21 15:40	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**71.0**	mV	-	1	06/14/21 15:40	
Oxygen, Dissolved	SM 4500-O G	**8.80**	mg/L	0.20	1	06/14/21 15:40	
pH, Field	SM 4500-H+ B	**6.79**	pH Units	-	1	06/14/21 15:40	
Temperature, Field	SM 2550 B	**16.8**	deg C	-	1	06/14/21 15:40	
Turbidity, Field	180.1	**8.1**	NTU	-	1	06/14/21 15:40	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 15:45
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2105997-006		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**223**	uMHOS/cm	-	1	06/14/21 15:45	
pH, Field	SM 4500-H+ B	**6.67**	pH Units	-	1	06/14/21 15:45	
Temperature, Field	SM 2550 B	**17.1**	deg C	-	1	06/14/21 15:45	
Turbidity, Field	180.1	**10.2**	NTU	-	1	06/14/21 15:45	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:05
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2105997-008		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**107**	uMHOS/cm	-	1	06/14/21 16:05	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**85.0**	mV	-	1	06/14/21 16:05	
Oxygen, Dissolved	SM 4500-O G	**8.63**	mg/L	0.20	1	06/14/21 16:05	
pH, Field	SM 4500-H+ B	**6.60**	pH Units	-	1	06/14/21 16:05	
Temperature, Field	SM 2550 B	**16.8**	deg C	-	1	06/14/21 16:05	
Turbidity, Field	180.1	**3.4**	NTU	-	1	06/14/21 16:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:15
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-2	**Basis:**	NA
Lab Code:	R2105997-009		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**138**	uMHOS/cm	-	1	06/14/21 16:15	
pH, Field	SM 4500-H+ B	**6.21**	pH Units	-	1	06/14/21 16:15	
Temperature, Field	SM 2550 B	**17.0**	deg C	-	1	06/14/21 16:15	
Turbidity, Field	180.1	**19.1**	NTU	-	1	06/14/21 16:15	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 16:55
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2105997-010		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**388**	uMHOS/cm	-	1	06/14/21 16:55	
pH, Field	SM 4500-H+ B	**6.32**	pH Units	-	1	06/14/21 16:55	
Temperature, Field	SM 2550 B	**12.9**	deg C	-	1	06/14/21 16:55	
Turbidity, Field	180.1	**35.6**	NTU	-	1	06/14/21 16:55	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	06/14/21 17:10
Sample Matrix:	Water	**Date Received:**	06/16/21 15:00
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2105997-011		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**386**	uMHOS/cm	-	1	06/14/21 17:10	
pH, Field	SM 4500-H+ B	**6.32**	pH Units	-	1	06/14/21 17:10	
Temperature, Field	SM 2550 B	**13.6**	deg C	-	1	06/14/21 17:10	
Turbidity, Field	180.1	**48.3**	NTU	-	1	06/14/21 17:10	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Broome County Division of Solid Waste Management **Service Request:** R2105997
Project: Colesville Streams / Seeps/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	R2105997-001	91	99	101
F-6	R2105997-002	92	99	102
SW-4	R2105997-003	95	101	106
SP-4	R2105997-004	94	103	107
SW-3	R2105997-005	94	102	104
SP-3 Water	R2105997-006	95	101	104
SW-2	R2105997-008	92	97	102
SP-2	R2105997-009	94	102	105
SP-5 Effluent	R2105997-010	94	101	104
SP-5 Influent	R2105997-011	95	102	102
Method Blank	RQ2107184-05	92	100	102
Method Blank	RQ2107239-04	99	104	103
Lab Control Sample	RQ2107184-03	96	101	103
Duplicate Lab Control Sample	RQ2107184-04	99	104	107
Lab Control Sample	RQ2107239-03	98	102	98

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2107184-05	**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	06/23/21 01:05	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 01:05	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 01:05	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 01:05	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 01:05	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 01:05	
Acetone	5.0 U	10	5.0	1	06/23/21 01:05	
Benzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 01:05	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 01:05	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 01:05	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 01:05	
Chlorobenzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
Chloroethane	0.23 U	5.0	0.23	1	06/23/21 01:05	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 01:05	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 01:05	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 01:05	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 01:05	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 01:05	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 01:05	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 01:05	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 01:05	
Methyl Acetate	0.33 U	10	0.33	1	06/23/21 01:05	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 01:05	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 01:05	
Styrene	0.20 U	5.0	0.20	1	06/23/21 01:05	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 01:05	
Toluene	0.20 U	5.0	0.20	1	06/23/21 01:05	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/23/21 01:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2107184-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 01:05	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 01:05	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 01:05	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	06/23/21 01:05	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 01:05	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 01:05	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 01:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	06/23/21 01:05	
Dibromofluoromethane	100	80 - 116	06/23/21 01:05	
Toluene-d8	102	87 - 121	06/23/21 01:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2107239-04	**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	06/23/21 23:28	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	06/23/21 23:28	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/23/21 23:28	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/23/21 23:28	
2-Hexanone	0.20 U	10	0.20	1	06/23/21 23:28	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/23/21 23:28	
Acetone	5.0 U	10	5.0	1	06/23/21 23:28	
Benzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
Bromodichloromethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
Bromoform	0.25 U	5.0	0.25	1	06/23/21 23:28	
Bromomethane	0.70 U	5.0	0.70	1	06/23/21 23:28	
Carbon Disulfide	0.42 U	10	0.42	1	06/23/21 23:28	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/23/21 23:28	
Chlorobenzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
Chloroethane	0.23 U	5.0	0.23	1	06/23/21 23:28	
Chloroform	0.24 U	5.0	0.24	1	06/23/21 23:28	
Chloromethane	0.28 U	5.0	0.28	1	06/23/21 23:28	
Cyclohexane	0.26 U	10	0.26	1	06/23/21 23:28	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/23/21 23:28	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/23/21 23:28	
Dichloromethane	0.65 U	5.0	0.65	1	06/23/21 23:28	
Ethylbenzene	0.20 U	5.0	0.20	1	06/23/21 23:28	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/23/21 23:28	
Methyl Acetate	0.33 U	10	0.33	1	06/23/21 23:28	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/23/21 23:28	
Methylcyclohexane	0.20 U	10	0.20	1	06/23/21 23:28	
Styrene	0.20 U	5.0	0.20	1	06/23/21 23:28	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/23/21 23:28	
Toluene	0.20 U	5.0	0.20	1	06/23/21 23:28	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/23/21 23:28	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2107239-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	06/23/21 23:28	
Vinyl Chloride	0.20	U	5.0	0.20	1	06/23/21 23:28	
Xylenes, Total	0.23	U	5.0	0.23	1	06/23/21 23:28	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	06/23/21 23:28	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	06/23/21 23:28	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	06/23/21 23:28	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	06/23/21 23:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	06/23/21 23:28	
Dibromofluoromethane	104	80 - 116	06/23/21 23:28	
Toluene-d8	103	87 - 121	06/23/21 23:28	

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

Service Request: R2105997
Date Analyzed: 06/23/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2107239-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.6	20.0	103	75-125
1,1,2,2-Tetrachloroethane	8260C	20.1	20.0	101	78-126
1,1,2-Trichloroethane	8260C	19.5	20.0	97	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.7	20.0	99	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.3	20.0	102	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	28.2	20.0	141 *	71-118
1,2,4-Trichlorobenzene	8260C	20.1	20.0	100	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.3	20.0	86	55-136
1,2-Dibromoethane	8260C	19.4	20.0	97	82-127
1,2-Dichlorobenzene	8260C	19.8	20.0	99	80-119
1,2-Dichloroethane	8260C	19.8	20.0	99	71-127
1,2-Dichloropropane	8260C	19.2	20.0	96	80-119
1,3-Dichlorobenzene	8260C	19.5	20.0	97	83-121
1,4-Dichlorobenzene	8260C	20.2	20.0	101	79-119
2-Butanone (MEK)	8260C	18.5	20.0	92	61-137
2-Hexanone	8260C	18.9	20.0	94	63-124
4-Methyl-2-pentanone	8260C	19.5	20.0	98	66-124
Acetone	8260C	17.5	20.0	87	40-161
Benzene	8260C	20.2	20.0	101	79-119
Bromodichloromethane	8260C	19.1	20.0	96	81-123
Bromoform	8260C	19.0	20.0	95	65-146
Bromomethane	8260C	25.7	20.0	129	42-166
Carbon Disulfide	8260C	21.9	20.0	110	66-128
Carbon Tetrachloride	8260C	20.0	20.0	100	70-127
Chlorobenzene	8260C	20.3	20.0	102	80-121
Chloroethane	8260C	20.3	20.0	102	62-131
Chloroform	8260C	20.4	20.0	102	79-120
Chloromethane	8260C	18.6	20.0	93	65-135
Cyclohexane	8260C	20.5	20.0	103	69-120
Dibromochloromethane	8260C	19.0	20.0	95	72-128
Dichlorodifluoromethane (CFC 12)	8260C	17.3	20.0	87	59-155
Dichloromethane	8260C	19.4	20.0	97	73-122
Ethylbenzene	8260C	20.5	20.0	102	76-120

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

Service Request: R2105997
Date Analyzed: 06/23/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2107239-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	19.9	20.0	100	77-128
Methyl Acetate	8260C	17.8	20.0	89	61-133
Methyl tert-Butyl Ether	8260C	19.8	20.0	99	75-118
Methylcyclohexane	8260C	20.6	20.0	103	51-129
Styrene	8260C	19.9	20.0	99	80-124
Tetrachloroethene (PCE)	8260C	21.3	20.0	107	72-125
Toluene	8260C	20.2	20.0	101	79-119
Trichloroethene (TCE)	8260C	19.5	20.0	97	74-122
Trichlorofluoromethane (CFC 11)	8260C	21.0	20.0	105	71-136
Vinyl Chloride	8260C	17.4	20.0	87	74-159
cis-1,2-Dichloroethene	8260C	21.0	20.0	105	80-121
cis-1,3-Dichloropropene	8260C	19.6	20.0	98	77-122
trans-1,2-Dichloroethene	8260C	23.0	20.0	115	73-118
trans-1,3-Dichloropropene	8260C	19.2	20.0	96	71-133

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QA/QC Report

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

Service Request: R2105997
Date Analyzed: 06/22/21

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2107184-03			RQ2107184-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	8260C	18.8	20.0	94	18.6	20.0	93	75-125	1	30
1,1,2,2-Tetrachloroethane	8260C	20.7	20.0	104	20.4	20.0	102	78-126	2	30
1,1,2-Trichloroethane	8260C	17.9	20.0	90	18.0	20.0	90	82-121	<1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.8	20.0	94	18.3	20.0	92	67-124	2	30
1,1-Dichloroethane (1,1-DCA)	8260C	20.3	20.0	102	19.9	20.0	100	80-124	2	30
1,1-Dichloroethene (1,1-DCE)	8260C	24.9	20.0	125 *	23.3	20.0	116	71-118	7	30
1,2,4-Trichlorobenzene	8260C	18.4	20.0	92	19.2	20.0	96	75-132	4	30
1,2-Dibromo-3-chloropropane (DBCP)	8260C	18.9	20.0	94	18.4	20.0	92	55-136	3	30
1,2-Dibromoethane	8260C	18.7	20.0	94	18.7	20.0	93	82-127	<1	30
1,2-Dichlorobenzene	8260C	18.3	20.0	92	18.5	20.0	93	80-119	1	30
1,2-Dichloroethane	8260C	19.0	20.0	95	19.2	20.0	96	71-127	<1	30
1,2-Dichloropropane	8260C	19.7	20.0	98	19.8	20.0	99	80-119	<1	30
1,3-Dichlorobenzene	8260C	18.7	20.0	94	18.2	20.0	91	83-121	3	30
1,4-Dichlorobenzene	8260C	18.0	20.0	90	17.4	20.0	87	79-119	3	30
2-Butanone (MEK)	8260C	22.4	20.0	112	22.2	20.0	111	61-137	1	30
2-Hexanone	8260C	21.3	20.0	106	20.5	20.0	103	63-124	4	30
4-Methyl-2-pentanone	8260C	21.5	20.0	108	21.8	20.0	109	66-124	1	30
Acetone	8260C	18.5	20.0	93	17.1	20.0	85	40-161	8	30
Benzene	8260C	19.4	20.0	97	19.7	20.0	99	79-119	2	30
Bromodichloromethane	8260C	18.6	20.0	93	18.4	20.0	92	81-123	1	30
Bromoform	8260C	16.3	20.0	81	15.6	20.0	78	65-146	4	30
Bromomethane	8260C	15.1	20.0	76	14.1	20.0	71	42-166	7	30
Carbon Disulfide	8260C	20.9	20.0	105	19.6	20.0	98	66-128	6	30
Carbon Tetrachloride	8260C	18.1	20.0	91	18.0	20.0	90	70-127	<1	30
Chlorobenzene	8260C	18.6	20.0	93	18.2	20.0	91	80-121	3	30
Chloroethane	8260C	21.7	20.0	108	20.7	20.0	104	62-131	5	30
Chloroform	8260C	19.4	20.0	97	19.0	20.0	95	79-120	2	30
Chloromethane	8260C	19.2	20.0	96	18.6	20.0	93	65-135	3	30
Cyclohexane	8260C	20.2	20.0	101	19.4	20.0	97	69-120	4	30
Dibromochloromethane	8260C	15.8	20.0	79	16.0	20.0	80	72-128	<1	30
Dichlorodifluoromethane (CFC 12)	8260C	16.4	20.0	82	15.6	20.0	78	59-155	5	30
Dichloromethane	8260C	19.7	20.0	99	19.7	20.0	99	73-122	<1	30
Ethylbenzene	8260C	18.5	20.0	92	18.4	20.0	92	76-120	<1	30

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

Service Request: R2105997
Date Analyzed: 06/22/21

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2107184-03			RQ2107184-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Isopropylbenzene (Cumene)	8260C	18.6	20.0	93	18.7	20.0	94	77-128	<1	30
Methyl Acetate	8260C	19.3	20.0	97	20.1	20.0	101	61-133	4	30
Methyl tert-Butyl Ether	8260C	18.9	20.0	94	18.3	20.0	92	75-118	3	30
Methylcyclohexane	8260C	20.6	20.0	103	20.8	20.0	104	51-129	1	30
Styrene	8260C	18.9	20.0	94	18.8	20.0	94	80-124	<1	30
Tetrachloroethene (PCE)	8260C	17.6	20.0	88	16.5	20.0	83	72-125	7	30
Toluene	8260C	18.9	20.0	94	19.1	20.0	96	79-119	1	30
Trichloroethene (TCE)	8260C	18.1	20.0	90	17.8	20.0	89	74-122	1	30
Trichlorofluoromethane (CFC 11)	8260C	20.9	20.0	105	20.1	20.0	101	71-136	4	30
Vinyl Chloride	8260C	18.5	20.0	93	18.5	20.0	93	74-159	<1	30
cis-1,2-Dichloroethene	8260C	19.8	20.0	99	19.1	20.0	95	80-121	4	30
cis-1,3-Dichloropropene	8260C	18.6	20.0	93	19.1	20.0	96	77-122	3	30
trans-1,2-Dichloroethene	8260C	21.6	20.0	108	21.3	20.0	107	73-118	1	30
trans-1,3-Dichloropropene	8260C	19.2	20.0	96	19.2	20.0	96	71-133	<1	30

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:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R2105997-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	06/18/21 20:42	06/18/21	
Antimony, Total	6010C	6.0	U	mg/Kg	6.0	1	06/18/21 20:42	06/18/21	
Arsenic, Total	6010C	1.0	U	mg/Kg	1.0	1	06/18/21 20:42	06/18/21	
Barium, Total	6010C	2.0	U	mg/Kg	2.0	1	06/18/21 20:42	06/18/21	
Beryllium, Total	6010C	0.30	U	mg/Kg	0.30	1	06/18/21 20:42	06/18/21	
Cadmium, Total	6010C	0.50	U	mg/Kg	0.50	1	06/18/21 20:42	06/18/21	
Calcium, Total	6010C	100	U	mg/Kg	100	1	06/18/21 20:42	06/18/21	
Chromium, Total	6010C	1.0	U	mg/Kg	1.0	1	06/18/21 20:42	06/18/21	
Cobalt, Total	6010C	5.0	U	mg/Kg	5.0	1	06/18/21 20:42	06/18/21	
Copper, Total	6010C	2.0	U	mg/Kg	2.0	1	06/18/21 20:42	06/18/21	
Iron, Total	6010C	20	U	mg/Kg	20	1	06/18/21 20:42	06/18/21	
Lead, Total	6010C	0.50	U	mg/Kg	0.50	1	06/18/21 20:42	06/18/21	
Magnesium, Total	6010C	100	U	mg/Kg	100	1	06/18/21 20:42	06/18/21	
Manganese, Total	6010C	2.0	U	mg/Kg	2.0	1	06/18/21 20:42	06/18/21	
Mercury, Total	7471B	0.033	U	mg/Kg	0.033	1	06/25/21 12:29	06/23/21	
Nickel, Total	6010C	4.0	U	mg/Kg	4.0	1	06/18/21 20:42	06/18/21	
Potassium, Total	6010C	200	U	mg/Kg	200	1	06/18/21 20:42	06/18/21	
Selenium, Total	6010C	1.0	U	mg/Kg	1.0	1	06/18/21 20:42	06/18/21	
Silver, Total	6010C	1.0	U	mg/Kg	1.0	1	06/18/21 20:42	06/18/21	
Sodium, Total	6010C	100	U	mg/Kg	100	1	06/18/21 20:42	06/18/21	
Thallium, Total	6010C	1.0	U	mg/Kg	1.0	1	06/18/21 20:42	06/18/21	
Vanadium, Total	6010C	5.0	U	mg/Kg	5.0	1	06/18/21 20:42	06/18/21	
Zinc, Total	6010C	2.0	U	mg/Kg	2.0	1	06/18/21 20:42	06/18/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2105997
Project:	Colesville Streams / Seeps/VOA + Metals	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2105997-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	06/22/21 17:40	06/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	06/22/21 17:40	06/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	06/22/21 17:40	06/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	06/22/21 17:40	06/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 17:40	06/21/21	
Calcium, Total	6010C	1000	U	ug/L	1000	1	06/22/21 17:40	06/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	06/22/21 17:40	06/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	06/22/21 17:40	06/21/21	
Iron, Total	6010C	100	U	ug/L	100	1	06/22/21 17:40	06/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	06/22/21 17:40	06/21/21	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	06/22/21 17:40	06/21/21	
Manganese, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	06/22/21 13:52	06/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	06/22/21 17:40	06/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	06/22/21 17:40	06/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Sodium, Total	6010C	1000	U	ug/L	1000	1	06/22/21 17:40	06/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	06/22/21 17:40	06/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	06/22/21 17:40	06/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	06/22/21 17:40	06/21/21	

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

Service Request: R2105997
Date Analyzed: 06/18/21 - 06/25/21

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R2105997-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	193	200	97	80-120
Antimony, Total	6010C	46.0	50.0	92	80-120
Arsenic, Total	6010C	3.76	4.0	94	80-120
Barium, Total	6010C	202	200	101	80-120
Beryllium, Total	6010C	4.86	5.00	97	80-120
Cadmium, Total	6010C	4.97	5.00	99	80-120
Calcium, Total	6010C	200	200	101	80-120
Chromium, Total	6010C	20.1	20.0	101	80-120
Cobalt, Total	6010C	50.2	50.0	100	80-120
Copper, Total	6010C	25.1	25.0	100	80-120
Iron, Total	6010C	99	100	99	80-120
Lead, Total	6010C	49.4	50.0	99	80-120
Magnesium, Total	6010C	190	200	96	80-120
Manganese, Total	6010C	49.3	50.0	99	80-120
Mercury, Total	7471B	0.171	0.167	103	80-120
Nickel, Total	6010C	49.7	50.0	99	80-120
Potassium, Total	6010C	1890	2000	94	80-120
Selenium, Total	6010C	84.7	101	84	80-120
Silver, Total	6010C	4.8	5.0	95	80-120
Sodium, Total	6010C	1930	2000	96	80-120
Thallium, Total	6010C	181	200	90	80-120
Vanadium, Total	6010C	49.4	50.0	99	80-120
Zinc, Total	6010C	48.7	50.0	97	80-120

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

Service Request: R2105997
Date Analyzed: 06/22/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2105997-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	1960	2000	98	80-120
Antimony, Total	6010C	482	500	96	80-120
Arsenic, Total	6010C	34	40	85	80-120
Barium, Total	6010C	2030	2000	101	80-120
Beryllium, Total	6010C	49.3	50.0	99	80-120
Cadmium, Total	6010C	50.5	50.0	101	80-120
Calcium, Total	6010C	2000	2000	101	80-120
Chromium, Total	6010C	200	200	100	80-120
Cobalt, Total	6010C	505	500	101	80-120
Copper, Total	6010C	243	250	97	80-120
Iron, Total	6010C	1000	1000	100	80-120
Lead, Total	6010C	496	500	99	80-120
Magnesium, Total	6010C	2000	2000	98	80-120
Manganese, Total	6010C	493	500	99	80-120
Mercury, Total	7470A	1.01	1.00	101	80-120
Nickel, Total	6010C	505	500	101	80-120
Potassium, Total	6010C	18900	20000	94	80-120
Selenium, Total	6010C	988	1010	98	80-120
Silver, Total	6010C	48	50	96	80-120
Sodium, Total	6010C	19500	20000	97	80-120
Thallium, Total	6010C	1840	2000	92	80-120
Vanadium, Total	6010C	492	500	98	80-120
Zinc, Total	6010C	497	500	99	80-120

October 29, 2021 Service Request No:R2110897

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

Laboratory Results for: Colesville SWs and Seeps

Dear Emily,

Enclosed are the results of the sample(s) submitted to our laboratory October 18, 2021
For your reference, these analyses have been assigned our service request number **R2110897.**

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

1565 Jefferson Rd, Building 300, Rochester, NY 14623 | 585-288-5380 | www.alsglobal.com

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Sediment, Water

Service Request: R2110897
Date Received: 10/18/2021

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:

Ten sediment, water samples were received for analysis at ALS Environmental on 10/18/2021. 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, 10/22/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 10/22/2021: 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.

Method 8260C, 10/22/2021: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Field:

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

Approved by _____ Date 10/29/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: F-6	Lab ID: R2110897-002					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	10.3			0.20	mg/L	SM 4500-O G
Conductivity, Field	128				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	68.0				mV	ASTM D1498-00
pH, Field	7.13				pH Units	SM 4500-H+ B
Temperature, Field	11.0				deg C	SM 2550 B
Turbidity, Field	2				NTU	180.1
Calcium, Total	13200			1000	ug/L	6010C
Iron, Total	200			100	ug/L	6010C
Magnesium, Total	3000			1000	ug/L	6010C
Manganese, Total	44			10	ug/L	6010C
Sodium, Total	6100			1000	ug/L	6010C

CLIENT ID: SW-4	Lab ID: R2110897-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	10.1			0.20	mg/L	SM 4500-O G
Conductivity, Field	120				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	70.0				mV	ASTM D1498-00
pH, Field	6.87				pH Units	SM 4500-H+ B
Temperature, Field	11.1				deg C	SM 2550 B
Turbidity, Field	6.1				NTU	180.1
Calcium, Total	12100			1000	ug/L	6010C
Iron, Total	230			100	ug/L	6010C
Magnesium, Total	2800			1000	ug/L	6010C
Manganese, Total	60			10	ug/L	6010C
Sodium, Total	5800			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.42	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-4	Lab ID: R2110897-004					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	412				uMHOS/cm	120.1
pH, Field	6.67				pH Units	SM 4500-H+ B
Temperature, Field	12.1				deg C	SM 2550 B
Turbidity, Field	43.6				NTU	180.1
Aluminum, Total	2590			100	ug/L	6010C
Arsenic, Total	840			10	ug/L	6010C
Barium, Total	225			20	ug/L	6010C
Calcium, Total	56100			1000	ug/L	6010C
Iron, Total	133000			1000	ug/L	6010C
Magnesium, Total	11000			1000	ug/L	6010C
Manganese, Total	7410			10	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-4			Lab ID: R2110897-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Potassium, Total	2900			2000	ug/L	6010C
Sodium, Total	6100			1000	ug/L	6010C
Zinc, Total	29			20	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	15		0.20	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.20	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.77	J	0.20	5.0	ug/L	8260C
Benzene	0.55	J	0.20	5.0	ug/L	8260C
Chlorobenzene	5.4		0.20	5.0	ug/L	8260C
Chloroethane	1.5	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	3.0	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	1.4	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.2	J	0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.34	J	0.20	5.0	ug/L	8260C

CLIENT ID: SW-3			Lab ID: R2110897-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	10.0			0.20	mg/L	SM 4500-O G
Conductivity, Field	115				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	-59.0				mV	ASTM D1498-00
pH, Field	6.74				pH Units	SM 4500-H+ B
Temperature, Field	10.9				deg C	SM 2550 B
Turbidity, Field	2.2				NTU	180.1
Calcium, Total	11800			1000	ug/L	6010C
Iron, Total	260			100	ug/L	6010C
Magnesium, Total	2800			1000	ug/L	6010C
Manganese, Total	54			10	ug/L	6010C
Sodium, Total	5900			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.27	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-3 Water			Lab ID: R2110897-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	278				uMHOS/cm	120.1
pH, Field	6.46				pH Units	SM 4500-H+ B
Temperature, Field	10.9				deg C	SM 2550 B
Turbidity, Field	5.4				NTU	180.1
Arsenic, Total	16			10	ug/L	6010C
Barium, Total	38			20	ug/L	6010C
Calcium, Total	33600			1000	ug/L	6010C
Iron, Total	8340			100	ug/L	6010C
Magnesium, Total	6900			1000	ug/L	6010C
Manganese, Total	3530			10	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3 Water			Lab ID: R2110897-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Sodium, Total	3500			1000	ug/L	6010C
1,1,2-Trichloroethane	0.36	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	15		0.20	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.51	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.66	J	0.20	5.0	ug/L	8260C
Benzene	0.40	J	0.20	5.0	ug/L	8260C
Chlorobenzene	24		0.20	5.0	ug/L	8260C
Chloroethane	1.8	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	2.4	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	2.6	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	3.9	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-3 Sediment			Lab ID: R2110897-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Total Solids	74.4				Percent	ALS SOP
Aluminum, Total	10500			27	mg/Kg	6010C
Arsenic, Total	49.4			1.3	mg/Kg	6010C
Barium, Total	46.3			2.7	mg/Kg	6010C
Beryllium, Total	0.43			0.40	mg/Kg	6010C
Calcium, Total	1050			130	mg/Kg	6010C
Chromium, Total	14.2			1.3	mg/Kg	6010C
Cobalt, Total	9.3			6.7	mg/Kg	6010C
Copper, Total	19.7			2.7	mg/Kg	6010C
Iron, Total	49000			270	mg/Kg	6010C
Lead, Total	12.4			0.67	mg/Kg	6010C
Magnesium, Total	3770			130	mg/Kg	6010C
Manganese, Total	899			2.7	mg/Kg	6010C
Nickel, Total	22.7			5.4	mg/Kg	6010C
Potassium, Total	870			270	mg/Kg	6010C
Vanadium, Total	15.2			6.7	mg/Kg	6010C
Zinc, Total	61.2			2.7	mg/Kg	6010C

CLIENT ID: SW-2			Lab ID: R2110897-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Oxygen, Dissolved	9.86			0.20	mg/L	SM 4500-O G
Conductivity, Field	93				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	72.0				mV	ASTM D1498-00
pH, Field	6.57				pH Units	SM 4500-H+ B
Temperature, Field	10.8				deg C	SM 2550 B
Turbidity, Field	3.8				NTU	180.1
Calcium, Total	8300			1000	ug/L	6010C
Iron, Total	380			100	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SW-2			Lab ID: R2110897-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Magnesium, Total	2400			1000	ug/L	6010C
Manganese, Total	29			10	ug/L	6010C
Sodium, Total	5400			1000	ug/L	6010C

CLIENT ID: SP-5 Effluent			Lab ID: R2110897-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	401				uMHOS/cm	120.1
pH, Field	6.36				pH Units	SM 4500-H+ B
Temperature, Field	13.7				deg C	SM 2550 B
Turbidity, Field	8.1				NTU	180.1
Arsenic, Total	172			10	ug/L	6010C
Barium, Total	150			20	ug/L	6010C
Calcium, Total	42700			1000	ug/L	6010C
Iron, Total	28400			100	ug/L	6010C
Magnesium, Total	9800			1000	ug/L	6010C
Manganese, Total	6260			10	ug/L	6010C
Potassium, Total	3100			2000	ug/L	6010C
Sodium, Total	6900			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	6.4		0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.26	J	0.20	5.0	ug/L	8260C
Benzene	0.28	J	0.20	5.0	ug/L	8260C
Chlorobenzene	2.5	J	0.20	5.0	ug/L	8260C
Chloroethane	1.1	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	0.82	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.44	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-5 Influent			Lab ID: R2110897-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Conductivity, Field	415				uMHOS/cm	120.1
pH, Field	6.30				pH Units	SM 4500-H+ B
Temperature, Field	13.7				deg C	SM 2550 B
Turbidity, Field	1.4				NTU	180.1
Arsenic, Total	150			10	ug/L	6010C
Barium, Total	145			20	ug/L	6010C
Calcium, Total	42300			1000	ug/L	6010C
Iron, Total	24700			100	ug/L	6010C
Magnesium, Total	9600			1000	ug/L	6010C
Manganese, Total	6160			10	ug/L	6010C
Potassium, Total	3100			2000	ug/L	6010C
Sodium, Total	6700			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	7.6		0.20	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-5 Influent			Lab ID: R2110897-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,2-Dichloroethane	0.20	J	0.20	5.0	ug/L	8260C
Chlorobenzene	1.8	J	0.20	5.0	ug/L	8260C
Chloroethane	1.4	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	0.45	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.53	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.54	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:**R2110897
Project: Colesville SWs and Seeps

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2110897-001	Trip Blank	10/18/2021	1005
R2110897-002	F-6	10/18/2021	1005
R2110897-003	SW-4	10/18/2021	1015
R2110897-004	SP-4	10/18/2021	1025
R2110897-005	SW-3	10/18/2021	1030
R2110897-006	SP-3 Water	10/18/2021	1035
R2110897-007	SP-3 Sediment	10/18/2021	1040
R2110897-008	SW-2	10/18/2021	1100
R2110897-009	SP-5 Effluent	10/18/2021	1135
R2110897-010	SP-5 Influent	10/18/2021	1145

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

060637

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 SW's + Seeps	Project Number:
Project Manager: Emily Giordano	Report CC:
Company/Address: Broome County Colesville Landfill, 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	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)	Field	% Solids						REMARKS/ ALTERNATE DESCRIPTION
Trip Blank		10/18/21	1005	W	3	X														T.B.
F-6			1005	W	4	X					X		X							1
SW-4			1015	W	4	X					X		X							2
SP-4			1025	W	4	X					X		X							3
SW-3			1030	W	4	X					X		X							4
SP-3 Water			1035	W	4	X					X		X							5
SP-3 Sediment			1040	Sed	2						X			X						10
SW-2			1100	W	4	X					X		X							6
SP-2			No Sample: See Below																	—
SP-5 Effluent			1135	W	X	X							X							8
SP-5 Influent		↓	1145	W	X	X							X							9

SPECIAL INSTRUCTIONS/COMMENTS

Metals

No Sample of SP-2 due to Seep being dry

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

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:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Kyle Lee	Printed Name: Mathew Marley	Printed Name	Printed Name	Printed Name	
Firm: ALS	Firm: ALS	Firm	Firm	Firm	
Date/Time: 10/18/21 ~~1540~~ 1550 KL	Date/Time: 10/18/21 15:50	Date/Time	Date/Time	Date/Time	

R2110897 5

Broome County Division of Solid Waste Management
Colesville SWs and Seeps

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

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **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 10/18/21 Time 1005 SWL —

Appearance Clear

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.12	7.14
Myron 6p	Conductivity	µmhos/cm	128	128
Myron 6p	Temperature	Degrees Celsius	11.0	11.0
Myron 6p	Redox	millivolts	68	
Lamotte	Turbidity	NTU	2.0	

D.O. = 10.31

Calibration Date/Time 10/18/21 0730 pH 7.00, 4.00, 10.00
1413 Set 1413

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **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 10/18/21 Time 1015 SWL —

Appearance Clear

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.87	6.87
Myron 6p	Conductivity	µmhos/cm	120	120
Myron 6p	Temperature	Degrees Celsius	11.1	11.1
Myron 6p	Redox	millivolts	70	
Lamotte	Turbidity	NTU	6.1	

D.O. = 10.10

Calibration Date/Time 10/18/21 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **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 10/18/21 Time 1025 SWL —

Appearance Rust tan moderatley turbid

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.67	6.67
Myron 6p	Conductivity	µmhos/cm	412	412
Myron 6p	Temperature	Degrees Celsius	12.1	12.1
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	43.6	

Calibration Date/Time 10/18/21 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **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 10/18/21 Time 1030 SWL —

Appearance Clear

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.74	6.74
Myron 6p	Conductivity	µmhos/cm	115	115
Myron 6p	Temperature	Degrees Celsius	10.9	10.9
Myron 6p	Redox	millivolts	-59	
Lamotte	Turbidity	NTU	2.2	

D.O. = 10.00

Calibration Date/Time 10/18/21 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **LAB ID** 5

SAMPLE POINT ID SP-3 Water

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 10/18/21 Time 1035 SWL —

Appearance Clear w/ slight iron bacteria

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.46	6.46
Myron 6p	Conductivity	µmhos/cm	278	278
Myron 6p	Temperature	Degrees Celsius	10.9	10.9
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	5.4	

Calibration Date/Time 10/18/21 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **LAB ID** (10) Metals, % Solids

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 10/18/21 Time 1040 SWL —

Appearance Silty dark Grey w/ very fine Sand

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee 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 SW's + Seeps **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 10/18/21 Time 1100 SWL —

Appearance Clear

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.57	6.57
Myron 6p	Conductivity	µmhos/cm	93	93
Myron 6p	Temperature	Degrees Celsius	10.8	10.8
Myron 6p	Redox	millivolts	72	
Lamotte	Turbidity	NTU	3.8	

D.O. = 9.86

Calibration Date/Time 10/18/21 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **LAB ID**

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

Date 10/18/21 Time SWL

Appearance

Weather Conditions

Sampling Technician (Print) Kyla Lee 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 No Sample as per Emily G. the seep was dry upon arrival. A small area was excavated by hand to see if the seep would percolate through, but it remained dry.

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **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 10/18/21 Time 1135 SWL —

Appearance Clear w/ Slight Fe bacteria

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.36	6.36
Myron 6p	Conductivity	µmhos/cm	401	401
Myron 6p	Temperature	Degrees Celsius	13.7	13.7
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	8.1	

Calibration Date/Time 10/18/21 0730

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.

FIELD MONITORING REPORT

PROJECT Colesville SW's + Seeps **LAB ID** 9

SAMPLE POINT ID SP-5 Influent

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date 10/18/21 Purge Method Bailer

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

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

Well Constant (gal/ft.) 0.1163 Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Bailer

Date 10/18/21 Time 1145 SWL —

Appearance Clear

Weather Conditions Overcast 45°

Sampling Technician (Print) Kyle Lee Signature

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.30	6.30
Myron 6p	Conductivity	µmhos/cm	415	415
Myron 6p	Temperature	Degrees Celsius	13.7	13.7
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	1.4	

Calibration Date/Time 10/18/21 0730

OBSERVATIONS As per Emily G. Sample was collected directly from the water in the pit rather than the stilling well

Sampling procedures were performed in accordance with all applicable protocols.

R2110897 5
Broome County Division of Solid Waste Management
Colesville SWs and Seeps

Cooler Receipt and Preservation Check Form

Project/Client Broome County Folder Number

Cooler received on 10/18/21 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: 10/18/21 Time: 16:00 ID: IR#7 (IR#1) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	1.6						
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: Cloor by MM on 10/18/21 at 16:10
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 10/19/21 Time: 1220 by: (P)

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	223419	HNO_3	✓		11/24/21					
≤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: 21-08-19 2596, 0504/21-ISE

Explain all Discrepancies/ Other Comments:

Rec'd metells for Inf & Eff

HPROD	BULK
HTR	FLDT
SUB	HGFB
(ALS)	LL3541

Labels secondary reviewed by: (B)
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:** R2110897
Project: Colesville SWs and 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:** R2110897
Project: Colesville SWs and Seeps/

Sample Name: Trip Blank **Date Collected:** 10/18/21
Lab Code: R2110897-001 **Date Received:** 10/18/21
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: F-6 **Date Collected:** 10/18/21
Lab Code: R2110897-002 **Date Received:** 10/18/21
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	NMANSEN
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:** 10/18/21
Lab Code: R2110897-003 **Date Received:** 10/18/21
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	NMANSEN
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:** R2110897
Project: Colesville SWs and Seeps/

Sample Name: SP-4 **Date Collected:** 10/18/21
Lab Code: R2110897-004 **Date Received:** 10/18/21
Sample Matrix: Water

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

Sample Name: SW-3 **Date Collected:** 10/18/21
Lab Code: R2110897-005 **Date Received:** 10/18/21
Sample Matrix: Water

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

Sample Name: SP-3 Water **Date Collected:** 10/18/21
Lab Code: R2110897-006 **Date Received:** 10/18/21
Sample Matrix: Water

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

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps/		

Sample Name:	SP-3 Water	**Date Collected:**	10/18/21
Lab Code:	R2110897-006	**Date Received:**	10/18/21
Sample Matrix:	Water		

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

Sample Name:	SP-3 Sediment	**Date Collected:**	10/18/21
Lab Code:	R2110897-007	**Date Received:**	10/18/21
Sample Matrix:	Sediment		

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

Sample Name:	SW-2	**Date Collected:**	10/18/21
Lab Code:	R2110897-008	**Date Received:**	10/18/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	NMANSEN
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:**	R2110897
Project:	Colesville SWs and Seeps/		

Sample Name:	SP-5 Effluent	**Date Collected:**	10/18/21
Lab Code:	R2110897-009	**Date Received:**	10/18/21
Sample Matrix:	Water		

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

Sample Name:	SP-5 Influent	**Date Collected:**	10/18/21
Lab Code:	R2110897-010	**Date Received:**	10/18/21
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
6010C	BDIAMOND	KMCLAEN
7470A	BDIAMOND	NMANSEN
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:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2110897-001	**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	10/22/21 16:31	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 16:31	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 16:31	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 16:31	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 16:31	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 16:31	
Acetone	5.0 U	10	5.0	1	10/22/21 16:31	
Benzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 16:31	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 16:31	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 16:31	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 16:31	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 16:31	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 16:31	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 16:31	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 16:31	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 16:31	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 16:31	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 16:31	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 16:31	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 16:31	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 16:31	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 16:31	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 16:31	
Styrene	0.20 U	5.0	0.20	1	10/22/21 16:31	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 16:31	
Toluene	0.20 U	5.0	0.20	1	10/22/21 16:31	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 16:31	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2110897-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	10/22/21 16:31	
Vinyl Chloride	0.20	U	5.0	0.20	1	10/22/21 16:31	
Xylenes, Total	0.23	U	5.0	0.23	1	10/22/21 16:31	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	10/22/21 16:31	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	10/22/21 16:31	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	10/22/21 16:31	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	10/22/21 16:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	10/22/21 16:31	
Dibromofluoromethane	104	80 - 116	10/22/21 16:31	
Toluene-d8	104	87 - 121	10/22/21 16:31	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2110897-002	**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	10/22/21 16:53	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 16:53	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 16:53	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 16:53	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 16:53	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 16:53	
Acetone	5.0 U	10	5.0	1	10/22/21 16:53	
Benzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 16:53	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 16:53	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 16:53	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 16:53	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 16:53	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 16:53	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 16:53	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 16:53	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 16:53	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 16:53	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 16:53	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 16:53	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 16:53	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 16:53	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 16:53	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 16:53	
Styrene	0.20 U	5.0	0.20	1	10/22/21 16:53	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 16:53	
Toluene	0.20 U	5.0	0.20	1	10/22/21 16:53	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 16:53	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2110897-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	10/22/21 16:53	
Vinyl Chloride	0.20 U	5.0	0.20	1	10/22/21 16:53	
Xylenes, Total	0.23 U	5.0	0.23	1	10/22/21 16:53	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	10/22/21 16:53	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	10/22/21 16:53	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	10/22/21 16:53	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	10/22/21 16:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	10/22/21 16:53	
Dibromofluoromethane	104	80 - 116	10/22/21 16:53	
Toluene-d8	104	87 - 121	10/22/21 16:53	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:15
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2110897-003	**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	10/22/21 17:15	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,1-Dichloroethane (1,1-DCA)	**0.42 J**	5.0	0.20	1	10/22/21 17:15	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 17:15	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 17:15	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 17:15	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 17:15	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 17:15	
Acetone	5.0 U	10	5.0	1	10/22/21 17:15	
Benzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 17:15	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 17:15	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 17:15	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 17:15	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 17:15	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 17:15	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 17:15	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 17:15	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 17:15	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 17:15	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 17:15	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 17:15	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 17:15	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 17:15	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 17:15	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 17:15	
Styrene	0.20 U	5.0	0.20	1	10/22/21 17:15	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 17:15	
Toluene	0.20 U	5.0	0.20	1	10/22/21 17:15	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 17:15	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:15
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-4	**Units:**	ug/L
Lab Code:	R2110897-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	10/22/21 17:15	
Vinyl Chloride	0.20	U	5.0	0.20	1	10/22/21 17:15	
Xylenes, Total	0.23	U	5.0	0.23	1	10/22/21 17:15	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	10/22/21 17:15	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	10/22/21 17:15	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	10/22/21 17:15	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	10/22/21 17:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	10/22/21 17:15	
Dibromofluoromethane	105	80 - 116	10/22/21 17:15	
Toluene-d8	103	87 - 121	10/22/21 17:15	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:25
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2110897-004	**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	10/22/21 17:36	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,1-Dichloroethane (1,1-DCA)	**15**	5.0	0.20	1	10/22/21 17:36	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 17:36	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 17:36	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,2-Dichlorobenzene	**0.20 J**	5.0	0.20	1	10/22/21 17:36	
1,2-Dichloroethane	**0.77 J**	5.0	0.20	1	10/22/21 17:36	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:36	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:36	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 17:36	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 17:36	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 17:36	
Acetone	5.0 U	10	5.0	1	10/22/21 17:36	
Benzene	**0.55 J**	5.0	0.20	1	10/22/21 17:36	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 17:36	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 17:36	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 17:36	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 17:36	
Chlorobenzene	**5.4**	5.0	0.20	1	10/22/21 17:36	
Chloroethane	**1.5 J**	5.0	0.23	1	10/22/21 17:36	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 17:36	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 17:36	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 17:36	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 17:36	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 17:36	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 17:36	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 17:36	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 17:36	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 17:36	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 17:36	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 17:36	
Styrene	0.20 U	5.0	0.20	1	10/22/21 17:36	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 17:36	
Toluene	0.20 U	5.0	0.20	1	10/22/21 17:36	
Trichloroethene (TCE)	**3.0 J**	5.0	0.20	1	10/22/21 17:36	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:25
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-4	**Units:**	ug/L
Lab Code:	R2110897-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	10/22/21 17:36	
Vinyl Chloride	**1.4**	**J**	5.0	0.20	1	10/22/21 17:36	
Xylenes, Total	0.23	U	5.0	0.23	1	10/22/21 17:36	
cis-1,2-Dichloroethene	**1.2**	**J**	5.0	0.23	1	10/22/21 17:36	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	10/22/21 17:36	
trans-1,2-Dichloroethene	**0.34**	**J**	5.0	0.20	1	10/22/21 17:36	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	10/22/21 17:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	10/22/21 17:36	
Dibromofluoromethane	103	80 - 116	10/22/21 17:36	
Toluene-d8	104	87 - 121	10/22/21 17:36	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:30
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2110897-005	**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	10/22/21 17:58	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,1-Dichloroethane (1,1-DCA)	**0.27 J**	5.0	0.20	1	10/22/21 17:58	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 17:58	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 17:58	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 17:58	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 17:58	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 17:58	
Acetone	5.0 U	10	5.0	1	10/22/21 17:58	
Benzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 17:58	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 17:58	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 17:58	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 17:58	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 17:58	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 17:58	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 17:58	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 17:58	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 17:58	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 17:58	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 17:58	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 17:58	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 17:58	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 17:58	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 17:58	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 17:58	
Styrene	0.20 U	5.0	0.20	1	10/22/21 17:58	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 17:58	
Toluene	0.20 U	5.0	0.20	1	10/22/21 17:58	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 17:58	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:30
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-3	**Units:**	ug/L
Lab Code:	R2110897-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	10/22/21 17:58	
Vinyl Chloride	0.20	U	5.0	0.20	1	10/22/21 17:58	
Xylenes, Total	0.23	U	5.0	0.23	1	10/22/21 17:58	
cis-1,2-Dichloroethene	0.23	U	5.0	0.23	1	10/22/21 17:58	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	10/22/21 17:58	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	10/22/21 17:58	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	10/22/21 17:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	10/22/21 17:58	
Dibromofluoromethane	105	80 - 116	10/22/21 17:58	
Toluene-d8	104	87 - 121	10/22/21 17:58	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2110897-006	**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	10/22/21 18:20	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,1,2-Trichloroethane	**0.36**	**J**	5.0	0.20	1	10/22/21 18:20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,1-Dichloroethane (1,1-DCA)	**15**		5.0	0.20	1	10/22/21 18:20	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	10/22/21 18:20	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	10/22/21 18:20	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,2-Dichlorobenzene	**0.51**	**J**	5.0	0.20	1	10/22/21 18:20	
1,2-Dichloroethane	**0.66**	**J**	5.0	0.20	1	10/22/21 18:20	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	10/22/21 18:20	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	10/22/21 18:20	
2-Butanone (MEK)	0.78	U	10	0.78	1	10/22/21 18:20	
2-Hexanone	0.20	U	10	0.20	1	10/22/21 18:20	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	10/22/21 18:20	
Acetone	5.0	U	10	5.0	1	10/22/21 18:20	
Benzene	**0.40**	**J**	5.0	0.20	1	10/22/21 18:20	
Bromodichloromethane	0.20	U	5.0	0.20	1	10/22/21 18:20	
Bromoform	0.25	U	5.0	0.25	1	10/22/21 18:20	
Bromomethane	0.70	U	5.0	0.70	1	10/22/21 18:20	
Carbon Disulfide	0.42	U	10	0.42	1	10/22/21 18:20	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	10/22/21 18:20	
Chlorobenzene	**24**		5.0	0.20	1	10/22/21 18:20	
Chloroethane	**1.8**	**J**	5.0	0.23	1	10/22/21 18:20	
Chloroform	0.24	U	5.0	0.24	1	10/22/21 18:20	
Chloromethane	0.28	U	5.0	0.28	1	10/22/21 18:20	
Cyclohexane	0.26	U	10	0.26	1	10/22/21 18:20	
Dibromochloromethane	0.20	U	5.0	0.20	1	10/22/21 18:20	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	10/22/21 18:20	
Dichloromethane	0.65	U	5.0	0.65	1	10/22/21 18:20	
Ethylbenzene	0.20	U	5.0	0.20	1	10/22/21 18:20	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	10/22/21 18:20	
Methyl Acetate	0.33	U	10	0.33	1	10/22/21 18:20	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	10/22/21 18:20	
Methylcyclohexane	0.20	U	10	0.20	1	10/22/21 18:20	
Styrene	0.20	U	5.0	0.20	1	10/22/21 18:20	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	10/22/21 18:20	
Toluene	0.20	U	5.0	0.20	1	10/22/21 18:20	
Trichloroethene (TCE)	**2.4**	**J**	5.0	0.20	1	10/22/21 18:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Water	**Units:**	ug/L
Lab Code:	R2110897-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24	U	5.0	0.24	1	10/22/21 18:20	
Vinyl Chloride	**2.6**	**J**	5.0	0.20	1	10/22/21 18:20	
Xylenes, Total	0.23	U	5.0	0.23	1	10/22/21 18:20	
cis-1,2-Dichloroethene	**3.9**	**J**	5.0	0.23	1	10/22/21 18:20	
cis-1,3-Dichloropropene	0.20	U	5.0	0.20	1	10/22/21 18:20	
trans-1,2-Dichloroethene	0.20	U	5.0	0.20	1	10/22/21 18:20	
trans-1,3-Dichloropropene	0.23	U	5.0	0.23	1	10/22/21 18:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	10/22/21 18:20	
Dibromofluoromethane	104	80 - 116	10/22/21 18:20	
Toluene-d8	105	87 - 121	10/22/21 18:20	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:00
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2110897-008	**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	10/22/21 18:42	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 18:42	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 18:42	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 18:42	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 18:42	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 18:42	
Acetone	5.0 U	10	5.0	1	10/22/21 18:42	
Benzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 18:42	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 18:42	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 18:42	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 18:42	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 18:42	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 18:42	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 18:42	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 18:42	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 18:42	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 18:42	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 18:42	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 18:42	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 18:42	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 18:42	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 18:42	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 18:42	
Styrene	0.20 U	5.0	0.20	1	10/22/21 18:42	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 18:42	
Toluene	0.20 U	5.0	0.20	1	10/22/21 18:42	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 18:42	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:00
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-2	**Units:**	ug/L
Lab Code:	R2110897-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	10/22/21 18:42	
Vinyl Chloride	0.20 U	5.0	0.20	1	10/22/21 18:42	
Xylenes, Total	0.23 U	5.0	0.23	1	10/22/21 18:42	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	10/22/21 18:42	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	10/22/21 18:42	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	10/22/21 18:42	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	10/22/21 18:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	10/22/21 18:42	
Dibromofluoromethane	105	80 - 116	10/22/21 18:42	
Toluene-d8	103	87 - 121	10/22/21 18:42	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2110897-009	**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)	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,1-Dichloroethane (1,1-DCA)	**6.4**	5.0	0.20	1	10/22/21 19:04	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 19:04	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 19:04	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,2-Dichloroethane	**0.26 J**	5.0	0.20	1	10/22/21 19:04	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 19:04	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 19:04	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 19:04	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 19:04	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 19:04	
Acetone	5.0 U	10	5.0	1	10/22/21 19:04	
Benzene	**0.28 J**	5.0	0.20	1	10/22/21 19:04	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 19:04	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 19:04	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 19:04	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 19:04	
Chlorobenzene	**2.5 J**	5.0	0.20	1	10/22/21 19:04	
Chloroethane	**1.1 J**	5.0	0.23	1	10/22/21 19:04	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 19:04	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 19:04	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 19:04	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 19:04	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 19:04	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 19:04	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 19:04	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 19:04	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 19:04	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 19:04	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 19:04	
Styrene	0.20 U	5.0	0.20	1	10/22/21 19:04	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 19:04	
Toluene	0.20 U	5.0	0.20	1	10/22/21 19:04	
Trichloroethene (TCE)	**0.82 J**	5.0	0.20	1	10/22/21 19:04	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Effluent	**Units:**	ug/L
Lab Code:	R2110897-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	10/22/21 19:04	
Vinyl Chloride	**0.44 J**	5.0	0.20	1	10/22/21 19:04	
Xylenes, Total	0.23 U	5.0	0.23	1	10/22/21 19:04	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	10/22/21 19:04	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	10/22/21 19:04	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	10/22/21 19:04	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	10/22/21 19:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	10/22/21 19:04	
Dibromofluoromethane	105	80 - 116	10/22/21 19:04	
Toluene-d8	105	87 - 121	10/22/21 19:04	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:45
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2110897-010	**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	10/22/21 19:26	
1,1,2,2-Tetrachloroethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,1,2-Trichloroethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,1-Dichloroethane (1,1-DCA)	**7.6**		5.0	0.20	1	10/22/21 19:26	
1,1-Dichloroethene (1,1-DCE)	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,2,4-Trichlorobenzene	0.34	U	5.0	0.34	1	10/22/21 19:26	
1,2-Dibromo-3-chloropropane (DBCP)	0.45	U	5.0	0.45	1	10/22/21 19:26	
1,2-Dibromoethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,2-Dichlorobenzene	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,2-Dichloroethane	**0.20**	**J**	5.0	0.20	1	10/22/21 19:26	
1,2-Dichloropropane	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,3-Dichlorobenzene	0.20	U	5.0	0.20	1	10/22/21 19:26	
1,4-Dichlorobenzene	0.20	U	5.0	0.20	1	10/22/21 19:26	
2-Butanone (MEK)	0.78	U	10	0.78	1	10/22/21 19:26	
2-Hexanone	0.20	U	10	0.20	1	10/22/21 19:26	
4-Methyl-2-pentanone	0.20	U	10	0.20	1	10/22/21 19:26	
Acetone	5.0	U	10	5.0	1	10/22/21 19:26	
Benzene	0.20	U	5.0	0.20	1	10/22/21 19:26	
Bromodichloromethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
Bromoform	0.25	U	5.0	0.25	1	10/22/21 19:26	
Bromomethane	0.70	U	5.0	0.70	1	10/22/21 19:26	
Carbon Disulfide	0.42	U	10	0.42	1	10/22/21 19:26	
Carbon Tetrachloride	0.34	U	5.0	0.34	1	10/22/21 19:26	
Chlorobenzene	**1.8**	**J**	5.0	0.20	1	10/22/21 19:26	
Chloroethane	**1.4**	**J**	5.0	0.23	1	10/22/21 19:26	
Chloroform	0.24	U	5.0	0.24	1	10/22/21 19:26	
Chloromethane	0.28	U	5.0	0.28	1	10/22/21 19:26	
Cyclohexane	0.26	U	10	0.26	1	10/22/21 19:26	
Dibromochloromethane	0.20	U	5.0	0.20	1	10/22/21 19:26	
Dichlorodifluoromethane (CFC 12)	0.21	U	5.0	0.21	1	10/22/21 19:26	
Dichloromethane	0.65	U	5.0	0.65	1	10/22/21 19:26	
Ethylbenzene	0.20	U	5.0	0.20	1	10/22/21 19:26	
Isopropylbenzene (Cumene)	0.20	U	5.0	0.20	1	10/22/21 19:26	
Methyl Acetate	0.33	U	10	0.33	1	10/22/21 19:26	
Methyl tert-Butyl Ether	0.20	U	5.0	0.20	1	10/22/21 19:26	
Methylcyclohexane	0.20	U	10	0.20	1	10/22/21 19:26	
Styrene	0.20	U	5.0	0.20	1	10/22/21 19:26	
Tetrachloroethene (PCE)	0.21	U	5.0	0.21	1	10/22/21 19:26	
Toluene	0.20	U	5.0	0.20	1	10/22/21 19:26	
Trichloroethene (TCE)	**0.45**	**J**	5.0	0.20	1	10/22/21 19:26	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:45
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Influent	**Units:**	ug/L
Lab Code:	R2110897-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	10/22/21 19:26	
Vinyl Chloride	**0.53 J**	5.0	0.20	1	10/22/21 19:26	
Xylenes, Total	0.23 U	5.0	0.23	1	10/22/21 19:26	
cis-1,2-Dichloroethene	**0.54 J**	5.0	0.23	1	10/22/21 19:26	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	10/22/21 19:26	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	10/22/21 19:26	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	10/22/21 19:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	10/22/21 19:26	
Dibromofluoromethane	101	80 - 116	10/22/21 19:26	
Toluene-d8	99	87 - 121	10/22/21 19:26	

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:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2110897-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/22/21 22:59	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 22:59	10/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/22/21 22:59	10/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/22/21 22:59	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 22:59	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 22:59	10/21/21	
Calcium, Total	6010C	**13200**		ug/L	1000	1	10/22/21 22:59	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:59	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 22:59	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 22:59	10/21/21	
Iron, Total	6010C	**200**		ug/L	100	1	10/22/21 22:59	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 22:59	10/21/21	
Magnesium, Total	6010C	**3000**		ug/L	1000	1	10/22/21 22:59	10/21/21	
Manganese, Total	6010C	**44**		ug/L	10	1	10/22/21 22:59	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:33	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 22:59	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 22:59	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:59	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 22:59	10/21/21	
Sodium, Total	6010C	**6100**		ug/L	1000	1	10/22/21 22:59	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:59	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 22:59	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 22:59	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:15
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2110897-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/22/21 23:02	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 23:02	10/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/22/21 23:02	10/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/22/21 23:02	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 23:02	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:02	10/21/21	
Calcium, Total	6010C	**12100**		ug/L	1000	1	10/22/21 23:02	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:02	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 23:02	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 23:02	10/21/21	
Iron, Total	6010C	**230**		ug/L	100	1	10/22/21 23:02	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:02	10/21/21	
Magnesium, Total	6010C	**2800**		ug/L	1000	1	10/22/21 23:02	10/21/21	
Manganese, Total	6010C	**60**		ug/L	10	1	10/22/21 23:02	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:36	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 23:02	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 23:02	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:02	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 23:02	10/21/21	
Sodium, Total	6010C	**5800**		ug/L	1000	1	10/22/21 23:02	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:02	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 23:02	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 23:02	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:25
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2110897-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**2590**		ug/L	100	1	10/22/21 23:06	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 23:06	10/21/21	
Arsenic, Total	6010C	**840**		ug/L	10	1	10/22/21 23:06	10/21/21	
Barium, Total	6010C	**225**		ug/L	20	1	10/22/21 23:06	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 23:06	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:06	10/21/21	
Calcium, Total	6010C	**56100**		ug/L	1000	1	10/22/21 23:06	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:06	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 23:06	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 23:06	10/21/21	
Iron, Total	6010C	**133000**		ug/L	1000	10	10/25/21 17:20	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:06	10/21/21	
Magnesium, Total	6010C	**11000**		ug/L	1000	1	10/22/21 23:06	10/21/21	
Manganese, Total	6010C	**7410**		ug/L	10	1	10/22/21 23:06	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:39	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 23:06	10/21/21	
Potassium, Total	6010C	**2900**		ug/L	2000	1	10/22/21 23:06	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:06	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 23:06	10/21/21	
Sodium, Total	6010C	**6100**		ug/L	1000	1	10/22/21 23:06	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:06	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 23:06	10/21/21	
Zinc, Total	6010C	**29**		ug/L	20	1	10/22/21 23:06	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:30
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2110897-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/22/21 23:09	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 23:09	10/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/22/21 23:09	10/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/22/21 23:09	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 23:09	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:09	10/21/21	
Calcium, Total	6010C	**11800**		ug/L	1000	1	10/22/21 23:09	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:09	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 23:09	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 23:09	10/21/21	
Iron, Total	6010C	**260**		ug/L	100	1	10/22/21 23:09	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:09	10/21/21	
Magnesium, Total	6010C	**2800**		ug/L	1000	1	10/22/21 23:09	10/21/21	
Manganese, Total	6010C	**54**		ug/L	10	1	10/22/21 23:09	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:41	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 23:09	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 23:09	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:09	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 23:09	10/21/21	
Sodium, Total	6010C	**5900**		ug/L	1000	1	10/22/21 23:09	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:09	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 23:09	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 23:09	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2110897-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/22/21 23:12	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 23:12	10/21/21	
Arsenic, Total	6010C	**16**		ug/L	10	1	10/22/21 23:12	10/21/21	
Barium, Total	6010C	**38**		ug/L	20	1	10/22/21 23:12	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 23:12	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:12	10/21/21	
Calcium, Total	6010C	**33600**		ug/L	1000	1	10/22/21 23:12	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:12	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 23:12	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 23:12	10/21/21	
Iron, Total	6010C	**8340**		ug/L	100	1	10/22/21 23:12	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:12	10/21/21	
Magnesium, Total	6010C	**6900**		ug/L	1000	1	10/22/21 23:12	10/21/21	
Manganese, Total	6010C	**3530**		ug/L	10	1	10/22/21 23:12	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:44	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 23:12	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 23:12	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:12	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 23:12	10/21/21	
Sodium, Total	6010C	**3500**		ug/L	1000	1	10/22/21 23:12	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:12	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 23:12	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 23:12	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:40
Sample Matrix:	Sediment	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Sediment	**Basis:**	Dry
Lab Code:	R2110897-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**10500**	mg/Kg	27	1	10/27/21 04:24	10/26/21	
Antimony, Total	6010C	8.1 U	mg/Kg	8.1	1	10/27/21 04:24	10/26/21	
Arsenic, Total	6010C	**49.4**	mg/Kg	1.3	1	10/27/21 04:24	10/26/21	
Barium, Total	6010C	**46.3**	mg/Kg	2.7	1	10/27/21 04:24	10/26/21	
Beryllium, Total	6010C	**0.43**	mg/Kg	0.40	1	10/27/21 04:24	10/26/21	
Cadmium, Total	6010C	0.67 U	mg/Kg	0.67	1	10/27/21 04:24	10/26/21	
Calcium, Total	6010C	**1050**	mg/Kg	130	1	10/27/21 04:24	10/26/21	
Chromium, Total	6010C	**14.2**	mg/Kg	1.3	1	10/27/21 04:24	10/26/21	
Cobalt, Total	6010C	**9.3**	mg/Kg	6.7	1	10/27/21 04:24	10/26/21	
Copper, Total	6010C	**19.7**	mg/Kg	2.7	1	10/27/21 04:24	10/26/21	
Iron, Total	6010C	**49000**	mg/Kg	270	10	10/27/21 05:36	10/26/21	
Lead, Total	6010C	**12.4**	mg/Kg	0.67	1	10/27/21 04:24	10/26/21	
Magnesium, Total	6010C	**3770**	mg/Kg	130	1	10/27/21 04:24	10/26/21	
Manganese, Total	6010C	**899**	mg/Kg	2.7	1	10/27/21 04:24	10/26/21	
Mercury, Total	7471B	0.025 U	mg/Kg	0.025	1	10/25/21 12:17	10/22/21	
Nickel, Total	6010C	**22.7**	mg/Kg	5.4	1	10/27/21 04:24	10/26/21	
Potassium, Total	6010C	**870**	mg/Kg	270	1	10/27/21 04:24	10/26/21	
Selenium, Total	6010C	1.3 U	mg/Kg	1.3	1	10/27/21 04:24	10/26/21	
Silver, Total	6010C	1.3 U	mg/Kg	1.3	1	10/27/21 04:24	10/26/21	
Sodium, Total	6010C	130 U	mg/Kg	130	1	10/27/21 04:24	10/26/21	
Thallium, Total	6010C	13 U	mg/Kg	13	10	10/27/21 05:36	10/26/21	
Vanadium, Total	6010C	**15.2**	mg/Kg	6.7	1	10/27/21 04:24	10/26/21	
Zinc, Total	6010C	**61.2**	mg/Kg	2.7	1	10/27/21 04:24	10/26/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:00
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2110897-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/22/21 23:15	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 23:15	10/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/22/21 23:15	10/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/22/21 23:15	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 23:15	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:15	10/21/21	
Calcium, Total	6010C	**8300**		ug/L	1000	1	10/22/21 23:15	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:15	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 23:15	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 23:15	10/21/21	
Iron, Total	6010C	**380**		ug/L	100	1	10/22/21 23:15	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 23:15	10/21/21	
Magnesium, Total	6010C	**2400**		ug/L	1000	1	10/22/21 23:15	10/21/21	
Manganese, Total	6010C	**29**		ug/L	10	1	10/22/21 23:15	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:46	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 23:15	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 23:15	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:15	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 23:15	10/21/21	
Sodium, Total	6010C	**5400**		ug/L	1000	1	10/22/21 23:15	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 23:15	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 23:15	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 23:15	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2110897-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/28/21 17:44	10/27/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/28/21 17:44	10/27/21	
Arsenic, Total	6010C	**172**		ug/L	10	1	10/28/21 17:44	10/27/21	
Barium, Total	6010C	**150**		ug/L	20	1	10/28/21 17:44	10/27/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/28/21 17:44	10/27/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:44	10/27/21	
Calcium, Total	6010C	**42700**		ug/L	1000	1	10/28/21 17:44	10/27/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:44	10/27/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/28/21 17:44	10/27/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/28/21 17:44	10/27/21	
Iron, Total	6010C	**28400**		ug/L	100	1	10/28/21 17:44	10/27/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:44	10/27/21	
Magnesium, Total	6010C	**9800**		ug/L	1000	1	10/28/21 17:44	10/27/21	
Manganese, Total	6010C	**6260**		ug/L	10	1	10/28/21 17:44	10/27/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/27/21 12:03	10/26/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/28/21 17:44	10/27/21	
Potassium, Total	6010C	**3100**		ug/L	2000	1	10/28/21 17:44	10/27/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:44	10/27/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/28/21 17:44	10/27/21	
Sodium, Total	6010C	**6900**		ug/L	1000	1	10/28/21 17:44	10/27/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:44	10/27/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/28/21 17:44	10/27/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/28/21 17:44	10/27/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:45
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2110897-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/28/21 17:47	10/27/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/28/21 17:47	10/27/21	
Arsenic, Total	6010C	**150**		ug/L	10	1	10/28/21 17:47	10/27/21	
Barium, Total	6010C	**145**		ug/L	20	1	10/28/21 17:47	10/27/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/28/21 17:47	10/27/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:47	10/27/21	
Calcium, Total	6010C	**42300**		ug/L	1000	1	10/28/21 17:47	10/27/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:47	10/27/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/28/21 17:47	10/27/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/28/21 17:47	10/27/21	
Iron, Total	6010C	**24700**		ug/L	100	1	10/28/21 17:47	10/27/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:47	10/27/21	
Magnesium, Total	6010C	**9600**		ug/L	1000	1	10/28/21 17:47	10/27/21	
Manganese, Total	6010C	**6160**		ug/L	10	1	10/28/21 17:47	10/27/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/27/21 12:05	10/26/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/28/21 17:47	10/27/21	
Potassium, Total	6010C	**3100**		ug/L	2000	1	10/28/21 17:47	10/27/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:47	10/27/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/28/21 17:47	10/27/21	
Sodium, Total	6010C	**6700**		ug/L	1000	1	10/28/21 17:47	10/27/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:47	10/27/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/28/21 17:47	10/27/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/28/21 17:47	10/27/21	

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:40
Sample Matrix:	Sediment	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Sediment	**Basis:**	As Received
Lab Code:	R2110897-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	**74.4**	Percent	-	1	10/23/21 11:45	

Field Data

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Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:05
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	F-6	**Basis:**	NA
Lab Code:	R2110897-002		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**128**	uMHOS/cm	-	1	10/18/21 10:05	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**68.0**	mV	-	1	10/18/21 10:05	
Oxygen, Dissolved	SM 4500-O G	**10.3**	mg/L	0.20	1	10/18/21 10:05	
pH, Field	SM 4500-H+ B	**7.13**	pH Units	-	1	10/18/21 10:05	
Temperature, Field	SM 2550 B	**11.0**	deg C	-	1	10/18/21 10:05	
Turbidity, Field	180.1	**2**	NTU	-	1	10/18/21 10:05	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:15
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-4	**Basis:**	NA
Lab Code:	R2110897-003		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**120**	uMHOS/cm	-	1	10/18/21 10:15	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**70.0**	mV	-	1	10/18/21 10:15	
Oxygen, Dissolved	SM 4500-O G	**10.1**	mg/L	0.20	1	10/18/21 10:15	
pH, Field	SM 4500-H+ B	**6.87**	pH Units	-	1	10/18/21 10:15	
Temperature, Field	SM 2550 B	**11.1**	deg C	-	1	10/18/21 10:15	
Turbidity, Field	180.1	**6.1**	NTU	-	1	10/18/21 10:15	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:25
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-4	**Basis:**	NA
Lab Code:	R2110897-004		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**412**	uMHOS/cm	-	1	10/18/21 10:25	
pH, Field	SM 4500-H+ B	**6.67**	pH Units	-	1	10/18/21 10:25	
Temperature, Field	SM 2550 B	**12.1**	deg C	-	1	10/18/21 10:25	
Turbidity, Field	180.1	**43.6**	NTU	-	1	10/18/21 10:25	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:30
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-3	**Basis:**	NA
Lab Code:	R2110897-005		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**115**	uMHOS/cm	-	1	10/18/21 10:30	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**-59.0**	mV	-	1	10/18/21 10:30	
Oxygen, Dissolved	SM 4500-O G	**10.0**	mg/L	0.20	1	10/18/21 10:30	
pH, Field	SM 4500-H+ B	**6.74**	pH Units	-	1	10/18/21 10:30	
Temperature, Field	SM 2550 B	**10.9**	deg C	-	1	10/18/21 10:30	
Turbidity, Field	180.1	**2.2**	NTU	-	1	10/18/21 10:30	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 10:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-3 Water	**Basis:**	NA
Lab Code:	R2110897-006		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**278**	uMHOS/cm	-	1	10/18/21 10:35	
pH, Field	SM 4500-H+ B	**6.46**	pH Units	-	1	10/18/21 10:35	
Temperature, Field	SM 2550 B	**10.9**	deg C	-	1	10/18/21 10:35	
Turbidity, Field	180.1	**5.4**	NTU	-	1	10/18/21 10:35	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:00
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SW-2	**Basis:**	NA
Lab Code:	R2110897-008		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**93**	uMHOS/cm	-	1	10/18/21 11:00	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	**72.0**	mV	-	1	10/18/21 11:00	
Oxygen, Dissolved	SM 4500-O G	**9.86**	mg/L	0.20	1	10/18/21 11:00	
pH, Field	SM 4500-H+ B	**6.57**	pH Units	-	1	10/18/21 11:00	
Temperature, Field	SM 2550 B	**10.8**	deg C	-	1	10/18/21 11:00	
Turbidity, Field	180.1	**3.8**	NTU	-	1	10/18/21 11:00	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:35
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Effluent	**Basis:**	NA
Lab Code:	R2110897-009		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**401**	uMHOS/cm	-	1	10/18/21 11:35	
pH, Field	SM 4500-H+ B	**6.36**	pH Units	-	1	10/18/21 11:35	
Temperature, Field	SM 2550 B	**13.7**	deg C	-	1	10/18/21 11:35	
Turbidity, Field	180.1	**8.1**	NTU	-	1	10/18/21 11:35	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21 11:45
Sample Matrix:	Water	**Date Received:**	10/18/21 15:50
Sample Name:	SP-5 Influent	**Basis:**	NA
Lab Code:	R2110897-010		

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	**415**	uMHOS/cm	-	1	10/18/21 11:45	
pH, Field	SM 4500-H+ B	**6.30**	pH Units	-	1	10/18/21 11:45	
Temperature, Field	SM 2550 B	**13.7**	deg C	-	1	10/18/21 11:45	
Turbidity, Field	180.1	**1.4**	NTU	-	1	10/18/21 11:45	

QC Summary Forms

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
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Client: Broome County Division of Solid Waste Management **Service Request:** R2110897
Project: Colesville SWs and 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	R2110897-001	100	104	104
F-6	R2110897-002	101	104	104
SW-4	R2110897-003	97	105	103
SP-4	R2110897-004	100	103	104
SW-3	R2110897-005	101	105	104
SP-3 Water	R2110897-006	100	104	105
SW-2	R2110897-008	102	105	103
SP-5 Effluent	R2110897-009	101	105	105
SP-5 Influent	R2110897-010	96	101	99
Method Blank	RQ2113479-06	99	102	102
Lab Control Sample	RQ2113479-03	101	107	101
F-6 MS	RQ2113479-07	108	107	106
F-6 DMS	RQ2113479-08	105	109	105

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21
Sample Matrix:	Water	**Date Received:**	10/18/21
		Date Analyzed:	10/22/21
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2110897-002	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike			Duplicate Matrix Spike					
		RQ2113479-07			RQ2113479-08					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	0.20 U	49.9	50.0	100	51.3	50.0	103	74-127	3	30
1,1,2,2-Tetrachloroethane	0.20 U	53.6	50.0	107	52.4	50.0	105	72-122	2	30
1,1,2-Trichloroethane	0.20 U	53.9	50.0	108	55.4	50.0	111	82-121	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	56.0	50.0	112	55.3	50.0	111	50-147	1	30
1,1-Dichloroethane (1,1-DCA)	0.20 U	59.6	50.0	119	59.7	50.0	119	74-132	<1	30
1,1-Dichloroethene (1,1-DCE)	0.20 U	55.3	50.0	111	56.2	50.0	112	71-118	2	30
1,2,4-Trichlorobenzene	0.34 U	59.1	50.0	118	58.9	50.0	118	69-122	<1	30
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	44.9	50.0	90	47.0	50.0	94	37-150	5	30
1,2-Dibromoethane	0.20 U	52.9	50.0	106	53.3	50.0	107	67-127	<1	30
1,2-Dichlorobenzene	0.20 U	53.9	50.0	108	53.9	50.0	108	77-120	<1	30
1,2-Dichloroethane	0.20 U	54.6	50.0	109	55.1	50.0	110	68-130	<1	30
1,2-Dichloropropane	0.20 U	55.4	50.0	111	56.9	50.0	114	79-124	3	30
1,3-Dichlorobenzene	0.20 U	55.3	50.0	111	54.0	50.0	108	83-121	2	30
1,4-Dichlorobenzene	0.20 U	50.0	50.0	100	50.2	50.0	100	82-120	<1	30
2-Butanone (MEK)	0.78 U	62.4	50.0	125	60.1	50.0	120	61-137	4	30
2-Hexanone	0.20 U	65.8	50.0	132	63.5	50.0	127	56-132	4	30
4-Methyl-2-pentanone	0.20 U	64.5	50.0	129	64.1	50.0	128	60-141	<1	30
Acetone	5.0 U	59.0	50.0	118	52.9	50.0	106	35-183	11	30
Benzene	0.20 U	56.4	50.0	113	56.7	50.0	113	76-129	<1	30
Bromodichloromethane	0.20 U	50.4	50.0	101	51.7	50.0	103	78-133	2	30
Bromoform	0.25 U	46.7	50.0	93	46.9	50.0	94	58-133	<1	30
Bromomethane	0.70 U	31.9	50.0	64	31.9	50.0	64	10-184	<1	30
Carbon Disulfide	0.42 U	55.6	50.0	111	58.6	50.0	117	59-140	5	30
Carbon Tetrachloride	0.34 U	45.9	50.0	92	47.9	50.0	96	65-135	4	30
Chlorobenzene	0.20 U	54.5	50.0	109	54.0	50.0	108	76-125	<1	30
Chloroethane	0.23 U	57.1	50.0	114	55.3	50.0	111	48-146	3	30
Chloroform	0.24 U	53.4	50.0	107	52.3	50.0	105	75-130	2	30
Chloromethane	0.28 U	83.0	50.0	166 *	81.5	50.0	163 *	55-160	2	30
Cyclohexane	0.26 U	63.4	50.0	127	64.2	50.0	128	52-145	1	30
Dibromochloromethane	0.20 U	48.2	50.0	96	48.7	50.0	97	72-128	<1	30
Dichlorodifluoromethane (CFC 12)	0.21 U	55.1	50.0	110	59.9	50.0	120	49-154	8	30
Dichloromethane	0.65 U	49.4	50.0	99	48.9	50.0	98	73-122	<1	30
Ethylbenzene	0.20 U	58.3	50.0	117	56.2	50.0	112	72-134	4	30

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	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	10/18/21
Sample Matrix:	Water	**Date Received:**	10/18/21
		Date Analyzed:	10/22/21
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	F-6	**Units:**	ug/L
Lab Code:	R2110897-002	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike			Duplicate Matrix Spike					
		RQ2113479-07			RQ2113479-08					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Isopropylbenzene (Cumene)	0.20 U	60.7	50.0	121	59.2	50.0	118	77-128	2	30
Methyl Acetate	0.33 U	61.9	50.0	124 *	59.4	50.0	119	26-121	4	30
Methyl tert-Butyl Ether	0.20 U	45.7	50.0	91	46.6	50.0	93	75-119	2	30
Methylcyclohexane	0.20 U	71.4	50.0	143	70.8	50.0	142	45-146	<1	30
Styrene	0.20 U	54.5	50.0	109	53.6	50.0	107	74-136	2	30
Tetrachloroethene (PCE)	0.21 U	58.5	50.0	117	60.0	50.0	120	72-125	3	30
Toluene	0.20 U	55.8	50.0	112	55.7	50.0	111	79-119	<1	30
Trichloroethene (TCE)	0.20 U	55.0	50.0	110	56.6	50.0	113	74-122	3	30
Trichlorofluoromethane (CFC 11)	0.24 U	53.1	50.0	106	51.6	50.0	103	71-136	3	30
Vinyl Chloride	0.20 U	64.8	50.0	130	63.0	50.0	126	74-159	3	30
cis-1,2-Dichloroethene	0.23 U	55.4	50.0	111	53.9	50.0	108	77-127	3	30
cis-1,3-Dichloropropene	0.20 U	44.4	50.0	89	46.8	50.0	94	52-134	5	30
trans-1,2-Dichloroethene	0.20 U	54.8	50.0	110	55.9	50.0	112	73-118	2	30
trans-1,3-Dichloropropene	0.23 U	40.8	50.0	82	43.5	50.0	87	71-133	6	30

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.

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2113479-06	**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	10/22/21 14:42	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	10/22/21 14:42	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	10/22/21 14:42	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
2-Butanone (MEK)	0.78 U	10	0.78	1	10/22/21 14:42	
2-Hexanone	0.20 U	10	0.20	1	10/22/21 14:42	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	10/22/21 14:42	
Acetone	5.0 U	10	5.0	1	10/22/21 14:42	
Benzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
Bromodichloromethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
Bromoform	0.25 U	5.0	0.25	1	10/22/21 14:42	
Bromomethane	0.70 U	5.0	0.70	1	10/22/21 14:42	
Carbon Disulfide	0.42 U	10	0.42	1	10/22/21 14:42	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	10/22/21 14:42	
Chlorobenzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
Chloroethane	0.23 U	5.0	0.23	1	10/22/21 14:42	
Chloroform	0.24 U	5.0	0.24	1	10/22/21 14:42	
Chloromethane	0.28 U	5.0	0.28	1	10/22/21 14:42	
Cyclohexane	0.26 U	10	0.26	1	10/22/21 14:42	
Dibromochloromethane	0.20 U	5.0	0.20	1	10/22/21 14:42	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	10/22/21 14:42	
Dichloromethane	0.65 U	5.0	0.65	1	10/22/21 14:42	
Ethylbenzene	0.20 U	5.0	0.20	1	10/22/21 14:42	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	10/22/21 14:42	
Methyl Acetate	0.33 U	10	0.33	1	10/22/21 14:42	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	10/22/21 14:42	
Methylcyclohexane	0.20 U	10	0.20	1	10/22/21 14:42	
Styrene	0.20 U	5.0	0.20	1	10/22/21 14:42	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	10/22/21 14:42	
Toluene	0.20 U	5.0	0.20	1	10/22/21 14:42	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	10/22/21 14:42	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2113479-06	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	10/22/21 14:42	
Vinyl Chloride	0.20 U	5.0	0.20	1	10/22/21 14:42	
Xylenes, Total	0.23 U	5.0	0.23	1	10/22/21 14:42	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	10/22/21 14:42	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	10/22/21 14:42	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	10/22/21 14:42	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	10/22/21 14:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	10/22/21 14:42	
Dibromofluoromethane	102	80 - 116	10/22/21 14:42	
Toluene-d8	102	87 - 121	10/22/21 14:42	

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Water

Service Request: R2110897
Date Analyzed: 10/22/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2113479-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.4	20.0	97	75-125
1,1,2,2-Tetrachloroethane	8260C	20.3	20.0	102	78-126
1,1,2-Trichloroethane	8260C	20.5	20.0	102	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	22.8	20.0	114	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	23.7	20.0	118	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	22.6	20.0	113	71-118
1,2,4-Trichlorobenzene	8260C	24.1	20.0	120	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	16.4	20.0	82	55-136
1,2-Dibromoethane	8260C	20.7	20.0	103	82-127
1,2-Dichlorobenzene	8260C	20.7	20.0	103	80-119
1,2-Dichloroethane	8260C	22.3	20.0	112	71-127
1,2-Dichloropropane	8260C	21.5	20.0	108	80-119
1,3-Dichlorobenzene	8260C	21.6	20.0	108	83-121
1,4-Dichlorobenzene	8260C	19.4	20.0	97	79-119
2-Butanone (MEK)	8260C	21.3	20.0	107	61-137
2-Hexanone	8260C	21.8	20.0	109	63-124
4-Methyl-2-pentanone	8260C	22.7	20.0	113	66-124
Acetone	8260C	21.4	20.0	107	40-161
Benzene	8260C	21.4	20.0	107	79-119
Bromodichloromethane	8260C	20.2	20.0	101	81-123
Bromoform	8260C	17.8	20.0	89	65-146
Bromomethane	8260C	12.9	20.0	65	42-166
Carbon Disulfide	8260C	23.8	20.0	119	66-128
Carbon Tetrachloride	8260C	18.6	20.0	93	70-127
Chlorobenzene	8260C	20.8	20.0	104	80-121
Chloroethane	8260C	22.8	20.0	114	62-131
Chloroform	8260C	21.0	20.0	105	79-120
Chloromethane	8260C	32.7	20.0	163 *	65-135
Cyclohexane	8260C	24.4	20.0	122 *	69-120
Dibromochloromethane	8260C	18.6	20.0	93	72-128
Dichlorodifluoromethane (CFC 12)	8260C	23.9	20.0	119	59-155
Dichloromethane	8260C	20.3	20.0	101	73-122
Ethylbenzene	8260C	21.5	20.0	107	76-120

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Water

Service Request: R2110897
Date Analyzed: 10/22/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2113479-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	22.4	20.0	112	77-128
Methyl Acetate	8260C	24.8	20.0	124	61-133
Methyl tert-Butyl Ether	8260C	18.3	20.0	91	75-118
Methylcyclohexane	8260C	26.5	20.0	132 *	51-129
Styrene	8260C	20.9	20.0	105	80-124
Tetrachloroethene (PCE)	8260C	22.1	20.0	111	72-125
Toluene	8260C	21.5	20.0	107	79-119
Trichloroethene (TCE)	8260C	22.5	20.0	112	74-122
Trichlorofluoromethane (CFC 11)	8260C	22.0	20.0	110	71-136
Vinyl Chloride	8260C	25.8	20.0	129	74-159
cis-1,2-Dichloroethene	8260C	21.7	20.0	108	80-121
cis-1,3-Dichloropropene	8260C	17.5	20.0	88	77-122
trans-1,2-Dichloroethene	8260C	21.9	20.0	109	73-118
trans-1,3-Dichloropropene	8260C	16.1	20.0	81	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:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R2110897-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	10/27/21 04:18	10/26/21	
Antimony, Total	6010C	6.0	U	mg/Kg	6.0	1	10/27/21 04:18	10/26/21	
Arsenic, Total	6010C	1.0	U	mg/Kg	1.0	1	10/27/21 04:18	10/26/21	
Barium, Total	6010C	2.0	U	mg/Kg	2.0	1	10/27/21 04:18	10/26/21	
Beryllium, Total	6010C	0.30	U	mg/Kg	0.30	1	10/27/21 04:18	10/26/21	
Cadmium, Total	6010C	0.50	U	mg/Kg	0.50	1	10/27/21 04:18	10/26/21	
Calcium, Total	6010C	100	U	mg/Kg	100	1	10/27/21 04:18	10/26/21	
Chromium, Total	6010C	1.0	U	mg/Kg	1.0	1	10/27/21 04:18	10/26/21	
Cobalt, Total	6010C	5.0	U	mg/Kg	5.0	1	10/27/21 04:18	10/26/21	
Copper, Total	6010C	2.0	U	mg/Kg	2.0	1	10/27/21 04:18	10/26/21	
Iron, Total	6010C	20	U	mg/Kg	20	1	10/27/21 04:18	10/26/21	
Lead, Total	6010C	0.50	U	mg/Kg	0.50	1	10/27/21 04:18	10/26/21	
Magnesium, Total	6010C	100	U	mg/Kg	100	1	10/27/21 04:18	10/26/21	
Manganese, Total	6010C	2.0	U	mg/Kg	2.0	1	10/27/21 04:18	10/26/21	
Mercury, Total	7471B	0.020	U	mg/Kg	0.020	1	10/25/21 11:00	10/22/21	
Nickel, Total	6010C	4.0	U	mg/Kg	4.0	1	10/27/21 04:18	10/26/21	
Potassium, Total	6010C	200	U	mg/Kg	200	1	10/27/21 04:18	10/26/21	
Selenium, Total	6010C	1.0	U	mg/Kg	1.0	1	10/27/21 04:18	10/26/21	
Silver, Total	6010C	1.0	U	mg/Kg	1.0	1	10/27/21 04:18	10/26/21	
Sodium, Total	6010C	100	U	mg/Kg	100	1	10/27/21 04:18	10/26/21	
Thallium, Total	6010C	1.0	U	mg/Kg	1.0	1	10/27/21 04:18	10/26/21	
Vanadium, Total	6010C	5.0	U	mg/Kg	5.0	1	10/27/21 04:18	10/26/21	
Zinc, Total	6010C	2.0	U	mg/Kg	2.0	1	10/27/21 04:18	10/26/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2110897-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	10/22/21 22:49	10/21/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/22/21 22:49	10/21/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/22/21 22:49	10/21/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/22/21 22:49	10/21/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 22:49	10/21/21	
Calcium, Total	6010C	1000	U	ug/L	1000	1	10/22/21 22:49	10/21/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/22/21 22:49	10/21/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/22/21 22:49	10/21/21	
Iron, Total	6010C	100	U	ug/L	100	1	10/22/21 22:49	10/21/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/22/21 22:49	10/21/21	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	10/22/21 22:49	10/21/21	
Manganese, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/22/21 11:00	10/21/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/22/21 22:49	10/21/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/22/21 22:49	10/21/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Sodium, Total	6010C	1000	U	ug/L	1000	1	10/22/21 22:49	10/21/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/22/21 22:49	10/21/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/22/21 22:49	10/21/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/22/21 22:49	10/21/21	

Analytical Report

Client:	Broome County Division of Solid Waste Management	**Service Request:**	R2110897
Project:	Colesville SWs and Seeps	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2110897-MB3		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100	U	ug/L	100	1	10/28/21 17:37	10/27/21	
Antimony, Total	6010C	60	U	ug/L	60	1	10/28/21 17:37	10/27/21	
Arsenic, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Barium, Total	6010C	20	U	ug/L	20	1	10/28/21 17:37	10/27/21	
Beryllium, Total	6010C	3.0	U	ug/L	3.0	1	10/28/21 17:37	10/27/21	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:37	10/27/21	
Calcium, Total	6010C	1000	U	ug/L	1000	1	10/28/21 17:37	10/27/21	
Chromium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Cobalt, Total	6010C	50	U	ug/L	50	1	10/28/21 17:37	10/27/21	
Copper, Total	6010C	20	U	ug/L	20	1	10/28/21 17:37	10/27/21	
Iron, Total	6010C	100	U	ug/L	100	1	10/28/21 17:37	10/27/21	
Lead, Total	6010C	5.0	U	ug/L	5.0	1	10/28/21 17:37	10/27/21	
Magnesium, Total	6010C	1000	U	ug/L	1000	1	10/28/21 17:37	10/27/21	
Manganese, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Mercury, Total	7470A	0.20	U	ug/L	0.20	1	10/27/21 11:55	10/26/21	
Nickel, Total	6010C	40	U	ug/L	40	1	10/28/21 17:37	10/27/21	
Potassium, Total	6010C	2000	U	ug/L	2000	1	10/28/21 17:37	10/27/21	
Selenium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Silver, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Sodium, Total	6010C	1000	U	ug/L	1000	1	10/28/21 17:37	10/27/21	
Thallium, Total	6010C	10	U	ug/L	10	1	10/28/21 17:37	10/27/21	
Vanadium, Total	6010C	50	U	ug/L	50	1	10/28/21 17:37	10/27/21	
Zinc, Total	6010C	20	U	ug/L	20	1	10/28/21 17:37	10/27/21	

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Sediment

Service Request: R2110897
Date Analyzed: 10/25/21 - 10/27/21

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R2110897-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	199	200	100	80-120
Antimony, Total	6010C	46.8	50.0	94	80-120
Arsenic, Total	6010C	3.82	4.0	96	80-120
Barium, Total	6010C	208	200	104	80-120
Beryllium, Total	6010C	5.07	5.00	101	80-120
Cadmium, Total	6010C	5.16	5.00	103	80-120
Calcium, Total	6010C	210	200	105	80-120
Chromium, Total	6010C	20.8	20.0	104	80-120
Cobalt, Total	6010C	52.7	50.0	105	80-120
Copper, Total	6010C	25.6	25.0	102	80-120
Iron, Total	6010C	105	100	105	80-120
Lead, Total	6010C	50.4	50.0	101	80-120
Magnesium, Total	6010C	200	200	99	80-120
Manganese, Total	6010C	51.0	50.0	102	80-120
Mercury, Total	7471B	0.102	0.100	102	80-120
Nickel, Total	6010C	52.5	50.0	105	80-120
Potassium, Total	6010C	1970	2000	99	80-120
Selenium, Total	6010C	87.5	101	87	80-120
Silver, Total	6010C	4.9	5.0	98	80-120
Sodium, Total	6010C	2140	2000	107	80-120
Thallium, Total	6010C	185	200	92	80-120
Vanadium, Total	6010C	51.3	50.0	103	80-120
Zinc, Total	6010C	49.7	50.0	99	80-120

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Water

Service Request: R2110897
Date Analyzed: 10/22/21 - 10/28/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2110897-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	1980	2000	99	80-120
Antimony, Total	6010C	488	500	98	80-120
Arsenic, Total	6010C	41	40	102	80-120
Barium, Total	6010C	2030	2000	102	80-120
Beryllium, Total	6010C	50.2	50.0	100	80-120
Cadmium, Total	6010C	50.6	50.0	101	80-120
Calcium, Total	6010C	2000	2000	101	80-120
Chromium, Total	6010C	205	200	102	80-120
Cobalt, Total	6010C	513	500	103	80-120
Copper, Total	6010C	243	250	97	80-120
Iron, Total	6010C	1010	1000	101	80-120
Lead, Total	6010C	496	500	99	80-120
Magnesium, Total	6010C	1900	2000	97	80-120
Manganese, Total	6010C	498	500	100	80-120
Mercury, Total	7470A	1.03	1.00	103	80-120
Nickel, Total	6010C	507	500	101	80-120
Potassium, Total	6010C	19100	20000	96	80-120
Selenium, Total	6010C	973	1010	96	80-120
Silver, Total	6010C	48	50	96	80-120
Sodium, Total	6010C	19800	20000	99	80-120
Thallium, Total	6010C	1840	2000	92	80-120
Vanadium, Total	6010C	496	500	99	80-120
Zinc, Total	6010C	496	500	99	80-120

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Water

Service Request: R2110897
Date Analyzed: 10/27/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2110897-LCS4

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

Client: Broome County Division of Solid Waste Management
Project: Colesville SWs and Seeps
Sample Matrix: Water

Service Request: R2110897
Date Analyzed: 10/22/21

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

			Lab Control Sample			Duplicate Lab Control Sample				
			R2110897-LCS2			R2110897-DLCS2				
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010C	2020	2000	101	1980	2000	99	80-120	2	20
Antimony, Total	6010C	489	500	98	481	500	96	80-120	2	20
Arsenic, Total	6010C	41	40	102	39	40	97	80-120	5	20
Barium, Total	6010C	2060	2000	103	2020	2000	101	80-120	2	20
Beryllium, Total	6010C	51.6	50.0	103	50.8	50.0	102	80-120	2	20
Cadmium, Total	6010C	51.7	50.0	103	51.1	50.0	102	80-120	1	20
Calcium, Total	6010C	2100	2000	104	2000	2000	102	80-120	2	20
Chromium, Total	6010C	208	200	104	204	200	102	80-120	2	20
Cobalt, Total	6010C	525	500	105	517	500	103	80-120	2	20
Copper, Total	6010C	250	250	100	246	250	98	80-120	2	20
Iron, Total	6010C	1030	1000	103	1010	1000	101	80-120	2	20
Lead, Total	6010C	509	500	102	501	500	100	80-120	2	20
Magnesium, Total	6010C	2000	2000	100	2000	2000	98	80-120	2	20
Manganese, Total	6010C	507	500	101	499	500	100	80-120	2	20
Nickel, Total	6010C	524	500	105	515	500	103	80-120	2	20
Potassium, Total	6010C	19700	20000	98	19300	20000	96	80-120	2	20
Selenium, Total	6010C	989	1010	98	980	1010	97	80-120	<1	20
Silver, Total	6010C	49	50	98	48	50	96	80-120	1	20
Sodium, Total	6010C	20400	20000	102	20000	20000	100	80-120	2	20
Thallium, Total	6010C	1880	2000	94	1860	2000	93	80-120	<1	20
Vanadium, Total	6010C	508	500	102	498	500	100	80-120	2	20
Zinc, Total	6010C	512	500	102	507	500	101	80-120	1	20

APPENDIX B
Molasses Solution Injection Volumes

Injection of Molasses Solution, August 2021
Colesville Landfill
Broome County, New York.

Annual (2021) Molasses Injection
Colesville Landfill Site
Broome County, NY

August 11-12, 2021

Molasses to Water Ratio: 4%

Injection Well ID	Solution Injection Quantity (Gallons)	Notes
PW-6	141.5	
GMMW-1	748.2	*(+)138 gallons of extra product added at end of injection on 8/12
IW-1	111.3	
IW-2	107.0	
IW-3	121.6	
IW-4	1024.0	
IW-5	1060.0	
IW-6	654.8	
IW-7	109.2	
IW-8	107.2	
IW-9	105.4	
Total Gallons Injected	4290.2	4428.2

APPENDIX C
Inspection and Certification Form

Colesville Landfill Inspection Checklist

Date: 10/18/2021 **Time:** 12:00 PM

Inspected by: Emily Giordano and Deb Smith

Weather Conditions: 45 degrees F and cloudy/rainy

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:

- Well PW-9 is broken.

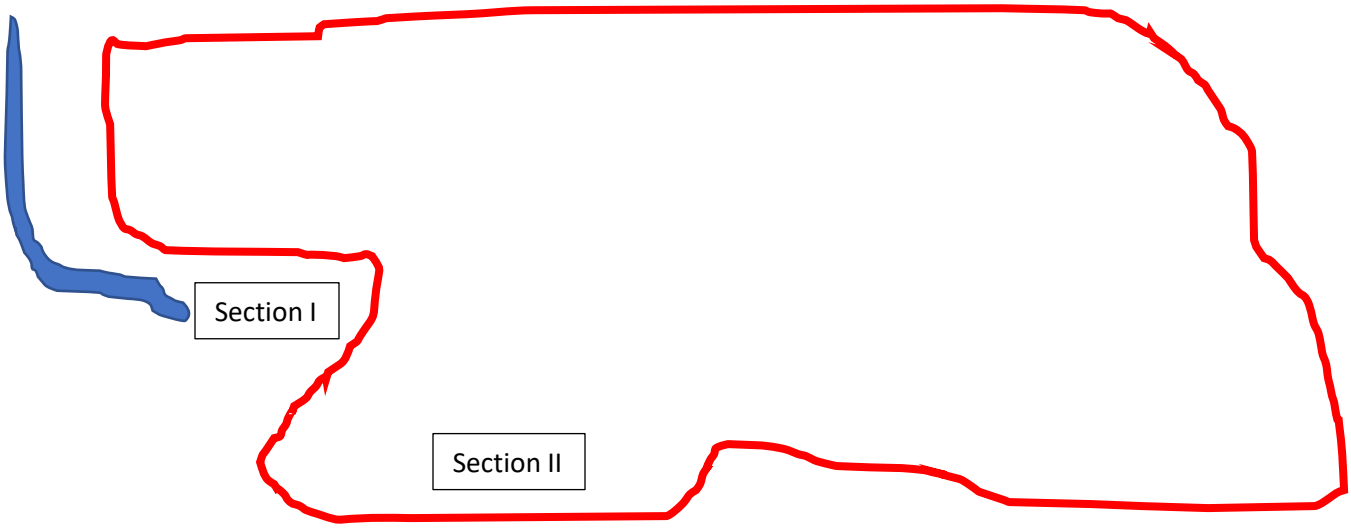
- Remnants of a mattress and frame left on river property.

- Tree blocking path near river property has been moved.

- Pipe needs to be cleaned in SP-5.

- Tree down and blocking entrance to SP-5.

- 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 Giordano, Solid Waste Management Specialist and Debra Smith, DSWM Director. In addition to the landfill facility, the surface water and springs and off-site properties were inspection 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 will have to be fixed since it is partially knocked over.

Remnants of mattress and frame will be removed and disposed of at the active landfill.

Barrier will be put in place to block path on property from being used.

The pipe from SP-5 will be cleaned to help with discharge of flow.

The tree blocking the entrance to SP-5 will be removed for better access.

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

Inspector's Signature:

Inspector: Emily E. Giordano **Date:** 10/25/2021

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: 10/18/2021 12:00 PM

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

Weather Conditions: 50 degrees F, cloudy/rainy

Describe inspection observations: A site-wide inspection was performed by Broome County staff Emily Giordano and Debra Smith, DSWM Director. 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:

1. A work plan will be developed and implemented to repair the settlement areas. 2. PW-9 will be fixed since it is partially knocked over. 3. Remnants of mattress and frame will be removed and properly disposed from the river property. 4. The pipe from SP-5 will be cleaned to help with discharge of flow. 5. The tree blocking the entrance to SP-5 will be removed for better access. 6. The erosion on the road will be repaired.

ATTACH PHOTOGRAPHS OF DEFICIENT AREAS OR ITEMS OBSERVED DURING THE INSPECTION

Inspector's Signature:

Signature:  Date: 10/25/2021

December 2021

Updates at Colesville Landfill

- Tree at entrance near SP-5 has been removed.
- Trash was removed from property near river.
- Road has some erosion on south side of access drive. Will reevaluate options and address next spring.

- Beaver dam located at outlet of pond. Photo below taken 11/18/2021. As of 12/13/2021, 2 beavers have been relocated from the site and the dam was removed to level out the water in the pond. Dam was rebuilt shortly after and there are continuing efforts by Broome County personnel to prevent this from continuing.

- PW-9 Broken Well. Capped and cover. Dug out around it to eventually replace.

- SP-5 outlet pipe dugout and exposed. Pipe was snaked and cleanout manhole was checked.

- SP-5 Cleanout Manhole

- Settlement Area on southside of landfill

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, 2021 through December 31, 2021

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

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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 2021 Period

- On 8/10/2020-8/12/2020, 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.
- SP-5 drainage pipe was cleaned out and snaked on 11/18/2021. Some build-up at outlet was removed to help with flow and prevent back-up.
- The landfill cap was mowed in late July 2021.
- Some surface sediment was removed in the area of SP-3 the week of June 7, 2021.

- 2 beavers were removed from pond on east of property at the end of November. Dam was removed and water level dropped. A week later the dam was built again. Traps have been reset and efforts are continuing.

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 surface sediment by SP-3
- 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. Hirsh _____ 10/25/2021

(signed) (date)

The experience to
listen
The power to
solve℠

Barton
&Loguidice

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