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Subject:
2020 Annual Monitoring Report, Colesville Landfill
Broome County, New York. (Site No. 704010).

ENVIRONMENT

Date:
December 16, 2020

Dear Mr. Long:

Contact:
Steven M. Feldman

This Annual Monitoring Report (report) was prepared 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 and ARCADIS 2015), which was approved by the New York State Department of Environmental Conservation (NYSDEC).

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This 2020 Annual Monitoring Report describes the collection and analysis of the following data:

- Groundwater data collected in November 2020;
- Surface water and spring water data collected in May and November 2020;
- SP-5 remediation system influent/effluent data collected in May and November 2020; and,
- SP-3 sediment data collected in May and November 2020.

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

METHODOLOGY

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.

Groundwater Monitoring

Groundwater monitoring performed in November 2020 consisted of 5th Quarter groundwater monitoring from 14 monitoring wells and is described in the SMP Monitoring Schedule. The samples were collected and analyzed by the laboratory (ALS) for volatile organic compounds (VOCs) and field analyzed for pH, temperature, oxidation-reduction potential (ORP), turbidity and specific conductance. Samples from a subset of monitoring wells were selectively analyzed for total organic carbon (TOC), total and dissolved iron, manganese, nitrate, nitrite, sulfate and light hydrocarbons (ethene, ethane and methane).

Surface Water Monitoring

Surface water samples were collected at the SW-2, SW-3, SW-4, and F-6 locations during the May and November 2020 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.

Spring Water and Sediment Monitoring

Spring water samples were collected at the SP-2, SP-3, and SP-4 locations during the May 2020 sampling event; only SP-3 was sampled in November 2020 because there was no spring flow at SP-2 and SP-4 due to very dry conditions. 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. On June 26, ALS returned to the site to resample the SP-2 location due to suspected anomalous VOC concentrations observed in the sample collected in May 2020. The spring water quality during 2020 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 May and November 2020 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.

Spring Water Remediation System Performance Monitoring

SP-5 Spring Water Remediation System OM&M was conducted during the May and November 2020 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.

RESULTS

The results of the environmental effectiveness and remediation system performance monitoring for the reporting period are summarized below, by environmental medium. Groundwater analytical data from September 2019 are also included to support a comparative evaluation of concentrations with the previous sampling event. An electronic copy of the reporting period laboratory analytical results is included in Appendix A.

Groundwater Quality

Analytical results for VOCs in groundwater samples collected during the reporting period and the previous groundwater monitoring in September 2019 are provided in Table 1. The locations of monitoring wells are shown on Figure 1.

As shown in Table 1, landfill perimeter monitoring well PW-7 exhibited a significant decrease in the number of VOCs detected when compared with 2019 results, and also displayed a decreasing concentration trend. The only VOCs detected above their respective Ambient Water Quality Standard and Guidance Value (SGV) in November 2020 were 1,1-dichloroethane (DCA) and cis-1,2-dichloroethene (DCE) at 14 µg/L and 16 µg/L, respectively. In addition to total VOC (TVOC) concentrations in PW-7 showing a relative decrease from 2019 to 2020, there has been a significant declining trend in TVOC concentrations observed since September 2014. Landfill perimeter monitoring well GMMW-7 also exhibited decreasing TVOC concentrations from 2019 to 2020, indicating the potential of a decreasing trend in VOC mass emanating from beneath the landfill.

Downgradient from the landfill perimeter in the mid-plume area (i.e., GMMW-5, GMMW-6, and GMMW-2), concentrations of chlorinated ethenes have significantly decreased over time as a result of the in-situ reactive zone (IRZ) enhanced reductive dechlorination (ERD). The primary VOCs present in groundwater in the mid-plume area are DCA and chloroethane (CA).

Further downgradient in monitoring wells near East Windsor Road (i.e., PW-4, PW-3 and W-16S), TVOC concentrations range from 5.6 µg/L to 23 µg/L. Former recovery well GMPW-4 has exhibited a decreasing trend in TVOC concentrations since 2014 and shows more recent stable concentrations of several VOCs, with TVOC concentrations at 59 µg/L in November 2020.

Concentrations of VOCs south of East Windsor Road (i.e., W-18 and W-20S) were also consistent with previous sampling results. TVOC concentrations in W-18 (12 µg/L) continue to show a decreasing trend and W-20S remains below detection limits.

Table 2 provides a summary of the geochemical monitoring results including general chemistry, inorganics, field parameters and dissolved gas parameters. Analytical data indicate that groundwater geochemistry in the vicinity of the injection wells (i.e., GMMW-5) has been shifting back towards more highly anaerobic and reducing conditions as a result of restarting molasses injections. This observation is supported by the following:

- Nitrate concentrations in groundwater monitoring wells in close proximity to and downgradient of the injection well network are considerably below the baseline concentration of 0.632 mg/L, at non-detect concentrations. The non-detect concentrations of nitrate are an indicator of reducing conditions.
- Dissolved (filtered) iron concentrations have increased in monitoring wells in close proximity to the injection well network. The highest dissolved iron concentrations are observed downgradient of the injection well network at monitoring wells GMMW-5 (74.2 mg/L) and GMMW-6 (22.2 mg/l).
- Ethene and ethane concentrations remained elevated in close proximity to and downgradient of the injection well network, and methane concentrations increased significantly in GMMW-5 and GMMW-6.

Surface Water Quality

Surface water quality analytical results for May and November 2020 are summarized in Table 3. As shown in Table 3, surface water quality remained in compliance with applicable water quality standards. 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.

Spring Water Quality

The embankment of the North Stream was inspected for springs during the site visits in May and November 2020. During inspection events, iron hydroxide staining was observed around the SP-2, SP-3, and SP-4 springs and the SP-5-effluent area during the May 2020 inspection. These observations have been generally consistent with conditions observed over the past several years. During the November 2020 sampling event, there was no evidence of spring water (and little to no staining) emanating from the SP-2 area or the SP-4 area, and samples were not collected from those areas. Spring water conditions at SP-3 and SP-5 were generally consistent with conditions observed in May 2020 and over the past several years.

Spring water samples were collected at the SP-2, SP-3, and SP-4 locations following the May 2020 inspection and at SP-3 only during the November sampling event. Spring water quality analytical results are summarized in Table 4. The concentration of VOCs detected at SP-2 in May 2020 was not consistent with historic observations in this area. Therefore, the SP-2 location was resampled in June 2020 and the results indicated non-detect concentrations except for a trace level of trichloroethene (0.35 µg/L). The June 2020 data are consistent with historical VOC results at SP-2. Relatively low concentrations of several VOCs were detected at the SP-3 spring water location during 2020, with generally consistent results observed in May and November. VOC concentrations at SP-4 in May 2020 were detected at relatively low levels, were consistent with results observed during 2019 and were in compliance with water quality standards.

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. Spring water VOC concentrations in November 2020 only exceeded the NYSDEC Part 703 Water Quality Standards (WQS) for Class C fresh surface waters for chlorobenzene (12 µg/L) at SP-3. All other VOC compounds were below the applicable WQS or non-detect. Where WQSs were not available, the NYSDEC Division of Water Technical Operational Guidance Series (TOGS 1.1.1) standards and guidance values were listed for comparative purposes. 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.

In general, the concentrations of metals were below their respective WQS with the exception of iron, which was present in all spring water samples at levels that exceeded the criteria for protection of aquatic life from chronic effects. However, these springs are found over a very limited area and all surface water samples were in compliance with applicable WQS.

Sediment Quality

Sediment samples (SP-3-SED) were collected in the vicinity of SP-3 during the site visits in May and November 2020 using the sampling methodology previously described. Sediment quality analytical results are summarized in Table 5.

Measures were taken to decant the liquid out of the sample during collection, and the sediment samples had percent moisture contents of 22.2 and 22.4 respectively. This range of percent moisture content appears to provide reliable data (i.e., not biased high) when comparing the relationship between sample moisture content and analytical data from previous results. When the moisture content is very high, the metals in the sediment pore water are included in the analysis. When the sample results are normalized to a dry weight basis the result is a very high concentration of metals in the sediment. Both the May and November sampling activities found exceedances of arsenic and nickel 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).

Groundwater Remediation System

One reagent injection was conducted during 2020. The injection was initiated on August 25 and was completed on August 26. Appendix B provides a summary of the quantity of molasses solution that was injected in each of the injection wells.

Spring Water Remediation System

During the site visits in May and November 2020, 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 remained stable in May and November at 24 µg/L. 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 9.4 µg/L (May 2020) and 9.6 µg/L (November 2020) were detected in SP-5 effluent.

Table 7 contains the SP-5 spring water remediation system VOC mass removal estimate since September 2019 and since system startup. Approximately 660,000 gallons of spring water were treated between September 2019 and November 2020, and approximately 0.14 pounds (lbs) of VOC mass were recovered since September 2019. An estimated 8,150,000 gallons of spring water has been treated and an estimated 2.9 lbs of VOC mass has been recovered since system startup in October 2003.

IC/EC AND O&M PLAN COMPLIANCE

Broome County personnel conducted site inspections to comply with IC/EC requirements during 2020. 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.

CONCLUSIONS

Based on the data generated during the reporting period, Arcadis concludes the following:

- The concentration of VOCs in groundwater downgradient of the landfill boundary generally remained stable during the reporting period when compared with the previous groundwater monitoring event; however, VOC concentrations at the landfill perimeter (i.e., PW-7 and GMMW-7) decreased in comparison with 2019 results.
- There have not been any discernible changes in the relative appearance of spring areas during 2020; substantial amounts of willows and grasses are growing in the area.
- 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 May and November of 2020 were generally consistent with sediment sample results from 2019.

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.

Please feel free to contact me if you have any questions or comments.

Sincerely,

Arcadis of New York, Inc.



Steven M. Feldman
Project Manager

Copies:

Laurie Haskell, Broome County
George Jacob, USEPA
Richard Jones, NYSDOH, electronic copy

Enclosures:

Tables

- 1 Concentrations of Volatile Organic Compounds Detected in Groundwater, Colesville Landfill, Broome County, New York.
- 2 Concentrations of General Chemistry, Inorganics, Field Parameters and Dissolved Gases Detected in Groundwater, Colesville Landfill, Broome County, New York.
- 3 Concentrations of Volatile Organic Compounds and Selected Metals Detected in Surface Water, Colesville Landfill, Broome County, New York.
- 4 Concentrations of Volatile Organic Compounds and Selected Metals Detected in Spring Water, Colesville Landfill, Broome County, New York.
- 5 Concentrations of Metals Detected in Sediment Samples Associated with Springs, Colesville Landfill, Broome County, New York.
- 6 Concentrations of Volatile Organic Compounds Detected in Aqueous Samples Collected from the SP-5 Spring Water Remediation System, Colesville Landfill, Broome County, New York.
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Figures

1. Site Plan, Colesville Landfill, Broome County, New York.
2. Spring Water and Surface Water Sampling Locations Along the North Stream, Colesville Landfill, Broome County, New York.

Appendices

- A Laboratory Analytical Results
- B Molasses Solution Injection Volumes
- C Inspection and Certification Form
- D O&M Plan Compliance Form

TABLES



Table 1.
Concentrations of Volatile Organic Compounds Detected in Groundwater
Colesville Landfill,
Broome County, New York.

Constituents (units in ug/L)	NYSDEC TOGS (1.1.1) SGV	Location ID: Date:	GMMW-02 09/17/19	GMMW-02 11/05/20	GMMW-02 11/05/20 dup	GMMW-05 09/17/19	GMMW-05 11/05/20	GMMW-06 09/17/19	GMMW-06 11/05/20	GMMW-07 09/17/19	GMMW-07 11/05/20	PW-03 09/17/19	PW-03 11/05/20	PW-04 09/17/19	PW-04 09/17/19 dup	PW-04 11/05/20	PW-05 09/17/19	PW-05 11/05/20	PW-07 09/17/19	PW-07 11/05/20	W-07 09/17/19
1,1,1-Trichloroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	5		26	17	16	<5.0	<5.0	51	53	110	47	6.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	76	14	<5.0
1,1-Dichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	0.04		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	0.0006		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	0.6		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	50		<10	<10	<10	<10	19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50		<10	<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	60		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	5		16	15	14	14	11	22	27	11	14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	21	<5.0	<5.0
Chloroethane	5		8.0	5.9	6	69	47	110	99	53	16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	36	<5.0	<5.0
Chloroform	7		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	5		7.5	<5.0	<5.0	<5.0	<5.0	9.0	17	77	42	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	56	16	<5.0
cis-1,3-Dichloropropene	0.4*		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dichlorodifluoromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl acetate	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	10		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylcyclohexane	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	0.4*		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5		8.7	7	6.7	<5.0	<5.0	<5.0	5.2	23	17	6.3	5.6	6.8	<5.0	6.0	<5.0	<5.0	9.1	<5.0	<5.0
Trichlorofluoromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2		<5.0	<5.0	<5.0	<5.0	<5.0	12	12	40	17	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	16	<5.0	<5.0
Xylenes (total)	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs			66	45	43	83	94	200	210	310	150	13	5.6	6.8	ND	6.0	ND	ND	210	30	ND

Table 1.
Concentrations of Volatile Organic Compounds Detected in Groundwater
Colesville Landfill,
Broome County, New York.

Constituents (units in ug/L)	NYSDEC TOGS (1.1.1) SGV	Location ID: Date:	W-07	W-16S	W-16S	W-17S	W-17S	W-18	W-18	W-20S	W-20S	GMPW-04	GMPW-04
			11/05/20	09/17/19	11/05/20	09/17/19	11/05/20	09/17/19	11/05/20	09/17/19	11/05/20	09/17/19	11/05/20
1,1,1-Trichloroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	5		<5.0	11	6.3	<5.0	<5.0	6.0	5.2	<5.0	<5.0	18	16
1,1-Dichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	0.04		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	0.0006		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	0.6		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	3		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	50		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetone	50		15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	60		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	5		<5.0	24	17	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.7	8.9
Chloroethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.2	7.4
Chloroform	7		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	5.7	<5.0	<5.0	<5.0	8.3	7.3
cis-1,3-Dichloropropene	0.4*		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	50		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dichlorodifluoromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl acetate	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	10		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylcyclohexane	--		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	0.4*		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5		<5.0	<5.0	<5.0	<5.0	<5.0	9.2	7.0	<5.0	<5.0	21	19
Trichlorofluoromethane	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (total)	5		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs			15	35	23	ND	ND	21	12	ND	ND	62	59

Table 1.
Concentrations of Volatile Organic Compounds Detected in Groundwater
Colesville Landfill,
Broome County, New York.

Notes and abbreviations:

NYSDEC	New York State Department of Environmental Conservation.
TOGS	Technical and Operational Guidance Series.
SGV	Ambient Water Quality Standards and Guidance Values.
B	Compound considered non-detect at the listed value due to associated blank contamination.
D	Concentration is based on a diluted sample analysis.
J	Concentration is an estimated value.
NA	not applicable
ug/L	micrograms per liter
*	Applies to the sum of cis- and trans-1,3-dichloropropene.
VOCs	volatile organic compounds
<	analyte below detection limit
Bold	Indicates detection above laboratory method detection limit.
	Compound concentration exceeds SGV.

Table 2.
Concentrations of General Chemistry, Inorganics,
Field Parameters and Dissolved Gases Detected in Groundwater,
Colesville Landfill,
Broome County, New York.

Parameters	Units	Typical Baseline Values ⁽¹⁾	GMMW-02 09/17/19	GMMW-02 11/05/20	GMMW-02 10/06/20 Dup	GMMW-05 09/17/19	GMMW-05 11/05/20	GMMW-06 09/17/19	GMMW-06 11/05/20	GMMW-07 09/17/19	GMMW-07 11/05/20
GENERAL CHEMISTRY											
Nitrate	mg/L	0.632	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nitrite	mg/L	0.026	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	4.38	13.8	12.5	12.7	2.2	5.9	3.5	2.5	12.1	11.7
Total Organic Carbon	mg/L	6.6	2.1	2.3	2.2	2.7	67	5.2	11.7	2.1	1.4
INORGANICS											
Iron	mg/L	0.493	0.120	0.26	0.25	19.7	81.4	17.8	18.9	0.100	0.100
Iron (Filtered)	mg/L	0.455	<0.1	<0.1	0.13	17	74.2	12.6	22.2	<0.1	<0.1
Manganese	mg/L	2.15	6.16	--	--	4.03	--	10.4	--	2.79	--
FIELD PARAMETERS											
pH	Standard units	6.88	6.23	6.2	6.25	6.79	6.49	6.45	6.38	6.79	6.21
Specific Conductance	mmhos/cm	0.420	0.513	0.498	0.502	0.367	0.806	0.875	1	0.374	0.382
Temperature	deg C	13.0	10.9	11.5	11.7	11.4	10.2	11	11.3	12.1	10.2
Reduction/Oxidation Potential	mv		100	104	107	-89	-85	-31	-40	85	89
Turbidity	NTU		2	3.1	2.2	8.2	12	9.2	5.9	7.7	1.6
DISSOLVED GASES											
Ethane	ng/L	2,590	600	1100	1000	12,000	9,200	3,100	8,400	700	700 J
Ethene	ng/L	7,700	420	500 J	430 J	670	1,800	2,600	7,700	2,800	1,800
Methane	ug/L	450	600	1,300 D	1,200 D	1,400	14,000 D	610	2,400 D	500	420 D

Notes and abbreviations on last page.

Table 2.
Concentrations of General Chemistry, Inorganics,
Field Parameters and Dissolved Gases Detected in Groundwater,
Colesville Landfill,
Broome County, New York.

Parameters	Units	Typical Baseline Values ⁽¹⁾	GMPW-04 09/17/19	GMPW-04 11/05/20	PW-03 09/17/19	PW-03 11/05/20	PW-04 09/17/19	PW-04 09/17/19 Dup	PW-04 11/05/20	PW-05 09/17/19	PW-05 11/05/20
GENERAL CHEMISTRY											
Nitrate	mg/L	0.632	--	--	<1	<1	<1	<1	<1	--	--
Nitrite	mg/L	0.026	--	--	<1	<1	<1	<1	<1	--	--
Sulfate	mg/L	4.38	--	--	10.2	9.7	12.6	12.9	9	--	--
Total Organic Carbon	mg/L	6.6	--	--	2	1.9	1.8	1.7	1.4	--	--
INORGANICS											
Iron	mg/L	0.493	--	--	0.920	9.42	0.560	0.900	0.230	--	--
Iron (Filtered)	mg/L	0.455	--	--	<0.1	0.21	<0.1	<0.1	<0.1	--	--
Manganese	mg/L	2.15	--	--	0.0160	--	0.129	0.194	--	--	--
FIELD PARAMETERS											
pH	Standard units	6.88	6.45	6.38	7.44	6.38	6.96	6.97	6.32	8.11	7.45
Specific Conductance	mmhos/cm	0.420	0.651	0.615	0.393	0.41	0.246	0.247	0.271	0.28	0.299
Temperature	deg C	13.0	12.7	12.8	14.7	13.3	11.9	11.9	12.3	13.4	13.9
Reduction/Oxidation Potential	mv		107	40	160	134	141	143	67	90	-44
Turbidity	NTU		3.3	3.2	15.2	12.5	9	8.5	2	49.6	32
DISSOLVED GASES											
Ethane	ng/L	2,590	--	--	<6	<1,000	<6	<6	<1,000	--	--
Ethene	ng/L	7,700	--	--	<12	<1,000	<12	<12	<1,000	--	--
Methane	ug/L	450	--	--	30	19	0.15 J	0.13 J	<1.1	--	--

Notes and abbreviations on last page.

Table 2.
Concentrations of General Chemistry, Inorganics,
Field Parameters and Dissolved Gases Detected in Groundwater,
Colesville Landfill,
Broome County, New York.

Parameters	Units	Typical Baseline Values ⁽¹⁾	PW-07 09/17/19	PW-07 11/05/20	W-07 09/17/19	W-07 11/05/20	W-16S 09/17/19	W-16S 11/05/20	W-17S 09/17/19	W-17S 11/05/20	W-18 09/17/19
GENERAL CHEMISTRY											
Nitrate	mg/L	0.632	1.9	2.2	--	--	<1	--	--	--	<1
Nitrite	mg/L	0.026	<1	<1	--	--	<1	--	--	--	<1
Sulfate	mg/L	4.38	8.2	9.6	--	--	10.9	--	--	--	8.7
Total Organic Carbon	mg/L	6.6	1.8	<1	--	--	2	--	--	--	1.4
INORGANICS											
Iron	mg/L	0.493	35.5	16.3	--	--	0.440	--	--	--	0.250
Iron (Filtered)	mg/L	0.455	3.96	0.56	--	--	0.24	--	--	--	<0.1
Manganese	mg/L	2.15	6.34	--	--	--	11.9	--	--	--	0.0420
FIELD PARAMETERS											
pH	Standard units	6.88	6.97	5.99	6.35	5.93	6.27	6.15	6.31	6.27	6.27
Specific Conductance	mmhos/cm	0.420	0.217	0.749	0.329	0.259	0.477	0.471	0.188	0.197	0.444
Temperature	deg C	13.0	11.9	10.2	11.9	10.1	14.1	11.8	15.6	12.2	15.8
Reduction/Oxidation Potential	mv		1	-23	4	57	34	112	167	95	94
Turbidity	NTU		18	22	14.8	33.4	4	7.6	9.2	4.4	2.9
DISSOLVED GASES											
Ethane	ng/L	2,590	200	<1,000	--	--	100 J	--	--	--	<6
Ethene	ng/L	7,700	680	<1,000	--	--	48 J	--	--	--	<12
Methane	ug/L	450	180	66	--	--	2,000	--	--	--	0.43 J

Notes and abbreviations on last page.

Table 2.
Concentrations of General Chemistry, Inorganics,
Field Parameters and Dissolved Gases Detected in Groundwater,
Colesville Landfill,
Broome County, New York.

Parameters	Units	Typical Baseline Values ⁽¹⁾	W-18 11/05/20	W-20S 09/17/19	W-20S 11/05/20
GENERAL CHEMISTRY					
Nitrate	mg/L	0.632	<1	<1	<1
Nitrite	mg/L	0.026	<1	<1	<1
Sulfate	mg/L	4.38	9.6	9.8	9
Total Organic Carbon	mg/L	6.6	1.7	<1	2.4
INORGANICS					
Iron	mg/L	0.493	0.340	3.98	4.21
Iron (Filtered)	mg/L	0.455	<0.1	<0.1	<0.1
Manganese	mg/L	2.15	- -	3.14	- -
FIELD PARAMETERS					
pH	Standard units	6.88	6.32	6.22	6.01
Specific Conductance	mmhos/cm	0.420	0.399	0.134	0.13
Temperature	deg C	13.0	14.5	13.6	12.7
Reduction/Oxidation Potential	mv		162	183	136
Turbidity	NTU		6.3	13.9	29.8
DISSOLVED GASES					
Ethane	ng/L	2,590	<1,000	<6	<1,000
Ethene	ng/L	7,700	<1,000	<12	<1,000
Methane	ug/L	450	<1.1	0.11 J	<1.1

Notes and abbreviations on last page.

Table 2.
Concentrations of General Chemistry, Field Parameters,
and Dissolved Gases Detected in Groundwater,
Colesville Landfill,
Broome County, New York.⁽¹⁾

Notes and abbreviations:

Bold constituent detected above method detection limit.

B	Compound considered non-detect at the listed value due to associated blank contamination.
D	Concentration is based on a diluted sample analysis.
deg C	degrees Celsius
IRZ	in-situ reactive zone
J	Concentration is an estimated value.
mg/L	milligrams per liter
mmhos/cm	millimhos per centimeter
ng/L	nanograms per liter
ug/L	micrograms per liter
--	not analyzed or collected
<	Analyte below detection limit.
(1)	Values represent data from Monitoring Well GMMW-5 collected on December 7, 1998.

Table 3
Concentrations of Volatile Organic Compounds and
Selected Metals Detected in Surface Water,
Colesville Landfill,
Broome County, New York.

Constituents	Sample ID: Date:		F-6 05/27/20	F-6 11/05/20	SW-2 05/27/20	SW-2 11/05/20	SW-3 05/27/20	SW-3 11/05/20	SW-4 05/27/20	SW-4 11/05/20
VOC's (units in ug/L)	NYSDEC Part 703 WQS ² Basis NA Cs)	Basis								
1,1,1-Trichloroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	40	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	NA		0.62 J	0.40 J	0.51 J	0.24 J	0.97 J	0.76 J	0.75 J	0.69 J
1,1-Dichloroethene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	5	A(C) a	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	5	A(C) b	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	5	A(C) b	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	5	A(C) b	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	NA		<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	NA		<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	NA		<10	<10	<10	<10	<10	<10	<10	<10
Acetone	NA		<10	<10	<10	<10	<10	<10	<10	<10
Benzene	10	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	NA		<10	<10	<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	5	A(C)	0.25 J	<5.0	<5.0	<5.0	0.48 J	0.25 J	0.35 J	<5.0
Chloroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	NA		<5.0	<5.0	<5.0	<5.0	0.49 J	0.27 J	0.47 J	0.32 J
cis-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	NA		<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dichlorodifluoromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	17	A(C) c	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl acetate	NA		<10	<10	<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylcyclohexane	NA		<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	200	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	1	H(FC) c	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	6000	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	40	H(FC)	<5.0	<5.0	<5.0	<5.0	0.34 J	<5.0	0.26 J	0.21 J
Trichlorofluoromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (total)	5	A(C) c	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	NA		0.87 J	0.40 J	0.51 J	0.24 J	2.3 J	1.3 J	1.8 J	1.2 J

Table 3
Concentrations of Volatile Organic Compounds and
Selected Metals Detected in Surface Water,
Colesville Landfill,
Broome County, New York.

Constituents	Sample ID:		F-6	F-6	SW-2	SW-2	SW-3	SW-3	SW-4	SW-4
	Date:		05/27/20	11/05/20	05/27/20	11/05/20	05/27/20	11/05/20	05/27/20	11/05/20
Metals (units in mg/L)	NYSDEC Part 703 WQS ² Basis NA Cs)	Basis								
Aluminum	0.1	A(C)	<0.100	<0.100	0.110	<0.100	<0.100	<0.100	<0.100	<0.100
Antimony	NA		<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Arsenic	0.15	A(C) d	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Barium	NA		<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Beryllium	1100	A(C) e	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
Cadmium	0.002	A(C) f	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Calcium	NA		15.4	17.7	13.7	14.6	14.2	16.0	14.4	16.7
Chromium	0.086	A(C) f	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	0.005	A(C) g	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Copper	0.009	A(C) f	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Iron	0.3	A(C)	0.200	<0.100	0.200	<0.100	0.260	<0.100	0.210	<0.100
Lead	0.005	A(C) f	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Magnesium	NA		3.50	3.80	3.20	3.30	3.30	3.50	3.30	3.70
Manganese	NA		0.0570	0.0700	0.0200	<0.0100	0.0650	0.0720	0.0580	0.0840
Mercury	0.0000007	H(FC)	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Nickel	0.05	A(C) f	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Potassium	NA		<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Selenium	0.0046	A(C) d	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver	0.0001	A(C) h	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Sodium	NA		6.30	7.00	6.20	6.70	6.20	6.80	6.10	6.90
Thallium	0.008	A(C) g	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	0.014	A(C) g	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Zinc	0.08	A(C) f	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200

Notes and abbreviations:

Bold constituent detected above method detection limit.

J Concentration is an estimated value.

mg/L milligrams per liter

ug/L micrograms per liter

< Analyte below detection limit.

(1) Data presented in this table corresponds to monitoring data during a two-year period (March 2013 to December 2015).

 Concentration exceeds WQS.

WQS Water quality standard

B Analyte was also detected in the associated method blank.

Table 4.
Concentrations of Volatile Organic Compounds
and Selected Metals Detected in Spring Water,
Colesville Landfill,
Broome County, New York.

Constituents	Sample ID: Date:		SP-2 5/27/2020	SP-2 6/26/2020	SP-3 5/27/2020	SP-3 11/5/2020	SP-4 9/16/2019	SP-4 5/27/2020
VOCs (units in ug/L)	NYSDEC Part 703 WQS ⁽¹⁾	Basis						
1,1,1-Trichloroethane	NA		0.26 J	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	40	H(FC)	0.22 J	<5.0	0.27 J	<5.0	<5.0	<5.0
1,1-Dichloroethane	NA		21	<5.0	9.0	12	3.6 J	7.7
1,1-Dichloroethene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	5	A(C) a	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	5	A(C) b	0.36 J	<5.0	<5.0	0.26 J	<5.0	<5.0
1,2-Dichloroethane	NA		0.54 J	<5.0	0.57 J	<5.0	0.33 J	<5.0
1,2-Dichloropropane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	5	A(C) b	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	5	A(C) b	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	NA		<10	<10	<10	<10	<10	<10
2-Hexanone	NA		<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	NA		<10	<10	<10	<10	<10	<10
Acetone	NA		<10	<10	<10	<10	2.1 BJ	<10
Benzene	10	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	NA		<10	<10	<10	<10	<10	<10
Carbon Tetrachloride	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	5	A(C)	16	<5.0	0.66 J	12	4.2 J	1.3 J
Chloroethane	NA		5.5	<5.0	<5.0	2.6 J	2.9 J	2.9 J
Chloroform	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	NA		7.1	<5.0	7.5	2.7 J	0.93 J	0.53 J
cis-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cyclohexane	NA		<10	<10	<10	<10	<10	<10
Dibromochloromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dichlorodifluoromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	17	A(C) c	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl acetate	NA		<10	<10	<10	<10	<10	<10
Methyl tert-butyl ether	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylcyclohexane	NA		<10	<10	<10	<10	<10	<10
Methylene Chloride	200	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	1	H(FC) c	0.33 J	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	6000	H(FC)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	40	H(FC)	3.0 J	0.35 J	1.5 J	1.9 J	0.49 J	1.7 J
Trichlorofluoromethane	NA		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	NA		1.1 J	<5.0	1.1 J	0.54 J	0.40 J	<5.0
Xylenes (total)	5	A(C) c	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total VOCs	NA		55 J	0.35 J	21 J	32 J	15 J	14 J

See notes on last page.

Table 4.
Concentrations of Volatile Organic Compounds
and Selected Metals Detected in Spring Water,
Colesville Landfill,
Broome County, New York.

Constituents	Sample ID: Date:		SP-2 5/27/2020	SP-2 6/26/2020	SP-3 5/27/2020	SP-3 11/5/2020	SP-4 9/16/2019	SP-4 5/27/2020
Metals (units in mg/L)	NYSDEC Part 703 WQS ⁽¹⁾	Basis						
Aluminum	0.1	A(C)	<0.100	<0.100	0.150	<0.100	<0.100	<0.100
Antimony	NA		<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
Arsenic	0.15	A(C) d	0.0210	<0.0100	0.0200	0.0190	0.0920	0.0170
Barium	NA		0.0470	<0.0200	<0.0200	0.0400	0.0780	0.0340
Beryllium	1100	A(C) e	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
Cadmium	0.002	A(C) f	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Calcium	NA		29.7	8.90	33.6	27.1	42.5	39.5
Chromium	0.086	A(C) f	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	0.005	A(C) g	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Copper	0.009	A(C) f	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
Iron	0.3	A(C)	22.7	2.90	11.0	27.1	14.6	2.90
Lead	0.005	A(C) f	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Magnesium	NA		6.20	2.30	6.20	5.70	7.80	8.10
Manganese	NA		6.15	2.25	1.86	4.51	4.63	1.75
Mercury	0.0000007	H(FC)	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Nickel	0.05	A(C) f	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Potassium	NA		<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Selenium	0.0046	A(C) d	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver	0.0001	A(C) h	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Sodium	NA		3.20	4.80	3.60	3.20	7.90	7.00
Thallium	0.008	A(C) g	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	0.014	A(C) g	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
Zinc	0.08	A(C) f	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200

See notes on last page.

Table 4.
Concentrations of Volatile Organic Compounds
and Selected Metals Detected in Spring Water,
Colesville Landfill,
Broome County, New York.⁽¹⁾

Notes and Abbreviations:

Bold constituent detected above method detection limit.

	Concentration exceeds WQS.
J	Concentration is an estimated value.
B	Compound considered non-detect at the listed value due to associated blank contamination.
mg/L	milligrams per liter
ug/L	micrograms per liter
NA	not applicable
VOCs	volatile organic compounds
WQS	water quality standard
<	analyte below detection limit
(1)	NYSEC Part 703 water quality standards were tabulated for Class C fresh surface waters. Where not available, the NYSDEC Division of Water Technical Operational Guidance Series (TOGS 1.1.1) standards and guidance values were used. Where standards for metals are based on hardness, a default value of 100 mg/L was used. Codes for the basis of the standards and guidance values follows: H(FC) = Health (Fish Consumption) A(C) = Aquatic (Chronic) gv = guidance value a = applies to sum of 1,2,3-, 1,2,4- and 1,3,5-trichlorobenzenes b = applies to sum of 1,2-, 1,3- and 1,4-dichlorobenzenes c = TOGS 1.1.1 guidance value d = for dissolved form e = for hardness > 75 ppm f = hardness dependent standard, which is based on a default hardness of 100 mg/L g = acid-soluble form h = for ionic silver

Table 5.
Concentrations of Metals Detected in Sediment Samples
Associated with Springs,
Colesville Landfill,
Broome County, New York.⁽¹⁾

	NYSDEC Freshwater Sediment Screening Values ^a			Location ID:	SED-3	SED-3	SED-3	SED-3
				Sample ID:	SP-3 -SED	SP-3 -SED	SP-3 -SED	SP-3 -SED
				Date:	06/03/19	09/16/19	05/27/20	11/05/20
	Class A	Class B	Class C	NOAA SQuiRT values ^b				
Metals (units in mg/kg)⁽¹⁾								
Arsenic	10	10 – 33	33	NA	35.4	10.3	13.6	14.7
Barium	NA	NA	NA	NA	61.8	41.8	69.5	61.6
Beryllium	NA	NA	NA	NA	<0.410	<0.380	0.540	0.490
Cadmium	1	1 – 5	5	NA	0.740	<0.640	<0.640	<0.610
Calcium	NA	NA	NA	NA	<140	270	1,570	1,330
Chromium	43	43 – 110	110	NA	10.9	10.3	15.5	16.2
Cobalt	NA	NA	NA	50+ ^c	9.00	7.70	12.3	11.0
Copper	32	32 – 150	150	NA	16.2	14.9	24.9	20.0
Iron	NA	NA	NA	20,000-40,000	40,100	22,500	31,800	31,100
Lead	36	36 – 130	130	NA	13.4	14.0	16.4	14.7
Magnesium	NA	NA	NA	NA	2,900	2,660	4,280	4,170
Manganese	NA	NA	NA	460-1100	1,660	506	4,680	996
Mercury	0.2	0.2 – 1	1	NA	<0.0490	<0.0430	<0.0400	<0.0410
Nickel	23	23 – 49	49	NA	17.8	16.3	28.8	25.4
Potassium	NA	NA	NA	NA	820	670	1,100	1,040
Selenium	NA	NA	NA	NA	<1.40	<1.30	<1.30	<12.0
Silver	1	1 – 2.2	2.2	NA	<1.40	<1.30	<1.30	<1.20
Sodium	NA	NA	NA	NA	<140	<130	<130	<120
Thallium	NA	NA	NA	NA	<14.0	<1.30	<1.30	<1.20
Vanadium	NA	NA	NA	NA	12.4	11.3	17.4	16.2
Zinc	120	120 – 460	460	NA	51.7	46.2	73.9	69.9
Miscellaneous								
Percent Moisture (% by wt.)	NA	NA	NA	NA	32.3	29.1	22.2	22.4

Notes and abbreviations on last page.

Table 5.
Concentrations of Metals Detected in Sediment Samples
Associated with Springs,
Colesville Landfill,
Broome County, New York.⁽¹⁾

Notes and abbreviations:

- a Values obtained from NYSDEC Technical Guidance for Screening Contaminated Sediments dated June 24, 2014.
- b Values obtained from NOAA's SQuiRT (Buchman, MF. 2008. NOAA Screening Quick Reference Tables, NOAA OR&R Report 08-1, Seattle, WA. Office of Response and Restoration Division, NOAA, 34 pp.)
- c Value from Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, Canada. Aug 1993. Value is LEL from Canadian Sediment Guidelines.

(1) Data presented in this table corresponds to monitoring data during a three-year period (March 2016 to December 2018).

(2) Background sediment sample collected by Arcadis from SP-1 spring sample location upstream of the SP-2 spring sample location (see Figure 1).

Bold constituent detected above method detection limit.

- B Analyte detected in the associated Method Blank.
- J Concentration is an estimated value
- Class B Considered to be slightly to moderately contaminated and additional testing required to evaluate the potential risks to aquatic li
- Class C Considered to be highly contaminated and likely to pose a risk to aquatic life.
- mg/kg milligrams per kilogram
- NA Not applicable
- NOAA National Oceanic and Atmospheric Administration
- NYSDEC New York State Department of Environmental Conservation
- SQuiRT Screening Quick Reference Tables
-  Class B sediments
-  Class C sediments
-  within or exceeds NOAA SQuiRT values
- < Analyte below detection limit.

Table 6
Concentrations of Volatile Organic Compounds
Detected in Aqueous Samples Collected from
SP-5 Spring Water Remediation System Colesville Landfill
Broome County, New York ⁽¹⁾

Constituents	Model Technology BPJ Limits ^{1,2}	Sample ID: Date:	SP-5 INF. 05/27/20	SP-5 INF. 11/05/20	SP-5 EFF. 05/27/20	SP-5 EFF. 11/05/20
VOCs (units in ug/L)						
1,1,1-Trichloroethane	10		<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	50		<5.0	<5.0	<5.0	<5.0
1,1,2-trichloro-1,2,2-trifluoroethane	NA		<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	100		<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	10		5.4	4.8 J	4.6 J	4.0 J
1,1-Dichloroethene	10-100		<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	NA		<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane	NA		<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	NA		<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	10-50		<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	10-100		<5.0	0.26 J	<5.0	<5.0
1,2-Dichloropropane	10		<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	10		<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	10		<5.0	<5.0	<5.0	<5.0
2-Butanone	NA		<10	<10	<10	<10
2-Hexanone	NA		<10	<10	<10	<10
4-Methyl-2-pentanone	NA		<10	<10	<10	<10
Acetone	NA		<10	<10	<10	<10
Benzene	5		0.76 J	0.90 J	0.23 J	0.26 J
Bromodichloromethane	NA		<5.0	<5.0	<5.0	<5.0
Bromoform	50		<5.0	<5.0	<5.0	<5.0
Bromomethane	10		<5.0	<5.0	<5.0	<5.0
Carbon Disulfide	NA		4.7 J	3.7 J	<10	<10
Carbon Tetrachloride	10-50		<5.0	<5.0	<5.0	<5.0
Chlorobenzene	10-25		10	11	2.8 J	2.6 J
Chloroethane	10		<5.0	<5.0	<5.0	1.2 J
Chloroform	100		<5.0	<5.0	<5.0	<5.0
Chloromethane	10		<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	10		1.4 J	0.99 J	0.69 J	0.60 J
cis-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0
Cyclohexane	NA		<10	<10	<10	<10
Dibromochloromethane	NA		<5.0	<5.0	<5.0	<5.0
Dichlorodifluoromethane	10		<5.0	<5.0	<5.0	<5.0
Ethylbenzene	5		<5.0	<5.0	<5.0	<5.0
Isopropylbenzene	NA		<5.0	<5.0	<5.0	<5.0
Methyl acetate	NA		<10	<10	<10	<10
Methyl tert-butyl ether	NA		<5.0	<5.0	<5.0	<5.0
Methylcyclohexane	NA		<10	<10	<10	<10
Methylene Chloride	10-100		<5.0	<5.0	<5.0	<5.0
Styrene	NA		<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	10-50		<5.0	<5.0	<5.0	<5.0
Toluene	5		<5.0	0.20 J	<5.0	<5.0
trans-1,2-Dichloroethene	10-100		<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	NA		<5.0	<5.0	<5.0	<5.0
Trichloroethene	10		1.8 J	1.7 J	0.60 J	0.65 J
Trichlorofluoromethane	10		<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	10		<5.0	<5.0	0.43 J	0.30 J
Xylenes (total)	NA		<5.0	<5.0	<5.0	<5.0
Total VOCs			24 J	24 J	9.4 J	9.6 J

Table 6
Concentrations of Volatile Organic Compounds
Detected in Aqueous Samples Collected from
SP-5 Spring Water Remediation System Colesville Landfill
Broome County, New York ⁽¹⁾

Constituents	Model Technology BPJ Limits ^{1,2}	Sample ID: Date:	SP-5 INF. 05/27/20	SP-5 INF. 11/05/20	SP-5 EFF. 05/27/20	SP-5 EFF. 11/05/20
Metals (units in mg/L)						
Aluminum			0.270	0.110	<0.100	<0.100
Antimony			<0.0600	<0.0600	<0.0600	<0.0600
Arsenic			0.313	0.148	0.151	0.117
Barium			0.137	0.144	0.156	0.155
Beryllium			<0.00300	<0.00300	<0.00300	<0.00300
Cadmium			<0.00500	<0.00500	<0.00500	<0.00500
Calcium			43.1	44.6	43.4	42.9
Chromium			<0.0100	<0.0100	<0.0100	<0.0100
Cobalt			<0.0500	<0.0500	<0.0500	<0.0500
Copper			<0.0200	<0.0200	<0.0200	<0.0200
Iron			45.6	30.6	31.5	28.5
Lead			0.240	0.0612	<0.00500	<0.00500
Magnesium			9.70	9.70	10.0	9.90
Manganese			6.07	6.50	6.26	6.60
Mercury			<0.000200	<0.000200	<0.000200	<0.000200
Nickel			<0.0400	<0.0400	<0.0400	<0.0400
Potassium			2.70	3.00	2.70	3.00
Selenium			<0.0100	<0.0100	<0.0100	<0.0100
Silver			<0.0100	<0.0100	<0.0100	<0.0100
Sodium			6.20	7.00	6.50	7.20
Thallium			<0.0100	<0.0100	<0.0100	<0.0100
Vanadium			<0.0500	<0.0500	<0.0500	<0.0500
Zinc			14.2	4.36	<0.0200	<0.0200

Notes and Abbreviations:

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

Bold constituent detected above method detection limit.

EFF.	effluent
INF.	influent
J	Concentration is an estimated value
B	Compound considered non-detect at the listed value due to associated blank contamination.
NA	not applicable
ug/L	micrograms per liter
VOCs	volatile organic compounds
BPJ	Best Professional Judgment
<	Analyte below detection limit.
TOGS	Technical and Operational Guidance Series

Table 7
SP-5 Spring Water Remediation System
Mass Removal Rate of Volatile Organic Compounds
Colesville Landfill
Broome County, New York

Date Sampled	Total VOC Influent Concentration (ug/L)	Effluent Flowrate (gpm)	Depth to Water (feet btc)	Total SW Treated ⁽¹⁾ Between Sampling Interval (gal)	Influent Concentration Geometric Mean ⁽²⁾ (ug/L)	Total Estimated ⁽³⁾ Mass Removed (lbs)
6/3/2019	24.0	1.1 ⁽⁴⁾	NM	280,000	22	0.052
9/16/2019	28.0	1.1 ⁽⁴⁾	NM	170,000	26	0.037
5/27/2020	24.0	1.1 ⁽⁴⁾	NM	400,000	26	0.087
11/5/2020	24.0	1.1 ⁽⁴⁾	NM	260,000	24	0.052
Total Estimated Mass Removed Since System Startup (lbs) =						2.9
Total Effluent Treated During Reporting Period (gallons) =						660,000
Total Effluent Treated Since System Startup (gallons) =						8,150,000

Notes and Abbreviations:

1. Total Spring Water Treated Between Sampling Intervals = Effluent Flowrate Geometric Mean x 1440 min/day x days between sampling events.
2. Influent Concentration Geometric Mean = (Influent Concentration for prior sampling event x Influent Concentration for current sampling event)^(1/2).
3. Total Mass Removed = (Total Groundwater Treated Between Sampling Intervals) x Influent Concentration Geometric Mean x 3.7854 L/gal x (1 lbs / 453,592,370 ug).
4. Effluent flow rate not recorded during the reporting period. Value shown is the average flow rate recorded between March 2013 and September 2014.

btc	below top of casing
gal	gallons
gpm	gallons per minute
lbs	pounds
NM	not measured
ug/L	micrograms per liter
SW	spring water
VOC	volatile organic compound

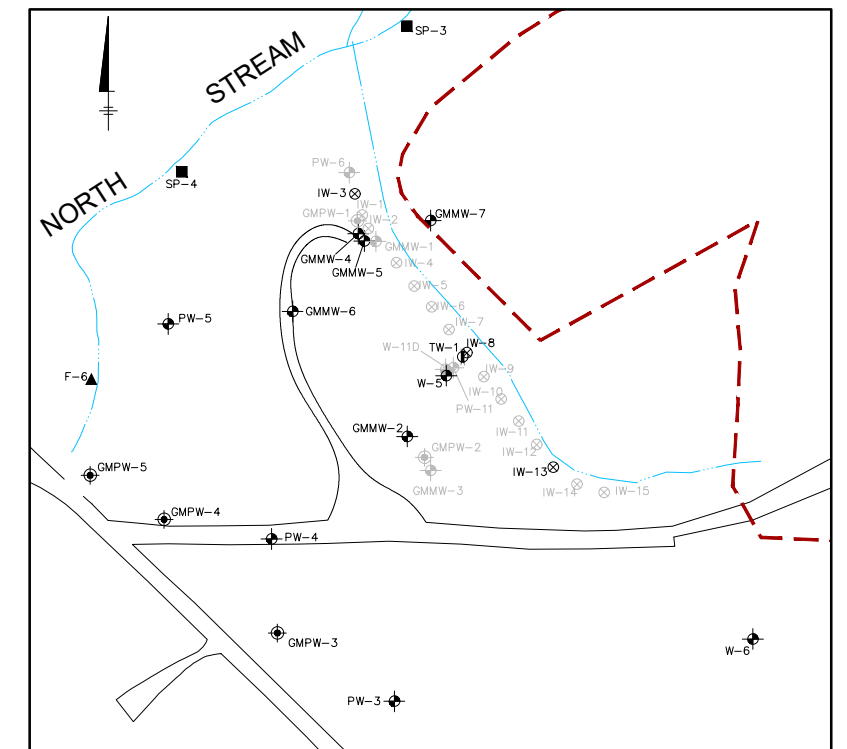
FIGURES



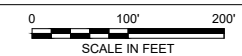


EXPLANATION

BOLD		IN-SITU REACTIVE ZONE (IRZ) DISCONTINUATION PILOT TEST MONITORING WELL
W-24 GMW-7		LOCATION AND DESIGNATION OF MONITORING WELL
SCOTT		LOCATION AND DESIGNATION OF EXISTING HOMEOWNER WELL
1W-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

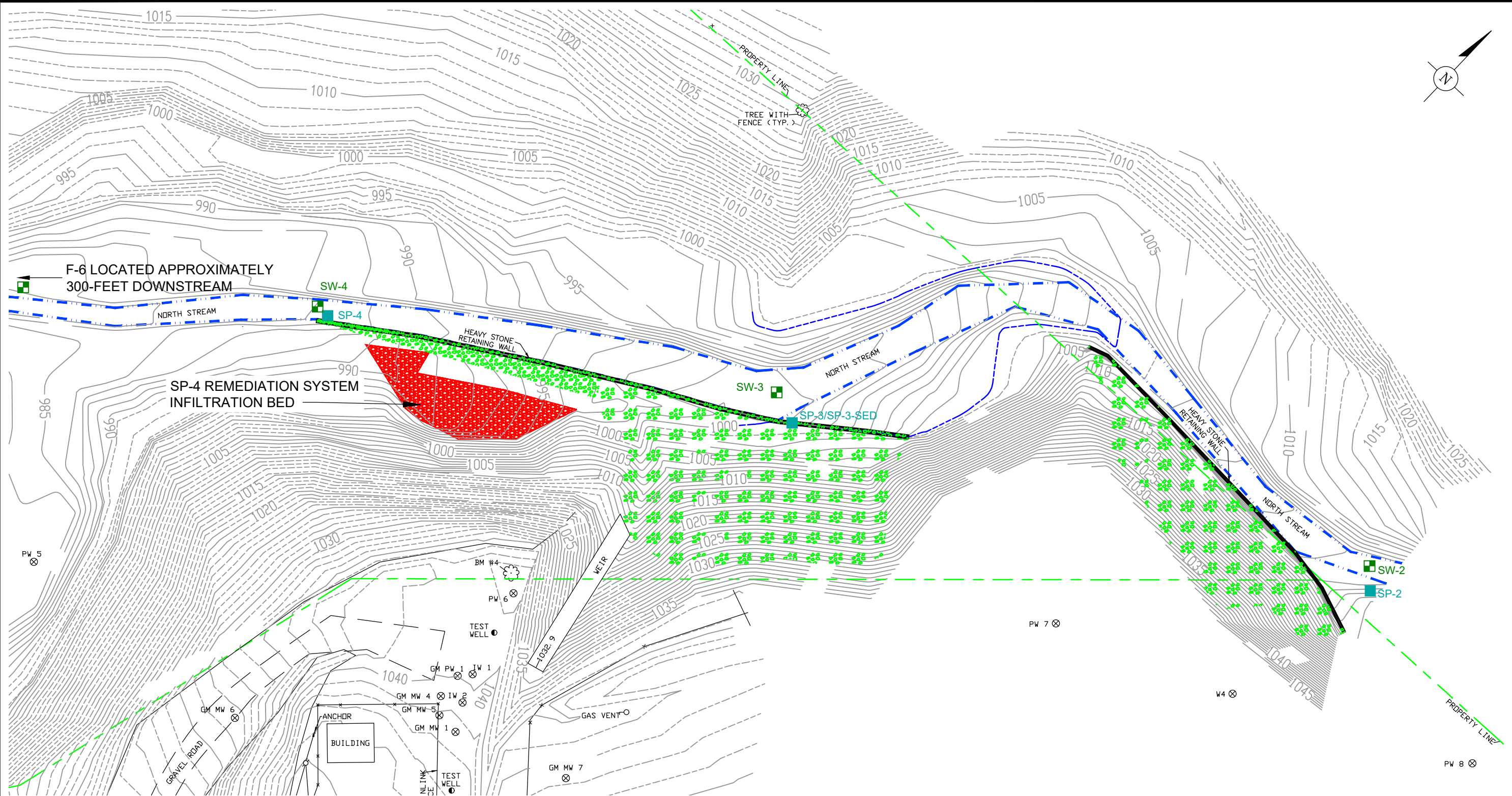


SITE PLAN SHOWING PROJECT AREA

COLESVILLE LANDFILL
COLESVILLE, NEW YORK

SITE PLAN

CITY:SYRACUSE-ENV DIV/GROUP:ENV DBA: SANCHEZ LD:ALS PIC:Ort) TM:Ort) LVR:Option="OFF"=REF" C:\Users\lsanchez\OneDrive - ARCADIS\BIM 360 Docs\BOONE COUNTY, NY\COLESVILLE LANDFILL GROUNDWATER\2017\NY000849.002801-DWG\BC-AR-F02 SAMPLING LOCA NORTH STREAM.dwg LAYOUT: 2 SAVED: 12/13/2017 10:28 AM ACADVER: 20.1S (LMS TECH) PAGES: 20 OF 20 PLOTSTYLETABLE: ARCADIS.ctb PLOTTED: 12/13/2017 1:16 PM BY: SANCHEZ, ADRIAN XREFS: IMAGES: PROJECTNAME: COLESVILLE LANDFILL



LEGEND:

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



COLESVILLE LANDFILL
COLESVILLE, NEW YORK

SPRING WATER AND SURFACE WATER
SAMPLING LOCATIONS
ALONG THE NORTH STREAM

ARCADIS Design & Consultancy
for natural and
built assets

FIGURE
2

APPENDICES



APPENDIX A

Laboratory Analytical Results





June 08, 2020

Service Request No:R2004443

Ms. Laurie Haskell
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville Surface Waters and Sediments

Dear Ms.Haskell,

Enclosed are the results of the sample(s) submitted to our laboratory May 27, 2020
For your reference, these analyses have been assigned our service request number **R2004443**.

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

ADDRESS

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

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Sediment, Water

Service Request: R2004443
Date Received: 05/27/2020

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 05/27/2020. 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, 06/02/2020: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Field:

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

Approved by



Date

06/08/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: F-6	Lab ID: R2004443-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	9.20			0.20	mg/L	SM 4500-O G
Conductivity, Field	158				uMHOS/cm	120.1
pH, Field	7.79				pH Units	SM 4500-H+ B
Redox Potential, Field	50				mV	ASTM D1498-00
Temperature, Field	9.30				deg C	SM 2550 B
Turbidity, Field	3.1				NTU	180.1
Calcium, Total	15400			1000	ug/L	6010C
Iron, Total	200			100	ug/L	6010C
Magnesium, Total	3500			1000	ug/L	6010C
Manganese, Total	57			10	ug/L	6010C
Sodium, Total	6300			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.62	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.25	J	0.20	5.0	ug/L	8260C

CLIENT ID: SW-4	Lab ID: R2004443-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	9.48			0.20	mg/L	SM 4500-O G
Conductivity, Field	152				uMHOS/cm	120.1
pH, Field	7.55				pH Units	SM 4500-H+ B
Redox Potential, Field	68				mV	ASTM D1498-00
Temperature, Field	9.70				deg C	SM 2550 B
Turbidity, Field	2.7				NTU	180.1
Calcium, Total	14400			1000	ug/L	6010C
Iron, Total	210			100	ug/L	6010C
Magnesium, Total	3300			1000	ug/L	6010C
Manganese, Total	58			10	ug/L	6010C
Sodium, Total	6100			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.75	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.35	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.26	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.47	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-4	Lab ID: R2004443-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	305				uMHOS/cm	120.1
pH, Field	6.92				pH Units	SM 4500-H+ B
Temperature, Field	8.50				deg C	SM 2550 B
Turbidity, Field	2.1				NTU	180.1
Arsenic, Total	17			10	ug/L	6010C
Barium, Total	34			20	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-4			Lab ID: R2004443-003			

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium, Total	39500			1000	ug/L	6010C
Iron, Total	2900			100	ug/L	6010C
Magnesium, Total	8100			1000	ug/L	6010C
Manganese, Total	1750			10	ug/L	6010C
Sodium, Total	7000			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	7.7		0.20	5.0	ug/L	8260C
Chlorobenzene	1.3	J	0.20	5.0	ug/L	8260C
Chloroethane	2.9	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	1.7	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.53	J	0.23	5.0	ug/L	8260C

CLIENT ID: SW-3			Lab ID: R2004443-004			

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	9.22			0.20	mg/L	SM 4500-O G
Conductivity, Field	152				uMHOS/cm	120.1
pH, Field	7.51				pH Units	SM 4500-H+ B
Redox Potential, Field	20				mV	ASTM D1498-00
Temperature, Field	9.60				deg C	SM 2550 B
Turbidity, Field	2.9				NTU	180.1
Calcium, Total	14200			1000	ug/L	6010C
Iron, Total	260			100	ug/L	6010C
Magnesium, Total	3300			1000	ug/L	6010C
Manganese, Total	65			10	ug/L	6010C
Sodium, Total	6200			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.97	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.48	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.34	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.49	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-3			Lab ID: R2004443-005			

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	253				uMHOS/cm	120.1
pH, Field	6.84				pH Units	SM 4500-H+ B
Temperature, Field	8.20				deg C	SM 2550 B
Turbidity, Field	6.9				NTU	180.1
Aluminum, Total	150			100	ug/L	6010C
Arsenic, Total	20			10	ug/L	6010C
Calcium, Total	33600			1000	ug/L	6010C
Iron, Total	11000			100	ug/L	6010C
Magnesium, Total	6200			1000	ug/L	6010C
Manganese, Total	1860			10	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3	Lab ID: R2004443-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Sodium, Total	3600			1000	ug/L	6010C
1,1,2-Trichloroethane	0.27	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	0.57	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.66	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	1.5	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	1.1	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	7.5		0.23	5.0	ug/L	8260C

CLIENT ID: SW-2	Lab ID: R2004443-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	9.22			0.20	mg/L	SM 4500-O G
Conductivity, Field	143				uMHOS/cm	120.1
pH, Field	7.38				pH Units	SM 4500-H+ B
Redox Potential, Field	57				mV	ASTM D1498-00
Temperature, Field	9.70				deg C	SM 2550 B
Turbidity, Field	3				NTU	180.1
Aluminum, Total	110			100	ug/L	6010C
Calcium, Total	13700			1000	ug/L	6010C
Iron, Total	200			100	ug/L	6010C
Magnesium, Total	3200			1000	ug/L	6010C
Manganese, Total	20			10	ug/L	6010C
Sodium, Total	6200			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.51	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-2	Lab ID: R2004443-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	247				uMHOS/cm	120.1
pH, Field	6.55				pH Units	SM 4500-H+ B
Temperature, Field	8.20				deg C	SM 2550 B
Turbidity, Field	11.7				NTU	180.1
Arsenic, Total	21			10	ug/L	6010C
Barium, Total	47			20	ug/L	6010C
Calcium, Total	29700			1000	ug/L	6010C
Iron, Total	22700			100	ug/L	6010C
Magnesium, Total	6200			1000	ug/L	6010C
Manganese, Total	6150			10	ug/L	6010C
Sodium, Total	3200			1000	ug/L	6010C
1,1,1-Trichloroethane (TCA)	0.26	J	0.21	5.0	ug/L	8260C
1,1,2-Trichloroethane	0.22	J	0.20	5.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	21		0.20	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-2	Lab ID: R2004443-007

Analyte	Results	Flag	MDL	MRL	Units	Method
1,2-Dichlorobenzene	0.36	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.54	J	0.20	5.0	ug/L	8260C
Chlorobenzene	16		0.20	5.0	ug/L	8260C
Chloroethane	5.5		0.23	5.0	ug/L	8260C
Tetrachloroethene (PCE)	0.33	J	0.21	5.0	ug/L	8260C
Trichloroethene (TCE)	3.0	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	1.1	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	7.1		0.23	5.0	ug/L	8260C

CLIENT ID: SP-3-SED	Lab ID: R2004443-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Total Solids	77.8				Percent	ALS SOP
Aluminum, Total	12300			26	mg/Kg	6010C
Arsenic, Total	13.6			1.3	mg/Kg	6010C
Barium, Total	69.5			2.6	mg/Kg	6010C
Beryllium, Total	0.54			0.39	mg/Kg	6010C
Calcium, Total	1570			130	mg/Kg	6010C
Chromium, Total	15.5			1.3	mg/Kg	6010C
Cobalt, Total	12.3			6.4	mg/Kg	6010C
Copper, Total	24.9			2.6	mg/Kg	6010C
Iron, Total	31800			260	mg/Kg	6010C
Lead, Total	16.4			0.64	mg/Kg	6010C
Magnesium, Total	4280			130	mg/Kg	6010C
Manganese, Total	4680			26	mg/Kg	6010C
Nickel, Total	28.8			5.1	mg/Kg	6010C
Potassium, Total	1100			260	mg/Kg	6010C
Vanadium, Total	17.4			6.4	mg/Kg	6010C
Zinc, Total	73.9			2.6	mg/Kg	6010C

CLIENT ID: SP-5 Influent	Lab ID: R2004443-009

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	440				uMHOS/cm	120.1
pH, Field	6.41				pH Units	SM 4500-H+ B
Temperature, Field	8.90				deg C	SM 2550 B
Turbidity, Field	22.9				NTU	180.1
Aluminum, Total	270			100	ug/L	6010C
Arsenic, Total	313			10	ug/L	6010C
Barium, Total	137			20	ug/L	6010C
Calcium, Total	43100			1000	ug/L	6010C
Iron, Total	45600			100	ug/L	6010C
Lead, Total	240			5.0	ug/L	6010C
Magnesium, Total	9700			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-5 Influent			Lab ID: R2004443-009			

Analyte	Results	Flag	MDL	MRL	Units	Method
Manganese, Total	6070			10	ug/L	6010C
Potassium, Total	2700			2000	ug/L	6010C
Sodium, Total	6200			1000	ug/L	6010C
Zinc, Total	14200			200	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	5.4		0.20	5.0	ug/L	8260C
Benzene	0.76	J	0.20	5.0	ug/L	8260C
Carbon Disulfide	4.7	J	0.25	10	ug/L	8260C
Chlorobenzene	10		0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	1.8	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1.4	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-5 Effluent			Lab ID: R2004443-010			

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	444				uMHOS/cm	120.1
pH, Field	6.50				pH Units	SM 4500-H+ B
Temperature, Field	9.20				deg C	SM 2550 B
Turbidity, Field	16.7				NTU	180.1
Arsenic, Total	151			10	ug/L	6010C
Barium, Total	156			20	ug/L	6010C
Calcium, Total	43400			1000	ug/L	6010C
Iron, Total	31500			100	ug/L	6010C
Magnesium, Total	10000			1000	ug/L	6010C
Manganese, Total	6260			10	ug/L	6010C
Potassium, Total	2700			2000	ug/L	6010C
Sodium, Total	6500			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	4.6	J	0.20	5.0	ug/L	8260C
Benzene	0.23	J	0.20	5.0	ug/L	8260C
Chlorobenzene	2.8	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.60	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.43	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.69	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
Project: Colesville Surface Waters and Sediments

Service Request:R2004443

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2004443-001	F-6	5/27/2020	
R2004443-002	SW-4	5/27/2020	
R2004443-003	SP-4	5/27/2020	
R2004443-004	SW-3	5/27/2020	
R2004443-005	SP-3	5/27/2020	
R2004443-006	SW-2	5/27/2020	
R2004443-007	SP-2	5/27/2020	
R2004443-008	SP-3-SED	5/27/2020	
R2004443-009	SP-5 Influent	5/27/2020	
R2004443-010	SP-5 Effluent	5/27/2020	
R2004443-011	Trip Blank	5/27/2020	



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

000112

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 Surface Waters and Sediments				ANALYSIS REQUESTED (Include Method Number and Container Preservative)																	
Project Manager Laurie Haskoll				PRESERVATIVE																	
Company/Address Broome County, Colesville LF Colesville, NY				NUMBER OF CONTAINERS GC/MS VOAs • 8200 • 824 • CLP GC/MS SVOAs • 8270 • 825 GC VOAs • 8021 • 801/802 PESTICIDES • 8081 • 808 PCBs • 8082 • 808 METALS, TOTAL (List in comments below) METALS, DISSOLVED (List in comments below) % Solids Preservative Key 0. NONE 1. HCL 2. HNO₃ 3. H₂SO₄ 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO₄ 8. Other _____																	
Phone # 607 778 2932																					
Email																					
Sampler's Signature Brian Mackin				Sampler's Printed Name BRIAN MACKIN																	
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE		TIME	MATRIX																
F-6		5/27/2020		0740	W																
SW-4				0750	W																
SP-4				0805	W																
SW-3				0815	W																
SP-3				0820	W																
SW-2				0840	W																
SP-2				0850	W																
SP-3-SED				0830	S																
SP-5 Influent				0940	W																
SP-5 Effluent				0910	W																
Trip Blank		↓		0740	W																
SPECIAL INSTRUCTIONS/COMMENTS Metals						TURNAROUND REQUIREMENTS						REPORT REQUIREMENTS						INVOICE INFORMATION			
						RUSH (SURCHARGES APPLY) 1 day 2 day 3 day 4 day 5 day Standard (10 business days-No Surcharge) REQUESTED REPORT DATE						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						PO # BILL TO:			
STATE WHERE SAMPLES WERE COLLECTED																					
RELINQUISHED BY		RECEIVED BY		RELINQUISHED BY		RECEIVED BY		RELINQUISHED BY		RECEIVED BY		RELINQUISHED BY		RECEIVED BY							
Signature Brian Mackin		Signature Quinton Kolbeck		Signature Quinton Kolbeck		Signature Quinton Kolbeck		Signature Quinton Kolbeck		Signature Quinton Kolbeck		Signature Quinton Kolbeck		Signature Quinton Kolbeck							
Printed Name BRIAN MACKIN		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck		Printed Name Quinton Kolbeck							
Firm ALS		Firm ALS		Firm ALS		Firm ALS		Firm ALS		Firm ALS		Firm ALS		Firm ALS							
Date/Time 5/27/2020		Date/Time 5/27/2020 1100		Date/Time 5/27/2020		Date/Time 5/27/2020		Date/Time 5/27/2020		Date/Time 5/27/2020		Date/Time 5/27/2020		Date/Time 5/27/2020							



Cooler Receipt and Preservation Check Form

R2004443

5

Broome County Division of Solid Waste Management
Colesville Surface Waters and Sediments



Project/Client _____ Folder Number _____

Cooler received on 5/27/2020 by: SW

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: <u>Wet Ice</u> 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/BOC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set ☒ NA ☐

3. Temperature Readings Date: 5/27/2020 Time: 1635 ID: IR#7 R#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>4.10</u>	<u>2.80</u>	<u>1.80</u>				
Within 0-6°C?	☒ N	☒ N	☒ 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: Room by SW on 5/27/2020 at 1635
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y ☐ N ☐

Cooler Breakdown/Preservation Check**: Date: 5/27/2020 Time: 1815 by: SW

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 ☐
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized	Tedlar® Bags Inflated ☒ NA ☐

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	<u>7234K</u>	HNO ₃	☒	☒	<u>111409Z</u>		<u>SP-2</u>	<u>110</u>	<u>B28014C</u>	<u>≤2</u>
≤2		H ₂ SO 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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O 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: 2538, 20-03-17, 081919-1TW, 11119-1SR

Explain all Discrepancies/ Other Comments:

* Paper work is marked as a Routine, bottles rec'd are for a Baseline.

HPROD	BULK
HTR	FLDT
SUB	HGFB
<u>ALS</u>	LL3541

Labels secondary reviewed by: SW
PC Secondary Review: _____

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



FIELD MONITORING REPORT

PROJECT Colesville 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 5/27/2020 Time 0740 SWL —

Appearance Clear

Weather Conditions Sun 62°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.79	
Myron 6p	Conductivity	µmhos/cm	158	
Myron 6p	Temperature	Degrees Celsius	9.3	
Myron 6p	Redox	millivolts	50	
Lamotte	Turbidity	NTU	3.1	

Calibration Date/Time 5/27/2020 0730 D.O. = 9.20
7.00/10.00/4.00
1413 set 1413
0.0/10.0

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 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 5/27/2020 Time 0750 SWL _____
Appearance Clear
Weather Conditions Sun 62°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.55	
Myron 6p	Conductivity	µmhos/cm	152	
Myron 6p	Temperature	Degrees Celsius	9.7	
Myron 6p	Redox	millivolts	68	
Lamotte	Turbidity	NTU	2.7	

Calibration Date/Time 5/27/2020 0730

D.O. = 9.48

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 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 5/27/2020 Time 0805 SWL —
Appearance Clear
Weather Conditions Sun, 62°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.92	
Myron 6p	Conductivity	µmhos/cm	305	
Myron 6p	Temperature	Degrees Celsius	8.5	
Myron 6p	Redox	millivolts	—	
Lamotte	Turbidity	NTU	2.1	

Calibration Date/Time 5/27/2020 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 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 5/27/2020 Time 0815 SWL _____

Appearance Clear

Weather Conditions Sun 62°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.51	
Myron 6p	Conductivity	µmhos/cm	152	
Myron 6p	Temperature	Degrees Celsius	9.6	
Myron 6p	Redox	millivolts	20	
Lamotte	Turbidity	NTU	2.9	

Calibration Date/Time 5/27/2020 0730

D.O. = 9.22

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville LAB ID 5

SAMPLE POINT ID SP-3

PURGE INFORMATION

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

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

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

Well Constant (gal/ft.) _____ Observations _____

Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab

Date 5/27/2020 Time 0820 SWL _____

Appearance Clear

Weather Conditions Sun 62°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	<u>6.84</u>	
Myron 6p	Conductivity	µmhos/cm	<u>253</u>	
Myron 6p	Temperature	Degrees Celsius	<u>8.2</u>	
Myron 6p	Redox	millivolts	<u>—</u>	
Lamotte	Turbidity	NTU	<u>6.9</u>	

Calibration Date/Time 5/27/2020 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 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 5/27/2020 Time 0840 SWL _____
Appearance Clear
Weather Conditions Sun, 62°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.38	
Myron 6p	Conductivity	µmhos/cm	143	
Myron 6p	Temperature	Degrees Celsius	9.7	
Myron 6p	Redox	millivolts	50	
Lamotte	Turbidity	NTU	3.0	

Calibration Date/Time 5/27/2020 0730 D.O. = 9.22

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville LAB ID 7

SAMPLE POINT ID SP-2

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____
SWL (ft.) _____ Start Time _____ Stop Time _____
Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____
Well Constant (gal/ft.) _____ Observations _____
Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab
Date 5/27/2020 Time 0850 SWL _____
Appearance Very slight rust tint
Weather Conditions Sun, 62°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.55	
Myron 6p	Conductivity	µmhos/cm	247	
Myron 6p	Temperature	Degrees Celsius	8.2	
Myron 6p	Redox	millivolts	—	
Lamotte	Turbidity	NTU	11.7	

Calibration Date/Time 5/27/2020 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville LAB ID (Sed)

SAMPLE POINT ID SP-3-Sed

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 5/27/2020 Time 0830 SWL _____
Appearance Dark brown sediment
Weather Conditions Sun 62°
Sampling Technician (Print) BRIAN MALKIN Signature Brian Malkin

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 LAB ID 8

SAMPLE POINT ID SP-5 INF

PURGE INFORMATION

Well Depth (ft.) 4.10 Purge Date 5/27/2020 Purge Method Bailer
SWL (ft.) 0.40 Start Time 0920 Stop Time 0925
Standing Water (ft.) 3.70 Volume Purged gal. 1.8 # casings 3
Well Constant (gal./ft.) 0.163 Observations Orange tint
Well Volume (gal.) 0.6

SAMPLING INFORMATION

Sample Method Bailer
Date 5/27/2020 Time 0940 SWL 0.40
Appearance Slight orange tint, slightly turbid
Weather Conditions Sun 65°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.41	
Myron 6p	Conductivity	µmhos/cm	440	
Myron 6p	Temperature	Degrees Celsius	8.9	
Myron 6p	Redox	millivolts	—	
Lamotte	Turbidity	NTU	22.9	

Calibration Date/Time 5/27/2020 0730

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville LAB ID 9

SAMPLE POINT ID SP-SEFF

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 5/27/2020 Time 0910 SWL _____

Appearance clear with orange flecks

Weather Conditions Sun 65°

Sampling Technician (Print) BRYAN MACKIN Signature Bryan Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.50	
Myron 6p	Conductivity	µmhos/cm	444	
Myron 6p	Temperature	Degrees Celsius	9.2	
Myron 6p	Redox	millivolts		
Lamotte	Turbidity	NTU	16.7	

Calibration Date/Time 5/27/2020 0730

OBSERVATIONS

Sample from cleanout

Sampling procedures were performed in accordance with all applicable protocols.



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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	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.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	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 Certifications¹

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 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
Project: Colesville Surface Waters and Sediments

Service Request: R2004443

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
ALS SOP	Sediment	Total Solids
ASTM D1498-00	Water	Redox Potential, Field
SM 2550 B	Water	Temperature, Field
SM 4500-H+ B	Water	pH, Field
SM 4500-O G	Water	Oxygen, Dissolved

ALS Group USA, Corp.
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Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments/

Service Request: R2004443

Sample Name: F-6
Lab Code: R2004443-001
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

120.1		JJANSON
180.1		JJANSON
6010C	AKONZEL	KMCLAEN
7470A	AKONZEL	AKONZEL
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Sample Name: SW-4
Lab Code: R2004443-002
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

120.1		JJANSON
180.1		JJANSON
6010C	AKONZEL	KMCLAEN
7470A	AKONZEL	AKONZEL
8260C		KRUEST
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 4500-O G		JJANSON

Sample Name: SP-4
Lab Code: R2004443-003
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

120.1		JJANSON
180.1		JJANSON
6010C	AKONZEL	KMCLAEN
7470A	AKONZEL	AKONZEL

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments/

Service Request: R2004443

Sample Name: SP-4
Lab Code: R2004443-003
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

8260C

KRUEST

SM 2550 B

JJANSON

SM 4500-H+ B

JJANSON

Sample Name: SW-3
Lab Code: R2004443-004
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

120.1

JJANSON

180.1

JJANSON

6010C

AKONZEL

KMCLAEN

7470A

AKONZEL

AKONZEL

8260C

KRUEST

SM 2550 B

JJANSON

SM 4500-H+ B

JJANSON

SM 4500-O G

JJANSON

Sample Name: SP-3
Lab Code: R2004443-005
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method

Extracted/Digested By

Analyzed By

120.1

JJANSON

180.1

JJANSON

6010C

AKONZEL

KMCLAEN

7470A

AKONZEL

AKONZEL

8260C

KRUEST

SM 2550 B

JJANSON

SM 4500-H+ B

JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments/

Service Request: R2004443

Sample Name: SW-2
Lab Code: R2004443-006
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

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

Sample Name: SP-2
Lab Code: R2004443-007
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

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

Sample Name: SP-3-SED
Lab Code: R2004443-008
Sample Matrix: Sediment

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN
7471B	AKONZEL	AKONZEL
ALS SOP		KWONG

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dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments/

Service Request: R2004443

Sample Name: SP-5 Influent
Lab Code: R2004443-009
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

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

Sample Name: SP-5 Effluent
Lab Code: R2004443-010
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

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

Sample Name: Trip Blank
Lab Code: R2004443-011
Sample Matrix: Water

Date Collected: 05/27/20
Date Received: 05/27/20

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST



INORGANIC PREPARATION METHODS

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

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: F-6
Lab Code: R2004443-001

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 17:09	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,1-Dichloroethane (1,1-DCA)	0.62 J	5.0	0.20	1	06/02/20 17:09	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 17:09	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 17:09	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 17:09	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:09	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:09	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 17:09	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 17:09	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 17:09	
Acetone	2.1 U	10	2.1	1	06/02/20 17:09	
Benzene	0.20 U	5.0	0.20	1	06/02/20 17:09	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 17:09	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 17:09	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 17:09	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 17:09	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 17:09	
Chlorobenzene	0.25 J	5.0	0.20	1	06/02/20 17:09	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 17:09	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 17:09	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 17:09	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 17:09	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 17:09	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 17:09	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 17:09	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 17:09	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 17:09	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 17:09	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 17:09	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 17:09	
Styrene	0.20 U	5.0	0.20	1	06/02/20 17:09	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 17:09	
Toluene	0.20 U	5.0	0.20	1	06/02/20 17:09	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/02/20 17:09	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 17:09	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 17:09	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: F-6
Lab Code: R2004443-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 17:09	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/02/20 17:09	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 17:09	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 17:09	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 17:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	06/02/20 17:09	
Dibromofluoromethane	94	89 - 119	06/02/20 17:09	
Toluene-d8	100	87 - 121	06/02/20 17:09	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-4
Lab Code: R2004443-002

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 17:31	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,1-Dichloroethane (1,1-DCA)	0.75 J	5.0	0.20	1	06/02/20 17:31	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 17:31	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 17:31	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 17:31	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:31	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:31	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 17:31	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 17:31	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 17:31	
Acetone	2.1 U	10	2.1	1	06/02/20 17:31	
Benzene	0.20 U	5.0	0.20	1	06/02/20 17:31	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 17:31	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 17:31	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 17:31	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 17:31	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 17:31	
Chlorobenzene	0.35 J	5.0	0.20	1	06/02/20 17:31	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 17:31	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 17:31	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 17:31	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 17:31	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 17:31	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 17:31	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 17:31	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 17:31	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 17:31	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 17:31	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 17:31	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 17:31	
Styrene	0.20 U	5.0	0.20	1	06/02/20 17:31	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 17:31	
Toluene	0.20 U	5.0	0.20	1	06/02/20 17:31	
Trichloroethene (TCE)	0.26 J	5.0	0.20	1	06/02/20 17:31	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 17:31	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 17:31	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-4
Lab Code: R2004443-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 17:31	
cis-1,2-Dichloroethene	0.47 J	5.0	0.23	1	06/02/20 17:31	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 17:31	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 17:31	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 17:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	06/02/20 17:31	
Dibromofluoromethane	91	89 - 119	06/02/20 17:31	
Toluene-d8	100	87 - 121	06/02/20 17:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-4
Lab Code: R2004443-003

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 17:53	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,1-Dichloroethane (1,1-DCA)	7.7	5.0	0.20	1	06/02/20 17:53	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 17:53	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 17:53	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 17:53	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:53	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 17:53	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 17:53	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 17:53	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 17:53	
Acetone	2.1 U	10	2.1	1	06/02/20 17:53	
Benzene	0.20 U	5.0	0.20	1	06/02/20 17:53	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 17:53	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 17:53	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 17:53	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 17:53	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 17:53	
Chlorobenzene	1.3 J	5.0	0.20	1	06/02/20 17:53	
Chloroethane	2.9 J	5.0	0.23	1	06/02/20 17:53	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 17:53	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 17:53	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 17:53	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 17:53	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 17:53	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 17:53	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 17:53	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 17:53	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 17:53	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 17:53	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 17:53	
Styrene	0.20 U	5.0	0.20	1	06/02/20 17:53	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 17:53	
Toluene	0.20 U	5.0	0.20	1	06/02/20 17:53	
Trichloroethene (TCE)	1.7 J	5.0	0.20	1	06/02/20 17:53	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 17:53	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 17:53	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-4
Lab Code: R2004443-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 17:53	
cis-1,2-Dichloroethene	0.53 J	5.0	0.23	1	06/02/20 17:53	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 17:53	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 17:53	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 17:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	06/02/20 17:53	
Dibromofluoromethane	96	89 - 119	06/02/20 17:53	
Toluene-d8	102	87 - 121	06/02/20 17:53	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-3
Lab Code: R2004443-004

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 18:15	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,1-Dichloroethane (1,1-DCA)	0.97 J	5.0	0.20	1	06/02/20 18:15	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 18:15	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 18:15	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 18:15	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:15	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:15	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 18:15	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 18:15	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 18:15	
Acetone	2.1 U	10	2.1	1	06/02/20 18:15	
Benzene	0.20 U	5.0	0.20	1	06/02/20 18:15	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 18:15	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 18:15	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 18:15	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 18:15	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 18:15	
Chlorobenzene	0.48 J	5.0	0.20	1	06/02/20 18:15	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 18:15	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 18:15	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 18:15	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 18:15	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 18:15	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 18:15	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 18:15	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 18:15	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 18:15	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 18:15	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 18:15	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 18:15	
Styrene	0.20 U	5.0	0.20	1	06/02/20 18:15	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 18:15	
Toluene	0.20 U	5.0	0.20	1	06/02/20 18:15	
Trichloroethene (TCE)	0.34 J	5.0	0.20	1	06/02/20 18:15	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 18:15	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 18:15	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-3
Lab Code: R2004443-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 18:15	
cis-1,2-Dichloroethene	0.49 J	5.0	0.23	1	06/02/20 18:15	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 18:15	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 18:15	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 18:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	06/02/20 18:15	
Dibromofluoromethane	94	89 - 119	06/02/20 18:15	
Toluene-d8	101	87 - 121	06/02/20 18:15	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-3
Lab Code: R2004443-005

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 18:37	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,1,2-Trichloroethane	0.27 J	5.0	0.20	1	06/02/20 18:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,1-Dichloroethane (1,1-DCA)	9.0	5.0	0.20	1	06/02/20 18:37	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 18:37	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 18:37	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 18:37	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,2-Dichloroethane	0.57 J	5.0	0.20	1	06/02/20 18:37	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:37	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:37	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 18:37	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 18:37	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 18:37	
Acetone	2.1 U	10	2.1	1	06/02/20 18:37	
Benzene	0.20 U	5.0	0.20	1	06/02/20 18:37	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 18:37	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 18:37	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 18:37	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 18:37	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 18:37	
Chlorobenzene	0.66 J	5.0	0.20	1	06/02/20 18:37	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 18:37	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 18:37	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 18:37	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 18:37	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 18:37	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 18:37	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 18:37	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 18:37	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 18:37	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 18:37	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 18:37	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 18:37	
Styrene	0.20 U	5.0	0.20	1	06/02/20 18:37	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 18:37	
Toluene	0.20 U	5.0	0.20	1	06/02/20 18:37	
Trichloroethene (TCE)	1.5 J	5.0	0.20	1	06/02/20 18:37	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 18:37	
Vinyl Chloride	1.1 J	5.0	0.20	1	06/02/20 18:37	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-3
Lab Code: R2004443-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 18:37	
cis-1,2-Dichloroethene	7.5	5.0	0.23	1	06/02/20 18:37	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 18:37	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 18:37	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 18:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	06/02/20 18:37	
Dibromofluoromethane	94	89 - 119	06/02/20 18:37	
Toluene-d8	100	87 - 121	06/02/20 18:37	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-2
Lab Code: R2004443-006

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 18:59	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,1-Dichloroethane (1,1-DCA)	0.51 J	5.0	0.20	1	06/02/20 18:59	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 18:59	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 18:59	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 18:59	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 18:59	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 18:59	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 18:59	
Acetone	2.1 U	10	2.1	1	06/02/20 18:59	
Benzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 18:59	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 18:59	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 18:59	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 18:59	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 18:59	
Chlorobenzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 18:59	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 18:59	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 18:59	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 18:59	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 18:59	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 18:59	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 18:59	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 18:59	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 18:59	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 18:59	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 18:59	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 18:59	
Styrene	0.20 U	5.0	0.20	1	06/02/20 18:59	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 18:59	
Toluene	0.20 U	5.0	0.20	1	06/02/20 18:59	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/02/20 18:59	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 18:59	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 18:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SW-2
Lab Code: R2004443-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 18:59	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/02/20 18:59	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 18:59	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 18:59	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 18:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	85 - 122	06/02/20 18:59	
Dibromofluoromethane	92	89 - 119	06/02/20 18:59	
Toluene-d8	99	87 - 121	06/02/20 18:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-2
Lab Code: R2004443-007

Units: ug/L
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)	0.26 J	5.0	0.21	1	06/02/20 19:20	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 19:20	
1,1,2-Trichloroethane	0.22 J	5.0	0.20	1	06/02/20 19:20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 19:20	
1,1-Dichloroethane (1,1-DCA)	21	5.0	0.20	1	06/02/20 19:20	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 19:20	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 19:20	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 19:20	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 19:20	
1,2-Dichlorobenzene	0.36 J	5.0	0.20	1	06/02/20 19:20	
1,2-Dichloroethane	0.54 J	5.0	0.20	1	06/02/20 19:20	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 19:20	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 19:20	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 19:20	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 19:20	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 19:20	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 19:20	
Acetone	2.1 U	10	2.1	1	06/02/20 19:20	
Benzene	0.20 U	5.0	0.20	1	06/02/20 19:20	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 19:20	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 19:20	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 19:20	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 19:20	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 19:20	
Chlorobenzene	16	5.0	0.20	1	06/02/20 19:20	
Chloroethane	5.5	5.0	0.23	1	06/02/20 19:20	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 19:20	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 19:20	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 19:20	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 19:20	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 19:20	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 19:20	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 19:20	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 19:20	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 19:20	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 19:20	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 19:20	
Styrene	0.20 U	5.0	0.20	1	06/02/20 19:20	
Tetrachloroethene (PCE)	0.33 J	5.0	0.21	1	06/02/20 19:20	
Toluene	0.20 U	5.0	0.20	1	06/02/20 19:20	
Trichloroethene (TCE)	3.0 J	5.0	0.20	1	06/02/20 19:20	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 19:20	
Vinyl Chloride	1.1 J	5.0	0.20	1	06/02/20 19:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-2
Lab Code: R2004443-007

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 19:20	
cis-1,2-Dichloroethene	7.1	5.0	0.23	1	06/02/20 19:20	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 19:20	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 19:20	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 19:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	06/02/20 19:20	
Dibromofluoromethane	93	89 - 119	06/02/20 19:20	
Toluene-d8	98	87 - 121	06/02/20 19:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-5 Influent
Lab Code: R2004443-009

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 19:42	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,1-Dichloroethane (1,1-DCA)	5.4	5.0	0.20	1	06/02/20 19:42	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 19:42	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 19:42	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 19:42	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 19:42	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 19:42	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 19:42	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 19:42	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 19:42	
Acetone	2.1 U	10	2.1	1	06/02/20 19:42	
Benzene	0.76 J	5.0	0.20	1	06/02/20 19:42	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 19:42	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 19:42	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 19:42	
Carbon Disulfide	4.7 J	10	0.25	1	06/02/20 19:42	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 19:42	
Chlorobenzene	10	5.0	0.20	1	06/02/20 19:42	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 19:42	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 19:42	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 19:42	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 19:42	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 19:42	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 19:42	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 19:42	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 19:42	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 19:42	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 19:42	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 19:42	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 19:42	
Styrene	0.20 U	5.0	0.20	1	06/02/20 19:42	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 19:42	
Toluene	0.20 U	5.0	0.20	1	06/02/20 19:42	
Trichloroethene (TCE)	1.8 J	5.0	0.20	1	06/02/20 19:42	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 19:42	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 19:42	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-5 Influent
Lab Code: R2004443-009

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 19:42	
cis-1,2-Dichloroethene	1.4 J	5.0	0.23	1	06/02/20 19:42	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 19:42	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 19:42	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 19:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	06/02/20 19:42	
Dibromofluoromethane	100	89 - 119	06/02/20 19:42	
Toluene-d8	100	87 - 121	06/02/20 19:42	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-5 Effluent
Lab Code: R2004443-010

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 20:04	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,1-Dichloroethane (1,1-DCA)	4.6 J	5.0	0.20	1	06/02/20 20:04	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 20:04	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 20:04	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 20:04	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 20:04	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 20:04	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 20:04	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 20:04	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 20:04	
Acetone	2.1 U	10	2.1	1	06/02/20 20:04	
Benzene	0.23 J	5.0	0.20	1	06/02/20 20:04	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 20:04	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 20:04	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 20:04	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 20:04	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 20:04	
Chlorobenzene	2.8 J	5.0	0.20	1	06/02/20 20:04	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 20:04	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 20:04	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 20:04	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 20:04	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 20:04	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 20:04	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 20:04	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 20:04	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 20:04	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 20:04	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 20:04	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 20:04	
Styrene	0.20 U	5.0	0.20	1	06/02/20 20:04	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 20:04	
Toluene	0.20 U	5.0	0.20	1	06/02/20 20:04	
Trichloroethene (TCE)	0.60 J	5.0	0.20	1	06/02/20 20:04	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 20:04	
Vinyl Chloride	0.43 J	5.0	0.20	1	06/02/20 20:04	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: SP-5 Effluent
Lab Code: R2004443-010

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 20:04	
cis-1,2-Dichloroethene	0.69 J	5.0	0.23	1	06/02/20 20:04	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 20:04	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 20:04	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 20:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	06/02/20 20:04	
Dibromofluoromethane	96	89 - 119	06/02/20 20:04	
Toluene-d8	103	87 - 121	06/02/20 20:04	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: Trip Blank
Lab Code: R2004443-011

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 16:47	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 16:47	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 16:47	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 16:47	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 16:47	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 16:47	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 16:47	
Acetone	2.1 U	10	2.1	1	06/02/20 16:47	
Benzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 16:47	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 16:47	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 16:47	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 16:47	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 16:47	
Chlorobenzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 16:47	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 16:47	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 16:47	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 16:47	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 16:47	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 16:47	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 16:47	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 16:47	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 16:47	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 16:47	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 16:47	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 16:47	
Styrene	0.20 U	5.0	0.20	1	06/02/20 16:47	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 16:47	
Toluene	0.20 U	5.0	0.20	1	06/02/20 16:47	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/02/20 16:47	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 16:47	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 16:47	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Sample Name: Trip Blank
Lab Code: R2004443-011

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 16:47	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/02/20 16:47	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 16:47	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 16:47	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 16:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	06/02/20 16:47	
Dibromofluoromethane	92	89 - 119	06/02/20 16:47	
Toluene-d8	101	87 - 121	06/02/20 16:47	



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: F-6
Lab Code: R2004443-001

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:08	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:08	06/01/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/02/20 17:08	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 17:08	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:08	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:08	06/01/20	
Calcium, Total	6010C	15400	ug/L	1000	1	06/02/20 17:08	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:08	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:08	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:08	06/01/20	
Iron, Total	6010C	200	ug/L	100	1	06/02/20 17:08	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:08	06/01/20	
Magnesium, Total	6010C	3500	ug/L	1000	1	06/02/20 17:08	06/01/20	
Manganese, Total	6010C	57	ug/L	10	1	06/02/20 17:08	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:37	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:08	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:08	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:08	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:08	06/01/20	
Sodium, Total	6010C	6300	ug/L	1000	1	06/02/20 17:08	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:08	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:08	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:08	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-4
Lab Code: R2004443-002

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:12	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:12	06/01/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/02/20 17:12	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 17:12	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:12	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:12	06/01/20	
Calcium, Total	6010C	14400	ug/L	1000	1	06/02/20 17:12	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:12	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:12	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:12	06/01/20	
Iron, Total	6010C	210	ug/L	100	1	06/02/20 17:12	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:12	06/01/20	
Magnesium, Total	6010C	3300	ug/L	1000	1	06/02/20 17:12	06/01/20	
Manganese, Total	6010C	58	ug/L	10	1	06/02/20 17:12	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:40	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:12	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:12	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:12	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:12	06/01/20	
Sodium, Total	6010C	6100	ug/L	1000	1	06/02/20 17:12	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:12	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:12	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:12	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-4
Lab Code: R2004443-003

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:15	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:15	06/01/20	
Arsenic, Total	6010C	17	ug/L	10	1	06/04/20 17:38	06/01/20	
Barium, Total	6010C	34	ug/L	20	1	06/02/20 17:15	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:15	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:15	06/01/20	
Calcium, Total	6010C	39500	ug/L	1000	1	06/02/20 17:15	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:15	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:15	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:15	06/01/20	
Iron, Total	6010C	2900	ug/L	100	1	06/02/20 17:15	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:15	06/01/20	
Magnesium, Total	6010C	8100	ug/L	1000	1	06/02/20 17:15	06/01/20	
Manganese, Total	6010C	1750	ug/L	10	1	06/02/20 17:15	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:42	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:15	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:15	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/04/20 17:38	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:15	06/01/20	
Sodium, Total	6010C	7000	ug/L	1000	1	06/02/20 17:15	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:15	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:15	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:15	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-3
Lab Code: R2004443-004

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:18	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:18	06/01/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/02/20 17:18	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 17:18	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:18	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:18	06/01/20	
Calcium, Total	6010C	14200	ug/L	1000	1	06/02/20 17:18	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:18	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:18	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:18	06/01/20	
Iron, Total	6010C	260	ug/L	100	1	06/02/20 17:18	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:18	06/01/20	
Magnesium, Total	6010C	3300	ug/L	1000	1	06/02/20 17:18	06/01/20	
Manganese, Total	6010C	65	ug/L	10	1	06/02/20 17:18	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:45	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:18	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:18	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:18	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:18	06/01/20	
Sodium, Total	6010C	6200	ug/L	1000	1	06/02/20 17:18	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:18	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:18	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:18	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-3
Lab Code: R2004443-005

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	150	ug/L	100	1	06/02/20 17:22	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:22	06/01/20	
Arsenic, Total	6010C	20	ug/L	10	1	06/02/20 17:22	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 17:22	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:22	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:22	06/01/20	
Calcium, Total	6010C	33600	ug/L	1000	1	06/02/20 17:22	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:22	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:22	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:22	06/01/20	
Iron, Total	6010C	11000	ug/L	100	1	06/02/20 17:22	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:22	06/01/20	
Magnesium, Total	6010C	6200	ug/L	1000	1	06/02/20 17:22	06/01/20	
Manganese, Total	6010C	1860	ug/L	10	1	06/02/20 17:22	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:48	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:22	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:22	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:22	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:22	06/01/20	
Sodium, Total	6010C	3600	ug/L	1000	1	06/02/20 17:22	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:22	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:22	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:22	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-2
Lab Code: R2004443-006

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	110	ug/L	100	1	06/02/20 17:25	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:25	06/01/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/02/20 17:25	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 17:25	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:25	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:25	06/01/20	
Calcium, Total	6010C	13700	ug/L	1000	1	06/02/20 17:25	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:25	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:25	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:25	06/01/20	
Iron, Total	6010C	200	ug/L	100	1	06/02/20 17:25	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:25	06/01/20	
Magnesium, Total	6010C	3200	ug/L	1000	1	06/02/20 17:25	06/01/20	
Manganese, Total	6010C	20	ug/L	10	1	06/02/20 17:25	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:50	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:25	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:25	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:25	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:25	06/01/20	
Sodium, Total	6010C	6200	ug/L	1000	1	06/02/20 17:25	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:25	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:25	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:25	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-2
Lab Code: R2004443-007

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:35	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:35	06/01/20	
Arsenic, Total	6010C	21	ug/L	10	1	06/02/20 17:35	06/01/20	
Barium, Total	6010C	47	ug/L	20	1	06/02/20 17:35	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:35	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:35	06/01/20	
Calcium, Total	6010C	29700	ug/L	1000	1	06/02/20 17:35	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:35	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:35	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:35	06/01/20	
Iron, Total	6010C	22700	ug/L	100	1	06/02/20 17:35	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:35	06/01/20	
Magnesium, Total	6010C	6200	ug/L	1000	1	06/02/20 17:35	06/01/20	
Manganese, Total	6010C	6150	ug/L	10	1	06/02/20 17:35	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:58	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:35	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 17:35	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:35	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:35	06/01/20	
Sodium, Total	6010C	3200	ug/L	1000	1	06/02/20 17:35	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:35	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:35	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:35	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Sediment
Sample Name: SP-3-SED
Lab Code: R2004443-008

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12300	mg/Kg	26	1	06/04/20 19:16	06/03/20	
Antimony, Total	6010C	7.7 U	mg/Kg	7.7	1	06/04/20 19:16	06/03/20	
Arsenic, Total	6010C	13.6	mg/Kg	1.3	1	06/04/20 19:16	06/03/20	
Barium, Total	6010C	69.5	mg/Kg	2.6	1	06/04/20 19:16	06/03/20	
Beryllium, Total	6010C	0.54	mg/Kg	0.39	1	06/04/20 19:16	06/03/20	
Cadmium, Total	6010C	0.64 U	mg/Kg	0.64	1	06/04/20 19:16	06/03/20	
Calcium, Total	6010C	1570	mg/Kg	130	1	06/04/20 19:16	06/03/20	
Chromium, Total	6010C	15.5	mg/Kg	1.3	1	06/04/20 19:16	06/03/20	
Cobalt, Total	6010C	12.3	mg/Kg	6.4	1	06/04/20 19:16	06/03/20	
Copper, Total	6010C	24.9	mg/Kg	2.6	1	06/04/20 19:16	06/03/20	
Iron, Total	6010C	31800	mg/Kg	260	10	06/04/20 19:52	06/03/20	
Lead, Total	6010C	16.4	mg/Kg	0.64	1	06/04/20 19:16	06/03/20	
Magnesium, Total	6010C	4280	mg/Kg	130	1	06/04/20 19:16	06/03/20	
Manganese, Total	6010C	4680	mg/Kg	26	10	06/04/20 19:52	06/03/20	
Mercury, Total	7471B	0.040 U	mg/Kg	0.040	1	06/03/20 14:47	06/02/20	
Nickel, Total	6010C	28.8	mg/Kg	5.1	1	06/04/20 19:16	06/03/20	
Potassium, Total	6010C	1100	mg/Kg	260	1	06/04/20 19:16	06/03/20	
Selenium, Total	6010C	1.3 U	mg/Kg	1.3	1	06/04/20 19:16	06/03/20	
Silver, Total	6010C	1.3 U	mg/Kg	1.3	1	06/04/20 19:16	06/03/20	
Sodium, Total	6010C	130 U	mg/Kg	130	1	06/04/20 19:16	06/03/20	
Thallium, Total	6010C	1.3 U	mg/Kg	1.3	1	06/04/20 19:16	06/03/20	
Vanadium, Total	6010C	17.4	mg/Kg	6.4	1	06/04/20 19:16	06/03/20	
Zinc, Total	6010C	73.9	mg/Kg	2.6	1	06/04/20 19:16	06/03/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-5 Influent
Lab Code: R2004443-009

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	270	ug/L	100	1	06/02/20 17:38	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:38	06/01/20	
Arsenic, Total	6010C	313	ug/L	10	1	06/02/20 17:38	06/01/20	
Barium, Total	6010C	137	ug/L	20	1	06/02/20 17:38	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:38	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:38	06/01/20	
Calcium, Total	6010C	43100	ug/L	1000	1	06/02/20 17:38	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:38	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:38	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:38	06/01/20	
Iron, Total	6010C	45600	ug/L	100	1	06/02/20 17:38	06/01/20	
Lead, Total	6010C	240	ug/L	5.0	1	06/02/20 17:38	06/01/20	
Magnesium, Total	6010C	9700	ug/L	1000	1	06/02/20 17:38	06/01/20	
Manganese, Total	6010C	6070	ug/L	10	1	06/02/20 17:38	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 12:00	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:38	06/01/20	
Potassium, Total	6010C	2700	ug/L	2000	1	06/02/20 17:38	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:38	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:38	06/01/20	
Sodium, Total	6010C	6200	ug/L	1000	1	06/02/20 17:38	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:38	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:38	06/01/20	
Zinc, Total	6010C	14200	ug/L	200	10	06/04/20 17:41	06/01/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-5 Effluent
Lab Code: R2004443-010

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 17:41	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 17:41	06/01/20	
Arsenic, Total	6010C	151	ug/L	10	1	06/02/20 17:41	06/01/20	
Barium, Total	6010C	156	ug/L	20	1	06/02/20 17:41	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 17:41	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:41	06/01/20	
Calcium, Total	6010C	43400	ug/L	1000	1	06/02/20 17:41	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:41	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 17:41	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 17:41	06/01/20	
Iron, Total	6010C	31500	ug/L	100	1	06/02/20 17:41	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 17:41	06/01/20	
Magnesium, Total	6010C	10000	ug/L	1000	1	06/02/20 17:41	06/01/20	
Manganese, Total	6010C	6260	ug/L	10	1	06/02/20 17:41	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 12:03	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 17:41	06/01/20	
Potassium, Total	6010C	2700	ug/L	2000	1	06/02/20 17:41	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:41	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 17:41	06/01/20	
Sodium, Total	6010C	6500	ug/L	1000	1	06/02/20 17:41	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 17:41	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 17:41	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 17:41	06/01/20	



General Chemistry

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Sediment
Sample Name: SP-3-SED
Lab Code: R2004443-008

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	77.8	Percent	-	1	05/27/20 09:45	



Field Data

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: F-6
Lab Code: R2004443-001

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	158	uMHOS/cm	-	1	05/27/20 07:40	
Oxygen, Dissolved	SM 4500-O G	9.20	mg/L	0.20	1	05/27/20 07:40	
pH, Field	SM 4500-H+ B	7.79	pH Units	-	1	05/27/20 07:40	
Redox Potential, Field	ASTM D1498-00	50	mV	-	1	05/27/20 07:40	
Temperature, Field	SM 2550 B	9.30	deg C	-	1	05/27/20 07:40	
Turbidity, Field	180.1	3.1	NTU	-	1	05/27/20 07:40	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-4
Lab Code: R2004443-002

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	152	uMHOS/cm	-	1	05/27/20 07:50	
Oxygen, Dissolved	SM 4500-O G	9.48	mg/L	0.20	1	05/27/20 07:50	
pH, Field	SM 4500-H+ B	7.55	pH Units	-	1	05/27/20 07:50	
Redox Potential, Field	ASTM D1498-00	68	mV	-	1	05/27/20 07:50	
Temperature, Field	SM 2550 B	9.70	deg C	-	1	05/27/20 07:50	
Turbidity, Field	180.1	2.7	NTU	-	1	05/27/20 07:50	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-4
Lab Code: R2004443-003

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	305	uMHOS/cm	-	1	05/27/20 08:05	
pH, Field	SM 4500-H+ B	6.92	pH Units	-	1	05/27/20 08:05	
Temperature, Field	SM 2550 B	8.50	deg C	-	1	05/27/20 08:05	
Turbidity, Field	180.1	2.1	NTU	-	1	05/27/20 08:05	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-3
Lab Code: R2004443-004

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	152	uMHOS/cm	-	1	05/27/20 08:15	
Oxygen, Dissolved	SM 4500-O G	9.22	mg/L	0.20	1	05/27/20 08:15	
pH, Field	SM 4500-H+ B	7.51	pH Units	-	1	05/27/20 08:15	
Redox Potential, Field	ASTM D1498-00	20	mV	-	1	05/27/20 08:15	
Temperature, Field	SM 2550 B	9.60	deg C	-	1	05/27/20 08:15	
Turbidity, Field	180.1	2.9	NTU	-	1	05/27/20 08:15	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-3
Lab Code: R2004443-005

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	253	uMHOS/cm	-	1	05/27/20 08:20	
pH, Field	SM 4500-H+ B	6.84	pH Units	-	1	05/27/20 08:20	
Temperature, Field	SM 2550 B	8.20	deg C	-	1	05/27/20 08:20	
Turbidity, Field	180.1	6.9	NTU	-	1	05/27/20 08:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SW-2
Lab Code: R2004443-006

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	143	uMHOS/cm	-	1	05/27/20 08:40	
Oxygen, Dissolved	SM 4500-O G	9.22	mg/L	0.20	1	05/27/20 08:40	
pH, Field	SM 4500-H+ B	7.38	pH Units	-	1	05/27/20 08:40	
Redox Potential, Field	ASTM D1498-00	57	mV	-	1	05/27/20 08:40	
Temperature, Field	SM 2550 B	9.70	deg C	-	1	05/27/20 08:40	
Turbidity, Field	180.1	3	NTU	-	1	05/27/20 08:40	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-2
Lab Code: R2004443-007

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	247	uMHOS/cm	-	1	05/27/20 08:50	
pH, Field	SM 4500-H+ B	6.55	pH Units	-	1	05/27/20 08:50	
Temperature, Field	SM 2550 B	8.20	deg C	-	1	05/27/20 08:50	
Turbidity, Field	180.1	11.7	NTU	-	1	05/27/20 08:50	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-5 Influent
Lab Code: R2004443-009

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	440	uMHOS/cm	-	1	05/27/20 09:40	
pH, Field	SM 4500-H+ B	6.41	pH Units	-	1	05/27/20 09:40	
Temperature, Field	SM 2550 B	8.90	deg C	-	1	05/27/20 09:40	
Turbidity, Field	180.1	22.9	NTU	-	1	05/27/20 09:40	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: SP-5 Effluent
Lab Code: R2004443-010

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20 16:20
Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	444	uMHOS/cm	-	1	05/27/20 09:10	
pH, Field	SM 4500-H+ B	6.50	pH Units	-	1	05/27/20 09:10	
Temperature, Field	SM 2550 B	9.20	deg C	-	1	05/27/20 09:10	
Turbidity, Field	180.1	16.7	NTU	-	1	05/27/20 09:10	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	89-119	87-121
F-6	R2004443-001	89	94	100
SW-4	R2004443-002	87	91	100
SP-4	R2004443-003	91	96	102
SW-3	R2004443-004	87	94	101
SP-3	R2004443-005	91	94	100
SW-2	R2004443-006	86	92	99
SP-2	R2004443-007	88	93	98
SP-5 Influent	R2004443-009	90	100	100
SP-5 Effluent	R2004443-010	94	96	103
Trip Blank	R2004443-011	90	92	101
Method Blank	RQ2005741-04	90	95	99
Lab Control Sample	RQ2005741-03	96	100	103
F-6 MS	RQ2005741-05	97	100	101
F-6 DMS	RQ2005741-06	99	105	105

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20
Date Analyzed: 06/2/20
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: F-6
Lab Code: R2004443-001
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2005741-05			Duplicate Matrix Spike RQ2005741-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	0.21 U	52.4	50.0	105	52.6	50.0	105	74-127	<1	30
1,1,2,2-Tetrachloroethane	0.20 U	54.0	50.0	108	56.1	50.0	112	72-122	4	30
1,1,2-Trichloroethane	0.20 U	51.6	50.0	103	52.5	50.0	105	82-121	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	51.3	50.0	103	52.1	50.0	104	50-147	1	30
1,1-Dichloroethane (1,1-DCA)	0.62 J	51.7	50.0	102	52.5	50.0	104	74-132	2	30
1,1-Dichloroethene (1,1-DCE)	0.25 U	50.4	50.0	101	50.4	50.0	101	71-118	<1	30
1,2,4-Trichlorobenzene	0.25 U	51.8	50.0	104	54.1	50.0	108	69-122	4	30
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	46.7	50.0	93	49.4	50.0	99	37-150	6	30
1,2-Dibromoethane	0.20 U	50.6	50.0	101	51.0	50.0	102	67-127	<1	30
1,2-Dichlorobenzene	0.20 U	50.1	50.0	100	51.6	50.0	103	77-120	3	30
1,2-Dichloroethane	0.20 U	53.5	50.0	107	53.7	50.0	107	68-130	<1	30
1,2-Dichloropropane	0.20 U	51.3	50.0	103	51.4	50.0	103	79-124	<1	30
1,3-Dichlorobenzene	0.20 U	48.6	50.0	97	50.6	50.0	101	83-121	4	30
1,4-Dichlorobenzene	0.20 U	49.1	50.0	98	51.5	50.0	103	82-120	5	30
2-Butanone (MEK)	0.78 U	45.9	50.0	92	45.2	50.0	90	61-137	2	30
2-Hexanone	0.20 U	45.8	50.0	92	48.0	50.0	96	56-132	5	30
4-Methyl-2-pentanone	0.20 U	46.7	50.0	93	47.4	50.0	95	60-141	2	30
Acetone	2.1 U	53.9	50.0	108	56.7	50.0	113	35-183	5	30
Benzene	0.20 U	51.9	50.0	104	52.2	50.0	104	76-129	<1	30
Bromodichloromethane	0.22 U	52.6	50.0	105	53.5	50.0	107	78-133	2	30
Bromoform	0.25 U	43.5	50.0	87	46.8	50.0	94	58-133	7	30
Bromomethane	0.70 U	46.7	50.0	93	46.3	50.0	93	10-184	<1	30
Carbon Disulfide	0.25 U	39.4	50.0	79	41.0	50.0	82	59-140	4	30
Carbon Tetrachloride	0.34 U	53.0	50.0	106	52.0	50.0	104	65-135	2	30
Chlorobenzene	0.25 J	54.8	50.0	109	56.5	50.0	113	76-125	3	30
Chloroethane	0.23 U	54.5	50.0	109	54.3	50.0	109	48-146	<1	30
Chloroform	0.24 U	48.9	50.0	98	49.0	50.0	98	75-130	<1	30
Chloromethane	0.28 U	44.7	50.0	89	46.1	50.0	92	55-160	3	30
Cyclohexane	0.26 U	49.9	50.0	100	51.5	50.0	103	52-145	3	30
Dibromochloromethane	0.20 U	51.2	50.0	102	53.3	50.0	107	72-128	4	30
Dichlorodifluoromethane (CFC 12)	0.21 U	52.5	50.0	105	53.2	50.0	106	49-154	1	30
Dichloromethane	0.36 U	48.3	50.0	97	47.5	50.0	95	73-122	2	30
Ethylbenzene	0.20 U	53.8	50.0	108	55.1	50.0	110	72-134	2	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.

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: 05/27/20
Date Received: 05/27/20
Date Analyzed: 06/2/20
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: F-6
Lab Code: R2004443-001
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Matrix Spike RQ2005741-05				Duplicate Matrix Spike RQ2005741-06					
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Isopropylbenzene (Cumene)	0.20 U	51.3	50.0	103	53.1	50.0	106	77-128	3	30
Methyl Acetate	0.33 U	44.3	50.0	89	45.2	50.0	90	26-121	2	30
Methyl tert-Butyl Ether	0.20 U	50.1	50.0	100	50.4	50.0	101	75-119	<1	30
Methylcyclohexane	0.20 U	50.6	50.0	101	50.0	50.0	100	45-146	1	30
Styrene	0.20 U	51.4	50.0	103	52.8	50.0	106	74-136	3	30
Tetrachloroethene (PCE)	0.21 U	54.1	50.0	108	55.1	50.0	110	72-125	2	30
Toluene	0.20 U	55.3	50.0	111	55.9	50.0	112	79-119	1	30
Trichloroethene (TCE)	0.20 U	48.6	50.0	97	47.3	50.0	95	74-122	3	30
Trichlorofluoromethane (CFC 11)	0.24 U	52.7	50.0	105	54.0	50.0	108	71-136	2	30
Vinyl Chloride	0.20 U	48.3	50.0	97	49.5	50.0	99	74-159	2	30
cis-1,2-Dichloroethene	0.23 U	52.7	50.0	105	51.8	50.0	104	77-127	2	30
cis-1,3-Dichloropropene	0.20 U	48.6	50.0	97	49.1	50.0	98	52-134	1	30
trans-1,2-Dichloroethene	0.20 U	48.9	50.0	98	50.1	50.0	100	73-118	2	30
trans-1,3-Dichloropropene	0.23 U	46.4	50.0	93	47.7	50.0	95	71-133	3	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.

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2005741-04

Units: ug/L
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)	0.21 U	5.0	0.21	1	06/02/20 13:41	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,1-Dichloroethene (1,1-DCE)	0.25 U	5.0	0.25	1	06/02/20 13:41	
1,2,4-Trichlorobenzene	0.25 U	5.0	0.25	1	06/02/20 13:41	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	06/02/20 13:41	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
2-Butanone (MEK)	0.78 U	10	0.78	1	06/02/20 13:41	
2-Hexanone	0.20 U	10	0.20	1	06/02/20 13:41	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	06/02/20 13:41	
Acetone	2.1 U	10	2.1	1	06/02/20 13:41	
Benzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
Bromodichloromethane	0.22 U	5.0	0.22	1	06/02/20 13:41	
Bromoform	0.25 U	5.0	0.25	1	06/02/20 13:41	
Bromomethane	0.70 U	5.0	0.70	1	06/02/20 13:41	
Carbon Disulfide	0.25 U	10	0.25	1	06/02/20 13:41	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	06/02/20 13:41	
Chlorobenzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
Chloroethane	0.23 U	5.0	0.23	1	06/02/20 13:41	
Chloroform	0.24 U	5.0	0.24	1	06/02/20 13:41	
Chloromethane	0.28 U	5.0	0.28	1	06/02/20 13:41	
Cyclohexane	0.26 U	10	0.26	1	06/02/20 13:41	
Dibromochloromethane	0.20 U	5.0	0.20	1	06/02/20 13:41	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	06/02/20 13:41	
Dichloromethane	0.36 U	5.0	0.36	1	06/02/20 13:41	
Ethylbenzene	0.20 U	5.0	0.20	1	06/02/20 13:41	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	06/02/20 13:41	
Methyl Acetate	0.33 U	10	0.33	1	06/02/20 13:41	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	06/02/20 13:41	
Methylcyclohexane	0.20 U	10	0.20	1	06/02/20 13:41	
Styrene	0.20 U	5.0	0.20	1	06/02/20 13:41	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	06/02/20 13:41	
Toluene	0.20 U	5.0	0.20	1	06/02/20 13:41	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	06/02/20 13:41	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	06/02/20 13:41	
Vinyl Chloride	0.20 U	5.0	0.20	1	06/02/20 13:41	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: RQ2005741-04

Service Request: R2004443
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	06/02/20 13:41	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	06/02/20 13:41	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	06/02/20 13:41	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	06/02/20 13:41	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	06/02/20 13:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	06/02/20 13:41	
Dibromofluoromethane	95	89 - 119	06/02/20 13:41	
Toluene-d8	99	87 - 121	06/02/20 13:41	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Analyzed: 06/02/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2005741-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.7	20.0	99	75-125
1,1,2,2-Tetrachloroethane	8260C	21.9	20.0	110	78-126
1,1,2-Trichloroethane	8260C	21.4	20.0	107	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.3	20.0	101	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.8	20.0	104	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.1	20.0	96	71-118
1,2,4-Trichlorobenzene	8260C	18.9	20.0	95	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	18.4	20.0	92	55-136
1,2-Dibromoethane	8260C	20.4	20.0	102	82-127
1,2-Dichlorobenzene	8260C	19.7	20.0	98	80-119
1,2-Dichloroethane	8260C	21.1	20.0	105	71-127
1,2-Dichloropropane	8260C	20.2	20.0	101	80-119
1,3-Dichlorobenzene	8260C	19.0	20.0	95	83-121
1,4-Dichlorobenzene	8260C	19.5	20.0	98	79-119
2-Butanone (MEK)	8260C	17.4	20.0	87	61-137
2-Hexanone	8260C	18.9	20.0	95	63-124
4-Methyl-2-pentanone	8260C	18.6	20.0	93	66-124
Acetone	8260C	13.0	20.0	65	40-161
Benzene	8260C	20.3	20.0	102	79-119
Bromodichloromethane	8260C	21.7	20.0	108	81-123
Bromoform	8260C	17.7	20.0	89	65-146
Bromomethane	8260C	22.0	20.0	110	42-166
Carbon Disulfide	8260C	16.4	20.0	82	66-128
Carbon Tetrachloride	8260C	19.3	20.0	96	70-127
Chlorobenzene	8260C	21.6	20.0	108	80-121
Chloroethane	8260C	20.3	20.0	102	62-131
Chloroform	8260C	20.0	20.0	100	79-120
Chloromethane	8260C	17.3	20.0	86	65-135
Cyclohexane	8260C	19.8	20.0	99	69-120
Dibromochloromethane	8260C	21.1	20.0	105	72-128
Dichlorodifluoromethane (CFC 12)	8260C	22.2	20.0	111	59-155
Dichloromethane	8260C	21.1	20.0	105	73-122
Ethylbenzene	8260C	20.3	20.0	102	76-120

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Superset Reference:20-0000550388 rev 00

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Analyzed: 06/02/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2005741-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	19.3	20.0	97	77-128
Methyl Acetate	8260C	13.5	20.0	67	40-112
Methyl tert-Butyl Ether	8260C	21.4	20.0	107	75-118
Methylcyclohexane	8260C	19.9	20.0	99	51-129
Styrene	8260C	19.9	20.0	100	80-124
Tetrachloroethene (PCE)	8260C	20.1	20.0	100	72-125
Toluene	8260C	21.9	20.0	109	79-119
Trichloroethene (TCE)	8260C	18.5	20.0	92	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.6	20.0	103	71-136
Vinyl Chloride	8260C	19.3	20.0	96	74-159
cis-1,2-Dichloroethene	8260C	20.4	20.0	102	80-121
cis-1,3-Dichloropropene	8260C	19.0	20.0	95	77-122
trans-1,2-Dichloroethene	8260C	19.0	20.0	95	73-118
trans-1,3-Dichloropropene	8260C	19.1	20.0	95	71-133



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Sediment

Sample Name: Method Blank
Lab Code: R2004443-MB1

Service Request: R2004443
Date Collected: NA
Date Received: NA

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	20 U	mg/Kg	20	1	06/04/20 19:09	06/03/20	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	1	06/04/20 19:09	06/03/20	
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	06/04/20 19:09	06/03/20	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	06/04/20 19:09	06/03/20	
Beryllium, Total	6010C	0.30 U	mg/Kg	0.30	1	06/04/20 19:09	06/03/20	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	06/04/20 19:09	06/03/20	
Calcium, Total	6010C	100 U	mg/Kg	100	1	06/04/20 19:09	06/03/20	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/04/20 19:09	06/03/20	
Cobalt, Total	6010C	5.0 U	mg/Kg	5.0	1	06/04/20 19:09	06/03/20	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	06/04/20 19:09	06/03/20	
Iron, Total	6010C	20 U	mg/Kg	20	1	06/04/20 19:09	06/03/20	
Lead, Total	6010C	0.50 U	mg/Kg	0.50	1	06/04/20 19:09	06/03/20	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	06/04/20 19:09	06/03/20	
Manganese, Total	6010C	2.0 U	mg/Kg	2.0	1	06/04/20 19:09	06/03/20	
Mercury, Total	7471B	0.033 U	mg/Kg	0.033	1	06/03/20 14:34	06/02/20	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	06/04/20 19:09	06/03/20	
Potassium, Total	6010C	200 U	mg/Kg	200	1	06/04/20 19:09	06/03/20	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/04/20 19:09	06/03/20	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	1	06/04/20 19:09	06/03/20	
Sodium, Total	6010C	100 U	mg/Kg	100	1	06/04/20 19:09	06/03/20	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	1	06/04/20 19:09	06/03/20	
Vanadium, Total	6010C	5.0 U	mg/Kg	5.0	1	06/04/20 19:09	06/03/20	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	06/04/20 19:09	06/03/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R2004443-MB2

Service Request: R2004443
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	06/02/20 16:55	06/01/20	
Antimony, Total	6010C	60 U	ug/L	60	1	06/02/20 16:55	06/01/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Barium, Total	6010C	20 U	ug/L	20	1	06/02/20 16:55	06/01/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	06/02/20 16:55	06/01/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 16:55	06/01/20	
Calcium, Total	6010C	1000 U	ug/L	1000	1	06/02/20 16:55	06/01/20	
Chromium, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	06/02/20 16:55	06/01/20	
Copper, Total	6010C	20 U	ug/L	20	1	06/02/20 16:55	06/01/20	
Iron, Total	6010C	100 U	ug/L	100	1	06/02/20 16:55	06/01/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	06/02/20 16:55	06/01/20	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	06/02/20 16:55	06/01/20	
Manganese, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	06/03/20 11:04	06/02/20	
Nickel, Total	6010C	40 U	ug/L	40	1	06/02/20 16:55	06/01/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	06/02/20 16:55	06/01/20	
Selenium, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Silver, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Sodium, Total	6010C	1000 U	ug/L	1000	1	06/02/20 16:55	06/01/20	
Thallium, Total	6010C	10 U	ug/L	10	1	06/02/20 16:55	06/01/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	06/02/20 16:55	06/01/20	
Zinc, Total	6010C	20 U	ug/L	20	1	06/02/20 16:55	06/01/20	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Sediment

Service Request: R2004443
Date Analyzed: 06/03/20 - 06/04/20

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2004443-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	3.62	4.0	91	80-120
Barium, Total	6010C	212	200	106	80-120
Beryllium, Total	6010C	5.00	5.00	100	80-120
Cadmium, Total	6010C	5.20	5.00	104	80-120
Calcium, Total	6010C	210	200	104	80-120
Chromium, Total	6010C	20.9	20.0	105	80-120
Cobalt, Total	6010C	52.4	50.0	105	80-120
Copper, Total	6010C	24.9	25.0	100	80-120
Iron, Total	6010C	99	100	99	80-120
Lead, Total	6010C	50.8	50.0	102	80-120
Magnesium, Total	6010C	200	200	98	80-120
Manganese, Total	6010C	50.8	50.0	102	80-120
Mercury, Total	7471B	0.175	0.167	105	80-120
Nickel, Total	6010C	51.6	50.0	103	80-120
Potassium, Total	6010C	1930	2000	96	80-120
Selenium, Total	6010C	105	101	104	80-120
Silver, Total	6010C	4.9	5.0	98	80-120
Sodium, Total	6010C	2020	2000	101	80-120
Thallium, Total	6010C	189	200	94	80-120
Vanadium, Total	6010C	51.1	50.0	102	80-120
Zinc, Total	6010C	49.6	50.0	99	80-120

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Analyzed: 06/03/20

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2004443-LCS3

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

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville Surface Waters and Sediments
Sample Matrix: Water

Service Request: R2004443
Date Analyzed: 06/02/20

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2004443-LCS2

Duplicate Lab Control Sample
R2004443-DLCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum, Total	6010C	1940	2000	97	1950	2000	98	80-120	<1	20
Antimony, Total	6010C	477	500	95	486	500	97	80-120	2	20
Arsenic, Total	6010C	40	40	100	39	40	97	80-120	3	20
Barium, Total	6010C	2060	2000	103	2070	2000	103	80-120	<1	20
Beryllium, Total	6010C	49.4	50.0	99	49.6	50.0	99	80-120	<1	20
Cadmium, Total	6010C	50.7	50.0	101	51.1	50.0	102	80-120	<1	20
Calcium, Total	6010C	2000	2000	100	2000	2000	101	80-120	<1	20
Chromium, Total	6010C	202	200	101	203	200	102	80-120	<1	20
Cobalt, Total	6010C	509	500	102	512	500	102	80-120	<1	20
Copper, Total	6010C	235	250	94	237	250	95	80-120	<1	20
Iron, Total	6010C	960	1000	96	970	1000	97	80-120	<1	20
Lead, Total	6010C	497	500	99	501	500	100	80-120	<1	20
Magnesium, Total	6010C	1900	2000	96	1900	2000	97	80-120	<1	20
Manganese, Total	6010C	492	500	98	495	500	99	80-120	<1	20
Nickel, Total	6010C	501	500	100	505	500	101	80-120	<1	20
Potassium, Total	6010C	18900	20000	95	19000	20000	95	80-120	<1	20
Selenium, Total	6010C	1290	1010	127 *	1290	1010	128 *	80-120	<1	20
Silver, Total	6010C	48	50	96	48	50	97	80-120	<1	20
Sodium, Total	6010C	19500	20000	97	19600	20000	98	80-120	<1	20
Thallium, Total	6010C	1850	2000	93	1860	2000	93	80-120	<1	20
Vanadium, Total	6010C	494	500	99	498	500	100	80-120	<1	20
Zinc, Total	6010C	494	500	99	497	500	99	80-120	<1	20



July 08, 2020

Service Request No:R2005525

Ms. Laurie Haskell
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville SP-2 Resample

Dear Ms.Haskell,

Enclosed are the results of the sample(s) submitted to our laboratory June 26, 2020
For your reference, these analyses have been assigned our service request number **R2005525**.

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

ADDRESS

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Received: 06/26/2020

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:

Two water samples were received for analysis at ALS Environmental on 06/26/2020. 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.

Volatiles by GC/MS:

Method 8260C, 07/07/2020: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Field:

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

Approved by



Date

07/08/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: Trip Blank			Lab ID: R2005525-001			

Analyte	Results	Flag	MDL	MRL	Units	Method
Chloroform	0.25	J	0.24	5.0	ug/L	8260C

CLIENT ID: SP-2			Lab ID: R2005525-002			

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	99				uMHOS/cm	120.1
pH, Field	6.65				pH Units	SM 4500-H+ B
Temperature, Field	13.6				deg C	SM 2550 B
Turbidity, Field	11.1				NTU	180.1
Calcium, Total	8900			1000	ug/L	6010C
Iron, Total	2900			100	ug/L	6010C
Magnesium, Total	2300			1000	ug/L	6010C
Manganese, Total	2250			10	ug/L	6010C
Sodium, Total	4800			1000	ug/L	6010C
Trichloroethene (TCE)	0.35	J	0.20	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
Project: Colesville SP-2 Resample

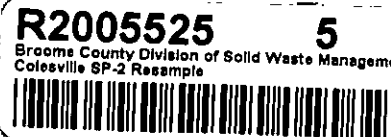
Service Request:R2005525

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2005525-001	Trip Blank	6/26/2020	0825
R2005525-002	SP-2	6/26/2020	0825



Cooler Receipt and Preservation Check Form



Project/Client _____ Folder Number _____

Cooler received on 6/26/2020 by: dw

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

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

3. Temperature Readings Date: 6/26/2020 Time: 1300 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>2.40</u>						
Within 0-6°C?	☒ 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: Roor by dw on 6/26/2020 at 1300
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 6/26/2020 Time: 1445 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
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated NA

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	<u>223419</u>	HNO ₃	☒		<u>1119092</u>					
≤2	<u>+</u>	H ₂ SO ₄	☒		<u>Folate</u>					
<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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O 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: 20-03-17 20-05-12, 04020-13mm, 84520-05
Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
SUB	HGFB
<u>ALS</u>	LL3541

Labels secondary reviewed by: dw
PC Secondary Review: _____

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



R205525

FIELD MONITORING REPORT

PROJECT Broome County Colesville Seeps/SW LAB ID * ReSample *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 GrabDate 6/26/2020 Time 0825 SWL —Appearance Tan tint w/ suspended specksWeather Conditions Clear 60°Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.65	6.65
Myron 6p	Conductivity	µmhos/cm	99	99
Myron 6p	Temperature	Degrees Celsius	13.6	13.6
Myron 6p	Redox	millivolts	—	—
Lamotte	Turbidity	NTU	11.1	—

Calibration Date/Time 6/26/2020 0800 pH 7.00 4.00 10.00
SC 1413 Set 1413OBSERVATIONS ReSample as per Laurie Haskell. No D.O. or Redox

Sampling procedures were performed in accordance with all applicable protocols.



Miscellaneous Forms

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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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	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.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	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 Certifications¹

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 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
Project: Colesville SP-2 Resample

Service Request: R2005525

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
SM 2550 B	Water	Temperature, Field
SM 4500-H+ B	Water	pH, Field

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Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample/

Service Request: R2005525

Sample Name: Trip Blank
Lab Code: R2005525-001
Sample Matrix: Water

Date Collected: 06/26/20
Date Received: 06/26/20

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: SP-2
Lab Code: R2005525-002
Sample Matrix: Water

Date Collected: 06/26/20
Date Received: 06/26/20

Analysis Method
120.1
180.1
6010C
6010C
7470A
8260C
SM 2550 B
SM 4500-H+ B

Extracted/Digested By

KMCLAEN
KMCLAEN
AKONZEL

Analyzed By
JJANSON
JJANSON
KMCLAEN
NMANSEN
AKONZEL
KRUEST
JJANSON
JJANSON



INORGANIC PREPARATION METHODS

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

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Sample Name: Trip Blank
Lab Code: R2005525-001

Units: ug/L
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	07/07/20 16:29	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	07/07/20 16:29	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	07/07/20 16:29	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
2-Butanone (MEK)	0.78 U	10	0.78	1	07/07/20 16:29	
2-Hexanone	0.20 U	10	0.20	1	07/07/20 16:29	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	07/07/20 16:29	
Acetone	5.0 U	10	5.0	1	07/07/20 16:29	
Benzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
Bromodichloromethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
Bromoform	0.25 U	5.0	0.25	1	07/07/20 16:29	
Bromomethane	0.70 U	5.0	0.70	1	07/07/20 16:29	
Carbon Disulfide	0.42 U	10	0.42	1	07/07/20 16:29	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	07/07/20 16:29	
Chlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
Chloroethane	0.23 U	5.0	0.23	1	07/07/20 16:29	
Chloroform	0.25 J	5.0	0.24	1	07/07/20 16:29	
Chloromethane	0.28 U	5.0	0.28	1	07/07/20 16:29	
Cyclohexane	0.26 U	10	0.26	1	07/07/20 16:29	
Dibromochloromethane	0.20 U	5.0	0.20	1	07/07/20 16:29	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	07/07/20 16:29	
Dichloromethane	0.65 U	5.0	0.65	1	07/07/20 16:29	
Ethylbenzene	0.20 U	5.0	0.20	1	07/07/20 16:29	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	07/07/20 16:29	
Methyl Acetate	0.33 U	10	0.33	1	07/07/20 16:29	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	07/07/20 16:29	
Methylcyclohexane	0.20 U	10	0.20	1	07/07/20 16:29	
Styrene	0.20 U	5.0	0.20	1	07/07/20 16:29	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	07/07/20 16:29	
Toluene	0.20 U	5.0	0.20	1	07/07/20 16:29	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	07/07/20 16:29	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	07/07/20 16:29	
Vinyl Chloride	0.20 U	5.0	0.20	1	07/07/20 16:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Sample Name: Trip Blank
Lab Code: R2005525-001

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	07/07/20 16:29	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	07/07/20 16:29	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	07/07/20 16:29	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	07/07/20 16:29	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	07/07/20 16:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	07/07/20 16:29	
Dibromofluoromethane	112	89 - 119	07/07/20 16:29	
Toluene-d8	116	87 - 121	07/07/20 16:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Sample Name: SP-2
Lab Code: R2005525-002

Units: ug/L
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	07/07/20 16:51	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	07/07/20 16:51	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	07/07/20 16:51	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
2-Butanone (MEK)	0.78 U	10	0.78	1	07/07/20 16:51	
2-Hexanone	0.20 U	10	0.20	1	07/07/20 16:51	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	07/07/20 16:51	
Acetone	5.0 U	10	5.0	1	07/07/20 16:51	
Benzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
Bromodichloromethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
Bromoform	0.25 U	5.0	0.25	1	07/07/20 16:51	
Bromomethane	0.70 U	5.0	0.70	1	07/07/20 16:51	
Carbon Disulfide	0.42 U	10	0.42	1	07/07/20 16:51	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	07/07/20 16:51	
Chlorobenzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
Chloroethane	0.23 U	5.0	0.23	1	07/07/20 16:51	
Chloroform	0.24 U	5.0	0.24	1	07/07/20 16:51	
Chloromethane	0.28 U	5.0	0.28	1	07/07/20 16:51	
Cyclohexane	0.26 U	10	0.26	1	07/07/20 16:51	
Dibromochloromethane	0.20 U	5.0	0.20	1	07/07/20 16:51	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	07/07/20 16:51	
Dichloromethane	0.65 U	5.0	0.65	1	07/07/20 16:51	
Ethylbenzene	0.20 U	5.0	0.20	1	07/07/20 16:51	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	07/07/20 16:51	
Methyl Acetate	0.33 U	10	0.33	1	07/07/20 16:51	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	07/07/20 16:51	
Methylcyclohexane	0.20 U	10	0.20	1	07/07/20 16:51	
Styrene	0.20 U	5.0	0.20	1	07/07/20 16:51	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	07/07/20 16:51	
Toluene	0.20 U	5.0	0.20	1	07/07/20 16:51	
Trichloroethene (TCE)	0.35 J	5.0	0.20	1	07/07/20 16:51	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	07/07/20 16:51	
Vinyl Chloride	0.20 U	5.0	0.20	1	07/07/20 16:51	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Sample Name: SP-2
Lab Code: R2005525-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	07/07/20 16:51	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	07/07/20 16:51	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	07/07/20 16:51	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	07/07/20 16:51	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	07/07/20 16:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	07/07/20 16:51	
Dibromofluoromethane	113	89 - 119	07/07/20 16:51	
Toluene-d8	117	87 - 121	07/07/20 16:51	



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water
Sample Name: SP-2
Lab Code: R2005525-002

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	07/02/20 18:38	06/30/20	
Antimony, Total	6010C	60 U	ug/L	60	1	07/02/20 18:38	06/30/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	07/02/20 18:38	06/30/20	
Barium, Total	6010C	20 U	ug/L	20	1	07/06/20 10:08	06/30/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	07/02/20 18:38	06/30/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	07/02/20 18:38	06/30/20	
Calcium, Total	6010C	8900	ug/L	1000	1	07/02/20 18:38	06/30/20	
Chromium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:38	06/30/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	07/02/20 18:38	06/30/20	
Copper, Total	6010C	20 U	ug/L	20	1	07/02/20 18:38	06/30/20	
Iron, Total	6010C	2900	ug/L	100	1	07/02/20 18:38	06/30/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	07/02/20 18:38	06/30/20	
Magnesium, Total	6010C	2300	ug/L	1000	1	07/02/20 18:38	06/30/20	
Manganese, Total	6010C	2250	ug/L	10	1	07/02/20 18:38	06/30/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	07/02/20 11:17	06/30/20	
Nickel, Total	6010C	40 U	ug/L	40	1	07/02/20 18:38	06/30/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	07/02/20 18:38	06/30/20	
Selenium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:38	06/30/20	
Silver, Total	6010C	10 U	ug/L	10	1	07/02/20 18:38	06/30/20	
Sodium, Total	6010C	4800	ug/L	1000	1	07/02/20 18:38	06/30/20	
Thallium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:38	06/30/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	07/02/20 18:38	06/30/20	
Zinc, Total	6010C	20 U	ug/L	20	1	07/02/20 18:38	06/30/20	



Field Data

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water
Sample Name: SP-2
Lab Code: R2005525-002

Service Request: R2005525
Date Collected: 06/26/20 08:25
Date Received: 06/26/20 13:20

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	99	uMHOS/cm	-	1	06/26/20 08:25	
pH, Field	SM 4500-H+ B	6.65	pH Units	-	1	06/26/20 08:25	
Temperature, Field	SM 2550 B	13.6	deg C	-	1	06/26/20 08:25	
Turbidity, Field	180.1	11.1	NTU	-	1	06/26/20 08:25	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	89-119	87-121
Trip Blank	R2005525-001	102	112	116
SP-2	R2005525-002	103	113	117
Method Blank	RQ2007234-04	106	116	119
Lab Control Sample	RQ2007234-03	113	116	120

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2007234-04

Units: ug/L
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	07/07/20 12:27	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	07/07/20 12:27	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	07/07/20 12:27	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
2-Butanone (MEK)	0.78 U	10	0.78	1	07/07/20 12:27	
2-Hexanone	0.20 U	10	0.20	1	07/07/20 12:27	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	07/07/20 12:27	
Acetone	5.0 U	10	5.0	1	07/07/20 12:27	
Benzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
Bromodichloromethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
Bromoform	0.25 U	5.0	0.25	1	07/07/20 12:27	
Bromomethane	0.70 U	5.0	0.70	1	07/07/20 12:27	
Carbon Disulfide	0.42 U	10	0.42	1	07/07/20 12:27	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	07/07/20 12:27	
Chlorobenzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
Chloroethane	0.23 U	5.0	0.23	1	07/07/20 12:27	
Chloroform	0.24 U	5.0	0.24	1	07/07/20 12:27	
Chloromethane	0.28 U	5.0	0.28	1	07/07/20 12:27	
Cyclohexane	0.26 U	10	0.26	1	07/07/20 12:27	
Dibromochloromethane	0.20 U	5.0	0.20	1	07/07/20 12:27	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	07/07/20 12:27	
Dichloromethane	0.65 U	5.0	0.65	1	07/07/20 12:27	
Ethylbenzene	0.20 U	5.0	0.20	1	07/07/20 12:27	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	07/07/20 12:27	
Methyl Acetate	0.33 U	10	0.33	1	07/07/20 12:27	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	07/07/20 12:27	
Methylcyclohexane	0.20 U	10	0.20	1	07/07/20 12:27	
Styrene	0.20 U	5.0	0.20	1	07/07/20 12:27	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	07/07/20 12:27	
Toluene	0.20 U	5.0	0.20	1	07/07/20 12:27	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	07/07/20 12:27	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	07/07/20 12:27	
Vinyl Chloride	0.20 U	5.0	0.20	1	07/07/20 12:27	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: RQ2007234-04

Service Request: R2005525
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	07/07/20 12:27	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	07/07/20 12:27	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	07/07/20 12:27	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	07/07/20 12:27	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	07/07/20 12:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	07/07/20 12:27	
Dibromofluoromethane	116	89 - 119	07/07/20 12:27	
Toluene-d8	119	87 - 121	07/07/20 12:27	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Analyzed: 07/07/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2007234-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	22.3	20.0	112	75-125
1,1,2,2-Tetrachloroethane	8260C	24.8	20.0	124	78-126
1,1,2-Trichloroethane	8260C	21.8	20.0	109	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	22.6	20.0	113	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	23.4	20.0	117	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	20.6	20.0	103	71-118
1,2,4-Trichlorobenzene	8260C	19.8	20.0	99	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.6	20.0	88	55-136
1,2-Dibromoethane	8260C	21.6	20.0	108	82-127
1,2-Dichlorobenzene	8260C	21.4	20.0	107	80-119
1,2-Dichloroethane	8260C	22.3	20.0	111	71-127
1,2-Dichloropropane	8260C	21.7	20.0	109	80-119
1,3-Dichlorobenzene	8260C	20.8	20.0	104	83-121
1,4-Dichlorobenzene	8260C	21.9	20.0	110	79-119
2-Butanone (MEK)	8260C	18.3	20.0	91	61-137
2-Hexanone	8260C	17.7	20.0	89	63-124
4-Methyl-2-pentanone	8260C	18.1	20.0	91	66-124
Acetone	8260C	23.0	20.0	115	40-161
Benzene	8260C	22.6	20.0	113	79-119
Bromodichloromethane	8260C	21.8	20.0	109	81-123
Bromoform	8260C	17.9	20.0	89	65-146
Bromomethane	8260C	23.9	20.0	119	42-166
Carbon Disulfide	8260C	19.0	20.0	95	66-128
Carbon Tetrachloride	8260C	20.4	20.0	102	70-127
Chlorobenzene	8260C	24.0	20.0	120	80-121
Chloroethane	8260C	15.9	20.0	80	62-131
Chloroform	8260C	21.8	20.0	109	79-120
Chloromethane	8260C	19.2	20.0	96	65-135
Cyclohexane	8260C	21.8	20.0	109	69-120
Dibromochloromethane	8260C	21.6	20.0	108	72-128
Dichlorodifluoromethane (CFC 12)	8260C	23.4	20.0	117	59-155
Dichloromethane	8260C	21.2	20.0	106	73-122
Ethylbenzene	8260C	22.7	20.0	114	76-120

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Analyzed: 07/07/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2007234-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	22.0	20.0	110	77-128
Methyl Acetate	8260C	19.0	20.0	95	61-133
Methyl tert-Butyl Ether	8260C	22.5	20.0	112	75-118
Methylcyclohexane	8260C	21.4	20.0	107	51-129
Styrene	8260C	21.7	20.0	108	80-124
Tetrachloroethene (PCE)	8260C	22.6	20.0	113	72-125
Toluene	8260C	22.9	20.0	115	79-119
Trichloroethene (TCE)	8260C	19.0	20.0	95	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.9	20.0	105	71-136
Vinyl Chloride	8260C	20.0	20.0	100	74-159
cis-1,2-Dichloroethene	8260C	22.5	20.0	113	80-121
cis-1,3-Dichloropropene	8260C	20.8	20.0	104	77-122
trans-1,2-Dichloroethene	8260C	21.4	20.0	107	73-118
trans-1,3-Dichloropropene	8260C	20.5	20.0	102	71-133



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R2005525-MB

Service Request: R2005525
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	07/02/20 18:22	06/30/20	
Antimony, Total	6010C	60 U	ug/L	60	1	07/02/20 18:22	06/30/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Barium, Total	6010C	20 U	ug/L	20	1	07/06/20 09:55	06/30/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	07/02/20 18:22	06/30/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	07/02/20 18:22	06/30/20	
Calcium, Total	6010C	1000 U	ug/L	1000	1	07/02/20 18:22	06/30/20	
Chromium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	07/02/20 18:22	06/30/20	
Copper, Total	6010C	20 U	ug/L	20	1	07/02/20 18:22	06/30/20	
Iron, Total	6010C	100 U	ug/L	100	1	07/02/20 18:22	06/30/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	07/02/20 18:22	06/30/20	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	07/02/20 18:22	06/30/20	
Manganese, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	07/02/20 10:03	06/30/20	
Nickel, Total	6010C	40 U	ug/L	40	1	07/02/20 18:22	06/30/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	07/02/20 18:22	06/30/20	
Selenium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Silver, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Sodium, Total	6010C	1000 U	ug/L	1000	1	07/02/20 18:22	06/30/20	
Thallium, Total	6010C	10 U	ug/L	10	1	07/02/20 18:22	06/30/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	07/02/20 18:22	06/30/20	
Zinc, Total	6010C	20 U	ug/L	20	1	07/02/20 18:22	06/30/20	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SP-2 Resample
Sample Matrix: Water

Service Request: R2005525
Date Analyzed: 07/02/20 - 07/06/20

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2005525-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	2190	2000	109	80-120
Antimony, Total	6010C	530	500	106	80-120
Arsenic, Total	6010C	43.5	40	109	80-120
Barium, Total	6010C	2140	2000	107	80-120
Beryllium, Total	6010C	55.6	50.0	111	80-120
Cadmium, Total	6010C	55.3	50.0	111	80-120
Calcium, Total	6010C	2160	2000	108	80-120
Chromium, Total	6010C	222	200	111	80-120
Cobalt, Total	6010C	563	500	113	80-120
Copper, Total	6010C	272	250	109	80-120
Iron, Total	6010C	1100	1000	110	80-120
Lead, Total	6010C	545	500	109	80-120
Magnesium, Total	6010C	2090	2000	105	80-120
Manganese, Total	6010C	539	500	108	80-120
Mercury, Total	7470A	1.04	1.00	104	80-120
Nickel, Total	6010C	552	500	110	80-120
Potassium, Total	6010C	20900	20000	104	80-120
Selenium, Total	6010C	1080	1010	107	80-120
Silver, Total	6010C	53	50	106	80-120
Sodium, Total	6010C	21000	20000	105	80-120
Thallium, Total	6010C	2030	2000	101	80-120
Vanadium, Total	6010C	546	500	109	80-120
Zinc, Total	6010C	546	500	109	80-120



November 23, 2020

Service Request No:R2010489

Ms. Laurie Haskell
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville

Dear Ms.Haskell,

Enclosed are the results of the sample(s) submitted to our laboratory November 05, 2020
For your reference, these analyses have been assigned our service request number **R2010489**.

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

ADDRESS

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dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Received: 11/05/2020

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:

Twenty nine drinking water samples were received for analysis at ALS Environmental on 11/05/2020. 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:

Method 6010C, 11/12/2020: The control limits for matrix spike recovery of one or more of the spiked analytes are not applicable and have been flagged with a "#". The concentration of the analyte(s) in the parent sample is more than 4x the spike concentration. No further corrective action was required.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 11/15/2020: 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, 11/15/2020: 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.

Volatiles by GC:

No significant anomalies were noted with this analysis.

Approved by

A handwritten signature in black ink, appearing to read "Brady Knutson".

Date

11/23/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: PW-7	Lab ID: R2010489-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	749				uMHOS/cm	120.1
Nitrate as Nitrogen	2.2			1.0	mg/L	300.0
Oxidation-Reduction Potential (ORP), Field	-23.0				mV	ASTM D1498-00
pH, Field	5.99				pH Units	SM 4500-H+ B
Sulfate	9.6			2.0	mg/L	300.0
Temperature, Field	10.2				deg C	SM 2550 B
Turbidity, Field	22				NTU	180.1
Iron, Total	16300			100	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	14			5.0	ug/L	8260C
cis-1,2-Dichloroethene	16			5.0	ug/L	8260C
Methane, Dissolved	66		0.75	1.1	ug/L	RSK 175

CLIENT ID: PW-7 Diss	Lab ID: R2010489-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	560			100	ug/L	6010C

CLIENT ID: GMMW-7	Lab ID: R2010489-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	1.4			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	382				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	89.0				mV	ASTM D1498-00
pH, Field	6.21				pH Units	SM 4500-H+ B
Sulfate	11.7			2.0	mg/L	300.0
Temperature, Field	10.2				deg C	SM 2550 B
Turbidity, Field	1.6				NTU	180.1
Iron, Total	100			100	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	47			5.0	ug/L	8260C
Chlorobenzene	14			5.0	ug/L	8260C
Chloroethane	16			5.0	ug/L	8260C
Trichloroethene (TCE)	17			5.0	ug/L	8260C
Vinyl Chloride	17			5.0	ug/L	8260C
cis-1,2-Dichloroethene	42			5.0	ug/L	8260C
Ethane, Dissolved	0.70	J	0.17	1.0	ug/L	RSK 175
Ethene, Dissolved	1.8		0.35	1.0	ug/L	RSK 175
Methane, Dissolved	420	D	7.5	11	ug/L	RSK 175

CLIENT ID: PW-3	Lab ID: R2010489-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	1.9			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	410				uMHOS/cm	120.1

SAMPLE DETECTION SUMMARY

CLIENT ID: PW-3	Lab ID: R2010489-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxidation-Reduction Potential (ORP), Field	134				mV	ASTM D1498-00
pH, Field	6.38				pH Units	SM 4500-H+ B
Sulfate	9.7			2.0	mg/L	300.0
Temperature, Field	13.3				deg C	SM 2550 B
Turbidity, Field	12.5				NTU	180.1
Iron, Total	9420			100	ug/L	6010C
Trichloroethene (TCE)	5.6			5.0	ug/L	8260C
Methane, Dissolved	19		0.75	1.1	ug/L	RSK 175

CLIENT ID: PW-3 Diss	Lab ID: R2010489-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	210			100	ug/L	6010C

CLIENT ID: W-16S	Lab ID: R2010489-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	471				uMHOS/c m	120.1
Oxidation-Reduction Potential (ORP), Field	112				mV	ASTM D1498-00
pH, Field	6.15				pH Units	SM 4500-H+ B
Temperature, Field	11.8				deg C	SM 2550 B
Turbidity, Field	7.6				NTU	180.1
1,1-Dichloroethane (1,1-DCA)	6.3			5.0	ug/L	8260C
Chlorobenzene	17			5.0	ug/L	8260C

CLIENT ID: W-17S	Lab ID: R2010489-009

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	197				uMHOS/c m	120.1
Oxidation-Reduction Potential (ORP), Field	95.0				mV	ASTM D1498-00
pH, Field	6.27				pH Units	SM 4500-H+ B
Temperature, Field	12.2				deg C	SM 2550 B
Turbidity, Field	4.4				NTU	180.1

CLIENT ID: W-20S	Lab ID: R2010489-010

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	2.4			2.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	130				uMHOS/c m	120.1
Oxidation-Reduction Potential (ORP), Field	136				mV	ASTM D1498-00
pH, Field	6.01				pH Units	SM 4500-H+ B
Sulfate	9.0			2.0	mg/L	300.0
Temperature, Field	12.7				deg C	SM 2550 B
Turbidity, Field	29.8				NTU	180.1
Iron, Total	4210			100	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: W-20S	Lab ID: R2010489-010

CLIENT ID: W-18	Lab ID: R2010489-012

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	1.7			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	399				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	162				mV	ASTM D1498-00
pH, Field	6.32				pH Units	SM 4500-H+ B
Sulfate	9.6			2.0	mg/L	300.0
Temperature, Field	14.5				deg C	SM 2550 B
Turbidity, Field	6.3				NTU	180.1
Iron, Total	340			100	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	5.2			5.0	ug/L	8260C
Trichloroethene (TCE)	7.0			5.0	ug/L	8260C

CLIENT ID: Equipment Blank	Lab ID: R2010489-014

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	4				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	103				mV	ASTM D1498-00
pH, Field	6.92				pH Units	SM 4500-H+ B
Temperature, Field	15.2				deg C	SM 2550 B
Turbidity, Field	0.4				NTU	180.1

CLIENT ID: W-7	Lab ID: R2010489-017

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	259				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	57.0				mV	ASTM D1498-00
pH, Field	5.93				pH Units	SM 4500-H+ B
Temperature, Field	10.1				deg C	SM 2550 B
Turbidity, Field	33.4				NTU	180.1
Acetone	15			10	ug/L	8260C

CLIENT ID: GMMW-2	Lab ID: R2010489-018

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	2.3			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	498				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	104				mV	ASTM D1498-00
pH, Field	6.20				pH Units	SM 4500-H+ B
Sulfate	12.5			2.0	mg/L	300.0
Temperature, Field	11.5				deg C	SM 2550 B
Turbidity, Field	3.1				NTU	180.1
Iron, Total	260			100	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: GMMW-2	Lab ID: R2010489-018

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethane (1,1-DCA)	17			5.0	ug/L	8260C
Chlorobenzene	15			5.0	ug/L	8260C
Chloroethane	5.9			5.0	ug/L	8260C
Trichloroethene (TCE)	7.0			5.0	ug/L	8260C
Ethane, Dissolved	1.1		0.17	1.0	ug/L	RSK 175
Ethene, Dissolved	0.50	J	0.35	1.0	ug/L	RSK 175
Methane, Dissolved	1300	D	38	53	ug/L	RSK 175

CLIENT ID: GMMW-2 Dup	Lab ID: R2010489-020

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	2.2			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	502				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	107				mV	ASTM D1498-00
pH, Field	6.25				pH Units	SM 4500-H+ B
Sulfate	12.7			2.0	mg/L	300.0
Temperature, Field	11.7				deg C	SM 2550 B
Turbidity, Field	2.2				NTU	180.1
Iron, Total	250			100	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	16			5.0	ug/L	8260C
Chlorobenzene	14			5.0	ug/L	8260C
Chloroethane	6.0			5.0	ug/L	8260C
Trichloroethene (TCE)	6.7			5.0	ug/L	8260C
Ethane, Dissolved	1.0		0.17	1.0	ug/L	RSK 175
Ethene, Dissolved	0.43	J	0.35	1.0	ug/L	RSK 175
Methane, Dissolved	1200	D	38	53	ug/L	RSK 175

CLIENT ID: GMMW-2 Dup Diss	Lab ID: R2010489-021

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	130			100	ug/L	6010C

CLIENT ID: GMMW-6	Lab ID: R2010489-022

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	11.7			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	1000				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	-40.0				mV	ASTM D1498-00
pH, Field	6.38				pH Units	SM 4500-H+ B
Sulfate	2.5			2.0	mg/L	300.0
Temperature, Field	11.3				deg C	SM 2550 B
Turbidity, Field	5.9				NTU	180.1
Iron, Total	18900			100	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: GMMW-6	Lab ID: R2010489-022

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethane (1,1-DCA)	53			5.0	ug/L	8260C
Chlorobenzene	27			5.0	ug/L	8260C
Chloroethane	99			5.0	ug/L	8260C
Trichloroethene (TCE)	5.2			5.0	ug/L	8260C
Vinyl Chloride	12			5.0	ug/L	8260C
cis-1,2-Dichloroethene	17			5.0	ug/L	8260C
Ethane, Dissolved	8.4		0.17	1.0	ug/L	RSK 175
Ethene, Dissolved	7.7		0.35	1.0	ug/L	RSK 175
Methane, Dissolved	2400	D	38	53	ug/L	RSK 175

CLIENT ID: GMMW-6 Diss	Lab ID: R2010489-023

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	22200			100	ug/L	6010C

CLIENT ID: PW-4	Lab ID: R2010489-024

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	1.4			1.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	271				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	67.0				mV	ASTM D1498-00
pH, Field	6.32				pH Units	SM 4500-H+ B
Sulfate	9.0			2.0	mg/L	300.0
Temperature, Field	12.3				deg C	SM 2550 B
Turbidity, Field	2				NTU	180.1
Iron, Total	230			100	ug/L	6010C
Trichloroethene (TCE)	6.0			5.0	ug/L	8260C

CLIENT ID: GMMW-5	Lab ID: R2010489-026

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon, Total Organic (TOC)	67.0			4.0	mg/L	SM 5310 C-2000 (2011)
Conductivity, Field	806				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	-85.0				mV	ASTM D1498-00
pH, Field	6.49				pH Units	SM 4500-H+ B
Sulfate	5.9			2.0	mg/L	300.0
Temperature, Field	10.2				deg C	SM 2550 B
Turbidity, Field	12				NTU	180.1
Iron, Total	81400			1000	ug/L	6010C
2-Butanone (MEK)	19			10	ug/L	8260C
Acetone	17			10	ug/L	8260C
Chlorobenzene	11			5.0	ug/L	8260C
Chloroethane	47			5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: GMMW-5	Lab ID: R2010489-026

Analyte	Results	Flag	MDL	MRL	Units	Method
Ethane, Dissolved	9.2		0.17	1.0	ug/L	RSK 175
Ethene, Dissolved	1.8		0.35	1.0	ug/L	RSK 175
Methane, Dissolved	14000	D	150	210	ug/L	RSK 175

CLIENT ID: GMMW-5 Diss	Lab ID: R2010489-027

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	74200			1000	ug/L	6010C

CLIENT ID: GMPW-4	Lab ID: R2010489-028

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	615				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	40.0				mV	ASTM D1498-00
pH, Field	6.38				pH Units	SM 4500-H+ B
Temperature, Field	12.8				deg C	SM 2550 B
Turbidity, Field	3.2				NTU	180.1
1,1-Dichloroethane (1,1-DCA)	16			5.0	ug/L	8260C
Chlorobenzene	8.9			5.0	ug/L	8260C
Chloroethane	7.4			5.0	ug/L	8260C
Trichloroethene (TCE)	19			5.0	ug/L	8260C
cis-1,2-Dichloroethene	7.3			5.0	ug/L	8260C

CLIENT ID: PW-5	Lab ID: R2010489-029

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	299				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	-44.0				mV	ASTM D1498-00
pH, Field	7.45				pH Units	SM 4500-H+ B
Temperature, Field	13.9				deg C	SM 2550 B
Turbidity, Field	32				NTU	180.1



Sample Receipt Information

ALS Environmental—Rochester Laboratory

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

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: Broome County Division of Solid Waste Management
Project: Colesville

Service Request:R2010489

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2010489-001	Trip Blank	11/5/2020	0855
R2010489-002	PW-7	11/5/2020	0855
R2010489-003	PW-7 Diss	11/5/2020	0855
R2010489-004	GMMW-7	11/5/2020	0910
R2010489-005	GMMW-7 Diss	11/5/2020	0910
R2010489-006	PW-3	11/5/2020	0935
R2010489-007	PW-3 Diss	11/5/2020	0935
R2010489-008	W-16S	11/5/2020	1010
R2010489-009	W-17S	11/5/2020	1020
R2010489-010	W-20S	11/5/2020	1035
R2010489-011	W-20S Diss	11/5/2020	1035
R2010489-012	W-18	11/5/2020	1050
R2010489-013	W-18 Diss	11/5/2020	1050
R2010489-014	Equipment Blank	11/5/2020	1100
R2010489-015	Equipment Blank Diss	11/5/2020	1100
R2010489-016	Trip Blank	11/5/2020	1010
R2010489-017	W-7	11/5/2020	0905
R2010489-018	GMMW-2	11/5/2020	0930
R2010489-019	GMMW-2 Diss	11/5/2020	0930
R2010489-020	GMMW-2 Dup	11/5/2020	0930
R2010489-021	GMMW-2 Dup Diss	11/5/2020	0930
R2010489-022	GMMW-6	11/5/2020	1010
R2010489-023	GMMW-6 Diss	11/5/2020	1010
R2010489-024	PW-4	11/5/2020	1030
R2010489-025	PW-4 Diss	11/5/2020	1030
R2010489-026	GMMW-5	11/5/2020	1055
R2010489-027	GMMW-5 Diss	11/5/2020	1055
R2010489-028	GMPW-4	11/5/2020	1115
R2010489-029	PW-5	11/5/2020	1130



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

001173

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

Project Name Coleville 5th Quarter		Project Number		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																		
Project Manager Laurie Hagkey		Report CC		PRESERVATIVE																		
Company/Address Broome County Landfill Kinapp Rd Binghamton, NY		Phone # 607-778-2250		Email		NUMBER OF CONTAINERS GC/MS VOAs • 8260 • 824 • CLP GC/MS SVOAs • 8270 • 825 GC VOAs • 8021 • 801/802 PESTICIDES • 8081 • 808 PCBs • 8082 • 808 METALS, TOTAL (List in comments below) METALS, DISSOLVED (List in comments below) Fe Fe TDC, RSK-175 NO₂, NO₃, SO₄ Preservative Key 0. NONE 1. HCL 2. HNO₃ 3. H₂SO₄ 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO₄ 8. Other _____																
Sampler's Signature <i>[Signature]</i>		Sampler's Printed Name Kyle Lee																				
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	TIME	MATRIX																		
Trip Blank		11/5/2020	0855	W	3	X											Full List T.B.					
PW-7			0855	W	12	X											54					
GMMW-7			0910	W	12	X											55					
PW-3			0935	W	24	X											56+57 QC					
W-163			1010	W	3	X											61					
W-179			1020	W	3	X											62					
W-205			1035	W	12	X											58					
W-18			1050	W	12	X											59					
Equipment Blank			1100	W	12	X											60					
Trip Blank			1010	W	3	X											Short List T.B.					
W-7			0905	W	3	X											100					
SPECIAL INSTRUCTIONS/COMMENTS Metals Soluble metals filtered in field using 0.45 micron filter					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:							
See QAPP ☐																						
STATE WHERE SAMPLES WERE COLLECTED																						
RELINQUISHED BY					RECEIVED BY					RELINQUISHED BY					RECEIVED BY							
Signature <i>[Signature]</i>					Signature <i>[Signature]</i>					Signature <i>[Signature]</i>					Signature <i>[Signature]</i>							
Printed Name Kyle Lee					Printed Name Quinten Kolbeck					Printed Name Quinten Kolbeck					Printed Name							
Firm ALS					Firm ALS					Firm ALS					Firm							
Date/Time 11/5/2020					Date/Time 11/5/2020 1145					Date/Time 11/5/2020					Date/Time							

R2010489
Broome County Division of Solid Waste Management
Colesville
5

[illegible]



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter Wells LAB ID Full List 54

SAMPLE POINT ID PW-7

PURGE INFORMATION

Well Depth (ft.) 64.25 Purge Date 11/4/2020 Purge Method Elec Pump
SWL (ft.) 41.74 Start Time 0934 Stop Time ~~1005~~ 1015 ^{11/4}
Standing Water (ft.) 22.51 Volume Purged gal. 11.1 # casings 3
Well Constant (gal/ft.) 0.163 Observations Rust tan turbid to
Well Volume (gal.) 3.7 tan slightly turbid

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 0855 SWL 47.16
Appearance Rust tan tint to rust tan w/ iron bacteria
Weather Conditions Sun 50°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	5.99	5.98
Myron 6p	Conductivity	µmhos/cm	749	749
Myron 6p	Temperature	Degrees Celsius	10.2	10.2
Myron 6p	Redox	millivolts	-23	
Lamotte	Turbidity	NTU	22.0	

Calibration Date/Time 11 / 5 / 2020 0830 pH 7.00 4.00 10.00
SC 1413 Set 1413

OBSERVATIONS



FIELD MONITORING REPORT

PROJECT Coleville 5th Quarter Well LAB ID Full List 55

SAMPLE POINT ID GMMW-7

PURGE INFORMATION

Well Depth (ft.) 71.97 Purge Date 11/4/2020 Purge Method Elec. Pump
SWL (ft.) 48.65 Start Time 0959 Stop Time 1003
Standing Water (ft.) 23.32 Volume Purged gal. 3.8 # casings 1 to dry
Well Constant (gal./ft.) 0.163 Observations Brown slightly turbid to
Well Volume (gal.) 3.8 brown tint

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 0910 SWL 48.65
Appearance Tan tint
Weather Conditions Sun 50°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.20	6.21
Myron 6p	Conductivity	µmhos/cm	382	382
Myron 6p	Temperature	Degrees Celsius	10.2	10.2
Myron 6p	Redox	millivolts	89	
Lamotte	Turbidity	NTU	1.6	

Calibration Date/Time 11 / 5 / 2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter LAB ID Full List 56+57 QC

SAMPLE POINT ID PW-3

PURGE INFORMATION

Well Depth (ft.) 30.96 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 13.46 Start Time 1026 Stop Time 1030
Standing Water (ft.) 17.50 Volume Purged gal. 5.25 # casings 1.9 to dry
Well Constant (gal/ft.) 0.163 Observations Tan tint to brown
Well Volume (gal.) 2.8 Slightly turbid to dark brown turbid

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 0935 SWL 14.44
Appearance Tan Slightly turbid to turbid tan
Weather Conditions Sun 50°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.38	6.38
Myron 6p	Conductivity	µmhos/cm	410	410
Myron 6p	Temperature	Degrees Celsius	13.3	13.3
Myron 6p	Redox	millivolts	134	
Lamotte	Turbidity	NTU	12.5	

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter LAB ID Voa Only 61

SAMPLE POINT ID W-165

PURGE INFORMATION

Well Depth (ft.) 22.15 Purge Date 11/4/2020 Purge Method Bailer

SWL (ft.) 9.86 Start Time 1043 Stop Time 1048

Standing Water (ft.) 12.29 Volume Purged gal. 3.0 # casings 1.5 to dry

Well Constant (gal/ft.) 0.163 Observations Tan tint to turbid rust

Well Volume (gal.) 2.0 orange w/ iron bacteria

SAMPLING INFORMATION

Sample Method Bailer

Date 11/5/2020 Time 1010 SWL 9.86

Appearance Tan tint w/ iron bacteria

Weather Conditions Sun 50°

Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.15	6.15
Myron 6p	Conductivity	µmhos/cm	471	471
Myron 6p	Temperature	Degrees Celsius	11.8	11.8
Myron 6p	Redox	millivolts	112	
Lamotte	Turbidity	NTU	7.6	

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter LAB ID Von Only 62

SAMPLE POINT ID W-179

PURGE INFORMATION

Well Depth (ft.) 21.73 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 10.90 Start Time 1104 Stop Time 1110
Standing Water (ft.) 10.83 Volume Purged gal. 5.4 # casings 3
Well Constant (gal/ft.) 0.163 Observations Tan tint to rust brown
Well Volume (gal.) 1.8 torbid

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1020 SWL 10.90
Appearance Tan tint
Weather Conditions Sun 53°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.26	6.27
Myron 6p	Conductivity	µmhos/cm	197	196
Myron 6p	Temperature	Degrees Celsius	12.2	12.2
Myron 6p	Redox	millivolts	95	
Lamotte	Turbidity	NTU	4.4	

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter LAB ID Full List 58

SAMPLE POINT ID W-20 S

PURGE INFORMATION

Well Depth (ft.) 21.75 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 10.00 Start Time 1128 Stop Time 1131
Standing Water (ft.) 11.75 Volume Purged gal. 2.5 # casings 1.3 to dry
Well Constant (gal/ft.) 0.163 Observations Brown tint to turbid
Well Volume (gal.) 1.9 dark brown

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1035 SWL 10.00
Appearance Brown moderately turbid
Weather Conditions Sun 57°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2	
Myron 6p	pH	unit	6.01	6.01	
Myron 6p	Conductivity	µmhos/cm	130	130	
Myron 6p	Temperature	Degrees Celsius	11.5 29.7	12.7	12.7
Myron 6p	Redox	millivolts	136		
Lamotte	Turbidity	NTU	29.8		

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____



FIELD MONITORING REPORT

PROJECT Coleville 5th Quarter LAB ID Full List 59

SAMPLE POINT ID W-18

PURGE INFORMATION

Well Depth (ft.) 18.10 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 10.11 Start Time 1148 Stop Time 1151
Standing Water (ft.) 7.99 Volume Purged gal. 3.9 # casings 3 vol
Well Constant (gal/ft.) 0.163 Observations Tan tint to turbid tan
Well Volume (gal.) 1.3

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1050 SWL 10.11
Appearance Clear to brown turbid
Weather Conditions Sun 60°
Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.31	6.32
Myron 6p	Conductivity	µmhos/cm	400	398
Myron 6p	Temperature	Degrees Celsius	14.5	14.5
Myron 6p	Redox	millivolts	162	
Lamotte	Turbidity	NTU	6.3	

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Coleville 5th Quarter LAB ID Full List 60

SAMPLE POINT ID Equipment Blank

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 11/5/2020 Time 1100 SWL -

Appearance Clear

Weather Conditions Sun 60°

Sampling Technician (Print) Kyle Lee Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.92	6.91
Myron 6p	Conductivity	µmhos/cm	4	4
Myron 6p	Temperature	Degrees Celsius	15.2	15.2
Myron 6p	Redox	millivolts	103	
Lamotte	Turbidity	NTU	0.4	

Calibration Date/Time 11/5/2020 0830

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter wells LAB ID 100 VOA only

SAMPLE POINT ID W-7

PURGE INFORMATION

Well Depth (ft.) 51.25 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 44.89 Start Time 0933 Stop Time 0938
Standing Water (ft.) 6.36 Volume Purged gal. 1.5 # casings 1.5 to Dry
Well Constant (gal./ft.) 0.163 Observations Turbid Brown/Rust +
Well Volume (gal.) 1.0 Turbid Tan

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 0905 SWL 45.60
Appearance Light Rust Tint
Weather Conditions Sunny 40°
Sampling Technician (Print) Quanta Kabeck Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	5.93	5.93
Myron 6p	Conductivity	µmhos/cm	259	259
Myron 6p	Temperature	Degrees Celsius	10.1	10.1
Myron 6p	Redox	millivolts	57	—
Lamotte	Turbidity	NTU	33.4	—

Calibration Date/Time 11 / 5 / 2020 0855 2.00 / 4.00 / 10.00
143 set 1413
0.0 / 10.0

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter wells LAB ID 48 + 49 Dup
Full List

SAMPLE POINT ID Gmmw-2

PURGE INFORMATION

Well Depth (ft.) 55.99 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 37.92 Start Time 0957 Stop Time 1007
Standing Water (ft.) 18.07 Volume Purged gal. 3.5 # casings 1.2 to Dry
Well Constant (gal./ft.) 0.163 Observations Light Tan Tint
Well Volume (gal.) 2.9

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 0930 SWL 40.55
Appearance Clear
Weather Conditions Sunny 40°
Sampling Technician (Print) Quinten Kolbakk Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.20	6.25
Myron 6p	Conductivity	µmhos/cm	498	502
Myron 6p	Temperature	Degrees Celsius	11.5	11.7
Myron 6p	Redox	millivolts	104	107
Lamotte	Turbidity	NTU	3.1	2.2

Calibration Date/Time 11/5/2020 0855

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter Wells LAB ID 50 Full List

SAMPLE POINT ID Gmmw-6

PURGE INFORMATION

Well Depth (ft.) 56.05 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 39.93 Start Time 1023 Stop Time 1035
Standing Water (ft.) 16.12 Volume Purged gal. 3.5 # casings 1.3 to Dry
Well Constant (gal./ft.) 0.163 Observations Light Turbid Tan
Well Volume (gal.) 2.6

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1010 SWL 42.15
Appearance Clear
Weather Conditions Sunny 50°
Sampling Technician (Print) Quinton Kolbark Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.38	6.38
Myron 6p	Conductivity	µmhos/cm	1000	999
Myron 6p	Temperature	Degrees Celsius	11.3	11.3
Myron 6p	Redox	millivolts	-40	—
Lamotte	Turbidity	NTU	5.9	—

Calibration Date/Time 11 / 5 / 2020 0855

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter wells LAB ID 51 Full List

SAMPLE POINT ID PW-4

PURGE INFORMATION

Well Depth (ft.) 23.20 Purge Date 11/4/2020 Purge Method Bailer
SWL (ft.) 18.80 Start Time 1050 Stop Time 1102
Standing Water (ft.) 4.40 Volume Purged gal. 2.1 # casings 3.0
Well Constant (gal./ft.) 0.163 Observations Turbid Brown to
Well Volume (gal.) 0.7 Turbid Tan

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1030 SWL 19.25
Appearance clear
Weather Conditions Sunny 55
Sampling Technician (Print) Quinton Kolbeck Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.32	6.32
Myron 6p	Conductivity	µmhos/cm	271	271
Myron 6p	Temperature	Degrees Celsius	12.3	12.3
Myron 6p	Redox	millivolts	67	—
Lamotte	Turbidity	NTU	2.0	—

Calibration Date/Time 11/5/2020 0855

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter wells LAB ID 52 Full List

SAMPLE POINT ID 6mmw-5

PURGE INFORMATION

Well Depth (ft.) 70.19 Purge Date 11/4/2020 Purge Method Pump
SWL (ft.) 49.22 Start Time 1123 Stop Time 1128
Standing Water (ft.) 20.97 Volume Purged gal. 3.4 # casings 100 to Dry
Well Constant (gal./ft.) 0.163 Observations Black
Well Volume (gal.) 3.4

SAMPLING INFORMATION

Sample Method Boiler
Date 11/5/2020 Time 1055 SWL 51.81
Appearance Tan Tint
Weather Conditions Sunny 60°
Sampling Technician (Print) Quinton Kolbeck Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.49	6.49
Myron 6p	Conductivity	µmhos/cm	806	806
Myron 6p	Temperature	Degrees Celsius	10.2	10.2
Myron 6p	Redox	millivolts	-85	—
Lamotte	Turbidity	NTU	12.0	—

Calibration Date/Time 11/5/2020 0855

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Collesville 5th Quarter wells LAB ID 64 Voa Only

SAMPLE POINT ID 6mPW-4

PURGE INFORMATION

Well Depth (ft.) 27.25 Purge Date 11/4/2020 Purge Method Pump
SWL (ft.) 15.94 Start Time 1154 Stop Time 1201
Standing Water (ft.) 11.31 Volume Purged gal. 16.5 # casings 1.0 to Dry
Well Constant (gal/ft.) 1.46 Observations Tan tint to clear
Well Volume (gal.) 16.5

SAMPLING INFORMATION

Sample Method Bailer
Date 11/5/2020 Time 1115 SWL 16.24
Appearance Clear
Weather Conditions Sunny 60°
Sampling Technician (Print) Quinton Kolbeck Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.38	6.37
Myron 6p	Conductivity	µmhos/cm	615	615
Myron 6p	Temperature	Degrees Celsius	12.8	12.8
Myron 6p	Redox	millivolts	40	—
Lamotte	Turbidity	NTU	3.2	—

Calibration Date/Time 11/5/2020 0855

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville 5th Quarter LAB ID 63 not only

SAMPLE POINT ID PW-5

PURGE INFORMATION

Well Depth (ft.) 26.95 Purge Date 11/4/2020 Purge Method Bailer

SWL (ft.) 1.90 Start Time 1227 Stop Time 1244

Standing Water (ft.) 25.05 Volume Purged gal. 12.3 # casings 3 vol

Well Constant (gal/ft.) 0.163 Observations Turbid brown

Well Volume (gal.) 4.1

SAMPLING INFORMATION

Sample Method Bailer

Date 11/5/2020 Time 1130 SWL 2.21

Appearance Light Brown Turbid

Weather Conditions Sunny 60°

Sampling Technician (Print) Quinten Kolbeck Signature [Signature]

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.45	7.45
Myron 6p	Conductivity	µmhos/cm	299	299
Myron 6p	Temperature	Degrees Celsius	13.9	13.9
Myron 6p	Redox	millivolts	-44	—
Lamotte	Turbidity	NTU	32.0	—

Calibration Date/Time 11/5/2020 0855

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.

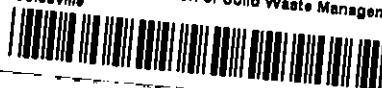


Cooler Receipt and Preservation Check Form

R2010489

Broom County Division of Solid Waste Management
Colesville

5



Project/Client Biorime Folder Number _____

Cooler received on 11/5/2020 by: Q/MW

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: <u>Wet Ice</u> 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 ☒ NA
6	Where did the bottles originate?	ALSTROC CLIENT
7	Soil VOA received as:	Bulk: Encore 5035set ☒ NA

8. Temperature Readings Date: 11/5/2020 Time: 1500 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.2</u>	<u>6.8</u>	<u>0.2</u>	<u>3.3</u>			
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 AWB on 11/5/2020 at 1500
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 11/6/2020 Time: 1352 by: PD

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES ☐ NO ☒ defective
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 ☐
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?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	<u>2234.9</u>	HNO ₃	☒		<u>1120051</u>					
≤2	<u>↓</u>	H ₂ SO ₄	☒		<u>2500112</u>					
<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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O 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: 2561-3 20-07-07, 9-35-01

Explain all Discrepancies/ Other Comments: _____

HPRD	BULK
HTR	FLDT
SUB.	HGFB
<u>ALS</u>	LL3541

Labels secondary reviewed by: Q

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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	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.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	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 Certifications¹

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 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.

ALS Group USA, Corp.
dba ALS Environmental

Client: Broome County Division of Solid Waste Management
Project: Colesville

Service Request: R2010489

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
120.1	Drinking Water	Conductivity, Field
180.1	Drinking Water	Turbidity, Field
300.0	Drinking Water	Nitrate as Nitrogen
300.0	Drinking Water	Nitrite as Nitrogen
6010C	Drinking Water	Iron, Dissolved
6010C	Drinking Water	Iron, Total
8260C	Drinking Water	1,1,1-Trichloroethane (TCA)
8260C	Drinking Water	1,1,2,2-Tetrachloroethane
8260C	Drinking Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260C	Drinking Water	1,1,2-Trichloroethane
8260C	Drinking Water	1,1-Dichloroethane (1,1-DCA)
8260C	Drinking Water	1,1-Dichloroethene (1,1-DCE)
8260C	Drinking Water	1,2,4-Trichlorobenzene
8260C	Drinking Water	1,2-Dibromo-3-chloropropane (DBCP)
8260C	Drinking Water	1,2-Dibromoethane
8260C	Drinking Water	1,2-Dichlorobenzene
8260C	Drinking Water	1,2-Dichloroethane
8260C	Drinking Water	1,2-Dichloropropane
8260C	Drinking Water	1,3-Dichlorobenzene
8260C	Drinking Water	1,4-Dichlorobenzene
8260C	Drinking Water	2-Butanone (MEK)
8260C	Drinking Water	2-Hexanone
8260C	Drinking Water	4-Methyl-2-pentanone
8260C	Drinking Water	Acetone
8260C	Drinking Water	Benzene
8260C	Drinking Water	Bromodichloromethane
8260C	Drinking Water	Bromoform
8260C	Drinking Water	Bromomethane
8260C	Drinking Water	Carbon Disulfide
8260C	Drinking Water	Carbon Tetrachloride
8260C	Drinking Water	Chlorobenzene
8260C	Drinking Water	Chloroethane
8260C	Drinking Water	Chloroform
8260C	Drinking Water	Chloromethane
8260C	Drinking Water	Cyclohexane
8260C	Drinking Water	Dibromochloromethane
8260C	Drinking Water	Dichlorodifluoromethane (CFC 12)
8260C	Drinking Water	Dichloromethane
8260C	Drinking Water	Ethylbenzene
8260C	Drinking Water	Isopropylbenzene (Cumene)
8260C	Drinking Water	Methyl Acetate
8260C	Drinking Water	Methyl tert-Butyl Ether
8260C	Drinking Water	Methylcyclohexane
8260C	Drinking Water	Styrene
8260C	Drinking Water	Tetrachloroethene (PCE)
8260C	Drinking Water	Toluene
8260C	Drinking Water	Trichloroethene (TCE)

ALS Group USA, Corp.
dba ALS Environmental

Client: Broome County Division of Solid Waste Management
Project: Colesville

Service Request: R2010489

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8260C	Drinking Water	Trichlorofluoromethane (CFC 11)
8260C	Drinking Water	Vinyl Chloride
8260C	Drinking Water	Xylenes, Total
8260C	Drinking Water	cis-1,2-Dichloroethene
8260C	Drinking Water	cis-1,3-Dichloropropene
8260C	Drinking Water	trans-1,2-Dichloroethene
8260C	Drinking Water	trans-1,3-Dichloropropene
ASTM D1498-00	Drinking Water	Oxidation-Reduction Potential (ORP), Field
SM 2550 B	Drinking Water	Temperature, Field
SM 4500-H+ B	Drinking Water	pH, Field

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: Trip Blank
Lab Code: R2010489-001
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: PW-7
Lab Code: R2010489-002
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
120.1
180.1
300.0
6010C
8260C

Extracted/Digested By

Analyzed By
JJANSON
JJANSON
KWONG
KMCLAEN
KRUEST

ASTM D1498-00
RSK 175
SM 2550 B
SM 4500-H+ B
SM 5310 C-2000(2011)

AKONZEL

JJANSON
FNAEGLER
JJANSON
JJANSON
SMEDBURY

Sample Name: PW-7 Diss
Lab Code: R2010489-003
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
6010C

Extracted/Digested By
AKONZEL

Analyzed By
KMCLAEN

Sample Name: GMMW-7
Lab Code: R2010489-004
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
120.1

Extracted/Digested By

Analyzed By
JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: GMMW-7
Lab Code: R2010489-004
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
180.1	AKONZEL	JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: GMMW-7
Lab Code: R2010489-004.R01
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
RSK 175		FNAEGLER

Sample Name: GMMW-7 Diss
Lab Code: R2010489-005
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: PW-3
Lab Code: R2010489-006
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: PW-3
Lab Code: R2010489-006
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KWONG
6010C	AKONZEL	KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: PW-3 Diss
Lab Code: R2010489-007
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: W-16S
Lab Code: R2010489-008
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: W-17S
Lab Code: R2010489-009
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: W-20S
Lab Code: R2010489-010
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
300.0		KWONG
6010C	AKONZEL	KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: W-20S Diss
Lab Code: R2010489-011
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: W-18
Lab Code: R2010489-012
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1	AKONZEL	JJANSON
180.1		JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: W-18 Diss
Lab Code: R2010489-013
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: Equipment Blank
Lab Code: R2010489-014
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1	AKONZEL	JJANSON
180.1		JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: Equipment Blank
Lab Code: R2010489-014
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
SM 5310 C-2000(2011)

Extracted/Digested By

Analyzed By
SMEDBURY

Sample Name: Equipment Blank Diss
Lab Code: R2010489-015
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
6010C

Extracted/Digested By
AKONZEL

Analyzed By
KMCLAEN

Sample Name: Trip Blank
Lab Code: R2010489-016
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: W-7
Lab Code: R2010489-017
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
120.1
180.1
8260C
ASTM D1498-00
SM 2550 B
SM 4500-H+ B

Extracted/Digested By

Analyzed By
JJANSON
JJANSON
KRUEST
JJANSON
JJANSON
JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: GMMW-2
Lab Code: R2010489-018
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1	AKONZEL	JJANSON
180.1		JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: GMMW-2
Lab Code: R2010489-018.R01
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
RSK 175		FNAEGLER

Sample Name: GMMW-2 Diss
Lab Code: R2010489-019
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: GMMW-2 Dup
Lab Code: R2010489-020
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON

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dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: GMMW-2 Dup
Lab Code: R2010489-020
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
180.1	AKONZEL	JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: GMMW-2 Dup
Lab Code: R2010489-020.R01
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
RSK 175		FNAEGLER

Sample Name: GMMW-2 Dup Diss
Lab Code: R2010489-021
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: GMMW-6
Lab Code: R2010489-022
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: GMMW-6
Lab Code: R2010489-022
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KWONG
6010C	AKONZEL	KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: GMMW-6
Lab Code: R2010489-022.R01
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
RSK 175		FNAEGLER

Sample Name: GMMW-6 Diss
Lab Code: R2010489-023
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN

Sample Name: PW-4
Lab Code: R2010489-024
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON
300.0		KWONG

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: PW-4
Lab Code: R2010489-024
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

Sample Name: PW-4 Diss
Lab Code: R2010489-025
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
6010C	AKONZEL	KMCLAEN
Sample Name: GMMW-5		Date Collected: 11/5/20
Lab Code: R2010489-026		Date Received: 11/5/20
Sample Matrix: Drinking Water		

Analysis Method	Extracted/Digested By	Analyzed By
120.1	AKONZEL	JJANSON
180.1		JJANSON
300.0		KWONG
6010C		KMCLAEN
8260C		KRUEST
ASTM D1498-00		JJANSON
RSK 175		FNAEGLER
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON
SM 5310 C-2000(2011)		SMEDBURY

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: GMMW-5
Lab Code: R2010489-026.R01
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
RSK 175

Extracted/Digested By

Analyzed By
FNAEGLER

Sample Name: GMMW-5 Diss
Lab Code: R2010489-027
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
6010C

Extracted/Digested By
AKONZEL

Analyzed By
KMCLAEN

Sample Name: GMPW-4
Lab Code: R2010489-028
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
120.1
180.1
8260C
ASTM D1498-00
SM 2550 B
SM 4500-H+ B

Extracted/Digested By

Analyzed By
JJANSON
JJANSON
KRUEST
JJANSON
JJANSON
JJANSON

Sample Name: PW-5
Lab Code: R2010489-029
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
120.1
180.1
8260C
ASTM D1498-00
SM 2550 B

Extracted/Digested By

Analyzed By
JJANSON
JJANSON
KRUEST
JJANSON
JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville/

Service Request: R2010489

Sample Name: PW-5
Lab Code: R2010489-029
Sample Matrix: Drinking Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
SM 4500-H+ B

Extracted/Digested By

Analyzed By
JJANSON



INORGANIC PREPARATION METHODS

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

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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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: Trip Blank
Lab Code: R2010489-001

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 00:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 00:19	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 00:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 00:19	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 00:19	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 00:19	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 00:19	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 00:19	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 00:19	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:19	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 00:19	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 00:19	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:19	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:19	
2-Butanone (MEK)	10 U	10	1	11/16/20 00:19	
2-Hexanone	10 U	10	1	11/16/20 00:19	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 00:19	
Acetone	10 U	10	1	11/16/20 00:19	
Benzene	5.0 U	5.0	1	11/16/20 00:19	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 00:19	
Bromoform	5.0 U	5.0	1	11/16/20 00:19	
Bromomethane	5.0 U	5.0	1	11/16/20 00:19	
Carbon Disulfide	10 U	10	1	11/16/20 00:19	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 00:19	
Chlorobenzene	5.0 U	5.0	1	11/16/20 00:19	
Chloroethane	5.0 U	5.0	1	11/16/20 00:19	
Chloroform	5.0 U	5.0	1	11/16/20 00:19	
Chloromethane	5.0 U	5.0	1	11/16/20 00:19	
Cyclohexane	10 U	10	1	11/16/20 00:19	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 00:19	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 00:19	
Dichloromethane	5.0 U	5.0	1	11/16/20 00:19	
Ethylbenzene	5.0 U	5.0	1	11/16/20 00:19	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 00:19	
Methyl Acetate	10 U	10	1	11/16/20 00:19	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 00:19	
Methylcyclohexane	10 U	10	1	11/16/20 00:19	
Styrene	5.0 U	5.0	1	11/16/20 00:19	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 00:19	
Toluene	5.0 U	5.0	1	11/16/20 00:19	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 00:19	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 00:19	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 00:19	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Trip Blank
Lab Code: R2010489-001

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 00:19	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 00:19	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 00:19	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 00:19	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 00:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/16/20 00:19	
Dibromofluoromethane	93	80 - 116	11/16/20 00:19	
Toluene-d8	97	87 - 121	11/16/20 00:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 01:25	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 01:25	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 01:25	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 01:25	
1,1-Dichloroethane (1,1-DCA)	14	5.0	1	11/16/20 01:25	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 01:25	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 01:25	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 01:25	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 01:25	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:25	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 01:25	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 01:25	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:25	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:25	
2-Butanone (MEK)	10 U	10	1	11/16/20 01:25	
2-Hexanone	10 U	10	1	11/16/20 01:25	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 01:25	
Acetone	10 U	10	1	11/16/20 01:25	
Benzene	5.0 U	5.0	1	11/16/20 01:25	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 01:25	
Bromoform	5.0 U	5.0	1	11/16/20 01:25	
Bromomethane	5.0 U	5.0	1	11/16/20 01:25	
Carbon Disulfide	10 U	10	1	11/16/20 01:25	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 01:25	
Chlorobenzene	5.0 U	5.0	1	11/16/20 01:25	
Chloroethane	5.0 U	5.0	1	11/16/20 01:25	
Chloroform	5.0 U	5.0	1	11/16/20 01:25	
Chloromethane	5.0 U	5.0	1	11/16/20 01:25	
Cyclohexane	10 U	10	1	11/16/20 01:25	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 01:25	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 01:25	
Dichloromethane	5.0 U	5.0	1	11/16/20 01:25	
Ethylbenzene	5.0 U	5.0	1	11/16/20 01:25	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 01:25	
Methyl Acetate	10 U	10	1	11/16/20 01:25	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 01:25	
Methylcyclohexane	10 U	10	1	11/16/20 01:25	
Styrene	5.0 U	5.0	1	11/16/20 01:25	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 01:25	
Toluene	5.0 U	5.0	1	11/16/20 01:25	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 01:25	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 01:25	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 01:25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 01:25	
cis-1,2-Dichloroethene	16	5.0	1	11/16/20 01:25	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:25	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 01:25	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/16/20 01:25	
Dibromofluoromethane	93	80 - 116	11/16/20 01:25	
Toluene-d8	97	87 - 121	11/16/20 01:25	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 01:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 01:47	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 01:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 01:47	
1,1-Dichloroethane (1,1-DCA)	47	5.0	1	11/16/20 01:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 01:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 01:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 01:47	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 01:47	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:47	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 01:47	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 01:47	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:47	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:47	
2-Butanone (MEK)	10 U	10	1	11/16/20 01:47	
2-Hexanone	10 U	10	1	11/16/20 01:47	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 01:47	
Acetone	10 U	10	1	11/16/20 01:47	
Benzene	5.0 U	5.0	1	11/16/20 01:47	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 01:47	
Bromoform	5.0 U	5.0	1	11/16/20 01:47	
Bromomethane	5.0 U	5.0	1	11/16/20 01:47	
Carbon Disulfide	10 U	10	1	11/16/20 01:47	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 01:47	
Chlorobenzene	14	5.0	1	11/16/20 01:47	
Chloroethane	16	5.0	1	11/16/20 01:47	
Chloroform	5.0 U	5.0	1	11/16/20 01:47	
Chloromethane	5.0 U	5.0	1	11/16/20 01:47	
Cyclohexane	10 U	10	1	11/16/20 01:47	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 01:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 01:47	
Dichloromethane	5.0 U	5.0	1	11/16/20 01:47	
Ethylbenzene	5.0 U	5.0	1	11/16/20 01:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 01:47	
Methyl Acetate	10 U	10	1	11/16/20 01:47	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 01:47	
Methylcyclohexane	10 U	10	1	11/16/20 01:47	
Styrene	5.0 U	5.0	1	11/16/20 01:47	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 01:47	
Toluene	5.0 U	5.0	1	11/16/20 01:47	
Trichloroethene (TCE)	17	5.0	1	11/16/20 01:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 01:47	
Vinyl Chloride	17	5.0	1	11/16/20 01:47	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 01:47	
cis-1,2-Dichloroethene	42	5.0	1	11/16/20 01:47	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:47	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 01:47	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/16/20 01:47	
Dibromofluoromethane	93	80 - 116	11/16/20 01:47	
Toluene-d8	97	87 - 121	11/16/20 01:47	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 06:32	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 06:32	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 06:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 06:32	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 06:32	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 06:32	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 06:32	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 06:32	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 06:32	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:32	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 06:32	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 06:32	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:32	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:32	
2-Butanone (MEK)	10 U	10	1	11/16/20 06:32	
2-Hexanone	10 U	10	1	11/16/20 06:32	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 06:32	
Acetone	10 U	10	1	11/16/20 06:32	
Benzene	5.0 U	5.0	1	11/16/20 06:32	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 06:32	
Bromoform	5.0 U	5.0	1	11/16/20 06:32	
Bromomethane	5.0 U	5.0	1	11/16/20 06:32	
Carbon Disulfide	10 U	10	1	11/16/20 06:32	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 06:32	
Chlorobenzene	5.0 U	5.0	1	11/16/20 06:32	
Chloroethane	5.0 U	5.0	1	11/16/20 06:32	
Chloroform	5.0 U	5.0	1	11/16/20 06:32	
Chloromethane	5.0 U	5.0	1	11/16/20 06:32	
Cyclohexane	10 U	10	1	11/16/20 06:32	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 06:32	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 06:32	
Dichloromethane	5.0 U	5.0	1	11/16/20 06:32	
Ethylbenzene	5.0 U	5.0	1	11/16/20 06:32	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 06:32	
Methyl Acetate	10 U	10	1	11/16/20 06:32	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 06:32	
Methylcyclohexane	10 U	10	1	11/16/20 06:32	
Styrene	5.0 U	5.0	1	11/16/20 06:32	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 06:32	
Toluene	5.0 U	5.0	1	11/16/20 06:32	
Trichloroethene (TCE)	5.6	5.0	1	11/16/20 06:32	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 06:32	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 06:32	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 06:32	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 06:32	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 06:32	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 06:32	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 06:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/16/20 06:32	
Dibromofluoromethane	93	80 - 116	11/16/20 06:32	
Toluene-d8	97	87 - 121	11/16/20 06:32	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-16S
Lab Code: R2010489-008

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 02:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 02:09	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 02:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 02:09	
1,1-Dichloroethane (1,1-DCA)	6.3	5.0	1	11/16/20 02:09	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 02:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 02:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 02:09	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 02:09	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:09	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 02:09	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 02:09	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:09	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:09	
2-Butanone (MEK)	10 U	10	1	11/16/20 02:09	
2-Hexanone	10 U	10	1	11/16/20 02:09	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 02:09	
Acetone	10 U	10	1	11/16/20 02:09	
Benzene	5.0 U	5.0	1	11/16/20 02:09	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 02:09	
Bromoform	5.0 U	5.0	1	11/16/20 02:09	
Bromomethane	5.0 U	5.0	1	11/16/20 02:09	
Carbon Disulfide	10 U	10	1	11/16/20 02:09	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 02:09	
Chlorobenzene	17	5.0	1	11/16/20 02:09	
Chloroethane	5.0 U	5.0	1	11/16/20 02:09	
Chloroform	5.0 U	5.0	1	11/16/20 02:09	
Chloromethane	5.0 U	5.0	1	11/16/20 02:09	
Cyclohexane	10 U	10	1	11/16/20 02:09	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 02:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 02:09	
Dichloromethane	5.0 U	5.0	1	11/16/20 02:09	
Ethylbenzene	5.0 U	5.0	1	11/16/20 02:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 02:09	
Methyl Acetate	10 U	10	1	11/16/20 02:09	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 02:09	
Methylcyclohexane	10 U	10	1	11/16/20 02:09	
Styrene	5.0 U	5.0	1	11/16/20 02:09	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 02:09	
Toluene	5.0 U	5.0	1	11/16/20 02:09	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 02:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 02:09	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 02:09	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-16S
Lab Code: R2010489-008

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 02:09	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:09	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:09	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:09	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/16/20 02:09	
Dibromofluoromethane	94	80 - 116	11/16/20 02:09	
Toluene-d8	95	87 - 121	11/16/20 02:09	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-17S
Lab Code: R2010489-009

Service Request: R2010489
Date Collected: 11/05/20 10:20
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 02:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 02:31	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 02:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 02:31	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 02:31	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 02:31	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 02:31	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 02:31	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 02:31	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:31	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 02:31	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 02:31	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:31	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:31	
2-Butanone (MEK)	10 U	10	1	11/16/20 02:31	
2-Hexanone	10 U	10	1	11/16/20 02:31	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 02:31	
Acetone	10 U	10	1	11/16/20 02:31	
Benzene	5.0 U	5.0	1	11/16/20 02:31	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 02:31	
Bromoform	5.0 U	5.0	1	11/16/20 02:31	
Bromomethane	5.0 U	5.0	1	11/16/20 02:31	
Carbon Disulfide	10 U	10	1	11/16/20 02:31	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 02:31	
Chlorobenzene	5.0 U	5.0	1	11/16/20 02:31	
Chloroethane	5.0 U	5.0	1	11/16/20 02:31	
Chloroform	5.0 U	5.0	1	11/16/20 02:31	
Chloromethane	5.0 U	5.0	1	11/16/20 02:31	
Cyclohexane	10 U	10	1	11/16/20 02:31	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 02:31	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 02:31	
Dichloromethane	5.0 U	5.0	1	11/16/20 02:31	
Ethylbenzene	5.0 U	5.0	1	11/16/20 02:31	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 02:31	
Methyl Acetate	10 U	10	1	11/16/20 02:31	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 02:31	
Methylcyclohexane	10 U	10	1	11/16/20 02:31	
Styrene	5.0 U	5.0	1	11/16/20 02:31	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 02:31	
Toluene	5.0 U	5.0	1	11/16/20 02:31	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 02:31	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 02:31	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 02:31	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-17S
Lab Code: R2010489-009

Service Request: R2010489
Date Collected: 11/05/20 10:20
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 02:31	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:31	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:31	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:31	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/16/20 02:31	
Dibromofluoromethane	95	80 - 116	11/16/20 02:31	
Toluene-d8	99	87 - 121	11/16/20 02:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 02:53	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 02:53	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 02:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 02:53	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 02:53	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 02:53	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 02:53	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 02:53	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 02:53	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:53	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 02:53	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 02:53	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:53	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 02:53	
2-Butanone (MEK)	10 U	10	1	11/16/20 02:53	
2-Hexanone	10 U	10	1	11/16/20 02:53	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 02:53	
Acetone	10 U	10	1	11/16/20 02:53	
Benzene	5.0 U	5.0	1	11/16/20 02:53	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 02:53	
Bromoform	5.0 U	5.0	1	11/16/20 02:53	
Bromomethane	5.0 U	5.0	1	11/16/20 02:53	
Carbon Disulfide	10 U	10	1	11/16/20 02:53	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 02:53	
Chlorobenzene	5.0 U	5.0	1	11/16/20 02:53	
Chloroethane	5.0 U	5.0	1	11/16/20 02:53	
Chloroform	5.0 U	5.0	1	11/16/20 02:53	
Chloromethane	5.0 U	5.0	1	11/16/20 02:53	
Cyclohexane	10 U	10	1	11/16/20 02:53	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 02:53	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 02:53	
Dichloromethane	5.0 U	5.0	1	11/16/20 02:53	
Ethylbenzene	5.0 U	5.0	1	11/16/20 02:53	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 02:53	
Methyl Acetate	10 U	10	1	11/16/20 02:53	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 02:53	
Methylcyclohexane	10 U	10	1	11/16/20 02:53	
Styrene	5.0 U	5.0	1	11/16/20 02:53	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 02:53	
Toluene	5.0 U	5.0	1	11/16/20 02:53	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 02:53	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 02:53	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 02:53	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 02:53	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:53	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:53	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 02:53	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 02:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/16/20 02:53	
Dibromofluoromethane	93	80 - 116	11/16/20 02:53	
Toluene-d8	96	87 - 121	11/16/20 02:53	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 03:15	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 03:15	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 03:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 03:15	
1,1-Dichloroethane (1,1-DCA)	5.2	5.0	1	11/16/20 03:15	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 03:15	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 03:15	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 03:15	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 03:15	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:15	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 03:15	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 03:15	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:15	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:15	
2-Butanone (MEK)	10 U	10	1	11/16/20 03:15	
2-Hexanone	10 U	10	1	11/16/20 03:15	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 03:15	
Acetone	10 U	10	1	11/16/20 03:15	
Benzene	5.0 U	5.0	1	11/16/20 03:15	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 03:15	
Bromoform	5.0 U	5.0	1	11/16/20 03:15	
Bromomethane	5.0 U	5.0	1	11/16/20 03:15	
Carbon Disulfide	10 U	10	1	11/16/20 03:15	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 03:15	
Chlorobenzene	5.0 U	5.0	1	11/16/20 03:15	
Chloroethane	5.0 U	5.0	1	11/16/20 03:15	
Chloroform	5.0 U	5.0	1	11/16/20 03:15	
Chloromethane	5.0 U	5.0	1	11/16/20 03:15	
Cyclohexane	10 U	10	1	11/16/20 03:15	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 03:15	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 03:15	
Dichloromethane	5.0 U	5.0	1	11/16/20 03:15	
Ethylbenzene	5.0 U	5.0	1	11/16/20 03:15	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 03:15	
Methyl Acetate	10 U	10	1	11/16/20 03:15	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 03:15	
Methylcyclohexane	10 U	10	1	11/16/20 03:15	
Styrene	5.0 U	5.0	1	11/16/20 03:15	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 03:15	
Toluene	5.0 U	5.0	1	11/16/20 03:15	
Trichloroethene (TCE)	7.0	5.0	1	11/16/20 03:15	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 03:15	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 03:15	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 03:15	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:15	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:15	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:15	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/16/20 03:15	
Dibromofluoromethane	94	80 - 116	11/16/20 03:15	
Toluene-d8	98	87 - 121	11/16/20 03:15	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 01:03	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 01:03	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 01:03	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 01:03	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 01:03	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 01:03	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 01:03	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 01:03	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 01:03	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:03	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 01:03	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 01:03	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:03	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 01:03	
2-Butanone (MEK)	10 U	10	1	11/16/20 01:03	
2-Hexanone	10 U	10	1	11/16/20 01:03	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 01:03	
Acetone	10 U	10	1	11/16/20 01:03	
Benzene	5.0 U	5.0	1	11/16/20 01:03	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 01:03	
Bromoform	5.0 U	5.0	1	11/16/20 01:03	
Bromomethane	5.0 U	5.0	1	11/16/20 01:03	
Carbon Disulfide	10 U	10	1	11/16/20 01:03	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 01:03	
Chlorobenzene	5.0 U	5.0	1	11/16/20 01:03	
Chloroethane	5.0 U	5.0	1	11/16/20 01:03	
Chloroform	5.0 U	5.0	1	11/16/20 01:03	
Chloromethane	5.0 U	5.0	1	11/16/20 01:03	
Cyclohexane	10 U	10	1	11/16/20 01:03	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 01:03	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 01:03	
Dichloromethane	5.0 U	5.0	1	11/16/20 01:03	
Ethylbenzene	5.0 U	5.0	1	11/16/20 01:03	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 01:03	
Methyl Acetate	10 U	10	1	11/16/20 01:03	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 01:03	
Methylcyclohexane	10 U	10	1	11/16/20 01:03	
Styrene	5.0 U	5.0	1	11/16/20 01:03	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 01:03	
Toluene	5.0 U	5.0	1	11/16/20 01:03	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 01:03	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 01:03	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 01:03	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 01:03	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 01:03	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:03	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 01:03	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 01:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/16/20 01:03	
Dibromofluoromethane	93	80 - 116	11/16/20 01:03	
Toluene-d8	96	87 - 121	11/16/20 01:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: Trip Blank
Lab Code: R2010489-016

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 00:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 00:41	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 00:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 00:41	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 00:41	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 00:41	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 00:41	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 00:41	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 00:41	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:41	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 00:41	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 00:41	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:41	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 00:41	
2-Butanone (MEK)	10 U	10	1	11/16/20 00:41	
2-Hexanone	10 U	10	1	11/16/20 00:41	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 00:41	
Acetone	10 U	10	1	11/16/20 00:41	
Benzene	5.0 U	5.0	1	11/16/20 00:41	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 00:41	
Bromoform	5.0 U	5.0	1	11/16/20 00:41	
Bromomethane	5.0 U	5.0	1	11/16/20 00:41	
Carbon Disulfide	10 U	10	1	11/16/20 00:41	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 00:41	
Chlorobenzene	5.0 U	5.0	1	11/16/20 00:41	
Chloroethane	5.0 U	5.0	1	11/16/20 00:41	
Chloroform	5.0 U	5.0	1	11/16/20 00:41	
Chloromethane	5.0 U	5.0	1	11/16/20 00:41	
Cyclohexane	10 U	10	1	11/16/20 00:41	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 00:41	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 00:41	
Dichloromethane	5.0 U	5.0	1	11/16/20 00:41	
Ethylbenzene	5.0 U	5.0	1	11/16/20 00:41	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 00:41	
Methyl Acetate	10 U	10	1	11/16/20 00:41	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 00:41	
Methylcyclohexane	10 U	10	1	11/16/20 00:41	
Styrene	5.0 U	5.0	1	11/16/20 00:41	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 00:41	
Toluene	5.0 U	5.0	1	11/16/20 00:41	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 00:41	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 00:41	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 00:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: Trip Blank
Lab Code: R2010489-016

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 00:41	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 00:41	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 00:41	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 00:41	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 00:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/16/20 00:41	
Dibromofluoromethane	92	80 - 116	11/16/20 00:41	
Toluene-d8	99	87 - 121	11/16/20 00:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-7
Lab Code: R2010489-017

Service Request: R2010489
Date Collected: 11/05/20 09:05
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 03:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 03:37	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 03:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 03:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 03:37	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 03:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 03:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 03:37	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 03:37	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:37	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 03:37	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 03:37	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:37	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:37	
2-Butanone (MEK)	10 U	10	1	11/16/20 03:37	
2-Hexanone	10 U	10	1	11/16/20 03:37	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 03:37	
Acetone	15	10	1	11/16/20 03:37	
Benzene	5.0 U	5.0	1	11/16/20 03:37	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 03:37	
Bromoform	5.0 U	5.0	1	11/16/20 03:37	
Bromomethane	5.0 U	5.0	1	11/16/20 03:37	
Carbon Disulfide	10 U	10	1	11/16/20 03:37	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 03:37	
Chlorobenzene	5.0 U	5.0	1	11/16/20 03:37	
Chloroethane	5.0 U	5.0	1	11/16/20 03:37	
Chloroform	5.0 U	5.0	1	11/16/20 03:37	
Chloromethane	5.0 U	5.0	1	11/16/20 03:37	
Cyclohexane	10 U	10	1	11/16/20 03:37	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 03:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 03:37	
Dichloromethane	5.0 U	5.0	1	11/16/20 03:37	
Ethylbenzene	5.0 U	5.0	1	11/16/20 03:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 03:37	
Methyl Acetate	10 U	10	1	11/16/20 03:37	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 03:37	
Methylcyclohexane	10 U	10	1	11/16/20 03:37	
Styrene	5.0 U	5.0	1	11/16/20 03:37	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 03:37	
Toluene	5.0 U	5.0	1	11/16/20 03:37	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 03:37	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 03:37	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 03:37	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-7
Lab Code: R2010489-017

Service Request: R2010489
Date Collected: 11/05/20 09:05
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 03:37	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:37	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:37	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:37	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/16/20 03:37	
Dibromofluoromethane	94	80 - 116	11/16/20 03:37	
Toluene-d8	98	87 - 121	11/16/20 03:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 03:59	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 03:59	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 03:59	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 03:59	
1,1-Dichloroethane (1,1-DCA)	17	5.0	1	11/16/20 03:59	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 03:59	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 03:59	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 03:59	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 03:59	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:59	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 03:59	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 03:59	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:59	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 03:59	
2-Butanone (MEK)	10 U	10	1	11/16/20 03:59	
2-Hexanone	10 U	10	1	11/16/20 03:59	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 03:59	
Acetone	10 U	10	1	11/16/20 03:59	
Benzene	5.0 U	5.0	1	11/16/20 03:59	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 03:59	
Bromoform	5.0 U	5.0	1	11/16/20 03:59	
Bromomethane	5.0 U	5.0	1	11/16/20 03:59	
Carbon Disulfide	10 U	10	1	11/16/20 03:59	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 03:59	
Chlorobenzene	15	5.0	1	11/16/20 03:59	
Chloroethane	5.9	5.0	1	11/16/20 03:59	
Chloroform	5.0 U	5.0	1	11/16/20 03:59	
Chloromethane	5.0 U	5.0	1	11/16/20 03:59	
Cyclohexane	10 U	10	1	11/16/20 03:59	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 03:59	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 03:59	
Dichloromethane	5.0 U	5.0	1	11/16/20 03:59	
Ethylbenzene	5.0 U	5.0	1	11/16/20 03:59	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 03:59	
Methyl Acetate	10 U	10	1	11/16/20 03:59	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 03:59	
Methylcyclohexane	10 U	10	1	11/16/20 03:59	
Styrene	5.0 U	5.0	1	11/16/20 03:59	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 03:59	
Toluene	5.0 U	5.0	1	11/16/20 03:59	
Trichloroethene (TCE)	7.0	5.0	1	11/16/20 03:59	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 03:59	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 03:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 03:59	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:59	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:59	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 03:59	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 03:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/16/20 03:59	
Dibromofluoromethane	94	80 - 116	11/16/20 03:59	
Toluene-d8	99	87 - 121	11/16/20 03:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 04:20	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 04:20	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 04:20	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 04:20	
1,1-Dichloroethane (1,1-DCA)	16	5.0	1	11/16/20 04:20	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 04:20	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 04:20	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 04:20	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 04:20	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:20	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 04:20	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 04:20	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:20	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:20	
2-Butanone (MEK)	10 U	10	1	11/16/20 04:20	
2-Hexanone	10 U	10	1	11/16/20 04:20	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 04:20	
Acetone	10 U	10	1	11/16/20 04:20	
Benzene	5.0 U	5.0	1	11/16/20 04:20	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 04:20	
Bromoform	5.0 U	5.0	1	11/16/20 04:20	
Bromomethane	5.0 U	5.0	1	11/16/20 04:20	
Carbon Disulfide	10 U	10	1	11/16/20 04:20	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 04:20	
Chlorobenzene	14	5.0	1	11/16/20 04:20	
Chloroethane	6.0	5.0	1	11/16/20 04:20	
Chloroform	5.0 U	5.0	1	11/16/20 04:20	
Chloromethane	5.0 U	5.0	1	11/16/20 04:20	
Cyclohexane	10 U	10	1	11/16/20 04:20	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 04:20	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 04:20	
Dichloromethane	5.0 U	5.0	1	11/16/20 04:20	
Ethylbenzene	5.0 U	5.0	1	11/16/20 04:20	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 04:20	
Methyl Acetate	10 U	10	1	11/16/20 04:20	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 04:20	
Methylcyclohexane	10 U	10	1	11/16/20 04:20	
Styrene	5.0 U	5.0	1	11/16/20 04:20	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 04:20	
Toluene	5.0 U	5.0	1	11/16/20 04:20	
Trichloroethene (TCE)	6.7	5.0	1	11/16/20 04:20	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 04:20	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 04:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 04:20	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 04:20	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 04:20	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 04:20	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 04:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/16/20 04:20	
Dibromofluoromethane	93	80 - 116	11/16/20 04:20	
Toluene-d8	100	87 - 121	11/16/20 04:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 04:42	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 04:42	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 04:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 04:42	
1,1-Dichloroethane (1,1-DCA)	53	5.0	1	11/16/20 04:42	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 04:42	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 04:42	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 04:42	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 04:42	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:42	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 04:42	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 04:42	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:42	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 04:42	
2-Butanone (MEK)	10 U	10	1	11/16/20 04:42	
2-Hexanone	10 U	10	1	11/16/20 04:42	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 04:42	
Acetone	10 U	10	1	11/16/20 04:42	
Benzene	5.0 U	5.0	1	11/16/20 04:42	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 04:42	
Bromoform	5.0 U	5.0	1	11/16/20 04:42	
Bromomethane	5.0 U	5.0	1	11/16/20 04:42	
Carbon Disulfide	10 U	10	1	11/16/20 04:42	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 04:42	
Chlorobenzene	27	5.0	1	11/16/20 04:42	
Chloroethane	99	5.0	1	11/16/20 04:42	
Chloroform	5.0 U	5.0	1	11/16/20 04:42	
Chloromethane	5.0 U	5.0	1	11/16/20 04:42	
Cyclohexane	10 U	10	1	11/16/20 04:42	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 04:42	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 04:42	
Dichloromethane	5.0 U	5.0	1	11/16/20 04:42	
Ethylbenzene	5.0 U	5.0	1	11/16/20 04:42	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 04:42	
Methyl Acetate	10 U	10	1	11/16/20 04:42	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 04:42	
Methylcyclohexane	10 U	10	1	11/16/20 04:42	
Styrene	5.0 U	5.0	1	11/16/20 04:42	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 04:42	
Toluene	5.0 U	5.0	1	11/16/20 04:42	
Trichloroethene (TCE)	5.2	5.0	1	11/16/20 04:42	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 04:42	
Vinyl Chloride	12	5.0	1	11/16/20 04:42	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 04:42	
cis-1,2-Dichloroethene	17	5.0	1	11/16/20 04:42	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 04:42	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 04:42	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 04:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/16/20 04:42	
Dibromofluoromethane	93	80 - 116	11/16/20 04:42	
Toluene-d8	97	87 - 121	11/16/20 04:42	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 05:04	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 05:04	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 05:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 05:04	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 05:04	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 05:04	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 05:04	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 05:04	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 05:04	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:04	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 05:04	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 05:04	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:04	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:04	
2-Butanone (MEK)	10 U	10	1	11/16/20 05:04	
2-Hexanone	10 U	10	1	11/16/20 05:04	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 05:04	
Acetone	10 U	10	1	11/16/20 05:04	
Benzene	5.0 U	5.0	1	11/16/20 05:04	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 05:04	
Bromoform	5.0 U	5.0	1	11/16/20 05:04	
Bromomethane	5.0 U	5.0	1	11/16/20 05:04	
Carbon Disulfide	10 U	10	1	11/16/20 05:04	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 05:04	
Chlorobenzene	5.0 U	5.0	1	11/16/20 05:04	
Chloroethane	5.0 U	5.0	1	11/16/20 05:04	
Chloroform	5.0 U	5.0	1	11/16/20 05:04	
Chloromethane	5.0 U	5.0	1	11/16/20 05:04	
Cyclohexane	10 U	10	1	11/16/20 05:04	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 05:04	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 05:04	
Dichloromethane	5.0 U	5.0	1	11/16/20 05:04	
Ethylbenzene	5.0 U	5.0	1	11/16/20 05:04	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 05:04	
Methyl Acetate	10 U	10	1	11/16/20 05:04	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 05:04	
Methylcyclohexane	10 U	10	1	11/16/20 05:04	
Styrene	5.0 U	5.0	1	11/16/20 05:04	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 05:04	
Toluene	5.0 U	5.0	1	11/16/20 05:04	
Trichloroethene (TCE)	6.0	5.0	1	11/16/20 05:04	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 05:04	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 05:04	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 05:04	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 05:04	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:04	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 05:04	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/16/20 05:04	
Dibromofluoromethane	94	80 - 116	11/16/20 05:04	
Toluene-d8	98	87 - 121	11/16/20 05:04	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00

Units: ug/L

Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 05:26	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 05:26	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 05:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 05:26	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 05:26	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 05:26	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 05:26	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 05:26	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 05:26	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:26	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 05:26	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 05:26	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:26	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:26	
2-Butanone (MEK)	19	10	1	11/16/20 05:26	
2-Hexanone	10 U	10	1	11/16/20 05:26	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 05:26	
Acetone	17	10	1	11/16/20 05:26	
Benzene	5.0 U	5.0	1	11/16/20 05:26	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 05:26	
Bromoform	5.0 U	5.0	1	11/16/20 05:26	
Bromomethane	5.0 U	5.0	1	11/16/20 05:26	
Carbon Disulfide	10 U	10	1	11/16/20 05:26	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 05:26	
Chlorobenzene	11	5.0	1	11/16/20 05:26	
Chloroethane	47	5.0	1	11/16/20 05:26	
Chloroform	5.0 U	5.0	1	11/16/20 05:26	
Chloromethane	5.0 U	5.0	1	11/16/20 05:26	
Cyclohexane	10 U	10	1	11/16/20 05:26	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 05:26	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 05:26	
Dichloromethane	5.0 U	5.0	1	11/16/20 05:26	
Ethylbenzene	5.0 U	5.0	1	11/16/20 05:26	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 05:26	
Methyl Acetate	10 U	10	1	11/16/20 05:26	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 05:26	
Methylcyclohexane	10 U	10	1	11/16/20 05:26	
Styrene	5.0 U	5.0	1	11/16/20 05:26	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 05:26	
Toluene	5.0 U	5.0	1	11/16/20 05:26	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 05:26	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 05:26	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 05:26	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 05:26	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 05:26	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:26	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 05:26	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/16/20 05:26	
Dibromofluoromethane	93	80 - 116	11/16/20 05:26	
Toluene-d8	98	87 - 121	11/16/20 05:26	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMPW-4
Lab Code: R2010489-028

Service Request: R2010489
Date Collected: 11/05/20 11:15
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 05:48	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 05:48	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 05:48	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 05:48	
1,1-Dichloroethane (1,1-DCA)	16	5.0	1	11/16/20 05:48	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 05:48	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 05:48	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 05:48	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 05:48	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:48	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 05:48	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 05:48	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:48	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 05:48	
2-Butanone (MEK)	10 U	10	1	11/16/20 05:48	
2-Hexanone	10 U	10	1	11/16/20 05:48	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 05:48	
Acetone	10 U	10	1	11/16/20 05:48	
Benzene	5.0 U	5.0	1	11/16/20 05:48	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 05:48	
Bromoform	5.0 U	5.0	1	11/16/20 05:48	
Bromomethane	5.0 U	5.0	1	11/16/20 05:48	
Carbon Disulfide	10 U	10	1	11/16/20 05:48	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 05:48	
Chlorobenzene	8.9	5.0	1	11/16/20 05:48	
Chloroethane	7.4	5.0	1	11/16/20 05:48	
Chloroform	5.0 U	5.0	1	11/16/20 05:48	
Chloromethane	5.0 U	5.0	1	11/16/20 05:48	
Cyclohexane	10 U	10	1	11/16/20 05:48	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 05:48	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 05:48	
Dichloromethane	5.0 U	5.0	1	11/16/20 05:48	
Ethylbenzene	5.0 U	5.0	1	11/16/20 05:48	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 05:48	
Methyl Acetate	10 U	10	1	11/16/20 05:48	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 05:48	
Methylcyclohexane	10 U	10	1	11/16/20 05:48	
Styrene	5.0 U	5.0	1	11/16/20 05:48	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 05:48	
Toluene	5.0 U	5.0	1	11/16/20 05:48	
Trichloroethene (TCE)	19	5.0	1	11/16/20 05:48	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 05:48	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 05:48	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMPW-4
Lab Code: R2010489-028

Service Request: R2010489
Date Collected: 11/05/20 11:15
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 05:48	
cis-1,2-Dichloroethene	7.3	5.0	1	11/16/20 05:48	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:48	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 05:48	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 05:48	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/16/20 05:48	
Dibromofluoromethane	98	80 - 116	11/16/20 05:48	
Toluene-d8	100	87 - 121	11/16/20 05:48	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Sample Name: PW-5
Lab Code: R2010489-029

Service Request: R2010489
Date Collected: 11/05/20 11:30
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/16/20 06:10	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/16/20 06:10	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/16/20 06:10	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/16/20 06:10	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/16/20 06:10	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/16/20 06:10	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/16/20 06:10	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/16/20 06:10	
1,2-Dibromoethane	5.0 U	5.0	1	11/16/20 06:10	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:10	
1,2-Dichloroethane	5.0 U	5.0	1	11/16/20 06:10	
1,2-Dichloropropane	5.0 U	5.0	1	11/16/20 06:10	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:10	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/16/20 06:10	
2-Butanone (MEK)	10 U	10	1	11/16/20 06:10	
2-Hexanone	10 U	10	1	11/16/20 06:10	
4-Methyl-2-pentanone	10 U	10	1	11/16/20 06:10	
Acetone	10 U	10	1	11/16/20 06:10	
Benzene	5.0 U	5.0	1	11/16/20 06:10	
Bromodichloromethane	5.0 U	5.0	1	11/16/20 06:10	
Bromoform	5.0 U	5.0	1	11/16/20 06:10	
Bromomethane	5.0 U	5.0	1	11/16/20 06:10	
Carbon Disulfide	10 U	10	1	11/16/20 06:10	
Carbon Tetrachloride	5.0 U	5.0	1	11/16/20 06:10	
Chlorobenzene	5.0 U	5.0	1	11/16/20 06:10	
Chloroethane	5.0 U	5.0	1	11/16/20 06:10	
Chloroform	5.0 U	5.0	1	11/16/20 06:10	
Chloromethane	5.0 U	5.0	1	11/16/20 06:10	
Cyclohexane	10 U	10	1	11/16/20 06:10	
Dibromochloromethane	5.0 U	5.0	1	11/16/20 06:10	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/16/20 06:10	
Dichloromethane	5.0 U	5.0	1	11/16/20 06:10	
Ethylbenzene	5.0 U	5.0	1	11/16/20 06:10	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/16/20 06:10	
Methyl Acetate	10 U	10	1	11/16/20 06:10	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/16/20 06:10	
Methylcyclohexane	10 U	10	1	11/16/20 06:10	
Styrene	5.0 U	5.0	1	11/16/20 06:10	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/16/20 06:10	
Toluene	5.0 U	5.0	1	11/16/20 06:10	
Trichloroethene (TCE)	5.0 U	5.0	1	11/16/20 06:10	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/16/20 06:10	
Vinyl Chloride	5.0 U	5.0	1	11/16/20 06:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-5
Lab Code: R2010489-029

Service Request: R2010489
Date Collected: 11/05/20 11:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/16/20 06:10	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 06:10	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 06:10	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/16/20 06:10	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/16/20 06:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/16/20 06:10	
Dibromofluoromethane	95	80 - 116	11/16/20 06:10	
Toluene-d8	97	87 - 121	11/16/20 06:10	



Volatile Organic Compounds by GC

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
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 11:17	
Ethene	0.35 U	1.0	0.35	1	11/17/20 11:17	
Methane	66	1.1	0.75	1	11/17/20 11:17	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.70 J	1.0	0.17	1	11/17/20 11:57	
Ethene	1.8	1.0	0.35	1	11/17/20 11:57	
Methane	420 D	11	7.5	10	11/17/20 12:06	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 12:15	
Ethene	0.35 U	1.0	0.35	1	11/17/20 12:15	
Methane	19	1.1	0.75	1	11/17/20 12:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 12:47	
Ethene	0.35 U	1.0	0.35	1	11/17/20 12:47	
Methane	0.75 U	1.1	0.75	1	11/17/20 12:47	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 11:08	
Ethene	0.35 U	1.0	0.35	1	11/17/20 11:08	
Methane	0.75 U	1.1	0.75	1	11/17/20 11:08	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 10:56	
Ethene	0.35 U	1.0	0.35	1	11/17/20 10:56	
Methane	0.75 U	1.1	0.75	1	11/17/20 10:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	1.1	1.0	0.17	1	11/17/20 13:49	
Ethene	0.50 J	1.0	0.35	1	11/17/20 13:49	
Methane	1300 D	53	38	50	11/17/20 13:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	1.0	1.0	0.17	1	11/17/20 14:08	
Ethene	0.43 J	1.0	0.35	1	11/17/20 14:08	
Methane	1200 D	53	38	50	11/17/20 14:21	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	8.4	1.0	0.17	1	11/17/20 14:30	
Ethene	7.7	1.0	0.35	1	11/17/20 14:30	
Methane	2400 D	53	38	50	11/17/20 14:41	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 13:10	
Ethene	0.35 U	1.0	0.35	1	11/17/20 13:10	
Methane	0.75 U	1.1	0.75	1	11/17/20 13:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	9.2	1.0	0.17	1	11/17/20 13:19	
Ethene	1.8	1.0	0.35	1	11/17/20 13:19	
Methane	14000 D	210	150	200	11/17/20 14:52	



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	16300	ug/L	100	1	11/12/20 02:06	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7 Diss
Lab Code: R2010489-003

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	560	ug/L	100	1	11/12/20 02:09	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	100	ug/L	100	1	11/12/20 02:12	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7 Diss
Lab Code: R2010489-005

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 02:15	11/09/20	

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dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	9420	ug/L	100	1	11/12/20 02:19	11/09/20	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3 Diss
Lab Code: R2010489-007

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	210	ug/L	100	1	11/12/20 02:41	11/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	4210	ug/L	100	1	11/12/20 02:58	11/09/20	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S Diss
Lab Code: R2010489-011

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 03:01	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	340	ug/L	100	1	11/12/20 03:04	11/09/20	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18 Diss
Lab Code: R2010489-013

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 03:07	11/09/20	

ALS Group USA, Corp.
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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	100 U	ug/L	100	1	11/12/20 03:17	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank Diss
Lab Code: R2010489-015

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 03:20	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	260	ug/L	100	1	11/12/20 03:24	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Diss
Lab Code: R2010489-019

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 03:27	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	250	ug/L	100	1	11/12/20 03:30	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup Diss
Lab Code: R2010489-021

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	130	ug/L	100	1	11/12/20 03:33	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	18900	ug/L	100	1	11/12/20 03:37	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6 Diss
Lab Code: R2010489-023

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	22200	ug/L	100	1	11/12/20 03:40	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	230	ug/L	100	1	11/12/20 03:43	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4 Diss
Lab Code: R2010489-025

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 03:46	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total	6010C	81400	ug/L	1000	10	11/11/20 21:13	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5 Diss
Lab Code: R2010489-027

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	74200	ug/L	1000	10	11/11/20 21:16	11/09/20	



General Chemistry

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	11/14/20 04:28	
Nitrate as Nitrogen	300.0	2.2	mg/L	1.0	10	11/06/20 13:59	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 13:59	
Sulfate	300.0	9.6	mg/L	2.0	10	11/06/20 13:59	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.4	mg/L	1.0	1	11/14/20 04:49	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:05	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:05	
Sulfate	300.0	11.7	mg/L	2.0	10	11/06/20 14:05	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.9	mg/L	1.0	1	11/14/20 05:10	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:11	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:11	
Sulfate	300.0	9.7	mg/L	2.0	10	11/06/20 14:11	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	2.4	mg/L	2.0	2	11/15/20 03:55	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:42	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:42	
Sulfate	300.0	9.0	mg/L	2.0	10	11/06/20 14:42	

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dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.7	mg/L	1.0	1	11/14/20 07:15	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:48	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:48	
Sulfate	300.0	9.6	mg/L	2.0	10	11/06/20 14:48	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	11/14/20 07:36	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:54	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 14:54	
Sulfate	300.0	2.0 U	mg/L	2.0	10	11/06/20 14:54	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	2.3	mg/L	1.0	1	11/14/20 07:57	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:00	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:00	
Sulfate	300.0	12.5	mg/L	2.0	10	11/06/20 15:00	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	2.2	mg/L	1.0	1	11/14/20 08:18	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:06	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:06	
Sulfate	300.0	12.7	mg/L	2.0	10	11/06/20 15:06	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	11.7	mg/L	1.0	1	11/14/20 08:39	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:12	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:12	
Sulfate	300.0	2.5	mg/L	2.0	10	11/06/20 15:12	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.4	mg/L	1.0	1	11/14/20 08:59	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:18	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:18	
Sulfate	300.0	9.0	mg/L	2.0	10	11/06/20 15:18	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	67.0	mg/L	4.0	4	11/15/20 04:16	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:24	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	11/06/20 15:24	
Sulfate	300.0	5.9	mg/L	2.0	10	11/06/20 15:24	



Field Data

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-7
Lab Code: R2010489-002

Service Request: R2010489
Date Collected: 11/05/20 08:55
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	749	uMHOS/cm	-	1	11/05/20 08:55	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-23.0	mV	-	1	11/05/20 08:55	
pH, Field	SM 4500-H+ B	5.99	pH Units	-	1	11/05/20 08:55	
Temperature, Field	SM 2550 B	10.2	deg C	-	1	11/05/20 08:55	
Turbidity, Field	180.1	22	NTU	-	1	11/05/20 08:55	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-7
Lab Code: R2010489-004

Service Request: R2010489
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	382	uMHOS/cm	-	1	11/05/20 09:10	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	89.0	mV	-	1	11/05/20 09:10	
pH, Field	SM 4500-H+ B	6.21	pH Units	-	1	11/05/20 09:10	
Temperature, Field	SM 2550 B	10.2	deg C	-	1	11/05/20 09:10	
Turbidity, Field	180.1	1.6	NTU	-	1	11/05/20 09:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-3
Lab Code: R2010489-006

Service Request: R2010489
Date Collected: 11/05/20 09:35
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	410	uMHOS/cm	-	1	11/05/20 09:35	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	134	mV	-	1	11/05/20 09:35	
pH, Field	SM 4500-H+ B	6.38	pH Units	-	1	11/05/20 09:35	
Temperature, Field	SM 2550 B	13.3	deg C	-	1	11/05/20 09:35	
Turbidity, Field	180.1	12.5	NTU	-	1	11/05/20 09:35	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-16S
Lab Code: R2010489-008

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	471	uMHOS/cm	-	1	11/05/20 10:10	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	112	mV	-	1	11/05/20 10:10	
pH, Field	SM 4500-H+ B	6.15	pH Units	-	1	11/05/20 10:10	
Temperature, Field	SM 2550 B	11.8	deg C	-	1	11/05/20 10:10	
Turbidity, Field	180.1	7.6	NTU	-	1	11/05/20 10:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-17S
Lab Code: R2010489-009

Service Request: R2010489
Date Collected: 11/05/20 10:20
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	197	uMHOS/cm	-	1	11/05/20 10:20	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	95.0	mV	-	1	11/05/20 10:20	
pH, Field	SM 4500-H+ B	6.27	pH Units	-	1	11/05/20 10:20	
Temperature, Field	SM 2550 B	12.2	deg C	-	1	11/05/20 10:20	
Turbidity, Field	180.1	4.4	NTU	-	1	11/05/20 10:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-20S
Lab Code: R2010489-010

Service Request: R2010489
Date Collected: 11/05/20 10:35
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	130	uMHOS/cm	-	1	11/05/20 10:35	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	136	mV	-	1	11/05/20 10:35	
pH, Field	SM 4500-H+ B	6.01	pH Units	-	1	11/05/20 10:35	
Temperature, Field	SM 2550 B	12.7	deg C	-	1	11/05/20 10:35	
Turbidity, Field	180.1	29.8	NTU	-	1	11/05/20 10:35	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-18
Lab Code: R2010489-012

Service Request: R2010489
Date Collected: 11/05/20 10:50
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	399	uMHOS/cm	-	1	11/05/20 10:50	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	162	mV	-	1	11/05/20 10:50	
pH, Field	SM 4500-H+ B	6.32	pH Units	-	1	11/05/20 10:50	
Temperature, Field	SM 2550 B	14.5	deg C	-	1	11/05/20 10:50	
Turbidity, Field	180.1	6.3	NTU	-	1	11/05/20 10:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Equipment Blank
Lab Code: R2010489-014

Service Request: R2010489
Date Collected: 11/05/20 11:00
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	4	uMHOS/cm	-	1	11/05/20 11:00	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	103	mV	-	1	11/05/20 11:00	
pH, Field	SM 4500-H+ B	6.92	pH Units	-	1	11/05/20 11:00	
Temperature, Field	SM 2550 B	15.2	deg C	-	1	11/05/20 11:00	
Turbidity, Field	180.1	0.4	NTU	-	1	11/05/20 11:00	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: W-7
Lab Code: R2010489-017

Service Request: R2010489
Date Collected: 11/05/20 09:05
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	259	uMHOS/cm	-	1	11/05/20 09:05	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	57.0	mV	-	1	11/05/20 09:05	
pH, Field	SM 4500-H+ B	5.93	pH Units	-	1	11/05/20 09:05	
Temperature, Field	SM 2550 B	10.1	deg C	-	1	11/05/20 09:05	
Turbidity, Field	180.1	33.4	NTU	-	1	11/05/20 09:05	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2
Lab Code: R2010489-018

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	498	uMHOS/cm	-	1	11/05/20 09:30	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	104	mV	-	1	11/05/20 09:30	
pH, Field	SM 4500-H+ B	6.20	pH Units	-	1	11/05/20 09:30	
Temperature, Field	SM 2550 B	11.5	deg C	-	1	11/05/20 09:30	
Turbidity, Field	180.1	3.1	NTU	-	1	11/05/20 09:30	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-2 Dup
Lab Code: R2010489-020

Service Request: R2010489
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	502	uMHOS/cm	-	1	11/05/20 09:30	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	107	mV	-	1	11/05/20 09:30	
pH, Field	SM 4500-H+ B	6.25	pH Units	-	1	11/05/20 09:30	
Temperature, Field	SM 2550 B	11.7	deg C	-	1	11/05/20 09:30	
Turbidity, Field	180.1	2.2	NTU	-	1	11/05/20 09:30	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-6
Lab Code: R2010489-022

Service Request: R2010489
Date Collected: 11/05/20 10:10
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	1000	uMHOS/cm	-	1	11/05/20 10:10	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-40.0	mV	-	1	11/05/20 10:10	
pH, Field	SM 4500-H+ B	6.38	pH Units	-	1	11/05/20 10:10	
Temperature, Field	SM 2550 B	11.3	deg C	-	1	11/05/20 10:10	
Turbidity, Field	180.1	5.9	NTU	-	1	11/05/20 10:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-4
Lab Code: R2010489-024

Service Request: R2010489
Date Collected: 11/05/20 10:30
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	271	uMHOS/cm	-	1	11/05/20 10:30	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	67.0	mV	-	1	11/05/20 10:30	
pH, Field	SM 4500-H+ B	6.32	pH Units	-	1	11/05/20 10:30	
Temperature, Field	SM 2550 B	12.3	deg C	-	1	11/05/20 10:30	
Turbidity, Field	180.1	2	NTU	-	1	11/05/20 10:30	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMMW-5
Lab Code: R2010489-026

Service Request: R2010489
Date Collected: 11/05/20 10:55
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	806	uMHOS/cm	-	1	11/05/20 10:55	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-85.0	mV	-	1	11/05/20 10:55	
pH, Field	SM 4500-H+ B	6.49	pH Units	-	1	11/05/20 10:55	
Temperature, Field	SM 2550 B	10.2	deg C	-	1	11/05/20 10:55	
Turbidity, Field	180.1	12	NTU	-	1	11/05/20 10:55	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: GMPW-4
Lab Code: R2010489-028

Service Request: R2010489
Date Collected: 11/05/20 11:15
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	615	uMHOS/cm	-	1	11/05/20 11:15	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	40.0	mV	-	1	11/05/20 11:15	
pH, Field	SM 4500-H+ B	6.38	pH Units	-	1	11/05/20 11:15	
Temperature, Field	SM 2550 B	12.8	deg C	-	1	11/05/20 11:15	
Turbidity, Field	180.1	3.2	NTU	-	1	11/05/20 11:15	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: PW-5
Lab Code: R2010489-029

Service Request: R2010489
Date Collected: 11/05/20 11:30
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	299	uMHOS/cm	-	1	11/05/20 11:30	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-44.0	mV	-	1	11/05/20 11:30	
pH, Field	SM 4500-H+ B	7.45	pH Units	-	1	11/05/20 11:30	
Temperature, Field	SM 2550 B	13.9	deg C	-	1	11/05/20 11:30	
Turbidity, Field	180.1	32	NTU	-	1	11/05/20 11:30	



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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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	80-116	87-121
Trip Blank	R2010489-001	95	93	97
PW-7	R2010489-002	95	93	97
GMMW-7	R2010489-004	93	93	97
PW-3	R2010489-006	96	93	97
W-16S	R2010489-008	92	94	95
W-17S	R2010489-009	94	95	99
W-20S	R2010489-010	94	93	96
W-18	R2010489-012	93	94	98
Equipment Blank	R2010489-014	95	93	96
Trip Blank	R2010489-016	95	92	99
W-7	R2010489-017	95	94	98
GMMW-2	R2010489-018	93	94	99
GMMW-2 Dup	R2010489-020	94	93	100
GMMW-6	R2010489-022	94	93	97
PW-4	R2010489-024	94	94	98
GMMW-5	R2010489-026	96	93	98
GMPW-4	R2010489-028	97	98	100
PW-5	R2010489-029	93	95	97
Method Blank	RQ2014017-04	95	93	99
Lab Control Sample	RQ2014017-03	97	96	98
PW-3 MS	RQ2014017-05	95	97	98
PW-3 DMS	RQ2014017-06	96	99	98

ALS Group USA, Corp.
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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/16/20
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: PW-3
Lab Code: R2010489-006
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2014017-05			Duplicate Matrix Spike RQ2014017-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	0.20 U	47.0	50.0	94	48.6	50.0	97	74-127	3	30
1,1,2,2-Tetrachloroethane	0.20 U	59.3	50.0	119	60.6	50.0	121	72-122	2	30
1,1,2-Trichloroethane	0.20 U	48.4	50.0	97	51.9	50.0	104	82-121	7	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	46.9	50.0	94	48.0	50.0	96	50-147	2	30
1,1-Dichloroethane (1,1-DCA)	0.20 U	55.1	50.0	110	55.4	50.0	111	74-132	<1	30
1,1-Dichloroethene (1,1-DCE)	0.20 U	55.0	50.0	110	57.2	50.0	114	71-118	4	30
1,2,4-Trichlorobenzene	0.34 U	50.0	50.0	100	50.7	50.0	101	69-122	1	30
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	54.0	50.0	108	55.5	50.0	111	37-150	3	30
1,2-Dibromoethane	0.20 U	48.9	50.0	98	50.2	50.0	100	67-127	3	30
1,2-Dichlorobenzene	0.20 U	48.3	50.0	97	48.0	50.0	96	77-120	<1	30
1,2-Dichloroethane	0.20 U	44.8	50.0	90	44.3	50.0	89	68-130	1	30
1,2-Dichloropropane	0.20 U	51.1	50.0	102	52.6	50.0	105	79-124	3	30
1,3-Dichlorobenzene	0.20 U	49.3	50.0	99	50.4	50.0	101	83-121	2	30
1,4-Dichlorobenzene	0.20 U	46.5	50.0	93	47.4	50.0	95	82-120	2	30
2-Butanone (MEK)	0.78 U	49.0	50.0	98	51.1	50.0	102	61-137	4	30
2-Hexanone	0.20 U	56.4	50.0	113	58.7	50.0	117	56-132	4	30
4-Methyl-2-pentanone	0.20 U	55.1	50.0	110	56.7	50.0	113	60-141	3	30
Acetone	5.0 U	49.3	50.0	99	50.8	50.0	102	35-183	3	30
Benzene	0.20 U	50.9	50.0	102	53.2	50.0	106	76-129	4	30
Bromodichloromethane	0.20 U	43.5	50.0	87	46.7	50.0	93	78-133	7	30
Bromoform	0.25 U	50.6	50.0	101	52.7	50.0	105	58-133	4	30
Bromomethane	0.70 U	37.5	50.0	75	39.1	50.0	78	10-184	4	30
Carbon Disulfide	0.42 U	41.3	50.0	83	42.3	50.0	85	59-140	2	30
Carbon Tetrachloride	0.34 U	46.3	50.0	93	47.9	50.0	96	65-135	3	30
Chlorobenzene	0.20 U	48.1	50.0	96	48.6	50.0	97	76-125	1	30
Chloroethane	0.23 U	45.6	50.0	91	45.5	50.0	91	48-146	<1	30
Chloroform	0.24 U	48.2	50.0	96	48.7	50.0	97	75-130	1	30
Chloromethane	0.28 U	55.0	50.0	110	54.4	50.0	109	55-160	1	30
Cyclohexane	0.26 U	49.6	50.0	99	51.9	50.0	104	52-145	5	30
Dibromochloromethane	0.20 U	49.7	50.0	99	51.6	50.0	103	72-128	4	30
Dichlorodifluoromethane (CFC 12)	0.21 U	52.4	50.0	105	53.4	50.0	107	49-154	2	30
Dichloromethane	0.65 U	48.3	50.0	97	47.7	50.0	95	73-122	1	30
Ethylbenzene	0.20 U	48.5	50.0	97	49.7	50.0	99	72-134	3	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.

ALS Group USA, Corp.
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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/16/20
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: PW-3
Lab Code: R2010489-006
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2014017-05			Duplicate Matrix Spike RQ2014017-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Isopropylbenzene (Cumene)	0.20 U	51.4	50.0	103	51.9	50.0	104	77-128	1	30
Methyl Acetate	0.33 U	36.2	50.0	72	39.6	50.0	79	26-121	9	30
Methyl tert-Butyl Ether	0.20 U	49.4	50.0	99	50.1	50.0	100	75-119	1	30
Methylcyclohexane	0.20 U	51.5	50.0	103	52.9	50.0	106	45-146	3	30
Styrene	0.20 U	48.0	50.0	96	48.8	50.0	98	74-136	2	30
Tetrachloroethene (PCE)	0.21 U	50.5	50.0	101	51.1	50.0	102	72-125	1	30
Toluene	0.20 U	50.7	50.0	101	52.3	50.0	105	79-119	3	30
Trichloroethene (TCE)	5.6	47.7	50.0	84	48.7	50.0	86	74-122	2	30
Trichlorofluoromethane (CFC 11)	0.24 U	45.9	50.0	92	46.1	50.0	92	71-136	<1	30
Vinyl Chloride	0.20 U	48.3	50.0	97	49.8	50.0	100	74-159	3	30
cis-1,2-Dichloroethene	0.23 U	53.2	50.0	106	53.4	50.0	107	77-127	<1	30
cis-1,3-Dichloropropene	0.20 U	45.4	50.0	91	47.0	50.0	94	52-134	3	30
trans-1,2-Dichloroethene	0.20 U	55.6	50.0	111	56.0	50.0	112	73-118	<1	30
trans-1,3-Dichloropropene	0.23 U	44.3	50.0	89	46.9	50.0	94	71-133	6	30

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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.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: RQ2014017-04

Service Request: R2010489
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	1	11/15/20 23:35	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	11/15/20 23:35	
1,1,2-Trichloroethane	5.0 U	5.0	1	11/15/20 23:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	1	11/15/20 23:35	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	1	11/15/20 23:35	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	1	11/15/20 23:35	
1,2,4-Trichlorobenzene	5.0 U	5.0	1	11/15/20 23:35	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	1	11/15/20 23:35	
1,2-Dibromoethane	5.0 U	5.0	1	11/15/20 23:35	
1,2-Dichlorobenzene	5.0 U	5.0	1	11/15/20 23:35	
1,2-Dichloroethane	5.0 U	5.0	1	11/15/20 23:35	
1,2-Dichloropropane	5.0 U	5.0	1	11/15/20 23:35	
1,3-Dichlorobenzene	5.0 U	5.0	1	11/15/20 23:35	
1,4-Dichlorobenzene	5.0 U	5.0	1	11/15/20 23:35	
2-Butanone (MEK)	10 U	10	1	11/15/20 23:35	
2-Hexanone	10 U	10	1	11/15/20 23:35	
4-Methyl-2-pentanone	10 U	10	1	11/15/20 23:35	
Acetone	10 U	10	1	11/15/20 23:35	
Benzene	5.0 U	5.0	1	11/15/20 23:35	
Bromodichloromethane	5.0 U	5.0	1	11/15/20 23:35	
Bromoform	5.0 U	5.0	1	11/15/20 23:35	
Bromomethane	5.0 U	5.0	1	11/15/20 23:35	
Carbon Disulfide	10 U	10	1	11/15/20 23:35	
Carbon Tetrachloride	5.0 U	5.0	1	11/15/20 23:35	
Chlorobenzene	5.0 U	5.0	1	11/15/20 23:35	
Chloroethane	5.0 U	5.0	1	11/15/20 23:35	
Chloroform	5.0 U	5.0	1	11/15/20 23:35	
Chloromethane	5.0 U	5.0	1	11/15/20 23:35	
Cyclohexane	10 U	10	1	11/15/20 23:35	
Dibromochloromethane	5.0 U	5.0	1	11/15/20 23:35	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	1	11/15/20 23:35	
Dichloromethane	5.0 U	5.0	1	11/15/20 23:35	
Ethylbenzene	5.0 U	5.0	1	11/15/20 23:35	
Isopropylbenzene (Cumene)	5.0 U	5.0	1	11/15/20 23:35	
Methyl Acetate	10 U	10	1	11/15/20 23:35	
Methyl tert-Butyl Ether	5.0 U	5.0	1	11/15/20 23:35	
Methylcyclohexane	10 U	10	1	11/15/20 23:35	
Styrene	5.0 U	5.0	1	11/15/20 23:35	
Tetrachloroethene (PCE)	5.0 U	5.0	1	11/15/20 23:35	
Toluene	5.0 U	5.0	1	11/15/20 23:35	
Trichloroethene (TCE)	5.0 U	5.0	1	11/15/20 23:35	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	1	11/15/20 23:35	
Vinyl Chloride	5.0 U	5.0	1	11/15/20 23:35	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: RQ2014017-04

Service Request: R2010489
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Xylenes, Total	5.0 U	5.0	1	11/15/20 23:35	
cis-1,2-Dichloroethene	5.0 U	5.0	1	11/15/20 23:35	
cis-1,3-Dichloropropene	5.0 U	5.0	1	11/15/20 23:35	
trans-1,2-Dichloroethene	5.0 U	5.0	1	11/15/20 23:35	
trans-1,3-Dichloropropene	5.0 U	5.0	1	11/15/20 23:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/15/20 23:35	
Dibromofluoromethane	93	80 - 116	11/15/20 23:35	
Toluene-d8	99	87 - 121	11/15/20 23:35	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/15/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2014017-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.7	20.0	93	75-125
1,1,2,2-Tetrachloroethane	8260C	24.9	20.0	125	78-126
1,1,2-Trichloroethane	8260C	20.2	20.0	101	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.0	20.0	95	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.9	20.0	100	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	22.0	20.0	110	71-118
1,2,4-Trichlorobenzene	8260C	20.5	20.0	102	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	23.4	20.0	117	55-136
1,2-Dibromoethane	8260C	19.9	20.0	100	82-127
1,2-Dichlorobenzene	8260C	19.1	20.0	95	80-119
1,2-Dichloroethane	8260C	18.2	20.0	91	71-127
1,2-Dichloropropane	8260C	21.8	20.0	109	80-119
1,3-Dichlorobenzene	8260C	19.9	20.0	99	83-121
1,4-Dichlorobenzene	8260C	18.9	20.0	95	79-119
2-Butanone (MEK)	8260C	23.0	20.0	115	61-137
2-Hexanone	8260C	25.1	20.0	125 *	63-124
4-Methyl-2-pentanone	8260C	23.7	20.0	118	66-124
Acetone	8260C	21.2	20.0	106	40-161
Benzene	8260C	20.7	20.0	104	79-119
Bromodichloromethane	8260C	17.8	20.0	89	81-123
Bromoform	8260C	21.3	20.0	107	65-146
Bromomethane	8260C	16.0	20.0	80	42-166
Carbon Disulfide	8260C	17.6	20.0	88	66-128
Carbon Tetrachloride	8260C	18.9	20.0	94	70-127
Chlorobenzene	8260C	19.6	20.0	98	80-121
Chloroethane	8260C	18.1	20.0	91	62-131
Chloroform	8260C	19.6	20.0	98	79-120
Chloromethane	8260C	21.5	20.0	108	65-135
Cyclohexane	8260C	20.4	20.0	102	69-120
Dibromochloromethane	8260C	20.7	20.0	103	72-128
Dichlorodifluoromethane (CFC 12)	8260C	21.4	20.0	107	59-155
Dichloromethane	8260C	19.5	20.0	97	73-122
Ethylbenzene	8260C	20.1	20.0	100	76-120

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/15/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2014017-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	20.7	20.0	103	77-128
Methyl Acetate	8260C	20.8	20.0	104	61-133
Methyl tert-Butyl Ether	8260C	20.4	20.0	102	75-118
Methylcyclohexane	8260C	20.5	20.0	102	51-129
Styrene	8260C	20.6	20.0	103	80-124
Tetrachloroethene (PCE)	8260C	19.5	20.0	97	72-125
Toluene	8260C	20.6	20.0	103	79-119
Trichloroethene (TCE)	8260C	17.5	20.0	88	74-122
Trichlorofluoromethane (CFC 11)	8260C	18.7	20.0	93	71-136
Vinyl Chloride	8260C	19.5	20.0	97	74-159
cis-1,2-Dichloroethene	8260C	20.3	20.0	101	80-121
cis-1,3-Dichloropropene	8260C	19.7	20.0	99	77-122
trans-1,2-Dichloroethene	8260C	22.8	20.0	114	73-118
trans-1,3-Dichloropropene	8260C	19.3	20.0	96	71-133



Volatile Organic Compounds by GC

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/17/20

Duplicate Matrix Spike Summary
Dissolved Gases by GC/FID

Sample Name: PW-3
Lab Code: R2010489-006
Analysis Method: RSK 175

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike RQ2014181-06		Result	Duplicate Matrix Spike RQ2014181-07		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Ethane	0.17 U	44.6	52.1	86	44.8	52.1	86	76-126	<1	20
Ethene	0.35 U	41.6	48.6	86	42.3	48.6	87	67-132	2	20
Methane	19	61.9	52.5	82	62.5	52.5	83	46-143	<1	20

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: RQ2014181-02

Service Request: R2010489
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethane	0.17 U	1.0	0.17	1	11/17/20 10:32	
Ethene	0.35 U	1.0	0.35	1	11/17/20 10:32	
Methane	0.75 U	1.1	0.75	1	11/17/20 10:32	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/17/20

Lab Control Sample Summary
Dissolved Gases by GC/FID

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2014181-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ethane	RSK 175	27.3	26.0	105	76-126
Ethene	RSK 175	25.3	24.3	104	73-129
Methane	RSK 175	27.5	26.2	105	75-128



Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: R2010489-MB1

Service Request: R2010489
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/10/20 20:14	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/10/20 20:14	11/09/20	

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dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: R2010489-MB2

Service Request: R2010489
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	6010C	100 U	ug/L	100	1	11/12/20 01:59	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/12/20 01:59	11/09/20	

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dba ALS Environmental

QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/12/20
Date Extracted: 11/9/20

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: PW-3
Lab Code: R2010489-006
Analysis Method: 6010C
Prep Method: EPA 3005A/3010A

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike R2010489-006MS		Result	Duplicate Matrix Spike R2010489-006DMS		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Iron, Total	9420	9730	1000	30 #	10700	1000	128 #	75-125	10	20

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/12/20
Date Extracted: 11/9/20

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: PW-3 Diss
Lab Code: R2010489-007
Analysis Method: 6010C
Prep Method: EPA 3005A/3010A

Units: ug/L
Basis: NA

Analyte Name	Matrix Spike R2010489-007MS				Duplicate Matrix Spike R2010489-007DMS				RPD	RPD Limit
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
Iron, Dissolved	210	1220	1000	101	1210	1000	99	75-125	<1	20

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489**Date Analyzed:** 11/10/20

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L**Basis:**NA**Lab Control Sample**

R2010489-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	6010C	970	1000	97	80-120
Iron, Total	6010C	970	1000	97	80-120

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/12/20

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L**Basis:**NA**Lab Control Sample**

R2010489-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	6010C	1000	1000	100	80-120
Iron, Total	6010C	1000	1000	100	80-120



General Chemistry

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: R2010489-MB1

Service Request: R2010489
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	11/14/20 02:44	
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	11/06/20 13:11	
Nitrite as Nitrogen	300.0	0.10 U	mg/L	0.10	1	11/06/20 13:11	
Sulfate	300.0	0.20 U	mg/L	0.20	1	11/06/20 13:11	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water
Sample Name: Method Blank
Lab Code: R2010489-MB2

Service Request: R2010489
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	11/14/20 19:25	

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/06/20 - 11/14/20

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: PW-3 **Units:** mg/L
Lab Code: R2010489-006 **Basis:** NA

Matrix Spike
R2010489-006MS

Duplicate Matrix Spike
R2010489-006DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Nitrate as Nitrogen	300.0	0.2 U	9.5	10.0	95	9.5	10.0	95	90-110	<1	20
Sulfate	300.0	9.7	28.5	20.0	94	28.4	20.0	94	90-110	<1	20
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.9	11.7	10.0	98	11.4	10.0	96	48-135	2	20
Nitrite as Nitrogen	300.0	0.2 U	9.3	10.0	93	9.5	10.0	95	90-110	1	20

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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/06/20 - 11/14/20

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2010489-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.3	10.0	103	80-121
Nitrate as Nitrogen	300.0	0.94	1.00	94	90-110
Nitrite as Nitrogen	300.0	0.95	1.00	95	90-110
Sulfate	300.0	1.97	2.00	99	90-110

ALS Group USA, Corp.
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QA/QC Report

Client: Broome County Division of Solid Waste Management
Project: Colesville
Sample Matrix: Drinking Water

Service Request: R2010489
Date Analyzed: 11/14/20

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2010489-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.2	10.0	102	80-121



November 23, 2020

Service Request No:R2010488

Ms. Laurie Haskell
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville SW, Seeps

Dear Ms.Haskell,

Enclosed are the results of the sample(s) submitted to our laboratory November 05, 2020
For your reference, these analyses have been assigned our service request number **R2010488**.

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

ADDRESS

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

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com



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

Service Request: R2010488
Date Received: 11/05/2020

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:

Eight water samples were received for analysis at ALS Environmental on 11/05/2020. 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.

Volatiles by GC/MS:

Method 8260C, 11/17/2020: 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, 11/17/2020: 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 11/23/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: F-6	Lab ID: R2010488-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	10.8			0.20	mg/L	SM 4500-O G
Conductivity, Field	170				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	30.0				mV	ASTM D1498-00
pH, Field	7.67				pH Units	SM 4500-H+ B
Temperature, Field	4.00				deg C	SM 2550 B
Turbidity, Field	5.7				NTU	180.1
Calcium, Total	17700			1000	ug/L	6010C
Magnesium, Total	3800			1000	ug/L	6010C
Manganese, Total	70			10	ug/L	6010C
Sodium, Total	7000			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.40	J	0.20	5.0	ug/L	8260C

CLIENT ID: SW-4	Lab ID: R2010488-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	10.7			0.20	mg/L	SM 4500-O G
Conductivity, Field	160				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	50.0				mV	ASTM D1498-00
pH, Field	7.49				pH Units	SM 4500-H+ B
Temperature, Field	4.20				deg C	SM 2550 B
Turbidity, Field	5.2				NTU	180.1
Calcium, Total	16700			1000	ug/L	6010C
Magnesium, Total	3700			1000	ug/L	6010C
Manganese, Total	84			10	ug/L	6010C
Sodium, Total	6900			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.69	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.21	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.32	J	0.23	5.0	ug/L	8260C

CLIENT ID: SW-3	Lab ID: R2010488-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	10.7			0.20	mg/L	SM 4500-O G
Conductivity, Field	158				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	57.0				mV	ASTM D1498-00
pH, Field	7.47				pH Units	SM 4500-H+ B
Temperature, Field	4.40				deg C	SM 2550 B
Turbidity, Field	4.9				NTU	180.1
Calcium, Total	16000			1000	ug/L	6010C
Magnesium, Total	3500			1000	ug/L	6010C
Manganese, Total	72			10	ug/L	6010C
Sodium, Total	6800			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: SW-3	Lab ID: R2010488-003

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethane (1,1-DCA)	0.76	J	0.20	5.0	ug/L	8260C
Chlorobenzene	0.25	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.27	J	0.23	5.0	ug/L	8260C

CLIENT ID: SW-2	Lab ID: R2010488-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Oxygen, Dissolved	10.1			0.20	mg/L	SM 4500-O G
Conductivity, Field	149				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	38.0				mV	ASTM D1498-00
pH, Field	7.61				pH Units	SM 4500-H+ B
Temperature, Field	4.20				deg C	SM 2550 B
Turbidity, Field	5.1				NTU	180.1
Calcium, Total	14600			1000	ug/L	6010C
Magnesium, Total	3300			1000	ug/L	6010C
Sodium, Total	6700			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	0.24	J	0.20	5.0	ug/L	8260C

CLIENT ID: SP-3	Lab ID: R2010488-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	235				uMHOS/cm	120.1
Oxidation-Reduction Potential (ORP), Field	-11.0				mV	ASTM D1498-00
pH, Field	6.99				pH Units	SM 4500-H+ B
Temperature, Field	4.00				deg C	SM 2550 B
Turbidity, Field	17.2				NTU	180.1
Arsenic, Total	19			10	ug/L	6010C
Barium, Total	40			20	ug/L	6010C
Calcium, Total	27100			1000	ug/L	6010C
Iron, Total	27100			100	ug/L	6010C
Magnesium, Total	5700			1000	ug/L	6010C
Manganese, Total	4510			10	ug/L	6010C
Sodium, Total	3200			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	12		0.20	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.26	J	0.20	5.0	ug/L	8260C
Chlorobenzene	12		0.20	5.0	ug/L	8260C
Chloroethane	2.6	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	1.9	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.54	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	2.7	J	0.23	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-5 (EFF)	Lab ID: R2010488-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	434				uMHOS/c m	120.1
Oxidation-Reduction Potential (ORP), Field	-30.0				mV	ASTM D1498-00
pH, Field	6.49				pH Units	SM 4500-H+ B
Temperature, Field	7.80				deg C	SM 2550 B
Turbidity, Field	9.9				NTU	180.1
Arsenic, Total	117			10	ug/L	6010C
Barium, Total	155			20	ug/L	6010C
Calcium, Total	42900			1000	ug/L	6010C
Iron, Total	28500			100	ug/L	6010C
Magnesium, Total	9900			1000	ug/L	6010C
Manganese, Total	6600			10	ug/L	6010C
Potassium, Total	3000			2000	ug/L	6010C
Sodium, Total	7200			1000	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	4.0	J	0.20	5.0	ug/L	8260C
Benzene	0.26	J	0.20	5.0	ug/L	8260C
Chlorobenzene	2.6	J	0.20	5.0	ug/L	8260C
Chloroethane	1.2	J	0.23	5.0	ug/L	8260C
Trichloroethene (TCE)	0.65	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	0.30	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.60	J	0.23	5.0	ug/L	8260C

CLIENT ID: SP-5 (INF)	Lab ID: R2010488-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Conductivity, Field	448				uMHOS/c m	120.1
Oxidation-Reduction Potential (ORP), Field	-27.0				mV	ASTM D1498-00
pH, Field	6.43				pH Units	SM 4500-H+ B
Temperature, Field	8.20				deg C	SM 2550 B
Turbidity, Field	14.7				NTU	180.1
Aluminum, Total	110			100	ug/L	6010C
Arsenic, Total	148			10	ug/L	6010C
Barium, Total	144			20	ug/L	6010C
Calcium, Total	44600			1000	ug/L	6010C
Iron, Total	30600			100	ug/L	6010C
Lead, Total	61.2			5.0	ug/L	6010C
Magnesium, Total	9700			1000	ug/L	6010C
Manganese, Total	6500			10	ug/L	6010C
Potassium, Total	3000			2000	ug/L	6010C
Sodium, Total	7000			1000	ug/L	6010C
Zinc, Total	4360			200	ug/L	6010C
1,1-Dichloroethane (1,1-DCA)	4.8	J	0.20	5.0	ug/L	8260C
1,2-Dichloroethane	0.26	J	0.20	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY**CLIENT ID: SP-5 (INF)****Lab ID: R2010488-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Benzene	0.90	J	0.20	5.0	ug/L	8260C
Carbon Disulfide	3.7	J	0.42	10	ug/L	8260C
Chlorobenzene	11		0.20	5.0	ug/L	8260C
Toluene	0.20	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	1.7	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
Project: Colesville SW, Seeps

Service Request:R2010488

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2010488-001	F-6	11/5/2020	0820
R2010488-002	SW-4	11/5/2020	0835
R2010488-003	SW-3	11/5/2020	0850
R2010488-004	SW-2	11/5/2020	0925
R2010488-005	SP-3	11/5/2020	0910
R2010488-006	SP-5 (EFF)	11/5/2020	1000
R2010488-007	SP-5 (INF)	11/5/2020	1025
R2010488-008	Trip Blank	11/5/2020	0820

[illegible]



FIELD MONITORING REPORT

PROJECT Colesville SW+ Seeps LAB ID 39

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 11/5/2020 Time 0820 SWL —
Appearance Clear
Weather Conditions Clear 45°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.67	7.67
Myron 6p	Conductivity	µmhos/cm	170	170
Myron 6p	Temperature	Degrees Celsius	4.0	4.0
Myron 6p	Redox	millivolts	30	
Lamotte	Turbidity	NTU	5.7	

Calibration Date/Time 11/5/2020 0800 7.00/10.00/4.00
1413 set 1413
OBSERVATIONS 0.0/10.0

D.O. = 10.82 mg/l



FIELD MONITORING REPORT

PROJECT Colesville SW and Seeps LAB ID 40

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 11/5/2020 Time 0835 SWL —

Appearance Clear

Weather Conditions Clear, 47°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.49	7.49
Myron 6p	Conductivity	µmhos/cm	159	160
Myron 6p	Temperature	Degrees Celsius	4.1	4.2
Myron 6p	Redox	millivolts	50	
Lamotte	Turbidity	NTU	5.2	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS

D.O. = 10.73 mg/l

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW and Seeps LAB ID 41

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 11/5/2020 Time 0850 SWL _____

Appearance Clear

Weather Conditions Clear, 47°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.47	7.47
Myron 6p	Conductivity	µmhos/cm	157	158
Myron 6p	Temperature	Degrees Celsius	4.4	4.4
Myron 6p	Redox	millivolts	57	
Lamotte	Turbidity	NTU	4.9	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS D.O. = 10.67 mg/l



FIELD MONITORING REPORT

PROJECT Colesville SWand Seeps LAB ID 42

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 11/5/2020 Time 0925 SWL —

Appearance Clear

Weather Conditions Overcast 47°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	7.61	7.61
Myron 6p	Conductivity	µmhos/cm	149	149
Myron 6p	Temperature	Degrees Celsius	4.2	4.2
Myron 6p	Redox	millivolts	38	
Lamotte	Turbidity	NTU	5.1	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS

D.O. = 10.11

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW/seeps LAB ID 43

SAMPLE POINT ID SP-3

PURGE INFORMATION

Well Depth (ft.) _____ Purge Date _____ Purge Method _____
SWL (ft.) _____ Start Time _____ Stop Time _____
Standing Water (ft.) _____ Volume Purged gal. _____ # casings _____
Well Constant (gal/ft.) _____ Observations _____
Well Volume (gal.) _____

SAMPLING INFORMATION

Sample Method Grab
Date 11/5/2020 Time 0910 SWL _____
Appearance Slight rust tint
Weather Conditions Clear 47°
Sampling Technician (Print) BRIAN MACKIN Signature _____

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.98	6.99
Myron 6p	Conductivity	µmhos/cm	235	235
Myron 6p	Temperature	Degrees Celsius	4.0	4.0
Myron 6p	Redox	millivolts	-11	
Lamotte	Turbidity	NTU	17.2	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW + Seeps LAB ID 44

SAMPLE POINT ID SP-5 (EFF)

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 11/5/2020 Time 1000 SWL _____

Appearance Clear

Weather Conditions Sun 51°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.49	6.49
Myron 6p	Conductivity	µmhos/cm	435	434
Myron 6p	Temperature	Degrees Celsius	7.8	7.8
Myron 6p	Redox	millivolts	-30	
Lamotte	Turbidity	NTU	99	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS _____

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW and Seeps LAB ID 45

SAMPLE POINT ID SP-5 (INF)

PURGE INFORMATION

Well Depth (ft.) 4.10

Purge Date 11/5/2020 Purge Method Bailer

SWL (ft.) 0.30

Start Time 1010 Stop Time 1015

Standing Water (ft.) 3.80

Volume Purged gal. 2 # casings 3

Well Constant (gal/ft.) 0.163

Observations _____

Well Volume (gal.) 0.6

SAMPLING INFORMATION

Sample Method Bailer

Date 11/5/2020 Time 1025 SWL 0.72

Appearance Slight tan-brown tint

Weather Conditions Sun 52°

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit	6.42	6.43
Myron 6p	Conductivity	µmhos/cm	447	448
Myron 6p	Temperature	Degrees Celsius	8.2	8.2
Myron 6p	Redox	millivolts	-27	
Lamotte	Turbidity	NTU	14.7	

Calibration Date/Time 11/5/2020 0800

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW/Seds LAB ID _____

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 _____

Date 11/5/2020 Time _____ SWL _____

Appearance _____

Weather Conditions _____

Sampling Technician (Print) BRIAN MALKIN Signature Brian Malkin

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

Calibration Date/Time 11/5/2020

OBSERVATIONS _____

No sample, seep not flowing

Sampling procedures were performed in accordance with all applicable protocols.



FIELD MONITORING REPORT

PROJECT Colesville SW/Seds 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 11/5/2020 Time _____ SWL _____

Appearance _____

Weather Conditions _____

Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

Meter	Parameter	Unit	Replicate 1	Replicate 2
Myron 6p	pH	unit		
Myron 6p	Conductivity	$\mu\text{mhos/cm}$		
Myron 6p	Temperature	Degrees Celsius		
Myron 6p	Redox	millivolts		
Lamotte	Turbidity	NTU		

Calibration Date/Time ____/____/____

OBSERVATIONS

No sample, seep not flowing



Cooler Receipt and Preservation Check Form

R2010488

5

Broome County Division of Solid Waste Management
Colesville 8W, Seeps



Project/Client Broome Folder Number _____

Cooler received on 11/5/2020 by: Q/PW

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: <u>Wet Ice</u> 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 ☒ NA
6	Where did the bottles originate?	ALS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <u>NA</u>

8. Temperature Readings Date: 11/5/2020 Time: 1500 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.2</u>	<u>6.8</u>	<u>0.2</u>	<u>3.3</u>			
Within 0-6°C?	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐
If <0°C, were samples frozen?	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐	<u>Y</u> ☒ <u>N</u> ☐

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 AWL on 11/5/2020 at 1500
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 11/6/2020 Time: 1333 by: AD

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES ☒ NO ☐ date/tins
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 ☐
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?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	<u>223419</u>	HNO ₃	☒		<u>1120081</u>					
≤2		H ₂ SO 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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O 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: 20-10-02 2513

Explain all Discrepancies/ Other Comments:

HPRD	BULK
HTR	FLDT
SUB	HGFB
<u>ALS</u>	LL3541

Labels secondary reviewed by: Q
PC Secondary Review: _____

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



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	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.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	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 Certifications¹

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 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
Project: Colesville SW, Seeps

Service Request: R2010488

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
120.1	Water	Conductivity, Field
180.1	Water	Turbidity, Field
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

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Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps/

Service Request: R2010488

Sample Name: F-6
Lab Code: R2010488-001
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

Sample Name: SW-4
Lab Code: R2010488-002
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

Sample Name: SW-3
Lab Code: R2010488-003
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
120.1		JJANSON
180.1		JJANSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps/

Service Request: R2010488

Sample Name: SW-3
Lab Code: R2010488-003
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

Sample Name: SW-2
Lab Code: R2010488-004
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

Sample Name: SP-3
Lab Code: R2010488-005
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps/

Service Request: R2010488

Sample Name: SP-3
Lab Code: R2010488-005
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST
ASTM D1498-00		JJANSON
SM 2550 B		JJANSON
SM 4500-H+ B		JJANSON

Sample Name: SP-5 (EFF)
Lab Code: R2010488-006
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

Sample Name: SP-5 (INF)
Lab Code: R2010488-007
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

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

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Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps/

Service Request: R2010488

Sample Name: Trip Blank
Lab Code: R2010488-008
Sample Matrix: Water

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST



INORGANIC PREPARATION METHODS

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

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Sample Name: F-6
Lab Code: R2010488-001

Units: ug/L
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	11/17/20 01:29	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,1-Dichloroethane (1,1-DCA)	0.40 J	5.0	0.20	1	11/17/20 01:29	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 01:29	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 01:29	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 01:29	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 01:29	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 01:29	
Acetone	5.0 U	10	5.0	1	11/17/20 01:29	
Benzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 01:29	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 01:29	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 01:29	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 01:29	
Chlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 01:29	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 01:29	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 01:29	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 01:29	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 01:29	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 01:29	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 01:29	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 01:29	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 01:29	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 01:29	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 01:29	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 01:29	
Styrene	0.20 U	5.0	0.20	1	11/17/20 01:29	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 01:29	
Toluene	0.20 U	5.0	0.20	1	11/17/20 01:29	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	11/17/20 01:29	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 01:29	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 01:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Sample Name: F-6
Lab Code: R2010488-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 01:29	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	11/17/20 01:29	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 01:29	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 01:29	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 01:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/17/20 01:29	
Dibromofluoromethane	91	80 - 116	11/17/20 01:29	
Toluene-d8	97	87 - 121	11/17/20 01:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 08:35
Date Received: 11/05/20 15:00

Sample Name: SW-4
Lab Code: R2010488-002

Units: ug/L
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	11/17/20 01:51	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,1-Dichloroethane (1,1-DCA)	0.69 J	5.0	0.20	1	11/17/20 01:51	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 01:51	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 01:51	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 01:51	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 01:51	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 01:51	
Acetone	5.0 U	10	5.0	1	11/17/20 01:51	
Benzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 01:51	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 01:51	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 01:51	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 01:51	
Chlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 01:51	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 01:51	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 01:51	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 01:51	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 01:51	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 01:51	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 01:51	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 01:51	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 01:51	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 01:51	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 01:51	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 01:51	
Styrene	0.20 U	5.0	0.20	1	11/17/20 01:51	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 01:51	
Toluene	0.20 U	5.0	0.20	1	11/17/20 01:51	
Trichloroethene (TCE)	0.21 J	5.0	0.20	1	11/17/20 01:51	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 01:51	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 01:51	

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Analytical Report

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

Sample Name: SW-4
Lab Code: R2010488-002

Service Request: R2010488
Date Collected: 11/05/20 08:35
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 01:51	
cis-1,2-Dichloroethene	0.32 J	5.0	0.23	1	11/17/20 01:51	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 01:51	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 01:51	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 01:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/17/20 01:51	
Dibromofluoromethane	94	80 - 116	11/17/20 01:51	
Toluene-d8	100	87 - 121	11/17/20 01:51	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 08:50
Date Received: 11/05/20 15:00

Sample Name: SW-3
Lab Code: R2010488-003

Units: ug/L
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	11/17/20 02:13	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,1-Dichloroethane (1,1-DCA)	0.76 J	5.0	0.20	1	11/17/20 02:13	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 02:13	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 02:13	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:13	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:13	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 02:13	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 02:13	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 02:13	
Acetone	5.0 U	10	5.0	1	11/17/20 02:13	
Benzene	0.20 U	5.0	0.20	1	11/17/20 02:13	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 02:13	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 02:13	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 02:13	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 02:13	
Chlorobenzene	0.25 J	5.0	0.20	1	11/17/20 02:13	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 02:13	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 02:13	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 02:13	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 02:13	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 02:13	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 02:13	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 02:13	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 02:13	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 02:13	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 02:13	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 02:13	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 02:13	
Styrene	0.20 U	5.0	0.20	1	11/17/20 02:13	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 02:13	
Toluene	0.20 U	5.0	0.20	1	11/17/20 02:13	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	11/17/20 02:13	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 02:13	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 02:13	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-3
Lab Code: R2010488-003

Service Request: R2010488
Date Collected: 11/05/20 08:50
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 02:13	
cis-1,2-Dichloroethene	0.27 J	5.0	0.23	1	11/17/20 02:13	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 02:13	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 02:13	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 02:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/17/20 02:13	
Dibromofluoromethane	92	80 - 116	11/17/20 02:13	
Toluene-d8	97	87 - 121	11/17/20 02:13	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 09:25
Date Received: 11/05/20 15:00

Sample Name: SW-2
Lab Code: R2010488-004

Units: ug/L
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	11/17/20 02:35	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,1-Dichloroethane (1,1-DCA)	0.24 J	5.0	0.20	1	11/17/20 02:35	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 02:35	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 02:35	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 02:35	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 02:35	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 02:35	
Acetone	5.0 U	10	5.0	1	11/17/20 02:35	
Benzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 02:35	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 02:35	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 02:35	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 02:35	
Chlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 02:35	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 02:35	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 02:35	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 02:35	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 02:35	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 02:35	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 02:35	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 02:35	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 02:35	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 02:35	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 02:35	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 02:35	
Styrene	0.20 U	5.0	0.20	1	11/17/20 02:35	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 02:35	
Toluene	0.20 U	5.0	0.20	1	11/17/20 02:35	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	11/17/20 02:35	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 02:35	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 02:35	

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Analytical Report

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

Sample Name: SW-2
Lab Code: R2010488-004

Service Request: R2010488
Date Collected: 11/05/20 09:25
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 02:35	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	11/17/20 02:35	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 02:35	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 02:35	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 02:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/17/20 02:35	
Dibromofluoromethane	92	80 - 116	11/17/20 02:35	
Toluene-d8	97	87 - 121	11/17/20 02:35	

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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Sample Name: SP-3
Lab Code: R2010488-005

Units: ug/L
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	11/17/20 02:57	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,1-Dichloroethane (1,1-DCA)	12	5.0	0.20	1	11/17/20 02:57	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 02:57	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 02:57	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,2-Dichlorobenzene	0.26 J	5.0	0.20	1	11/17/20 02:57	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:57	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 02:57	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 02:57	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 02:57	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 02:57	
Acetone	5.0 U	10	5.0	1	11/17/20 02:57	
Benzene	0.20 U	5.0	0.20	1	11/17/20 02:57	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 02:57	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 02:57	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 02:57	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 02:57	
Chlorobenzene	12	5.0	0.20	1	11/17/20 02:57	
Chloroethane	2.6 J	5.0	0.23	1	11/17/20 02:57	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 02:57	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 02:57	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 02:57	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 02:57	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 02:57	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 02:57	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 02:57	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 02:57	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 02:57	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 02:57	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 02:57	
Styrene	0.20 U	5.0	0.20	1	11/17/20 02:57	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 02:57	
Toluene	0.20 U	5.0	0.20	1	11/17/20 02:57	
Trichloroethene (TCE)	1.9 J	5.0	0.20	1	11/17/20 02:57	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 02:57	
Vinyl Chloride	0.54 J	5.0	0.20	1	11/17/20 02:57	

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Analytical Report

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

Sample Name: SP-3
Lab Code: R2010488-005

Service Request: R2010488
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 02:57	
cis-1,2-Dichloroethene	2.7 J	5.0	0.23	1	11/17/20 02:57	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 02:57	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 02:57	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 02:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/17/20 02:57	
Dibromofluoromethane	92	80 - 116	11/17/20 02:57	
Toluene-d8	98	87 - 121	11/17/20 02:57	

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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 10:00
Date Received: 11/05/20 15:00

Sample Name: SP-5 (EFF)
Lab Code: R2010488-006

Units: ug/L
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	11/17/20 03:19	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,1-Dichloroethane (1,1-DCA)	4.0 J	5.0	0.20	1	11/17/20 03:19	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 03:19	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 03:19	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:19	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:19	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 03:19	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 03:19	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 03:19	
Acetone	5.0 U	10	5.0	1	11/17/20 03:19	
Benzene	0.26 J	5.0	0.20	1	11/17/20 03:19	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 03:19	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 03:19	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 03:19	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 03:19	
Chlorobenzene	2.6 J	5.0	0.20	1	11/17/20 03:19	
Chloroethane	1.2 J	5.0	0.23	1	11/17/20 03:19	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 03:19	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 03:19	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 03:19	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 03:19	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 03:19	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 03:19	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 03:19	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 03:19	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 03:19	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 03:19	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 03:19	
Styrene	0.20 U	5.0	0.20	1	11/17/20 03:19	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 03:19	
Toluene	0.20 U	5.0	0.20	1	11/17/20 03:19	
Trichloroethene (TCE)	0.65 J	5.0	0.20	1	11/17/20 03:19	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 03:19	
Vinyl Chloride	0.30 J	5.0	0.20	1	11/17/20 03:19	

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Analytical Report

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

Sample Name: SP-5 (EFF)
Lab Code: R2010488-006

Service Request: R2010488
Date Collected: 11/05/20 10:00
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 03:19	
cis-1,2-Dichloroethene	0.60 J	5.0	0.23	1	11/17/20 03:19	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 03:19	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 03:19	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 03:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/17/20 03:19	
Dibromofluoromethane	94	80 - 116	11/17/20 03:19	
Toluene-d8	99	87 - 121	11/17/20 03:19	

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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 10:25
Date Received: 11/05/20 15:00

Sample Name: SP-5 (INF)
Lab Code: R2010488-007

Units: ug/L
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	11/17/20 03:40	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,1-Dichloroethane (1,1-DCA)	4.8 J	5.0	0.20	1	11/17/20 03:40	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 03:40	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,2-Dichloroethane	0.26 J	5.0	0.20	1	11/17/20 03:40	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:40	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 03:40	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 03:40	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 03:40	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 03:40	
Acetone	5.0 U	10	5.0	1	11/17/20 03:40	
Benzene	0.90 J	5.0	0.20	1	11/17/20 03:40	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 03:40	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 03:40	
Carbon Disulfide	3.7 J	10	0.42	1	11/17/20 03:40	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 03:40	
Chlorobenzene	11	5.0	0.20	1	11/17/20 03:40	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 03:40	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 03:40	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 03:40	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 03:40	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 03:40	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 03:40	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 03:40	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 03:40	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 03:40	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 03:40	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 03:40	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 03:40	
Styrene	0.20 U	5.0	0.20	1	11/17/20 03:40	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 03:40	
Toluene	0.20 J	5.0	0.20	1	11/17/20 03:40	
Trichloroethene (TCE)	1.7 J	5.0	0.20	1	11/17/20 03:40	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 03:40	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 03:40	

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Analytical Report

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

Sample Name: SP-5 (INF)
Lab Code: R2010488-007

Service Request: R2010488
Date Collected: 11/05/20 10:25
Date Received: 11/05/20 15:00

Units: ug/L

Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 03:40	
cis-1,2-Dichloroethene	0.99 J	5.0	0.23	1	11/17/20 03:40	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 03:40	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 03:40	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/17/20 03:40	
Dibromofluoromethane	92	80 - 116	11/17/20 03:40	
Toluene-d8	97	87 - 121	11/17/20 03:40	

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Analytical Report

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

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Sample Name: Trip Blank
Lab Code: R2010488-008

Units: ug/L
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	11/17/20 01:07	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/17/20 01:07	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/17/20 01:07	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/17/20 01:07	
2-Hexanone	0.20 U	10	0.20	1	11/17/20 01:07	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/17/20 01:07	
Acetone	5.0 U	10	5.0	1	11/17/20 01:07	
Benzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
Bromoform	0.25 U	5.0	0.25	1	11/17/20 01:07	
Bromomethane	0.70 U	5.0	0.70	1	11/17/20 01:07	
Carbon Disulfide	0.42 U	10	0.42	1	11/17/20 01:07	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/17/20 01:07	
Chlorobenzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
Chloroethane	0.23 U	5.0	0.23	1	11/17/20 01:07	
Chloroform	0.24 U	5.0	0.24	1	11/17/20 01:07	
Chloromethane	0.28 U	5.0	0.28	1	11/17/20 01:07	
Cyclohexane	0.26 U	10	0.26	1	11/17/20 01:07	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/17/20 01:07	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/17/20 01:07	
Dichloromethane	0.65 U	5.0	0.65	1	11/17/20 01:07	
Ethylbenzene	0.20 U	5.0	0.20	1	11/17/20 01:07	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/17/20 01:07	
Methyl Acetate	0.33 U	10	0.33	1	11/17/20 01:07	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/17/20 01:07	
Methylcyclohexane	0.20 U	10	0.20	1	11/17/20 01:07	
Styrene	0.20 U	5.0	0.20	1	11/17/20 01:07	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/17/20 01:07	
Toluene	0.20 U	5.0	0.20	1	11/17/20 01:07	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	11/17/20 01:07	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/17/20 01:07	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/17/20 01:07	

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Analytical Report

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

Sample Name: Trip Blank
Lab Code: R2010488-008

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/17/20 01:07	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	11/17/20 01:07	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/17/20 01:07	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/17/20 01:07	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/17/20 01:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/17/20 01:07	
Dibromofluoromethane	93	80 - 116	11/17/20 01:07	
Toluene-d8	98	87 - 121	11/17/20 01:07	



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: F-6
Lab Code: R2010488-001

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:25	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:25	11/09/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/20 00:25	11/09/20	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/20 00:25	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:25	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:25	11/09/20	
Calcium, Total	6010C	17700	ug/L	1000	1	11/11/20 00:25	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:25	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:25	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:25	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/20 00:25	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:25	11/09/20	
Magnesium, Total	6010C	3800	ug/L	1000	1	11/11/20 00:25	11/09/20	
Manganese, Total	6010C	70	ug/L	10	1	11/11/20 00:25	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 09:46	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:25	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/20 00:25	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:25	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:25	11/09/20	
Sodium, Total	6010C	7000	ug/L	1000	1	11/11/20 00:25	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:25	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:25	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:25	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-4
Lab Code: R2010488-002

Service Request: R2010488
Date Collected: 11/05/20 08:35
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:34	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:34	11/09/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/20 00:34	11/09/20	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/20 00:34	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:34	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:34	11/09/20	
Calcium, Total	6010C	16700	ug/L	1000	1	11/11/20 00:34	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:34	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:34	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:34	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/20 00:34	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:34	11/09/20	
Magnesium, Total	6010C	3700	ug/L	1000	1	11/11/20 00:34	11/09/20	
Manganese, Total	6010C	84	ug/L	10	1	11/11/20 00:34	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 09:54	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:34	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/20 00:34	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:34	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:34	11/09/20	
Sodium, Total	6010C	6900	ug/L	1000	1	11/11/20 00:34	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:34	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:34	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:34	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-3
Lab Code: R2010488-003

Service Request: R2010488
Date Collected: 11/05/20 08:50
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:38	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:38	11/09/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/20 00:38	11/09/20	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/20 00:38	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:38	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:38	11/09/20	
Calcium, Total	6010C	16000	ug/L	1000	1	11/11/20 00:38	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:38	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:38	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:38	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/20 00:38	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:38	11/09/20	
Magnesium, Total	6010C	3500	ug/L	1000	1	11/11/20 00:38	11/09/20	
Manganese, Total	6010C	72	ug/L	10	1	11/11/20 00:38	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 10:01	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:38	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/20 00:38	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:38	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:38	11/09/20	
Sodium, Total	6010C	6800	ug/L	1000	1	11/11/20 00:38	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:38	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:38	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:38	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-2
Lab Code: R2010488-004

Service Request: R2010488
Date Collected: 11/05/20 09:25
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:41	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:41	11/09/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/20 00:41	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:41	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:41	11/09/20	
Calcium, Total	6010C	14600	ug/L	1000	1	11/11/20 00:41	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:41	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:41	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/20 00:41	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:41	11/09/20	
Magnesium, Total	6010C	3300	ug/L	1000	1	11/11/20 00:41	11/09/20	
Manganese, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 10:04	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:41	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/20 00:41	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Sodium, Total	6010C	6700	ug/L	1000	1	11/11/20 00:41	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:41	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:41	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:41	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-3
Lab Code: R2010488-005

Service Request: R2010488
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:44	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:44	11/09/20	
Arsenic, Total	6010C	19	ug/L	10	1	11/11/20 00:44	11/09/20	
Barium, Total	6010C	40	ug/L	20	1	11/11/20 00:44	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:44	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:44	11/09/20	
Calcium, Total	6010C	27100	ug/L	1000	1	11/11/20 00:44	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:44	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:44	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:44	11/09/20	
Iron, Total	6010C	27100	ug/L	100	1	11/11/20 00:44	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:44	11/09/20	
Magnesium, Total	6010C	5700	ug/L	1000	1	11/11/20 00:44	11/09/20	
Manganese, Total	6010C	4510	ug/L	10	1	11/11/20 00:44	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 10:06	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:44	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/20 00:44	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:44	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:44	11/09/20	
Sodium, Total	6010C	3200	ug/L	1000	1	11/11/20 00:44	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:44	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:44	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:44	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-5 (EFF)
Lab Code: R2010488-006

Service Request: R2010488
Date Collected: 11/05/20 10:00
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/11/20 00:47	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:47	11/09/20	
Arsenic, Total	6010C	117	ug/L	10	1	11/11/20 00:47	11/09/20	
Barium, Total	6010C	155	ug/L	20	1	11/11/20 00:47	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:47	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:47	11/09/20	
Calcium, Total	6010C	42900	ug/L	1000	1	11/11/20 00:47	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:47	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:47	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:47	11/09/20	
Iron, Total	6010C	28500	ug/L	100	1	11/11/20 00:47	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:47	11/09/20	
Magnesium, Total	6010C	9900	ug/L	1000	1	11/11/20 00:47	11/09/20	
Manganese, Total	6010C	6600	ug/L	10	1	11/11/20 00:47	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 10:09	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:47	11/09/20	
Potassium, Total	6010C	3000	ug/L	2000	1	11/11/20 00:47	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:47	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:47	11/09/20	
Sodium, Total	6010C	7200	ug/L	1000	1	11/11/20 00:47	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:47	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:47	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/20 00:47	11/09/20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-5 (INF)
Lab Code: R2010488-007

Service Request: R2010488
Date Collected: 11/05/20 10:25
Date Received: 11/05/20 15:00

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	110	ug/L	100	1	11/11/20 00:51	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/11/20 00:51	11/09/20	
Arsenic, Total	6010C	148	ug/L	10	1	11/11/20 00:51	11/09/20	
Barium, Total	6010C	144	ug/L	20	1	11/11/20 00:51	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/11/20 00:51	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/20 00:51	11/09/20	
Calcium, Total	6010C	44600	ug/L	1000	1	11/11/20 00:51	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:51	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/11/20 00:51	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/20 00:51	11/09/20	
Iron, Total	6010C	30600	ug/L	100	1	11/11/20 00:51	11/09/20	
Lead, Total	6010C	61.2	ug/L	5.0	1	11/11/20 00:51	11/09/20	
Magnesium, Total	6010C	9700	ug/L	1000	1	11/11/20 00:51	11/09/20	
Manganese, Total	6010C	6500	ug/L	10	1	11/11/20 00:51	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 10:12	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/20 00:51	11/09/20	
Potassium, Total	6010C	3000	ug/L	2000	1	11/11/20 00:51	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:51	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/11/20 00:51	11/09/20	
Sodium, Total	6010C	7000	ug/L	1000	1	11/11/20 00:51	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/11/20 00:51	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/11/20 00:51	11/09/20	
Zinc, Total	6010C	4360	ug/L	200	10	11/11/20 21:26	11/09/20	



Field Data

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: F-6
Lab Code: R2010488-001

Service Request: R2010488
Date Collected: 11/05/20 08:20
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	170	uMHOS/cm	-	1	11/05/20 08:20	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	30.0	mV	-	1	11/05/20 08:20	
Oxygen, Dissolved	SM 4500-O G	10.8	mg/L	0.20	1	11/05/20 08:20	
pH, Field	SM 4500-H+ B	7.67	pH Units	-	1	11/05/20 08:20	
Temperature, Field	SM 2550 B	4.00	deg C	-	1	11/05/20 08:20	
Turbidity, Field	180.1	5.7	NTU	-	1	11/05/20 08:20	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-4
Lab Code: R2010488-002

Service Request: R2010488
Date Collected: 11/05/20 08:35
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	160	uMHOS/cm	-	1	11/05/20 08:35	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	50.0	mV	-	1	11/05/20 08:35	
Oxygen, Dissolved	SM 4500-O G	10.7	mg/L	0.20	1	11/05/20 08:35	
pH, Field	SM 4500-H+ B	7.49	pH Units	-	1	11/05/20 08:35	
Temperature, Field	SM 2550 B	4.20	deg C	-	1	11/05/20 08:35	
Turbidity, Field	180.1	5.2	NTU	-	1	11/05/20 08:35	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-3
Lab Code: R2010488-003

Service Request: R2010488
Date Collected: 11/05/20 08:50
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	158	uMHOS/cm	-	1	11/05/20 08:50	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	57.0	mV	-	1	11/05/20 08:50	
Oxygen, Dissolved	SM 4500-O G	10.7	mg/L	0.20	1	11/05/20 08:50	
pH, Field	SM 4500-H+ B	7.47	pH Units	-	1	11/05/20 08:50	
Temperature, Field	SM 2550 B	4.40	deg C	-	1	11/05/20 08:50	
Turbidity, Field	180.1	4.9	NTU	-	1	11/05/20 08:50	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SW-2
Lab Code: R2010488-004

Service Request: R2010488
Date Collected: 11/05/20 09:25
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	149	uMHOS/cm	-	1	11/05/20 09:25	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	38.0	mV	-	1	11/05/20 09:25	
Oxygen, Dissolved	SM 4500-O G	10.1	mg/L	0.20	1	11/05/20 09:25	
pH, Field	SM 4500-H+ B	7.61	pH Units	-	1	11/05/20 09:25	
Temperature, Field	SM 2550 B	4.20	deg C	-	1	11/05/20 09:25	
Turbidity, Field	180.1	5.1	NTU	-	1	11/05/20 09:25	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-3
Lab Code: R2010488-005

Service Request: R2010488
Date Collected: 11/05/20 09:10
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	235	uMHOS/cm	-	1	11/05/20 09:10	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-11.0	mV	-	1	11/05/20 09:10	
pH, Field	SM 4500-H+ B	6.99	pH Units	-	1	11/05/20 09:10	
Temperature, Field	SM 2550 B	4.00	deg C	-	1	11/05/20 09:10	
Turbidity, Field	180.1	17.2	NTU	-	1	11/05/20 09:10	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-5 (EFF)
Lab Code: R2010488-006

Service Request: R2010488
Date Collected: 11/05/20 10:00
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	434	uMHOS/cm	-	1	11/05/20 10:00	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-30.0	mV	-	1	11/05/20 10:00	
pH, Field	SM 4500-H+ B	6.49	pH Units	-	1	11/05/20 10:00	
Temperature, Field	SM 2550 B	7.80	deg C	-	1	11/05/20 10:00	
Turbidity, Field	180.1	9.9	NTU	-	1	11/05/20 10:00	

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW, Seeps
Sample Matrix: Water
Sample Name: SP-5 (INF)
Lab Code: R2010488-007

Service Request: R2010488
Date Collected: 11/05/20 10:25
Date Received: 11/05/20 15:00

Basis: NA

Field Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Conductivity, Field	120.1	448	uMHOS/cm	-	1	11/05/20 10:25	
Oxidation-Reduction Potential (ORP), Field	ASTM D1498-00	-27.0	mV	-	1	11/05/20 10:25	
pH, Field	SM 4500-H+ B	6.43	pH Units	-	1	11/05/20 10:25	
Temperature, Field	SM 2550 B	8.20	deg C	-	1	11/05/20 10:25	
Turbidity, Field	180.1	14.7	NTU	-	1	11/05/20 10:25	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2010488

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	80-116	87-121
F-6	R2010488-001	92	91	97
SW-4	R2010488-002	95	94	100
SW-3	R2010488-003	94	92	97
SW-2	R2010488-004	95	92	97
SP-3	R2010488-005	94	92	98
SP-5 (EFF)	R2010488-006	95	94	99
SP-5 (INF)	R2010488-007	94	92	97
Trip Blank	R2010488-008	94	93	98
Method Blank	RQ2014092-04	93	93	98
Lab Control Sample	RQ2014092-03	96	98	100

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Analytical Report

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

Service Request: R2010488
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2014092-04

Units: ug/L
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	11/16/20 23:40	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,2,4-Trichlorobenzene	0.34 U	5.0	0.34	1	11/16/20 23:40	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	11/16/20 23:40	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
2-Butanone (MEK)	0.78 U	10	0.78	1	11/16/20 23:40	
2-Hexanone	0.20 U	10	0.20	1	11/16/20 23:40	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	11/16/20 23:40	
Acetone	5.0 U	10	5.0	1	11/16/20 23:40	
Benzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
Bromodichloromethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
Bromoform	0.25 U	5.0	0.25	1	11/16/20 23:40	
Bromomethane	0.70 U	5.0	0.70	1	11/16/20 23:40	
Carbon Disulfide	0.42 U	10	0.42	1	11/16/20 23:40	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	11/16/20 23:40	
Chlorobenzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
Chloroethane	0.23 U	5.0	0.23	1	11/16/20 23:40	
Chloroform	0.24 U	5.0	0.24	1	11/16/20 23:40	
Chloromethane	0.31 J	5.0	0.28	1	11/16/20 23:40	
Cyclohexane	0.26 U	10	0.26	1	11/16/20 23:40	
Dibromochloromethane	0.20 U	5.0	0.20	1	11/16/20 23:40	
Dichlorodifluoromethane (CFC 12)	0.21 U	5.0	0.21	1	11/16/20 23:40	
Dichloromethane	0.65 U	5.0	0.65	1	11/16/20 23:40	
Ethylbenzene	0.20 U	5.0	0.20	1	11/16/20 23:40	
Isopropylbenzene (Cumene)	0.20 U	5.0	0.20	1	11/16/20 23:40	
Methyl Acetate	0.33 U	10	0.33	1	11/16/20 23:40	
Methyl tert-Butyl Ether	0.20 U	5.0	0.20	1	11/16/20 23:40	
Methylcyclohexane	0.20 U	10	0.20	1	11/16/20 23:40	
Styrene	0.20 U	5.0	0.20	1	11/16/20 23:40	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	11/16/20 23:40	
Toluene	0.20 U	5.0	0.20	1	11/16/20 23:40	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	11/16/20 23:40	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	11/16/20 23:40	
Vinyl Chloride	0.20 U	5.0	0.20	1	11/16/20 23:40	

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Analytical Report

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

Sample Name: Method Blank
Lab Code: RQ2014092-04

Service Request: R2010488
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Xylenes, Total	0.23 U	5.0	0.23	1	11/16/20 23:40	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	11/16/20 23:40	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	11/16/20 23:40	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	11/16/20 23:40	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	11/16/20 23:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/16/20 23:40	
Dibromofluoromethane	93	80 - 116	11/16/20 23:40	
Toluene-d8	98	87 - 121	11/16/20 23:40	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2010488
Date Analyzed: 11/16/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2014092-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.9	20.0	100	75-125
1,1,2,2-Tetrachloroethane	8260C	26.3	20.0	132 *	78-126
1,1,2-Trichloroethane	8260C	22.4	20.0	112	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.3	20.0	101	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	21.6	20.0	108	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	23.3	20.0	116	71-118
1,2,4-Trichlorobenzene	8260C	21.8	20.0	109	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	24.0	20.0	120	55-136
1,2-Dibromoethane	8260C	20.8	20.0	104	82-127
1,2-Dichlorobenzene	8260C	20.7	20.0	104	80-119
1,2-Dichloroethane	8260C	19.6	20.0	98	71-127
1,2-Dichloropropane	8260C	22.7	20.0	114	80-119
1,3-Dichlorobenzene	8260C	21.8	20.0	109	83-121
1,4-Dichlorobenzene	8260C	20.6	20.0	103	79-119
2-Butanone (MEK)	8260C	22.2	20.0	111	61-137
2-Hexanone	8260C	23.6	20.0	118	63-124
4-Methyl-2-pentanone	8260C	23.3	20.0	117	66-124
Acetone	8260C	20.9	20.0	104	40-161
Benzene	8260C	22.0	20.0	110	79-119
Bromodichloromethane	8260C	19.6	20.0	98	81-123
Bromoform	8260C	22.8	20.0	114	65-146
Bromomethane	8260C	17.9	20.0	89	42-166
Carbon Disulfide	8260C	16.3	20.0	81	66-128
Carbon Tetrachloride	8260C	19.7	20.0	99	70-127
Chlorobenzene	8260C	20.5	20.0	102	80-121
Chloroethane	8260C	19.8	20.0	99	62-131
Chloroform	8260C	21.1	20.0	105	79-120
Chloromethane	8260C	24.3	20.0	122	65-135
Cyclohexane	8260C	21.4	20.0	107	69-120
Dibromochloromethane	8260C	21.9	20.0	109	72-128
Dichlorodifluoromethane (CFC 12)	8260C	22.6	20.0	113	59-155
Dichloromethane	8260C	20.1	20.0	100	73-122
Ethylbenzene	8260C	20.2	20.0	101	76-120

Printed 11/23/2020 11:06:25 AM

Superset Reference:20-0000569835 rev 00

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2010488
Date Analyzed: 11/16/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2014092-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Isopropylbenzene (Cumene)	8260C	22.3	20.0	112	77-128
Methyl Acetate	8260C	21.9	20.0	109	61-133
Methyl tert-Butyl Ether	8260C	21.7	20.0	109	75-118
Methylcyclohexane	8260C	22.6	20.0	113	51-129
Styrene	8260C	21.0	20.0	105	80-124
Tetrachloroethene (PCE)	8260C	20.6	20.0	103	72-125
Toluene	8260C	22.2	20.0	111	79-119
Trichloroethene (TCE)	8260C	18.9	20.0	94	74-122
Trichlorofluoromethane (CFC 11)	8260C	19.8	20.0	99	71-136
Vinyl Chloride	8260C	21.0	20.0	105	74-159
cis-1,2-Dichloroethene	8260C	22.0	20.0	110	80-121
cis-1,3-Dichloropropene	8260C	21.2	20.0	106	77-122
trans-1,2-Dichloroethene	8260C	23.3	20.0	116	73-118
trans-1,3-Dichloropropene	8260C	20.7	20.0	104	71-133



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R2010488-MB

Service Request: R2010488
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	100 U	ug/L	100	1	11/10/20 23:16	11/09/20	
Antimony, Total	6010C	60 U	ug/L	60	1	11/10/20 23:16	11/09/20	
Arsenic, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Barium, Total	6010C	20 U	ug/L	20	1	11/10/20 23:16	11/09/20	
Beryllium, Total	6010C	3.0 U	ug/L	3.0	1	11/10/20 23:16	11/09/20	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/10/20 23:16	11/09/20	
Calcium, Total	6010C	1000 U	ug/L	1000	1	11/10/20 23:16	11/09/20	
Chromium, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Cobalt, Total	6010C	50 U	ug/L	50	1	11/10/20 23:16	11/09/20	
Copper, Total	6010C	20 U	ug/L	20	1	11/10/20 23:16	11/09/20	
Iron, Total	6010C	100 U	ug/L	100	1	11/10/20 23:16	11/09/20	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	11/10/20 23:16	11/09/20	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	11/10/20 23:16	11/09/20	
Manganese, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Mercury, Total	7470A	0.20 U	ug/L	0.20	1	11/11/20 09:00	11/10/20	
Nickel, Total	6010C	40 U	ug/L	40	1	11/10/20 23:16	11/09/20	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/10/20 23:16	11/09/20	
Selenium, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Silver, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Sodium, Total	6010C	1000 U	ug/L	1000	1	11/10/20 23:16	11/09/20	
Thallium, Total	6010C	10 U	ug/L	10	1	11/10/20 23:16	11/09/20	
Vanadium, Total	6010C	50 U	ug/L	50	1	11/10/20 23:16	11/09/20	
Zinc, Total	6010C	20 U	ug/L	20	1	11/10/20 23:16	11/09/20	

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2010488
Date Collected: 11/05/20
Date Received: 11/05/20
Date Analyzed: 11/11/20
Date Extracted: 11/10/20

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: F-6
Lab Code: R2010488-001
Analysis Method: 7470A
Prep Method: Method

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike R2010488-001MS		Result	Duplicate Matrix Spike R2010488-001DMS		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Mercury, Total	0.08 U	1.01	1.00	101	0.99	1.00	99	75-125	2	20

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

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

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

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.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2010488
Date Analyzed: 11/10/20 - 11/11/20

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2010488-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	1980	2000	99	80-120
Antimony, Total	6010C	473	500	95	80-120
Arsenic, Total	6010C	38	40	94	80-120
Barium, Total	6010C	2030	2000	102	80-120
Beryllium, Total	6010C	48.5	50.0	97	80-120
Cadmium, Total	6010C	48.7	50.0	97	80-120
Calcium, Total	6010C	1970	2000	99	80-120
Chromium, Total	6010C	199	200	100	80-120
Cobalt, Total	6010C	492	500	98	80-120
Copper, Total	6010C	243	250	97	80-120
Iron, Total	6010C	974	1000	97	80-120
Lead, Total	6010C	485	500	97	80-120
Magnesium, Total	6010C	1880	2000	94	80-120
Manganese, Total	6010C	488	500	98	80-120
Mercury, Total	7470A	1.00	1.00	100	80-120
Nickel, Total	6010C	492	500	98	80-120
Potassium, Total	6010C	19200	20000	96	80-120
Selenium, Total	6010C	947	1010	94	80-120
Silver, Total	6010C	48	50	96	80-120
Sodium, Total	6010C	19900	20000	100	80-120
Thallium, Total	6010C	1840	2000	92	80-120
Vanadium, Total	6010C	490	500	98	80-120
Zinc, Total	6010C	484	500	97	80-120



November 19, 2020

Service Request No:R2010579

Ms. Laurie Haskell
Broome County Division of Solid Waste Management
60 Hawley St.
P.O. Box 1766
Binghamton, NY 13902

Laboratory Results for: Colesville SW/Seeps/Sed

Dear Ms.Haskell,

Enclosed are the results of the sample(s) submitted to our laboratory November 05, 2020
For your reference, these analyses have been assigned our service request number **R2010579**.

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

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

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

Service Request: R2010579
Date Received: 11/05/2020

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:

One sediment sample was received for analysis at ALS Environmental on 11/05/2020. 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.

Approved by 

Date 11/19/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: SP-3 Sed	Lab ID: R2010579-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Total Solids	77.6				Percent	ALS SOP
Aluminum, Total	12000			24	mg/Kg	6010C
Arsenic, Total	14.7			1.2	mg/Kg	6010C
Barium, Total	61.6			2.4	mg/Kg	6010C
Beryllium, Total	0.49			0.36	mg/Kg	6010C
Calcium, Total	1330			120	mg/Kg	6010C
Chromium, Total	16.2			1.2	mg/Kg	6010C
Cobalt, Total	11.0			6.1	mg/Kg	6010C
Copper, Total	20.0			2.4	mg/Kg	6010C
Iron, Total	31100			240	mg/Kg	6010C
Lead, Total	14.7			0.61	mg/Kg	6010C
Magnesium, Total	4170			120	mg/Kg	6010C
Manganese, Total	996			2.4	mg/Kg	6010C
Nickel, Total	25.4			4.9	mg/Kg	6010C
Potassium, Total	1040			240	mg/Kg	6010C
Vanadium, Total	16.2			6.1	mg/Kg	6010C
Zinc, Total	69.9			2.4	mg/Kg	6010C



Sample Receipt Information

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
Project: Colesville SW/Seeps/Sed/VOA + Metals

Service Request:R2010579

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2010579-001	SP-3 Sed	11/5/2020	0930

[illegible]



FIELD MONITORING REPORT

PROJECT Colesville Sediments LAB ID _____
SAMPLE POINT ID Sed 3 SP-3-Sed Bgm 11/5/2020

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 11/5/2020 Time 0930 SWL _____
Appearance Brown, sandy
Weather Conditions Clear 51°
Sampling Technician (Print) BRIAN MACKIN Signature Brian Mackin

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		

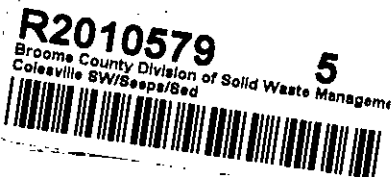
Calibration Date/Time 11/5/2020

OBSERVATIONS

Sampling procedures were performed in accordance with all applicable protocols.



Cooler Receipt and Preservation Check Form



Project/Client Broome Folder Number _____

Cooler received on 11/5/2020 by: Q/PW 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: <u>Wet Ice</u> 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 ☒ NA
6	Where did the bottles originate?	ALS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <u>NA</u>

8. Temperature Readings Date: 11/5/2020 Time: 1500 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.2</u>	<u>6.8</u>	<u>0.2</u>	<u>3.8</u>			
Within 0-6°C?	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐
If <0°C, were samples frozen?	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐	<u>Y</u> ☒ ☐

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 AWL on 11/5/2020 at 1500
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y ☐ N ☐

Cooler Breakdown/Preservation Check**: Date: 11/6/2020 Time: 1352 by: Q/PW

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 ☐
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?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
<u>2</u>	<u>22349</u>	HNO ₃	☒		<u>21120051</u>					
<u>2</u>		H ₂ SO ₄	☒		<u>25000112</u>					
<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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O 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: 2561-3, 20-07-07, 9-315-001

Explain all Discrepancies/ Other Comments: _____

Labels secondary reviewed by: Q

PC Secondary Review: _____

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

HPRD	BULK
HTR	FLDT
SUB	HGFB
<u>ALS</u>	LL3541



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	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.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	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 Certifications¹

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 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
Project: Colesville SW/Seeps/Sed/VOA + Metals

Service Request: R2010579

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
ALS SOP	Sediment	Total Solids

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Analyst Summary report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW/Seeps/Sed/VOA + Metals

Service Request: R2010579

Sample Name: SP-3 Sed
Lab Code: R2010579-001
Sample Matrix: Sediment

Date Collected: 11/5/20
Date Received: 11/5/20

Analysis Method

6010C
7471B
ALS SOP

Extracted/Digested By

AKONZEL
AKONZEL

Analyzed By

KMCLAEN
AKONZEL
KAWONG



INORGANIC PREPARATION METHODS

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

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Metals

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW/Seeps/Sed/VOA + Metals
Sample Matrix: Sediment
Sample Name: SP-3 Sed
Lab Code: R2010579-001

Service Request: R2010579
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	12000	mg/Kg	24	1	11/13/20 01:43	11/10/20	
Antimony, Total	6010C	7.3 U	mg/Kg	7.3	1	11/13/20 01:43	11/10/20	
Arsenic, Total	6010C	14.7	mg/Kg	1.2	1	11/13/20 01:43	11/10/20	
Barium, Total	6010C	61.6	mg/Kg	2.4	1	11/13/20 01:43	11/10/20	
Beryllium, Total	6010C	0.49	mg/Kg	0.36	1	11/13/20 01:43	11/10/20	
Cadmium, Total	6010C	0.61 U	mg/Kg	0.61	1	11/13/20 01:43	11/10/20	
Calcium, Total	6010C	1330	mg/Kg	120	1	11/13/20 01:43	11/10/20	
Chromium, Total	6010C	16.2	mg/Kg	1.2	1	11/13/20 01:43	11/10/20	
Cobalt, Total	6010C	11.0	mg/Kg	6.1	1	11/13/20 01:43	11/10/20	
Copper, Total	6010C	20.0	mg/Kg	2.4	1	11/13/20 01:43	11/10/20	
Iron, Total	6010C	31100	mg/Kg	240	10	11/13/20 03:27	11/10/20	
Lead, Total	6010C	14.7	mg/Kg	0.61	1	11/13/20 01:43	11/10/20	
Magnesium, Total	6010C	4170	mg/Kg	120	1	11/13/20 01:43	11/10/20	
Manganese, Total	6010C	996	mg/Kg	2.4	1	11/13/20 01:43	11/10/20	
Mercury, Total	7471B	0.041 U	mg/Kg	0.041	1	11/18/20 14:17	11/17/20	
Nickel, Total	6010C	25.4	mg/Kg	4.9	1	11/13/20 01:43	11/10/20	
Potassium, Total	6010C	1040	mg/Kg	240	1	11/13/20 01:43	11/10/20	
Selenium, Total	6010C	12 U	mg/Kg	12	10	11/13/20 03:27	11/10/20	
Silver, Total	6010C	1.2 U	mg/Kg	1.2	1	11/13/20 01:43	11/10/20	
Sodium, Total	6010C	120 U	mg/Kg	120	1	11/13/20 01:43	11/10/20	
Thallium, Total	6010C	1.2 U	mg/Kg	1.2	1	11/13/20 01:43	11/10/20	
Vanadium, Total	6010C	16.2	mg/Kg	6.1	1	11/13/20 01:43	11/10/20	
Zinc, Total	6010C	69.9	mg/Kg	2.4	1	11/13/20 01:43	11/10/20	



General Chemistry

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Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW/Seeps/Sed/VOA + Metals
Sample Matrix: Sediment
Sample Name: SP-3 Sed
Lab Code: R2010579-001

Service Request: R2010579
Date Collected: 11/05/20 09:30
Date Received: 11/05/20 15:00
Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Total Solids	ALS SOP	77.6	Percent	-	1	11/13/20 14:00	



QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Broome County Division of Solid Waste Management
Project: Colesville SW/Seeps/Sed/VOA + Metals
Sample Matrix: Sediment
Sample Name: Method Blank
Lab Code: R2010579-MB

Service Request: R2010579
Date Collected: NA
Date Received: NA

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	20 U	mg/Kg	20	1	11/13/20 00:05	11/10/20	
Antimony, Total	6010C	6.0 U	mg/Kg	6.0	1	11/13/20 00:05	11/10/20	
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	11/13/20 00:05	11/10/20	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	11/13/20 00:05	11/10/20	
Beryllium, Total	6010C	0.30 U	mg/Kg	0.30	1	11/13/20 00:05	11/10/20	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	11/13/20 00:05	11/10/20	
Calcium, Total	6010C	100 U	mg/Kg	100	1	11/13/20 00:05	11/10/20	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	11/13/20 00:05	11/10/20	
Cobalt, Total	6010C	5.0 U	mg/Kg	5.0	1	11/13/20 00:05	11/10/20	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	11/13/20 00:05	11/10/20	
Iron, Total	6010C	20 U	mg/Kg	20	1	11/13/20 00:05	11/10/20	
Lead, Total	6010C	0.50 U	mg/Kg	0.50	1	11/13/20 00:05	11/10/20	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	11/13/20 00:05	11/10/20	
Manganese, Total	6010C	2.0 U	mg/Kg	2.0	1	11/13/20 00:05	11/10/20	
Mercury, Total	7471B	0.033 U	mg/Kg	0.033	1	11/18/20 13:23	11/17/20	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	11/13/20 00:05	11/10/20	
Potassium, Total	6010C	200 U	mg/Kg	200	1	11/13/20 00:05	11/10/20	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	11/13/20 00:05	11/10/20	
Silver, Total	6010C	1.0 U	mg/Kg	1.0	1	11/13/20 00:05	11/10/20	
Sodium, Total	6010C	100 U	mg/Kg	100	1	11/13/20 00:05	11/10/20	
Thallium, Total	6010C	1.0 U	mg/Kg	1.0	1	11/13/20 00:05	11/10/20	
Vanadium, Total	6010C	5.0 U	mg/Kg	5.0	1	11/13/20 00:05	11/10/20	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	11/13/20 00:05	11/10/20	

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QA/QC Report

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

Service Request: R2010579
Date Analyzed: 11/13/20 - 11/18/20

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2010579-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum, Total	6010C	199	200	100	80-120
Antimony, Total	6010C	48.1	50.0	96	80-120
Arsenic, Total	6010C	4.20	4.0	105	80-120
Barium, Total	6010C	206	200	103	80-120
Beryllium, Total	6010C	5.06	5.00	101	80-120
Cadmium, Total	6010C	5.15	5.00	103	80-120
Calcium, Total	6010C	207	200	104	80-120
Chromium, Total	6010C	20.8	20.0	104	80-120
Cobalt, Total	6010C	51.9	50.0	104	80-120
Copper, Total	6010C	25.6	25.0	103	80-120
Iron, Total	6010C	102	100	102	80-120
Lead, Total	6010C	51.0	50.0	102	80-120
Magnesium, Total	6010C	200	200	100	80-120
Manganese, Total	6010C	50.5	50.0	101	80-120
Mercury, Total	7471B	0.172	0.167	103	80-120
Nickel, Total	6010C	51.3	50.0	103	80-120
Potassium, Total	6010C	1930	2000	96	80-120
Selenium, Total	6010C	90.6	101	90	80-120
Silver, Total	6010C	4.9	5.0	98	80-120
Sodium, Total	6010C	1930	2000	97	80-120
Thallium, Total	6010C	188	200	94	80-120
Vanadium, Total	6010C	50.6	50.0	101	80-120
Zinc, Total	6010C	50.5	50.0	101	80-120

APPENDIX B

Molasses Solution Injection Volumes



Table B-1
Injection of Molasses Solution, August 2020
Colesville Landfill
Broome County, New York.

Injection Start Date =		8/25/2020
Injection Completion Date =		8/26/2020
Molasses to Water Ratio (%) =		4.0
	Molasses	
Injection	Solution Injection	
Well ID	Quantity	
	(gal.)	
PW-6	100	
IW-3	100	
IW-1	100	
IW-2	100	
GMMW-1	736	
IW-4	1,077	
IW-5	1,077	
IW-6	749	
IW-7	100	
IW-8 ⁴	100	
IW-9	106	
Totals (gal.) =	4,345	

Notes:

gal.

Gallons.

APPENDIX C

Colesville Landfill Inspection and Certification Form



Colesville Landfill Inspection and Certification Form

Date: 10/7/2020 Time: 9:30 AM

Inspected by: Laurie Haskell, Rich Hand, and Deb Smith

Weather conditions: 50 degrees F and cloudy

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
Are the gas venting pipes 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

Are there any new or inhabited buildings on any easement properties?
(includes County and Tom Scott properties)

Yes	No
	X

Describe any problems identified below:

Well W-4 (NE of PW-7) needs a new cap, the hinge is broken

There is a settlement area in the south west section of the landfill adjacent to the south fence that needs to have a drainage swale installed. See sketch and picture below.



Southwest side settlement on cap

The drainage area on the west end of the landfill (outside of the cap) needs to be regraded to restore the necessary slope to direct stormwater to the ditch. See sketch above and picture below.



West end drainage area outside of cap



West end drainage outlet

Describe inspection observations: A site-wide inspection was performed by Broome County staff Laurie Haskell, Debra Smith, DSWM Director, and Richard Hand, Landfill Supervisor. In addition to the landfill facility, the surface water and springs and off-site properties were inspected. 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.

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

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

Monitoring well W-4 will be repaired.

Inspector's Signature:

Signature: Laurie Haskell Date: 12/15/2020

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, 2020 through December 31, 2020

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

Describe O&M Plan Compliance:

A. Components of O&M Plan

The Operation and Maintenance Plan contained in Section 5 of the 2020 SMP 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 2020 Period

- On 8/25/2020-8/26/2020, molasses was injected into eleven wells by personnel from Arcadis and Broome County. Following injections, the hose apparatus originating in the treatment building was rinsed, as well as the mixing tank, to remove residual molasses solution.
- Deposited material was cleaned out of the SP-5 drainage pipe during monitoring. On 8/12, 2020 some brush was removed by the outlet that was blocking flow and causing back-up.
- The landfill cap was mowed on August 12, 2020.
- Some surface sediment was removed in the area of SP-3 the week of May 18, 2020.

INSPECTION AND CERTIFICATION FORM

C. Evaluation of Remedial Systems

Maintenance required for next year:

- Mow landfill cap
- Fix settlement recently noted along the 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

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.

Laurie Haskell

(signed)

12/14/2020

(date)

O&M COMPLIANCE FORM