Prepared for:

City of Takoma Park
Department of Public Works

Dry Weather Screening, Analysis & Evaluation of Outfalls Report

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1. INTRODUCTION

1.1. Project Description

The City of Takoma Park (City) has coverage under the Maryland Department of the Environment (MDE) National Pollutant Discharge Elimination System (NPDES) General Permit for Small municipal separate storm sewer system (MS4). The conditions of the permit require the City to develop, implement and enforce a program to detect and eliminate illicit discharges. The City has contracted BayLand Consultants & Designers, Inc. (BayLand) to provide dry weather analysis and outfall evaluation for 78 outfalls in the City of Takoma Park for five consecutive years. This will be the fourth year of the dry weather analysis and outfall evaluation.

The purpose of this project was to provide the City with quantitative data on non-stormwater discharges into Sligo Creek which eventually drains to the Northwest Branch of the Anacostia River, and a qualitative assessment of outfall conditions observed during the 2022 evaluation. BayLand performed dry weather screening for 78 outfalls within the City for illicit discharge and analyzed the surface water samples collected. Outfall screening took place after 72 hours of antecedent dry weather.

Field testing of any outfalls with flow after 72 hours of dry weather included surface water samples collected and measurements of pH, temperature, and chlorine. Field testing and water sample collection was conducted from March 1st through March 3rd, 2022. The collected water samples were then sent to Australian Laboratory Services (ALS) Environmental for analysis of 16 different parameters (Table 1 – Conductivity through Total Phosphorus).

1.2. Study Area Description

Sligo Creek is a perennial tributary of the Northwest Branch of the Anacostia River. The Creek is one of the most urbanized in the Anacostia Watershed (Montgomery County Government, 2019). The Sligo Creek Watershed (USGS 01650800) is approximately 6.45 square miles and contains four major tributaries: Wheaton Branch, Comstock Branch, Takoma Park Branch, and Long Branch (USGS, 2019).

The drainage area is a mix of high density commercial and urban residential land uses. The neighborhoods were developed rapidly in the 1950s and 1960s, before modern environmental standards were put into place, which has led to degraded water quality in receiving streams. Montgomery County has begun installing several stormwater managements (SWM) and stream restoration projects in the watershed to help improve water quality (George, 2012). Over the last few years, the City has installed SWM facilities and has several bioretention facilities, a modular wetland and a stream restoration project that was completed in 2020 (Takoma Park, 2020). Updates and maintenance along the Sligo Creek trail were completed in 2020. New road construction over Sligo Creek at Park Valley Road was also completed between the 2019 and 2020 sampling times.

1.3. Stormwater Regulatory Requirements

The U.S. Environmental Protection Agency's (EPA) stormwater regulations define "illicit discharge" as "any discharge to municipal separate storm sewer that is not composed entirely of stormwater" (except for discharges from firefighting activities and a few other categories). Municipalities operating under a Phase II MS4 permit must develop and implement a plan to detect and address non-stormwater discharges. Sources of illicit discharges include, but are not limited to, sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper oil disposal, radiator flushing disposal, laundry wastewater, spills from roadway accidents, and improper disposal of auto and household toxics. EPA guidance recommends that the plan to detect and address illicit discharges include the following four components:

1. Locate Problem Areas – Procedures for locating priority areas likely to have illicit discharges.
2. Find the Source – Procedures for tracing the source on an illicit discharge.
3. Remove/Correct Illicit Connections – Procedures for removing the source of the discharge.
4. Document Actions Taken – Procedures for program evaluation and assessment.

The EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for identifying priority areas.

1.3.1. Federal & State Water Quality Criteria Tables

Water quality criteria can be applied to both the local and national levels. The purpose of assigning water quality criteria a numeric value is for the protection of aquatic life and human health. The freshwater values for water criteria defined by the Code of Maryland Regulations (COMAR) can be found in Table 1.

The EPA sets the standards for the national recommended water quality criteria (Table 2). This table is the most up-to-date criteria for aquatic life ambient water quality criteria. Maryland uses these values as a guide and therefore both sets of criteria are listed and used as a part of this study.

For the purpose of applying Escherichia coli (E. coli) and Enterococci criteria levels, the more stringent Recreational Water Quality Criteria (RWQC) for primary contact were used due to Sligo Creek's easy water access and proximity to multiple parks and bike paths. The EPA defines primary contact as "activities where immersion and ingestion are likely and there is a high degree of bodily contact with the water, such as swimming, bathing, surfing, water skiing, tubing, skin diving, water play by children, or similar water-contact activities."

Table 1 – Maryland Water Criteria Specific to Designated Uses	
Parameter	**Criteria**
pH	6.5 to 8.5
Temperature (F)	Maximum 32°C or ambient temperature, whichever is greater
Conductivity (umhos/cm)	No existing criteria
Turbidity (NTU)	Maximum of 150 NTU and monthly average of 50 NTU
Detergents	No existing criteria
Ammonia	No existing criteria
Boron	No existing criteria
E. coli (MPN/100ml)	235[1]
Enterococci (MPN/100ml)	61[2]
Total Coliform	No existing criteria
Fluoride	No existing criteria
Hardness	No existing criteria
Potassium	No existing criteria
Chloride	No existing criteria
Chlorine (mg/L)	< 0.10 mg/L
Color	Maximum of 75 units as a monthly average
Total Nitrogen (mg/L)	No existing criteria
Total Phosphorus (mg/L)	No existing criteria

1 and 2: Bacteria Indicator Criteria for Recreational Full Body Contact. Source: COMAR 26.08.02.033 http://www.dsd.state.md.us/comar/SubtitleSearch.aspx?search=26.08.02.

Table 2 – U.S. EPA Recreational Water Quality Criteria	
Parameter	**Criteria**
pH	6.5 to 9.0
Temperature (F)	Site and species specific
Conductivity (umhos/cm)	No existing criteria
Turbidity (NTU)	Site and species specific
Detergents	No existing criteria
Ammonia	Chronic 1.9[1], Acute 17[1]
Boron	No existing criteria
E. coli (MPN/100ml)	126[2]
Enterococci (MPN/100ml)	35[2]
Total Coliform	No existing criteria
Fluoride	No existing criteria
Hardness	No existing criteria
Potassium	No existing criteria
Chloride	Chronic 230, Acute 860
Chlorine (mg/L)	Chronic 0.011, Acute 0.019
Color	75
Total Nitrogen (mg/L)	No existing criteria
Total Phosphorus (mg/L)	No existing criteria

1: 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia Freshwater (EPA)
2: 2012 Recreational Water Quality Criteria (EPA)
Source: EPA Current Water Quality Criteria http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm

Table 3 – Parameters Measured & Significance	
Parameter	**Significance**
pH	A measure of the hydrogen ion concentration indicating neutrality, acidity, or alkalinity of a solution. Ideal range 6.5 to 8.0.
Water Temperature	Thermal property of ambient water that may affect aquatic organisms. Most sensitive organisms prefer uniformly colder waters.
Specific Conductivity	A measure of the ability of water to conduct an electrical current at 25C. Most streams range from 50 to 1500 umhos/cm, but studies have shown that "freshwater streams ideally should have a conductivity between 150 to 500 umhos/cm to support diverse aquatic life." (Friends of Sligo Creek: Water Quality Parameters).
Turbidity	Turbidity is the measure of the specific portion of light that is deflected by undissolved particles as it passes through water. High levels of total suspended solids (TSS) will increase turbidity and decrease water clarity. EPA recommendations based on reference streams in Ecoregion IX suggest an ideal turbidity criteria of 3.15-13.5 (far lower than the COMAR Standard of 150 NTU). It should be noted that the COMAR Standard states that turbidity may not exceed levels detrimental to aquatic life and the 150 NTU Standard is typically applied to stormwater runoff from construction sites after erosion and sediment control measures.
Detergents (Surfactants)	Presence of surfactants which may be an indicator of washwater or sewage. No current criteria set; however a threshold of 0.50 mg/L has been established by MDE to determine the potential for the presence of an illicit discharge.
Ammonia	A nutrient that can increase algal blooms. Sources include organic decomposition, agricultural and urban runoff, and wastewater effluent. Elevated levels can present acute and chronic toxicity levels to freshwater aquatic organisms.
Boron	Boron is a naturally occurring chemical element essential to plant growth but may be toxic in excessive concentrations. Anthropogenic sources of boron in the freshwater streams include sewage sludge and effluents, atmospheric deposition from coal combustion, cleaning compounds and agricultural chemicals. Recommended guidelines for freshwater aquatic life are 0.67-2.0 mg/L.
Escherichia coli (E. coli)	A species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. The EPA recommends E. coli as the best indicator of health risk from water contact in recreational waters. Elevated levels may be an indicator of wastewater migration into a storm drain system. Threshold limits are based on water use and contact.
Enterococci	A subgroup of fecal streptococcus bacteria that are human-specific and used as a best indicator of health risk in saltwater because of their ability to survive, and as a useful indicator in freshwater too. Elevated levels may be an indicator of wastewater migration into a storm drain system. Threshold limits are based on water use and contact.
Total Coliform	A group of naturally occurring bacteria that are present in human feces, animal waste, soil, and other places in the environment. Not a recommended indicator of health risk in recreational waters due to their abundance in the environment; a more useful indicator of drinking water contamination.
Fluoride	A chemical element added to drinking water in some municipalities to reduce incidence of tooth decay. Elevated levels may be an indicator of potable water migration into a storm drain system.
Hardness	Hardness is a measure of the concentration of calcium and magnesium in water. Some aquatic species are sensitive to the hardness of water. It may be an indicator of sewage, washwater, tap water or industrial liquid waste.
Potassium	A naturally occurring element that can be used as an indicator of sewage and/or industrial waste. Elevated levels of potassium can be toxic to some aquatic species.
Chloride	Chloride ions are naturally occurring and may be present in groundwater baseflow. Large concentrations increase the corrosiveness of water and present acute and chronic toxicity to aquatic organisms. Sources of anthropogenic chlorides include road salt, sewage contamination, and water softener discharges.

Table 3 – Parameters Measured & Significance	
Parameter	**Significance**
Chlorine (Total)	Chlorine is a chemical commonly used as a biocide in drinking water and wastewater treatment, as well as numerous other industrial applications. Excess levels of chlorine can have acute and chronic toxicity on aquatic organisms. It can be used as an indicator of wastewater, and potable water migration into a storm drain system, and/or illicit industrial discharges.
Color	A measure that indicates the amount of photosynthetically active light available to primary producers at lower depths. Color can be used as an indicator of sewage, grey water, and industrial discharges.
Total Nitrogen (TN)	A naturally occurring compound necessary for plant health. Excessive levels can accelerate algal growth, which can lead to depletions of dissolved oxygen in water and decreased light transmission to benthic organisms. Nitrogen is an indicator of sewage, and fertilizer contamination. EPA recommendations based on reference streams in Ecoregion IX suggest an ideal TN criteria of 0.07-1.0 mg/L.
Total Phosphorus (TP)	A naturally occurring compound necessary for plant health. Excessive levels can accelerate algal growth, which can lead to depletions of dissolved oxygen in water and decreased light transmission to benthic organisms. Phosphorus is an indicator of sewage, and fertilizer contamination. EPA recommendations based on reference streams in Ecoregion IX suggest an ideal TP criteria of 0.022-0.10 mg/L.

2. DISTRIBUTION MAP OF INSPECTED & SAMPLED OUTFALLS

Visual inspections of 78 outfalls were conducted throughout the Sligo Creek watershed within the City of Takoma Park following 72 hours of dry weather (Figure 1). BayLand collected surface water samples at 14 outfalls where active flow was observed. All the outfalls sampled had been sampled previously.

The spatial distribution of the 14 outfalls where dry weather flow was observed did not provide any obvious indicators of problem areas within the site vicinity to focus illicit discharge source identification and elimination efforts.

N

Legend

- Outfalls
- Streams
- CONVEYANCE
- Takoma Park Boundary
- Outfall Inspected
- Outfall Inspected & Sampled

1,200 600 0 1,200 Feet

1 " = 1,200 Feet

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Takoma Park Outfall Location Map 2022

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3. SAMPLING RESULTS

There were surface water samples collected at 14 distinct outfall locations where active water flow was observed following 72 hours of antecedent dry weather. All 14 outfalls were sampled in 2021, 12 outfalls were sampled in 2020, 10 outfalls were sampled in 2019, eight outfalls were sampled in 2017, 2015, 2010, and 2007. Outfall testing results are summarized in Tables 4 through 17 and the laboratory data sheets are provided in Appendix A.

3.1. Result Tables of Structures Sampled

Table 4 – Structure #80 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.9	8.0	8.2	7.9	7.8	7.66	7.55	6.83	6.5 to 8.5	6.5 to 9.0
Temperature (C)	16.1	21.1	24.3	21.2	23.5	14.9	17.8	11.8	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	470	610	794	630	648	670	643	870	No existing criteria	No existing criteria
Turbidity (NTU)	6.0	0.3	1.5	0.67	16.4	3.65	3.72	5.88	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	1.6	<0.10	<0.025	0.026	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	<0.2	<0.2	<0.2	<0.2	0.119	0.123	0.449	0.259	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	6.4	<0.05	0.025	0.0272	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	2,100	1,100	488	198.9	>2419.6	727	55	152	235	126[2]
Enterococci (MPN/100ml)	9,300	≥2,400	238	36.8	>2419.6	579	131	86	61	35[2]
Total Coliform	Presence	1,300	>2,420	>2,419.6	>2419.6	>2419.6	1730	>2419.6	No existing criteria	No existing criteria
Fluoride	0.5	<0.2	<0.2	0.21	0.24	ND	ND	ND	No existing criteria	No existing criteria
Hardness	144	120	138	130	110	153	134	151	No existing criteria	No existing criteria
Potassium	3.6	6.1	5.02	4.23	3.9	4.7	4.1	4.4	No existing criteria	No existing criteria
Chloride	63	130	164	150	149	140	127	171	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.71	0.02	0.12	0.07	0.13	0.00	0.16	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	5	26	17	25	10	10	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	2.1	3.6	1.67	ND	1.60	2.15	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	<0.05	<0.05	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 5 – Structure #212 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.6	7.4	7.5	7.83	7.4	7.61	7.4	6.8	6.5 to 8.5	6.5 to 9.0
Temperature (C)	18.9	20.5	21.5	20.9	21.6	15.0	17.4	12.3	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	440	490	574	570	606	547	602	662	No existing criteria	No existing criteria
Turbidity (NTU)	70	0.7	1.0	0.94	2.45	9.17	3.50	5.54	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.12	<0.10	<0.025	0.028	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	<0.2	<0.2	<0.2	<0.2	0.131	0.110	0.443	0.188	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	5.1	<0.05	0.13	0.0196	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	7,500	650	548	88.4	387	50	312	133	235	126[2]
Enterococci (MPN/100ml)	4,300	1,100	98.4	7.5	1,410	105	>2419	32	61	35[2]
Total Coliform	Presence	≥2,400	>2,420	>2,419.6	>2419.6	1050	>2419.6	980	No existing criteria	No existing criteria
Fluoride	0.2	<0.2	<0.2	0.16	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	68	95	73.6	85	87	92.4	109	89	No existing criteria	No existing criteria
Potassium	3.7	4.9	3.26	3.54	3.7	3.6	3.9	3.2	No existing criteria	No existing criteria
Chloride	90	120	139	150	149	140	123	143	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	90	0.02	<0.01	0.06	ND	0.00	0.03	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	<5	5	9.0	10	20	10	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	2.1	4.4	2.03	ND	3.10	1.85	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	<0.05	<0.05	ND	ND	0.10	ND	No existing criteria	No existing criteria

Table 6 – Structure #289 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.4	7.8	8.1	7.68	7.4	8.31	7.42	6.83	6.5 to 8.5	6.5 to 9.0
Temperature (C)	18.3	18.9	21.6	19.6	22.2	15.4	14.6	12.83	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	790	800	789	840	971	907	860	2200	No existing criteria	No existing criteria
Turbidity (NTU)	9.2	200	1.9	1.5	8.34	7.83	1.13	0.24	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.27	<0.10	<0.025	<0.02	ND	ND	ND	0.241	No existing criteria	No existing criteria
Ammonia	<0.2	0.4	<0.2	<0.2	0.375	0.105	0.174	0.381	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	5.8	0.10	0.035	0.0464	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	930	730	488	107.6	105	2420	517	115	235	126[2]
Enterococci (MPN/100ml)	2,300	≥2,400	1,050	517.2	190	>2419.6	792	135	61	35[2]
Total Coliform	Presence	1,700	>2,420	>2,419.6	>2419.6	>2419.6	980	>2419.6	No existing criteria	No existing criteria
Fluoride	0.5	0.3	<0.2	0.21	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	244	250	189	210	209	164	183	185	No existing criteria	No existing criteria
Potassium	7.4	9.1	5.92	5.35	8.4	25.9	5.3	5.6	No existing criteria	No existing criteria
Chloride	120	160	156	190	217	142	199	190	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.03	<0.02	0.11	0.01	ND	0.02	0.09	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	48	18	19	25	20	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	2.4	3.35	1.4	3.36	1.79	1.60	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	0.26	<0.05	ND	0.10	ND	ND	No existing criteria	No existing criteria

Table 7 – Structure #290 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	9.7	No flow	8.1	7.99	7.2	8.12	7.30	7.12	6.5 to 8.5	6.5 to 9.0
Temperature (C)	25	No flow	21.8	19.6	23.3	16.7	13.6	11.72	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	1,500	No flow	716	740	1110	842	660	932	No existing criteria	No existing criteria
Turbidity (NTU)	11	No flow	1.5	2.6	32.6	8.30	0.60	2.22	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.13	No flow	<0.025	<0.02	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	<0.2	No flow	<0.2	<0.2	0.174	ND	ND	0.498	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	5.1	No flow	0.037	0.0407	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	4,300	No flow	687	70.8	2420	2420	ND	41	235	126[2]
Enterococci (MPN/100ml)	7,500	No flow	687	32.7	>2419.6	>2419.6	2	75	61	35[2]
Total Coliform	Presence	No flow	>2,420	2,419.6	>2419.6	>2419.6	ND	1990	No existing criteria	No existing criteria
Fluoride	0.4	No flow	<0.2	0.32	ND	ND	0.58	ND	No existing criteria	No existing criteria
Hardness	104	No flow	194	200	220	188	139	184	No existing criteria	No existing criteria
Potassium	4.3	No flow	5.87	5.51	10.3	9.7	3.6	5.8	No existing criteria	No existing criteria
Chloride	390	No flow	147	150	230	138	139	183	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	<0.2	No flow	0.11	0.06	ND	0.00	0.52	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	No flow	24	32	60	15	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	3	4.99	2.59	2.47	2.26	3.31	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	0.10	<0.05	ND	ND	0.19	ND	No existing criteria	No existing criteria

Table 8 – Structure #736 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	7.2	7.12	6.91	6.45	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	23.4	15.5	17.8	12.4	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	750	773	713	846	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	1.13	0.27	0.28	1.81	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	0.162	0.133	ND	ND	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	45	2	2	4	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	921	5	11	6	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	>2419.6	387	107	1350	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	189	186	188	199	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	4.7	4.9	4.9	6.5	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	186	180	123	136	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	0.01	0.16	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	5	5	5	ND	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	2.03	ND	2.20	1.80	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 9 – Structure #862 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	7.23	7.57	7.5	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	17.5	17.8	11.27	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	584	706	619	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.20	0.34	0.32	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	0.64	0.341	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	2	4	16	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	11	20	3	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	173	649	167	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	138	147	138	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	3.5	3.5	3.6	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	80.5	167	95.9	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.00	ND	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	5	5	10	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	No existing criteria	No existing criteria

Table 10 – Structure #879 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	7.6	7.71	8.87	6.41	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	23.9	18	15.7	12.44	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	751	562	618	607	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	0.82	0.51	0.46	0.46	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	0.134	0.323	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	461	15	3	47	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	>2419.6	21	36	4	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	>2419.6	1730	113	187	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	168	124	124	136	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	4.7	3.4	3.2	3.6	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	170	79.3	139	94.8	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	0.00	ND	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	10	10	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 11 – Structure #881 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	7.3	7.94	8.23	6.71	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	24.3	18.6	16.2	11.55	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	756	549	621	612	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	1.24	0.50	0.57	1.03	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	0.271	ND	0.19	0.328	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	248	36	6	5	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	1550	15	20	11	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	>2419.6	2420	165	214	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	173	117	125	132	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	5.3	3.5	3.3	3.5	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	176	76.2	141	95.1	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	0.00	0.00	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	10	10	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 12 – Structure #965 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.3	7.9	7.8	7.68	7.19	7.65	7.53	7.38	6.5 to 8.5	6.5 to 9.0
Temperature (C)	21.1	20.5	24.8	19.2	26.2	18.3	15.7	11.22	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	800	790	1,040	990	746	750	694	900	No existing criteria	No existing criteria
Turbidity (NTU)	1.4	1.6	1.1	<0.5	2.58	0.37	0.86	0.28	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.12	<0.10	<0.025	<0.02	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	<0.2	<0.2	<0.2	<0.2	ND	ND	ND	0.315	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	4.8	<0.05	0.013	0.0583	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	430	690	411	488.4	613	153	56	17	235	126[2]
Enterococci (MPN/100ml)	930	≥2,400	1,300	980.4	>2,419.6	291	344	10	61	35[2]
Total Coliform	Presence	≥2,400	>2,420	>2,419.6	>2,419.6	2420	816	1550	No existing criteria	No existing criteria
Fluoride	0.2	<0.2	<0.2	<0.1	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	220	230	245	230	162	178	142	159	No existing criteria	No existing criteria
Potassium	6.1	7.0	5.58	5.28	4.7	4.4	4.1	4.5	No existing criteria	No existing criteria
Chloride	160	160	234	240	171	108	163	193	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.09	0.02	0.04	0.02	ND	0.03	0.02	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	6	8	9.0	10	5	5	10	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	1.6	5.49	1.86	1.87	2.46	3.41	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	<0.05	<0.05	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 13 – Structure #1013 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	7.44	7.22	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	16.8	9.11	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	1860	1980	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.15	0.72	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.357	0.320	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	2	1	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	6	548	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	579	1990	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	323	351	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	8.8	9.6	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	547	652	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.04	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	3.51	2.31	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria

Table 14 – Structure #1077 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	7.36	6.32	6.5 to 8.5	6.5 to 9.0
Temperature (C)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	12.8	9.72	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	785	909	No existing criteria	No existing criteria
Turbidity (NTU)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	3.01	16	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
Ammonia	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	0.395	0.711	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	28	1300	235	126[2]
Enterococci (MPN/100ml)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	4	61	35[2]
Total Coliform	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	>2419.6	1730	No existing criteria	No existing criteria
Fluoride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	No existing criteria	No existing criteria
Hardness	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	155	150	No existing criteria	No existing criteria
Potassium	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	3.6	4.2	No existing criteria	No existing criteria
Chloride	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	193	205	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	20	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	1.78	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	ND	0.16	No existing criteria	No existing criteria

Table 15 – Structure #1106 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.6	7.4	7.4	7.13	6.8	7.25	7.09	6.36	6.5 to 8.5	6.5 to 9.0
Temperature (C)	25.6	19.4	22.4	24.0	26.1	19.3	19.3	14.88	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	540	780	1,130	1,100	1180	1040	1070	1140	No existing criteria	No existing criteria
Turbidity (NTU)	3.4	7.9	18.9	30	46.0	29.3	14.0	45.2	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.12	<0.10	<0.025	0.086	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	<0.2	0.6	0.47	0.48	0.591	0.336	0.411	0.708	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	6.3	<0.05	0.021	0.0225	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	230	33	4.1	191.8	5	ND	2	172	235	126[2]
Enterococci (MPN/100ml)	1,500	43	7.4	2.0	133	ND	5	83	61	35[2]
Total Coliform	Presence	≥2,400	>2,420	>2,419.6	>2419.6	461	167	1730	No existing criteria	No existing criteria
Fluoride	1.0	0.3	<0.2	0.15	ND	0.22	ND	ND	No existing criteria	No existing criteria
Hardness	136	130	177	200	179	175	180	146	No existing criteria	No existing criteria
Potassium	5.2	7.2	6.24	6.170	5.8	5.3	4.9	4.7	No existing criteria	No existing criteria
Chloride	85	210	290	330	387	309	237	279	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.02	0.03	0.05	0.16	0.13	0.03	0.02	0.11	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	<5	57	183	250	100	60	5	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	2.1	3.3	2.16	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	0.10	<0.05	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 16 – Structure #1107 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.3	7.9	8.0	7.94	7.1	7.32	7.3	5.87	6.5 to 8.5	6.5 to 9.0
Temperature (C)	16.7	18.9	22.1	18.6	24.3	66.1	18.6	12.1	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	720	910	1,200	900	716	758	696	763	No existing criteria	No existing criteria
Turbidity (NTU)	28	36	5.3	1.0	1.66	3.58	5.17	9.26	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.18	<0.10	<0.025	0.022	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	0.6	1.7	1.35	<0.2	0.929	0.212	0.260	0.200	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	7.4	<0.05	0.025	0.0242	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	30	69	206	547.6	613	1410	82	4	235	126[2]
Enterococci (MPN/100ml)	7,500	23	326	54.5	488	62	64	3	61	35[2]
Total Coliform	Presence	≥2,400	>2,420	>2,416.9	>2419.6	1990	961	308	No existing criteria	No existing criteria
Fluoride	0.3	<0.2	<0.2	0.12	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	192	230	162	210	164	175	128	118	No existing criteria	No existing criteria
Potassium	6.0	8.6	4.75	4.65	5.7	4.9	3.7	3.3	No existing criteria	No existing criteria
Chloride	120	240	265	220	165	174	145	176	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.09	0.02	0.1	0.0	ND	0.04	ND	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	50	60	59	19	20	25	25	5	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	1.8	2.64	1.95	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	<0.05	<0.05	ND	ND	ND	ND	No existing criteria	No existing criteria

Table 17 – Structure #1220 Results										
Parameter	**2007 Result**	**2010 Result**	**2015 Result**	**2017 Result**	**2019 Result**	**2020 Result**	**2021 Result**	**2022 Result**	**Maryland COMAR Standard**	**EPA Standard**
pH	7.3	7.9	8.0	7.94	7.1	7.32	7.3	6.72	6.5 to 8.5	6.5 to 9.0
Temperature (C)	16.7	18.9	22.1	18.6	24.3	66.1	18.6	11.3	Maximum 32°C or ambient temperature, whichever is greater	Site and species specific
Conductivity (umhos/cm)	720	910	1,200	900	716	758	696	1090	No existing criteria	No existing criteria
Turbidity (NTU)	28	36	5.3	1.0	1.66	3.58	5.17	2.76	Maximum of 150 NTU and monthly average of 50 NTU	Site and species specific
Detergents	0.18	<0.10	<0.025	0.022	ND	ND	ND	ND	No existing criteria	No existing criteria
Ammonia	0.6	1.7	1.35	<0.2	0.929	0.212	0.260	0.482	No existing criteria	Chronic 1.9[1], Acute 17[1]
Boron	7.4	<0.05	0.025	0.0242	ND	ND	ND	ND	No existing criteria	No existing criteria
E. coli (MPN/100ml)	30	69	206	547.6	613	1410	82	67	235	126[2]
Enterococci (MPN/100ml)	7,500	23	326	54.5	488	62	64	11	61	35[2]
Total Coliform	Presence	≥2,400	>2,420	>2,416.9	>2419.6	1990	961	411	No existing criteria	No existing criteria
Fluoride	0.3	<0.2	<0.2	0.12	ND	ND	ND	ND	No existing criteria	No existing criteria
Hardness	192	230	162	210	164	175	128	120	No existing criteria	No existing criteria
Potassium	6.0	8.6	4.75	4.65	5.7	4.9	3.7	3.7	No existing criteria	No existing criteria
Chloride	120	240	265	220	165	174	145	268	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	0.09	0.02	0.1	0.0	ND	0.04	ND	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	50	60	59	19	20	25	25	25	Maximum of 75 units as a monthly average	75
Total Nitrogen (mg/L)	Not Tested	Not Tested	1.8	2.64	1.95	ND	ND	ND	No existing criteria	No existing criteria
Total Phosphorus (mg/L)	Not Tested	Not Tested	<0.05	<0.05	ND	ND	ND	0.38	No existing criteria	No existing criteria

3.2. Evaluation of Results

E. coli and enterococci displayed lower levels than previous years, with the exception of #1077, at each outfall with levels exceeding the Maryland COMAR standards and/or EPA standards. 2022 has the lowest number of outfalls sampled with flowing water of any year. In 2022, elevated levels of bacteria decreased for most of the outfalls, but the most notable change was #212. Outfall #289 bacteria levels were less than 2021 but outfall #290 was considerably higher than 2021. Outfalls #290 and #1107 displayed orange in both the pipe and outfall channel. Chlorine did not exceed Maryland and/or EPA standards at most of the outfalls. Four samples had pH levels that were below both Maryland COMAR and EPA standards. The pH levels were below 6.5 which could indicate leaf litter, woody debris and/or lawn fertilizers causing the water to be a bit acidic. This will be monitored next year to see if several samples continue to be slightly acidic. Outfalls #862, #881, #965 and #1220 were all sampled and tested; however, zero parameters exceeded Maryland COMAR or EPA standards.

Table 18 – Evaluation of Field and Laboratory Test Results (2022)

Structure # Flow Type	Exceedance Parameters	Conclusions
#80 Substantial	E. coli	Results continue to suggest possible sanitary wastewater and potable water migration into a storm drain system, and/or illicit industrial discharges. E. coli levels decreased from 2021 but continue to exceed EPA and Maryland standards.
#212 Substantial	E. coli	Results continue to suggest possible sanitary wastewater contamination or septic migration into storm drain system. E. coli decreased from 2021 but continues to exceed EPA standards.
#289 Substantial	Enterococci	Results continue to suggest possible sanitary wastewater contamination or septic migration into storm drain system. Enterococci decreased from 2021 but continues to exceed Maryland and EPA standards.
#290 Substantial	Enterococci	Results suggest possible sanitary wastewater, and potable water migration into a storm drain system. Enterococci increased from 2021 and continues to exceed Maryland and EPA standards.
#736 Moderate	Low pH	Results suggest possible potable water migration. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish.
#879 Moderate	Low pH	Results suggest possible potable water migration. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish.
#1013 Trickle	Enterococci Chloride	Results continue to suggest possible sanitary wastewater and potable water migration into a storm drain system, and/or illicit industrial discharges. Enterococci levels increased from 2021 and now exceed EPA and Maryland standards. Chloride again exceeds EPA chronic standards and Maryland standards.
#1077 Trickle	E. coli Low pH	Results suggest possible sanitary wastewater contamination or septic migration into storm drain system. E. coli increased significantly from 2021 and exceed EPA and Maryland standards. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish.
#1106 Moderate	Low pH E. coli Enterococci	Results suggest possible wastewater, and potable water migration into a storm drain system, and/or illicit industrial discharges. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish.
#1107 Trickle	Low pH	Results suggest possible potable water migration. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish.

3.3. Photo Documentation of Sampled Outfalls

Photo 1 – Structure #80

Photo 2 – Structure #212

Photo 3 – Stucture #289

Photo 4 – Structure #290

Photo 5 – Structure #736

Photo 9 – Structure #862

Photo 10 – Structure #879

Photo 11 – Structure #881

Photo 13 – Structure #965

Photo 16 – Structure #1013

Photo 18 – Structure #1077

Photo 19 – Structure #1106

Photo 20 – Structure #1107

Photo 23 – Structure #1220

4. OUTFALL STABILITY

All 78 outfalls were investigated for key stability parameters while water quality sampling was being conducted. These parameters included bank erosion, deposition, condition of the outfall pipe and the condition of the outfall channel. As a result, 23 sites were identified as in need of retrofit, emergency repairs and/or should be monitored closely to prevent future failure.

4.1. Photo Documentation of Select Outfalls

Photo 24 – Structure #55: Failing concrete apron with minor undermining and high bank erosion downstream

Photo 25 – Structure #60: Concrete outfall cracked and failing

Photo 26 – Structure #71: Outfall 60% clogged with sediment

Photo 27 – Structure #212 – Corner of outfall broken

Photo 28 – Structure #273 – Outfall filled with sediment

Photo 29 – Structure #289 & #290: Concrete apron cracked and undermined with deep scour pool; wingwall is cracked

Photo 30 - Structure #854: Outfall is filled with sediment and leaf matter

Photo 31 – Structure #881 is cracked on bottom causing erosion under pipe

Photo 32 – Structure #930: Outfall cracked on bottom causing erosion under pipe

Photo 33 – Structure #960: Outfall has erosion under the pipe, has headcut and eroded banks leading to stream

Photo 34 – Structure #962: Road edge and concrete section of the outfall pipe is failing and bank erosion downstream

Photo 35 – Structure # 973: Outfall overgrown with vegetation and pipe broken

Photo 36 - #979: Obstructed by concrete and debris

Photo 37 – Structure #983: Base is eroded and wingwall is cracked

Photo 38 – Structure #986: Outfall overgrown with vegetation

Photo 39 – Structure # 991: Outfall filled 95 percent with sediment and debris

Photo 40 – Structure #1004: Outfall filled 35 percent with sediment and debris

Photo 41 – Structure #1005: Outfall 95% full of sediment

Photo 42 – Structure #1028: End of concrete channel undermined, 2-foot drop to channel along with eroded banks

Photo 43 – Structure #1080: Riprap partially obstructing flow

Photo 44 – Structure #1107: Crack in the pipe causing water to flow under the outfall causing erosion beneath the pipe

Photo 45 – Structure #1153: Outfall pipe is crushed and 40% filled with sediment

Photo 46 – Structure #1230: Outfall cracked with 50 percent filled sediment and debris

4.2. Evaluation of Outfall Stability

Outfalls were selected for potential retrofit or emergency repairs due to one or more of the following: excessive bank erosion, sediment deposition, flow obstruction, the poor condition of the outfall pipe and/or the poor the condition of the outfall channel.

Most of the issues at these 23 sites were either deterioration of the outfall pipe or an unstable outfall channel. These sites require further investigation to assess the total magnitude of deterioration and potential for outfall retrofit or emergency repair. Total Maximum Daily Load (TMDL) and MS4 water quality credits can also be calculated during this evaluation. The potential projects would provide stable outfall structures, stable outfall channels, minimize impact to adjacent private properties and existing forests, and maximize water quality and ecological uplift.

5. RECOMMENDATIONS

BayLand was unable to locate or identify illicit discharge sources upstream of the outfalls which exhibited dry weather flow during the limited field investigation. Further stormwater drainage system studies and analyses are recommended to determine the upstream illicit discharge sources.

Seven of the 14 structures sampled had elevated levels of E. coli and/or enterococci. E. coli and enterococci are indicators of fecal material contamination for illicit discharge detection. BayLand recommends a trunk investigation of a few outfalls in which we will progressively work up the trunk from the outfalls and field test manholes along the way. The highest priority outfall would be #1077 which displayed significantly high E. coli levels. Upstream flow tracing and mapping of sanitary sewer lines in relation to stormwater lines could also be recommended to determine if exfiltration pathways are the source of elevated E. coli, enterococci, and chlorine levels found this year. If the upstream source remains unidentified, closed-circuit television (CCTV) pipe inspection services are recommended. In-stream monitoring at points upstream and downstream of recreational areas can also be conducted to determine possible health risks to the public, if any, and to determine priority areas for illicit discharge elimination.

One of the 14 structures sampled displayed chloride levels which were above the EPA chronic and acute toxicity standards. Chloride can be used as an indicator of wastewater, potable water migration into a storm drain system, and/or illicit industrial discharges. Chloride tests can be conducted by a lab and are relatively affordable. BayLand also recommends sampling surface water downstream of the outfalls to determine ambient chlorine levels in the receiving stream.

Five of the 14 structures sampled displayed pH levels below the Maryland standards and the EPA standards. Low pH can be used as an indicator of possible potable water migration. Low pH can impede shell formation for aquatic invertebrates and can bring metals to a more dangerous dissolved state which has been shown to kill fish. pH test kits are relatively affordable, and sampling can be conducted quickly and efficiently. If results at these same outfalls for 2023 continue to be slightly acidic BayLand would recommend pH testing at each outfall and in the receiving streams to determine if the recreational waters downstream are also slightly acidic.

Closed-circuit television (CCTV) was conducted on the storm drain systems for #80, #212, and #1106 in 2021. Video was performed for outfall #80 to just above manhole #8002. Video for outfall #212 was taken from the outfall to manhole #21203. Video was captured for outfall #1106 to just above manhole #110601. These videos were then reviewed for problems such as cracks, pipe deterioration, leaks, and other issues that could result in illicit discharges and the results are provided in a separate report. In 2021 illicit discharge tracking was performed for outfalls #289, #290, #965, #1107, and #1220 and their respective storm drain systems upstream.

We also recommend conducting a detailed outfall assessment for some of the higher priority unstable outfall sites. Some outfalls are in poor structural condition and are higher priority than the others. Other outfall channels are in poor condition and could benefit from retrofit. The outfalls can be investigated and assessed for all visual signs of water quality and structural impairments, existing vegetation, bank and bed erosion, and downstream channel instability. We would then rank the unstable outfalls according to the severity of instabilities, constructability, property ownership and potential for maximum MS4 and TMDL credit. BayLand can also provide design objectives and a concept level construction cost estimate. All this data would then be summarized and include a brief narrative of the outfall assessment methodology and restoration prioritization.

Based on previous years of recommendations and additional work performed by BayLand the highest priority recommendations would be to conduct CCTV videos in outfall systems #289 and #290 and perform illicit discharge tracking at #1077. However, a detailed outfall assessment on several structures could provide more value to the City including any potential MS4 and TMDL credits.

6. CONCLUSION

The Sligo Creek Watershed has been significantly influenced by commercial and residential land uses, particularly relating to the stormwater system within Takoma Park. Takoma Park was rapidly developed roughly 70 years ago and therefore some of the storm drain infrastructure is in poor condition. Water sampling results continue to indicate possible sanitary wastewater contamination or septic migration into storm drain system. Chloride was prevalent in one of the samples collected this year. A few samples also resulted in pH levels being lower than the EPA and MD pH criteria.

Tracking and finding the illicit discharges will help reduce toxic pollutants which are threatening to aquatic life and human health. Looking into the sources of discharge can help determine appropriate action and then reduction in pollutants entering the stream system. Implementing outfall retrofits and emergency repairs will protect public infrastructure, reduce channel erosion and erosion threatening infrastructure, protect adjacent lands, improve, and enhance riparian buffer, and reduce pollutants to receiving bodies of water.

Outfall screening and evaluation for 2023 will follow the same methodologies used in previous years. The sampling will be conducted around the same time of year and results will be compared to previous years of sampling.

7. REFERENCES

Environmental Consultants and Contractors. 2017. *Dry Weather Water Analysis & Outfall Evaluation Report*. Chantilly, VA.

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APPENDIX A

Laboratory Data Sheets

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **BayLands Consultants & Designers, Inc.**

Project Takoma Park Dry Weather
Workorder 3229804
Report ID 156845 on 3/21/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Mar 01, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Elizabeth Parker (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Bill Heckert - BayLands Consultants & Designers, Inc.
Zachary Tate - BayLands Consultants & Designers, Inc.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3229804001	212	Water	03/01/2022 11:00 AM	03/01/2022 4:35 PM	CBC	Collected By Client
3229804002	80	Water	03/01/2022 11:24 AM	03/01/2022 4:35 PM	CBC	Collected By Client
3229804003	736	Water	03/01/2022 9:40 AM	03/01/2022 4:35 PM	CBC	Collected By Client
3229804004	1107	Water	03/01/2022 12:05 PM	03/01/2022 4:35 PM	CBC	Collected By Client
3229804005	1220	Water	03/01/2022 12:35 PM	03/01/2022 4:35 PM	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation #	
1	The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
2	The color determination was performed on a sample aliquot with a pH of 6.
3	Color by SM 2120B is reported as True Color.
4	MBAS calculated as LAS molecular weight 348 g/mol.
5	This sample result was calculated and reported using Method SM2340B-2011.
6	Analyte was analyzed past the 48 hour holding time.
7	Analyte was analyzed past the 8 hour holding time.

Client Sample ID	**212**	Collected	**03/01/2022 11:00 AM**
Lab Sample ID	**3229804001**	Lab Receipt	**03/01/2022 4:35 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3229804001-C1(Nitric Acid)
Batch	823638	Aliquot	50 mL
Date	03/03/2022 11:00 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	823872	Dilution	1
Date	03/04/2022 12:12 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	89.0	mg/L	0.33	C,5
Potassium, Total	7440-09-7	3.2	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3229804001-A(Na Thiosulfate)
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823223	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	133	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823412	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	980	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3229804001-B(Na Thiosulfate)
Batch	823215	Aliquot	100 mL
Date	03/01/2022 6:11 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823216	Dilution	1
Date	03/02/2022 7:57 PM	Analyst	MBR

Client Sample ID	212	Collected	03/01/2022 11:00 AM
Lab Sample ID	3229804001	Lab Receipt	03/01/2022 4:35 PM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	32	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3229804001-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823495	Dilution	2
Date	03/02/2022 10:36 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3229804001-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824834	Dilution	5
Date	03/10/2022 1:57 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	143	mg/L	5.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3229804001-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	823934	Dilution	5
Date	03/08/2022 8:40 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	1.85	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3229804001-G(Sulfuric Acid)
Batch	823515	Aliquot	50 mL
Date	03/02/2022 2:46 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823758	Dilution	1
Date	03/03/2022 7:28 PM	Analyst	SAM

Client Sample ID	212	Collected	03/01/2022 11:00 AM
Lab Sample ID	3229804001	Lab Receipt	03/01/2022 4:35 PM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3229804001-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	823491	Dilution	10
Date	03/04/2022 1:06 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.188	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3229804001-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823256	Dilution	1
Date	03/03/2022 11:42 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3229804001-E(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823255	Dilution	1
Date	03/03/2022 9:50 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	5.54	NTU	0.10	C

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	212	Collected	03/01/2022 11:00 AM
Lab Sample ID	3229804001	Lab Receipt	03/01/2022 4:35 PM

Prep

Method	N/A	Container	3229804001-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	662	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3229804001-G(Sulfuric Acid)
Batch	823528	Aliquot	5 mL
Date	03/03/2022 6:55 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	823989	Dilution	1
Date	03/04/2022 11:28 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3229804001-E(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823253	Dilution	1
Date	03/03/2022 10:52 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3229804001-D(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823469	Dilution	1
Date	03/02/2022 2:48 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,4

Client Sample ID	**212**	Collected	**03/01/2022 11:00 AM**
Lab Sample ID	**3229804001**	Lab Receipt	**03/01/2022 4:35 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3229804001-G(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	825564	Dilution	1
Date	03/12/2022 4:14 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	1.85	mg/L	1.50	C

Client Sample ID	**80**	Collected	**03/01/2022 11:24 AM**
Lab Sample ID	**3229804002**	Lab Receipt	**03/01/2022 4:35 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3229804002-C1(Nitric Acid)
Batch	823638	Aliquot	50 mL
Date	03/03/2022 11:00 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	823872	Dilution	1
Date	03/04/2022 12:15 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	151	mg/L	0.33	C,5
Potassium, Total	7440-09-7	4.4	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3229804002-A(Na Thiosulfate)
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823223	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	152	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823412	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	>2419.6	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3229804002-B(Na Thiosulfate)
Batch	823215	Aliquot	100 mL
Date	03/01/2022 6:11 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823216	Dilution	1
Date	03/02/2022 7:57 PM	Analyst	MBR

Client Sample ID	**80**	Collected	**03/01/2022 11:24 AM**
Lab Sample ID	**3229804002**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	86	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3229804002-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823495	Dilution	2
Date	03/02/2022 10:48 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3229804002-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824834	Dilution	5
Date	03/10/2022 2:08 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	171	mg/L	5.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3229804002-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	823934	Dilution	5
Date	03/08/2022 8:41 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	2.15	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3229804002-G(Sulfuric Acid)
Batch	823515	Aliquot	50 mL
Date	03/02/2022 2:46 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823758	Dilution	1
Date	03/03/2022 7:31 PM	Analyst	SAM

Client Sample ID	**80**	Collected	**03/01/2022 11:24 AM**
Lab Sample ID	**3229804002**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3229804002-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	823491	Dilution	10
Date	03/03/2022 11:31 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.259	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3229804002-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823256	Dilution	1
Date	03/03/2022 11:42 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3229804002-E(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823255	Dilution	1
Date	03/03/2022 9:50 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	5.88	NTU	0.10	C

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	80	Collected	03/01/2022 11:24 AM
Lab Sample ID	3229804002	Lab Receipt	03/01/2022 4:35 PM

Prep

Method	N/A	Container	3229804002-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	870	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3229804002-G(Sulfuric Acid)
Batch	823528	Aliquot	5 mL
Date	03/03/2022 6:55 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	823989	Dilution	1
Date	03/04/2022 11:31 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3229804002-E(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823253	Dilution	1
Date	03/03/2022 10:52 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3229804002-D(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823469	Dilution	1
Date	03/02/2022 2:48 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,4

Client Sample ID	**80**	Collected	**03/01/2022 11:24 AM**
Lab Sample ID	**3229804002**	Lab Receipt	**03/01/2022 4:35 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3229804002-G(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	825564	Dilution	1
Date	03/12/2022 4:14 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	2.15	mg/L	1.50	C

Client Sample ID	**736**	Collected	**03/01/2022 9:40 AM**
Lab Sample ID	**3229804003**	Lab Receipt	**03/01/2022 4:35 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3229804003-C1(Nitric Acid)
Batch	823638	Aliquot	50 mL
Date	03/03/2022 11:00 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	823872	Dilution	1
Date	03/04/2022 12:18 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	199	mg/L	0.33	C,5
Potassium, Total	7440-09-7	6.5	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3229804003-A(Na Thiosulfate)
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823223	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	4	MPN/100mL	1	C,7

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823412	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1350	MPN/100mL	1	C,7

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3229804003-B(Na Thiosulfate)
Batch	823215	Aliquot	100 mL
Date	03/01/2022 6:11 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823216	Dilution	1
Date	03/02/2022 7:57 PM	Analyst	MBR

Client Sample ID	**736**	Collected	**03/01/2022 9:40 AM**
Lab Sample ID	**3229804003**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	6	MPN/100mL	1	C,7

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3229804003-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823495	Dilution	2
Date	03/02/2022 10:59 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3229804003-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824834	Dilution	5
Date	03/10/2022 2:18 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	136	mg/L	5.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3229804003-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	823934	Dilution	5
Date	03/08/2022 8:42 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	1.80	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3229804003-G(Sulfuric Acid)
Batch	823515	Aliquot	50 mL
Date	03/02/2022 2:46 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823758	Dilution	1
Date	03/03/2022 7:34 PM	Analyst	SAM

Client Sample ID	**736**	Collected	**03/01/2022 9:40 AM**
Lab Sample ID	**3229804003**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3229804003-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	823491	Dilution	10
Date	03/04/2022 2:55 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	ND	mg/L	0.100	C,ND

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3229804003-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823256	Dilution	1
Date	03/03/2022 11:42 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	ND	CU	5	C,ND,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3229804003-E(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823255	Dilution	1
Date	03/03/2022 9:50 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	1.81	NTU	0.10	C,6

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	736	Collected	03/01/2022 9:40 AM
Lab Sample ID	3229804003	Lab Receipt	03/01/2022 4:35 PM

Prep

Method	N/A	Container	3229804003-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	846	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3229804003-G(Sulfuric Acid)
Batch	823528	Aliquot	5 mL
Date	03/03/2022 6:55 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	823989	Dilution	1
Date	03/04/2022 11:33 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3229804003-E(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823253	Dilution	1
Date	03/03/2022 10:52 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3229804003-D(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823469	Dilution	1
Date	03/02/2022 2:48 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,4

Client Sample ID	**736**	Collected	**03/01/2022 9:40 AM**
Lab Sample ID	**3229804003**	Lab Receipt	**03/01/2022 4:35 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3229804003-G(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	825564	Dilution	1
Date	03/12/2022 4:14 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	1.80	mg/L	1.50	C

Client Sample ID	**1107**	Collected	**03/01/2022 12:05 PM**
Lab Sample ID	**3229804004**	Lab Receipt	**03/01/2022 4:35 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3229804004-C1(Nitric Acid)
Batch	823638	Aliquot	50 mL
Date	03/03/2022 11:00 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	823872	Dilution	1
Date	03/04/2022 12:29 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	118	mg/L	0.33	C,5
Potassium, Total	7440-09-7	3.3	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3229804004-A(Na Thiosulfate)
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823223	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	4	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823412	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	308	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3229804004-B(Na Thiosulfate)
Batch	823215	Aliquot	100 mL
Date	03/01/2022 6:11 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823216	Dilution	1
Date	03/02/2022 7:57 PM	Analyst	MBR

Client Sample ID	**1107**	Collected	**03/01/2022 12:05 PM**
Lab Sample ID	**3229804004**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	3	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3229804004-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823585	Dilution	2
Date	03/02/2022 10:09 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	176	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3229804004-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	823934	Dilution	5
Date	03/08/2022 8:50 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.57	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3229804004-G(Sulfuric Acid)
Batch	823515	Aliquot	50 mL
Date	03/02/2022 2:46 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823758	Dilution	1
Date	03/03/2022 7:37 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	1107	Collected	03/01/2022 12:05 PM
Lab Sample ID	3229804004	Lab Receipt	03/01/2022 4:35 PM

Prep

Method	N/A	Container	3229804004-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	823788	Dilution	10
Date	03/05/2022 12:25 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.200	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3229804004-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823256	Dilution	1
Date	03/03/2022 11:42 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3229804004-E(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823255	Dilution	1
Date	03/03/2022 9:50 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	9.26	NTU	0.10	C

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3229804004-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	763	umhos/cm	1	C

Client Sample ID	**1107**	Collected	**03/01/2022 12:05 PM**
Lab Sample ID	**3229804004**	Lab Receipt	**03/01/2022 4:35 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3229804004-G(Sulfuric Acid)
Batch	823528	Aliquot	5 mL
Date	03/03/2022 6:55 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	823989	Dilution	1
Date	03/04/2022 11:36 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3229804004-E(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823253	Dilution	1
Date	03/03/2022 10:52 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3229804004-D(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823469	Dilution	1
Date	03/02/2022 2:48 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,4

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3229804004-G(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	825564	Dilution	1
Date	03/12/2022 4:14 AM	Analyst	NJA

Client Sample ID	**1107**	Collected	**03/01/2022 12:05 PM**
Lab Sample ID	**3229804004**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.50	C,ND

Client Sample ID	**1220**	Collected	**03/01/2022 12:35 PM**
Lab Sample ID	**3229804005**	Lab Receipt	**03/01/2022 4:35 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3229804005-C1(Nitric Acid)
Batch	823638	Aliquot	50 mL
Date	03/03/2022 11:00 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	823872	Dilution	1
Date	03/04/2022 12:32 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	120	mg/L	0.33	C,5
Potassium, Total	7440-09-7	3.7	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3229804005-A(Na Thiosulfate)
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823223	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	67	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	
Batch	823222	Aliquot	100 mL
Date	03/01/2022 6:47 PM	Tech.	MBR

Analysis

Method	S9223B-04	Fraction	
Batch	823412	Dilution	1
Date	03/02/2022 8:12 PM	Analyst	MBR

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	411	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3229804005-B(Na Thiosulfate)
Batch	823215	Aliquot	100 mL
Date	03/01/2022 6:11 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823216	Dilution	1
Date	03/02/2022 7:57 PM	Analyst	MBR

Client Sample ID	**1220**	Collected	**03/01/2022 12:35 PM**
Lab Sample ID	**3229804005**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	11	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3229804005-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823585	Dilution	2
Date	03/02/2022 10:20 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3229804005-F(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824834	Dilution	5
Date	03/10/2022 2:29 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	268	mg/L	5.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3229804005-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824498	Dilution	1
Date	03/08/2022 12:49 PM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.14	mg/L	0.10	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3229804005-G(Sulfuric Acid)
Batch	823515	Aliquot	50 mL
Date	03/02/2022 2:46 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823758	Dilution	1
Date	03/03/2022 7:40 PM	Analyst	SAM

Client Sample ID	**1220**	Collected	**03/01/2022 12:35 PM**
Lab Sample ID	**3229804005**	Lab Receipt	**03/01/2022 4:35 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	0.38	mg/L	0.10	C

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3229804005-G(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	823782	Dilution	10
Date	03/04/2022 11:44 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.482	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3229804005-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823256	Dilution	1
Date	03/03/2022 11:42 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	25	CU	5	C,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3229804005-E(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823255	Dilution	1
Date	03/03/2022 9:50 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	2.76	NTU	0.10	C

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	1220	Collected	03/01/2022 12:35 PM
Lab Sample ID	3229804005	Lab Receipt	03/01/2022 4:35 PM

Prep

Method	N/A	Container	3229804005-E(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	1090	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3229804005-G(Sulfuric Acid)
Batch	823528	Aliquot	5 mL
Date	03/03/2022 6:55 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	823989	Dilution	1
Date	03/04/2022 12:04 PM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3229804005-E(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823253	Dilution	1
Date	03/03/2022 10:52 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3229804005-D(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823469	Dilution	1
Date	03/02/2022 2:48 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,4

Client Sample ID	**1220**	Collected	**03/01/2022 12:35 PM**
Lab Sample ID	**3229804005**	Lab Receipt	**03/01/2022 4:35 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3229804005-G(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	825564	Dilution	1
Date	03/12/2022 4:14 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.10	C,ND

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3229804001	212	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3229804002	80	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3229804003	736	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3229804004	1107	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3229804005	1220	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	

3/21/2022 12:53 PM

ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

COC #: 3229804

Logged By: EXP
PM: EXP

1 of

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: BayLand Consultants & Designers Inc.

Address: 7455 New Ridge Road, Suite T
Hanover, MD 21076

Contact: Zach Tate

Phone#: 410-694-9401

Project Name/#: Takoma Park Dry Weather Screening

Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: _____ **Approved By:** _____

Email? [x] -Y ztate@baylandinc.com

Fax? [ ] -Y No.: _____

Receipt Information (complete)
Cooler Temp: 4 TI
No. of Coolers: _____
Custody Seals Pres
(if present) Seals In
Received on
COC/Labels Complete/Accu
Cont. in Good C
Correct Contai
Correct Sample Vol
Correct Presen
Headspace/Vo
Courier/Tracking #:

Temp Taken By: EXP
WO Temp (°C) 4
Therm ID: 575
Receipt Info Completed By: EXP

Cooler Custody Seal Intact	Y N	NA
Sample Custody Seal Intact	Y N	NA
Received on Ice	Y	N NA
Cooler & Samples Intact	Y	N
Correct Containers Provided	Y	N
Sample Label/COC Agree	Y	N
Adequate Sample Volumes	Y	N
VOA Headspace Present	Y N	NA
Voa Trip Blank	Y N	NA
NJ≤ 4 Days?	Y	
Rad Screen (uCi)		
Courier/Tracking #:		

SDWA Compliance
PWSID

Y NA

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Container Type	Container Size	Preservative	200.7TB, 200.7THA, 200.7TK	300_WCHL, 300_WFLU	365.1WTP	NH3_IC	S2120BCOLR, S2130BTURB	S2510WCOND, S4500CTKNW	S4500TCL, S5540WMBAS	TOTALN, TRMD200.7	S9223ECOLM	S9230COLM, S9223MD_TC	Sample/COC C
					Plastic jar			ANALYSES/METHOD REQUESTED										
								Enter Number of Containers Per Sample or Field Results Below.										
212	3/1/22	11:00	Provided	Surface Water				1	1	1	1	1	1	1	1	1	1	2 x 1L P
80	↓	11:24						1	1	1	1	1	1	1	1	1	1	1 x 250 P
736		9:40						1	1	1	1	1	1	1	1	1	1	1 x 125 P HNO3
1107		12:05						1	1	1	1	1	1	1	1	1	1	1 x 250 P H2SO4
~~1221~~ 1220	↓	12:35						1	1	1	1	1	1	1	1	1	1	2 x 120 P ST
per Z Tate EDD 3-1-22																		

for each set

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment
oOther: _____

Project Comments:

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	BayLand Consultants & Designers, Inc.	3/1/22	2:46	2	[signature] ALS	3-1-22	1446
3	[signature] ALS	3-1-22	1636	4	[signature]	3-1-22	1636
5				6			
7				8			
9				10			

Data Deliverables: [x] Standard [ ] CLP-like [ ] USACE

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [x] MD [ ] WV

Reportable to PADEP? Yes [ ]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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Rev 8/04

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **BayLands Consultants & Designers, Inc.**

Project Takoma Park Dry Weather
Workorder 3230104
Report ID 156128 on 3/17/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Mar 02, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Elizabeth Parker (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Bill Heckert - BayLands Consultants & Designers, Inc.
Zachary Tate - BayLands Consultants & Designers, Inc.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3230104001	881	Water	03/02/2022 11:50 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104002	879	Water	03/02/2022 11:45 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104003	1013	Water	03/02/2022 8:50 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104004	290	Water	03/02/2022 10:15 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104005	289	Water	03/02/2022 10:15 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104006	965	Water	03/02/2022 9:40 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104007	862	Water	03/02/2022 11:37 AM	03/02/2022 5:52 PM	CBC	Collected By Client
3230104008	1106	Water	03/02/2022 12:20 PM	03/02/2022 5:52 PM	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation #	
1	The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
2	The color determination was performed on a sample aliquot with a pH of 5.
3	Analyte was analyzed past the 48 hour holding time.
4	Color by SM 2120B is reported as True Color.
5	MBAS calculated as LAS molecular weight 348 g/mol.
6	This sample result was calculated and reported using Method SM2340B-2011.
7	One of the two matrix spike analyses performed on this sample failed to meet acceptable recovery limits. The other matrix spike was within acceptable recovery limits. Matrix interferences are the possible cause for the failure.
8	The color determination was performed on a sample aliquot with a pH of 6.
9	Analyte was analyzed past the 8 hour holding time.
10	The color determination was performed on a sample aliquot with a pH of 1.

Client Sample ID	**881**	Collected	**03/02/2022 11:50 AM**
Lab Sample ID	**3230104001**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104001-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:12 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	132	mg/L	0.33	C,6
Potassium, Total	7440-09-7	3.5	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104001-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	5	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104001-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	214	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104001-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**881**	Collected	**03/02/2022 11:50 AM**
Lab Sample ID	**3230104001**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	11	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104001-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823701	Dilution	2
Date	03/03/2022 11:44 PM	Analyst	M1D

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	95.1	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104001-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:45 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.97	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104001-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 7:42 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	**881**	Collected	**03/02/2022 11:50 AM**
Lab Sample ID	**3230104001**	Lab Receipt	**03/02/2022 5:52 PM**

Prep

Method	N/A	Container	3230104001-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824533	Dilution	10
Date	03/10/2022 2:07 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.328	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104001-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104001-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	1.03	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104001-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	612	umhos/cm	1	C

Client Sample ID	**881**	Collected	**03/02/2022 11:50 AM**
Lab Sample ID	**3230104001**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104001-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:08 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104001-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104001-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104001-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**881**	Collected	**03/02/2022 11:50 AM**
Lab Sample ID	**3230104001**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.50	C,ND

Client Sample ID	**879**	Collected	**03/02/2022 11:45 AM**
Lab Sample ID	**3230104002**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104002-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:15 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	136	mg/L	0.33	C,6
Potassium, Total	7440-09-7	3.6	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104002-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	47	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104002-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	187	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104002-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**879**	Collected	**03/02/2022 11:45 AM**
Lab Sample ID	**3230104002**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	4	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104002-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823701	Dilution	2
Date	03/03/2022 11:55 PM	Analyst	M1D

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	94.8	mg/L	2.0	C,7
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104002-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:46 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.94	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104002-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 7:57 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	879	Collected	03/02/2022 11:45 AM
Lab Sample ID	3230104002	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104002-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824483	Dilution	10
Date	03/09/2022 3:56 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.323	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104002-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,3,4,8

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104002-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	0.46	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104002-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	607	umhos/cm	1	C

Client Sample ID	**879**	Collected	**03/02/2022 11:45 AM**
Lab Sample ID	**3230104002**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104002-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:11 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104002-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104002-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104002-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**879**	Collected	**03/02/2022 11:45 AM**
Lab Sample ID	**3230104002**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.50	C,ND

Client Sample ID	**1013**	Collected	**03/02/2022 8:50 AM**
Lab Sample ID	**3230104003**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104003-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:18 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	351	mg/L	0.33	C,6
Potassium, Total	7440-09-7	9.6	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104003-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	1	MPN/100mL	1	C,9

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104003-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1990	MPN/100mL	1	C,9

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104003-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**1013**	Collected	**03/02/2022 8:50 AM**
Lab Sample ID	**3230104003**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	548	MPN/100mL	1	C,9

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	2
Date	03/03/2022 9:25 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824094	Dilution	25
Date	03/06/2022 1:29 AM	Analyst	M1D

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	652	mg/L	25.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104003-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:47 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	2.31	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104003-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:00 PM	Analyst	SAM

Client Sample ID	**1013**	Collected	**03/02/2022 8:50 AM**
Lab Sample ID	**3230104003**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3230104003-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824533	Dilution	10
Date	03/10/2022 3:01 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.320	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	0.72	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	1013	Collected	03/02/2022 8:50 AM
Lab Sample ID	3230104003	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	1980	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104003-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:14 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104003-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104003-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Client Sample ID	**1013**	Collected	**03/02/2022 8:50 AM**
Lab Sample ID	**3230104003**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104003-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	2.31	mg/L	1.50	C

Client Sample ID	**290**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104004**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104004-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:22 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	184	mg/L	0.33	C,6
Potassium, Total	7440-09-7	5.8	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104004-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	41	MPN/100mL	1	C,9

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104004-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1990	MPN/100mL	1	C,9

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104004-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**290**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104004**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	75	MPN/100mL	1	C,9

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104004-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	2
Date	03/03/2022 9:35 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	183	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104004-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:48 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	2.21	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104004-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:03 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	290	Collected	03/02/2022 10:15 AM
Lab Sample ID	3230104004	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104004-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824483	Dilution	10
Date	03/09/2022 3:42 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.498	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104004-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104004-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	2.22	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104004-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	932	umhos/cm	1	C

Client Sample ID	**290**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104004**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104004-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:16 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	1.1	mg/L	1.0	C

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104004-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104004-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104004-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**290**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104004**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	3.31	mg/L	1.20	c

Client Sample ID	**289**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104005**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104005-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:25 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	185	mg/L	0.33	C,6
Potassium, Total	7440-09-7	5.6	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104005-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	115	MPN/100mL	1	C,9

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104005-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	>2419.6	MPN/100mL	1	C,9

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104005-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**289**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104005**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	135	MPN/100mL	1	C,9

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104005-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	2
Date	03/03/2022 9:46 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	190	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104005-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:49 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	1.60	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104005-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:06 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	289	Collected	03/02/2022 10:15 AM
Lab Sample ID	3230104005	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104005-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824539	Dilution	10
Date	03/10/2022 2:46 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.381	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104005-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,3,4,10

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104005-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	0.24	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104005-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	2
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	2200	umhos/cm	2	C

Client Sample ID	**289**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104005**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104005-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:37 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104005-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104005-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	0.241	mg/L	0.200	C,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104005-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**289**	Collected	**03/02/2022 10:15 AM**
Lab Sample ID	**3230104005**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	1.60	mg/L	1.50	c

Client Sample ID	**965**	Collected	**03/02/2022 9:40 AM**
Lab Sample ID	**3230104006**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104006-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:28 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	159	mg/L	0.33	C,6
Potassium, Total	7440-09-7	4.5	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104006-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	17	MPN/100mL	1	C,9

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104006-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1550	MPN/100mL	1	C,9

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104006-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**965**	Collected	**03/02/2022 9:40 AM**
Lab Sample ID	**3230104006**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	10	MPN/100mL	1	C,9

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104006-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	2
Date	03/03/2022 9:56 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	193	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104006-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:50 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	1.81	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104006-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:09 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	965	Collected	03/02/2022 9:40 AM
Lab Sample ID	3230104006	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104006-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824533	Dilution	10
Date	03/10/2022 2:48 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.315	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104006-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	10	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104006-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	0.28	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104006-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	900	umhos/cm	1	C

Client Sample ID	965	Collected	03/02/2022 9:40 AM
Lab Sample ID	3230104006	Lab Receipt	03/02/2022 5:52 PM

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104006-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:45 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	1.6	mg/L	1.0	C

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104006-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104006-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104006-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**965**	Collected	**03/02/2022 9:40 AM**
Lab Sample ID	**3230104006**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	3.41	mg/L	1.20	c

Client Sample ID	**862**	Collected	**03/02/2022 11:37 AM**
Lab Sample ID	**3230104007**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104007-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:31 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	138	mg/L	0.33	C,6
Potassium, Total	7440-09-7	3.6	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104007-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	16	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104007-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	167	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104007-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**862**	Collected	**03/02/2022 11:37 AM**
Lab Sample ID	**3230104007**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	3	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104007-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	2
Date	03/03/2022 10:07 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	95.9	mg/L	2.0	C
Fluoride	F	ND	mg/L	0.20	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104007-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:51 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.82	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104007-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:12 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	862	Collected	03/02/2022 11:37 AM
Lab Sample ID	3230104007	Lab Receipt	03/02/2022 5:52 PM

Prep

Method	N/A	Container	3230104007-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824533	Dilution	10
Date	03/10/2022 3:56 AM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.341	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104007-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	10	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104007-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	0.32	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104007-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	619	umhos/cm	1	C

Client Sample ID	862	Collected	03/02/2022 11:37 AM
Lab Sample ID	3230104007	Lab Receipt	03/02/2022 5:52 PM

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104007-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:47 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104007-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104007-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104007-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**862**	Collected	**03/02/2022 11:37 AM**
Lab Sample ID	**3230104007**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.50	C,ND

Client Sample ID	**1106**	Collected	**03/02/2022 12:20 PM**
Lab Sample ID	**3230104008**	Lab Receipt	**03/02/2022 5:52 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230104008-E(Nitric Acid)
Batch	823719	Aliquot	50 mL
Date	03/04/2022 8:12 AM	Tech.	JSE

Analysis

Method	EPA 200.7	Fraction	
Batch	824170	Dilution	1
Date	03/08/2022 1:41 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	146	mg/L	0.33	C,6
Potassium, Total	7440-09-7	4.7	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104008-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823656	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	172	MPN/100mL	1	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230104008-F(Na Thiosulfate)
Batch	823655	Aliquot	100 mL
Date	03/02/2022 6:46 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823657	Dilution	1
Date	03/03/2022 7:18 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1730	MPN/100mL	1	C

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230104008-F(Na Thiosulfate)
Batch	823572	Aliquot	100 mL
Date	03/02/2022 7:10 PM	Tech.	CDB

Analysis

Method	Enterolert	Fraction	
Batch	823573	Dilution	1
Date	03/03/2022 7:45 PM	Analyst	CDB

Client Sample ID	**1106**	Collected	**03/02/2022 12:20 PM**
Lab Sample ID	**3230104008**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	83	MPN/100mL	1	C

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230104008-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823586	Dilution	5
Date	03/03/2022 10:17 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	279	mg/L	5.0	C
Fluoride	F	ND	mg/L	0.50	C,ND

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230104008-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 8:52 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	1.36	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230104008-D(Sulfuric Acid)
Batch	823753	Aliquot	50 mL
Date	03/03/2022 2:54 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	823833	Dilution	1
Date	03/04/2022 8:15 PM	Analyst	SAM

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	ND	mg/L	0.10	C,ND

Wet Chemistry (General)
ASTM D6919-09

Client Sample ID	**1106**	Collected	**03/02/2022 12:20 PM**
Lab Sample ID	**3230104008**	Lab Receipt	**03/02/2022 5:52 PM**

Prep

Method	N/A	Container	3230104008-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824483	Dilution	10
Date	03/09/2022 2:07 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.708	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230104008-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823594	Dilution	1
Date	03/05/2022 5:15 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3,4

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230104008-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823597	Dilution	1
Date	03/05/2022 5:55 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	45.2	NTU	0.10	C,3

Wet Chemistry (General)
SM2510B-2011

Prep

Method	N/A	Container	3230104008-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	1140	umhos/cm	1	C

Client Sample ID	**1106**	Collected	**03/02/2022 12:20 PM**
Lab Sample ID	**3230104008**	Lab Receipt	**03/02/2022 5:52 PM**

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230104008-D(Sulfuric Acid)
Batch	823911	Aliquot	5 mL
Date	03/04/2022 12:09 PM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824305	Dilution	1
Date	03/07/2022 10:50 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	ND	mg/L	1.0	C,ND

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230104008-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823599	Dilution	1
Date	03/07/2022 5:42 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	0.11	mg/L	0.10	C,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230104008-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823629	Dilution	1
Date	03/03/2022 2:34 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.200	C,ND,5

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230104008-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

Client Sample ID	**1106**	Collected	**03/02/2022 12:20 PM**
Lab Sample ID	**3230104008**	Lab Receipt	**03/02/2022 5:52 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	ND	mg/L	1.50	C,ND

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3230104001	881	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104002	879	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104003	1013	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104004	290	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3230104005	289	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104006	965	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104007	862	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	
3230104008	1106	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	

3/17/2022 6:26 AM

ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

COC # 3230104
ALSI C
Logged By: EXP
PM: EXP

1 of 1

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: BayLand Consultants & Designers Inc.

Address: 7455 New Ridge Road, Suite T
Hanover, MD 21076

Contact: Zach Tate

Phone#: 410-694-9401

Project Name/#: Takoma Park Dry Weather Screening

Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: _____ **Approved By:** _____

Email? [x] -Y ztate@baylandinc.com

Fax? [ ] -Y No.: _____

Receipt information (completed by Lab)

Cooler Temp: 3 Therm ID: 595

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(if present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	200.7TB, 200.7THA, 200.7TK	300_WCHL, 300_WFLU	365.1WTP	NH3_IC	S2120BCOLR, S2130BTURB	S2510WCOND, S4500CTKNW	S4500TCL, S5540WMBAS	TOTALN, TRMD200.7	S9223ECOLM	S9230COLM, S9223MD_TC	Sample/COC Comments
					Enter Number of Containers Per Sample or Field Results Below.										
881	3/2/22	11:50	Provided	Surface Water	1	1	1	1	1	1	1	1	1	1	
879	3/2/22	11:45			1	1	1	1	1	1	1	1	1	1	
1013	3/2/22	8:50			1	1	1	1	1	1	1	1	1	1	
290	3/2/22	10:15			1	1	1	1	1	1	1	1	1	1	
289	3/2/22	10:15			1	1	1	1	1	1	1	1	1	1	
965	3/2/22	9:40			1	1	1	1	1	1	1	1	1	1	
862	3/2/22	11:37			1	1	1	1	1	1	1	1	1	1	
1106	3/2/22	12:20			1	1	1	1	1	1	1	1	1	1	

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment
oOther: _____

Project Comments:

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 BayLand Consultants & Designers, Inc.	3/2/2022	2:00	2 [signature] ALS	3/2/22	1400
3 [signature] ALS	3/2/22	1800	4 [signature]	3/2/22	1800
5			6		
7			8		
9			10		

Data Deliverables
[x] Standard
[ ] CLP-like
[ ] USACE
[ ]

Special Processing
USACE [ ]
Navy [ ]
[ ]

State Samples Collected In
[ ] NY
[ ] NJ
[ ] PA
[ ] NC
[x] MD
WV

Reportable to PADEP? Yes [ ]
PWSID # _____

Sample Disposal
Lab [ ]
Special [ ]

EDDS: Format Type- _____

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **BayLands Consultants & Designers, Inc.**

Project Takoma Park Dry Weather
Workorder 3230377
Report ID 158737 on 3/30/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Mar 03, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Elizabeth Parker (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Bill Heckert - BayLands Consultants & Designers, Inc.
Zachary Tate - BayLands Consultants & Designers, Inc.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3230377001	1077	Water	03/03/2022 8:45 AM	03/03/2022 4:50 PM	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation #	
1	The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
2	The color determination was performed on a sample aliquot with a pH of 5.
3	Color by SM 2120B is reported as True Color.
4	Due to sample matrix interferences, this analyte was analyzed at a dilution and the detection levels adjusted accordingly.
5	MBAS calculated as LAS molecular weight 348 g/mol.
6	This sample result was calculated and reported using Method SM2340B-2011.
7	Analyte was analyzed past the 8 hour holding time.
8	Temperature exceeded method requirements during incubation.

Client Sample ID	**1077**	Collected	**03/03/2022 8:45 AM**
Lab Sample ID	**3230377001**	Lab Receipt	**03/03/2022 4:50 PM**

Metals Analytical
EPA 200.7

Prep

Method	EPA TRMD	Container	3230377001-E1(Nitric Acid)
Batch	824098	Aliquot	50 mL
Date	03/05/2022 12:25 PM	Tech.	AHI

Analysis

Method	EPA 200.7	Fraction	
Batch	824165	Dilution	1
Date	03/07/2022 5:40 PM	Analyst	SRT

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Boron, Total	7440-42-8	ND	mg/L	0.050	C,ND
Hardness	Hard	150	mg/L	0.33	C,6
Potassium, Total	7440-09-7	4.2	mg/L	0.25	C

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230377001-F(Na Thiosulfate)
Batch	823806	Aliquot	100 mL
Date	03/03/2022 6:18 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823808	Dilution	1
Date	03/04/2022 6:20 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
E. Coli	ECOLI	1300	MPN/100mL	1	C,7

Microbiology
S9223B-04

Prep

Method	S9223B-04	Container	3230377001-F(Na Thiosulfate)
Batch	823806	Aliquot	100 mL
Date	03/03/2022 6:18 PM	Tech.	CDB

Analysis

Method	S9223B-04	Fraction	
Batch	823807	Dilution	1
Date	03/04/2022 6:20 PM	Analyst	CDB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Coliform	T COLI	1730	MPN/100mL	1	C,7

Microbiology
Enterolert

Prep

Method	Enterolert	Container	3230377001-F(Na Thiosulfate)
Batch	823985	Aliquot	100 mL
Date	03/03/2022 6:59 PM	Tech.	MBR

Analysis

Method	Enterolert	Fraction	
Batch	823986	Dilution	1
Date	03/04/2022 8:10 PM	Analyst	CDB

Client Sample ID	**1077**	Collected	**03/03/2022 8:45 AM**
Lab Sample ID	**3230377001**	Lab Receipt	**03/03/2022 4:50 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Enterococcus	ENTERO	4	MPN/100mL	1	C,7,8

Wet Chemistry (General)
EPA 300.0

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	823849	Dilution	2
Date	03/04/2022 12:07 PM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Fluoride	F	ND	mg/L	0.20	C,ND

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 300.0	Fraction	
Batch	824970	Dilution	5
Date	03/10/2022 2:19 PM	Analyst	GJB

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chloride	Cl	205	mg/L	5.0	C

Wet Chemistry (General)
EPA 353.2

Prep

Method	N/A	Container	3230377001-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 353.2	Fraction	
Batch	824794	Dilution	5
Date	03/10/2022 9:09 AM	Analyst	KXH

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Nitrate/Nitrite-N	NO23	0.58	mg/L	0.50	C

Wet Chemistry (General)
EPA 365.1

Prep

Method	EPA 365.1	Container	3230377001-D(Sulfuric Acid)
Batch	823812	Aliquot	50 mL
Date	03/03/2022 7:06 PM	Tech.	SAM

Analysis

Method	EPA 365.1	Fraction	
Batch	824319	Dilution	1
Date	03/09/2022 4:45 PM	Analyst	SAM

Client Sample ID	**1077**	Collected	**03/03/2022 8:45 AM**
Lab Sample ID	**3230377001**	Lab Receipt	**03/03/2022 4:50 PM**

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Phosphorus, Total	PO4T	0.16	mg/L	0.10	C

Wet Chemistry (General)
ASTM D6919-09

Prep

Method	N/A	Container	3230377001-D(Sulfuric Acid)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	ASTM D6919-09	Fraction	
Batch	824540	Dilution	10
Date	03/10/2022 6:50 PM	Analyst	ALK

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Ammonia-N	NH3N	0.711	mg/L	0.100	C

Wet Chemistry (General)
SM2120B-2011

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2120B-2011	Fraction	
Batch	823860	Dilution	1
Date	03/04/2022 6:28 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Color, Apparent	COLOR	5	CU	5	C,2,3

Wet Chemistry (General)
SM2130B-2011

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	25 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2130B-2011	Fraction	
Batch	823862	Dilution	1
Date	03/04/2022 11:48 AM	Analyst	LXZ

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Turbidity	Turb	16.0	NTU	0.10	C

Wet Chemistry (General)
SM2510B-2011

Client Sample ID	**1077**	Collected	**03/03/2022 8:45 AM**
Lab Sample ID	**3230377001**	Lab Receipt	**03/03/2022 4:50 PM**

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM2510B-2011	Fraction	
Batch	824442	Dilution	1
Date	03/08/2022 9:48 AM	Analyst	BXD

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Specific Conductance	Cond	909	umhos/cm	1	C

Wet Chemistry (General)
S4500NH3G-11

Prep

Method	S4500-NorgB-11	Container	3230377001-D(Sulfuric Acid)
Batch	824246	Aliquot	5 mL
Date	03/08/2022 7:31 AM	Tech.	JXL

Analysis

Method	S4500NH3G-11	Fraction	
Batch	824833	Dilution	1
Date	03/09/2022 9:45 AM	Analyst	JXL

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Kjeldahl Nitrogen	TKN	1.2	mg/L	1.0	C

Wet Chemistry (General)
SM4500-Cl G-2011

Prep

Method	N/A	Container	3230377001-A(Unpreserved)
Batch	N/A	Aliquot	5 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM4500-Cl G-2011	Fraction	
Batch	823863	Dilution	1
Date	03/07/2022 5:50 AM	Analyst	MSA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Chlorine, Total Residual	TResCl	ND	mg/L	0.10	C,ND,1

Wet Chemistry (General)
SM5540C-2011

Prep

Method	N/A	Container	3230377001-C(Unpreserved)
Batch	N/A	Aliquot	100 mL
Date	N/A	Tech.	N/A

Analysis

Method	SM5540C-2011	Fraction	
Batch	823954	Dilution	2
Date	03/04/2022 2:55 PM	Analyst	NPF

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Surfactants (MBAS)	MBAS	ND	mg/L	0.400	C,ND,4,5

Client Sample ID	**1077**	Collected	**03/03/2022 8:45 AM**
Lab Sample ID	**3230377001**	Lab Receipt	**03/03/2022 4:50 PM**

Wet Chemistry (General)
Calculation

Prep

Method	N/A	Container	3230377001-D(Sulfuric Acid)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	Calculation	Fraction	
Batch	827062	Dilution	1
Date	03/17/2022 1:36 AM	Analyst	NJA

RESULTS

Compound	CAS No	Result	Units	RDL	Qualifiers
Total Nitrogen	TN	1.78	mg/L	1.20	C

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3230377001	1077	EPA 200.7	EPA TRMD	
		Enterolert	Enterolert	
		S9223B-04	S9223B-04	
		ASTM D6919-09	N/A	
		Calculation	N/A	
		EPA 300.0	N/A	
		EPA 353.2	N/A	
		EPA 365.1	EPA 365.1	
		S4500NH3G-11	S4500-NorgB-11	
		SM2120B-2011	N/A	
		SM2130B-2011	N/A	
		SM2510B-2011	N/A	
		SM4500-Cl G-2011	N/A	
		SM5540C-2011	N/A	

3/30/2022 3:44 PM

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3230377

ALSI Quo

Logged By: EXP
PM: EXP

1 of 1

Client Name: BayLand Consultants & Designers Inc.

Address: 7455 New Ridge Road, Suite T
Hanover, MD 21076

Contact: Zach Tate

Phone#: 410-694-9401

Project Name/#: Takoma Park Dry Weather Screening

Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: _____ **Approved By:** _____

Email? [x] -Y ztate@baylandinc.com

Fax? [ ] -Y No.: _____

Receipt Information (completed by Receiving Lab)

Cooler Temp: 4 Therm ID: 535

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?		X	
(if present) Seals Intact?		X	
Received on Ice?	X		
COC/Labels Complete/Accurate?	X		
Cont. in Good Cond.?	X		
Correct Containers?	X		
Correct Sample Volumes?	X		
Correct Preservation?	X		
Headspace/Volatiles?		X	

Courier/Tracking #:

Container Type	Plastic jar									
Container Size										
Preservative										

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	200.7TB, 200.7THA, 200.7TIK	300_WCHL, 300_WFLU	365.1WTP	NH3_IC	S2120BCOLR, S2130BTURB	S2510WCOND, S4500CTKNW	S4500TCL, S5540WMBAS	TOTALN, TRMD200.7	S9223ECOLM	S9230COLM, S9223MD_TC
					Enter Number of Containers Per Sample or Field Results Below.									
1077	3/322	8:45	Provided	Surface Water	1	1	1	1	1	1	1	1	1	1

Sample/COC Comments

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment
oOther: _____

Project Comments:

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 BayLand Consultants & Designers, Inc.	3/3/2022	12:00	2 D. Blank ALS	3322 1230	
3 D. Blank ALS	3-3-22	1650	4	3-3-22	1650
5			6		
7			8		
9			10		

Data Deliverables: [x] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [x] MD [ ] WV

Reportable to PADEP? Yes [ ] PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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