D&B ENGINEERS AND ARCHITECTS

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April 8, 2022

Liberty New York Water – Sea Cliff Operations District
PWS ID No. NY2902853
MCL Deferral for PFOA and PFOS
Quarterly Report – First Quarter 2022

Introduction

On behalf of Liberty, D&B Engineers and Architects (D&B) has prepared this document in accordance with the requirements of the New York State Department of Health (NYSDOH) for public water suppliers who have been granted deferrals from maximum contaminant level (MCL) violations for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). The Sea Cliff Operations District was granted an MCL deferral for PFOA and PFOS in 2020 and was granted an extension in December 2021 for the last phase of construction ending in June 2022. Liberty was granted the extension to the original deferral for the Sea Cliff Operations District due to its proactive efforts toward the implementation of treatment for these compounds.

The enclosed is a report describing Liberty's progress towards maintaining the highest quality of water for our customers in the Sea Cliff Operations District and meeting the deadlines set forth in the deferral approval. The schedule for the project is contained in **Attachment A**.

Corrective Action Plan Milestones

Glen Head Station Granular Activated Carbon Project (GAC)

The Glen Head Station GAC project is currently under construction. Completed plans were submitted to the Town of Oyster Bay (TOB) Building Department and to the Nassau County Department of Health (NCDH) in August 2020. Liberty received approval for construction in January 2021 after obtaining approval from the Zoning Board of Appeals. Approval from the NCDH was received in March 2021. In the interim, the contract was competitively bid and awarded.

Site work, concrete, plumbing, and piping are at approximate 95% completion. The footings, foundations, slabs, and concrete pads have been poured and approved by the TOB. Treatment vessels have been delivered to the site and underground and aboveground piping have been finished. Before the vessels were delivered, extensive coordination with the vessel manufacturer, the crane operator, the electrical utility (PSEG) and Liberty had to be finalized. Liberty closely coordinated with PSEG in order to temporarily remove high voltage overhead wires; however, due to PSEG's tight summer schedule, the delivery was moved from July 2021 to September 16, 2021. Liberty and the contractor worked closely together to finalize all the steps necessary to clear the roads for a smooth equipment delivery on site.

The GAC vessels are connected to the system and are in working operation, however, not yet in service. Water quality sampling has been performed on the completed GAC system and a partial Engineer's Certification has been presented to the NCDH. The building wall and roof construction have been finalized, as well as the interior electrical, HVAC equipment, doors, daylight panels, and water heater. Every effort was made by Liberty to meet the December 2021 timeframe for project completion; however, delays related scheduling and coordinating with PSEG, along with prolonged supply chain issues on receipt of building materials set the anticipated project schedule back by several months. Construction is on track to be completed before the June 2022 deadline. All necessary public notification will be delivered when completed.

Although it has been granted a deferral, the Sea Cliff Operations District was able to minimize the usage of this well.

Public Notification

Liberty notified its north shore customers of a key construction milestone reached in the fourth quarter of 2021. Liberty posted social media content regarding the installation of four GAC vessels to remove per- and polyfluoroalkyl substances (PFAS) from the source water. An update was also provided to elected officials for the area. Public notification regarding the presence and regulation of emerging compounds, as well as the deferral was included in the former New York American Water (NYAW) 2020 Annual Water Quality Report/Consumer Confidence Report released in May 2021. The report was posted on the former NYAW website and publicized via newspaper ads and bill insert. The report specific to the Sea Cliff Operations District is available at https://new-york-water.libertyutilities.com/uploads/water%20quality%20reports/seacliff_2020.pdf. In addition, Liberty has uploaded this quarterly report to its website at https://new-york-water.libertyutilities.com/all/residential/safety/glen-head-public-notification.html. Documentation of public notification is contained in **Attachment B**.

Analytical Sampling

Sample results for the well for which the deferral was granted (Glen Head Well, PWS# NY2902853) taken in the first quarter of 2022 are contained in the table below. The full laboratory report for the sample is contained in **Attachment C**.

First Quarter 2022 PFOA and PFOS Water Quality Monitoring Results
(nanograms per Liter, ng/L or parts per trillion, ppt)

Sea Cliff OPS District (PWS# NY2902853)					
Location	**Well ID #**	**Date Sampled**	**Lab Utilized**	**PFOA (ng/L)**	**PFOS (ng/L)**
Glen Head Well	N-05792	2/16/2022	Pace	ND	2.3

ND: Non Detect

Conclusion

As demonstrated above, Liberty is actively working to preserve the quality of water for its customers and comply with the requirements put forth by the NYSDOH. Liberty looks forward to continuing to work towards completion of its treatment facilities for the Sea Cliff Operations District.

Should you have any questions, please contact the undersigned at (516) 364-9890, extension 3401, or visit the website, https://www.libertyenergyandwater.com.

Very truly yours,

Philip Sachs, P.E.
Vice President

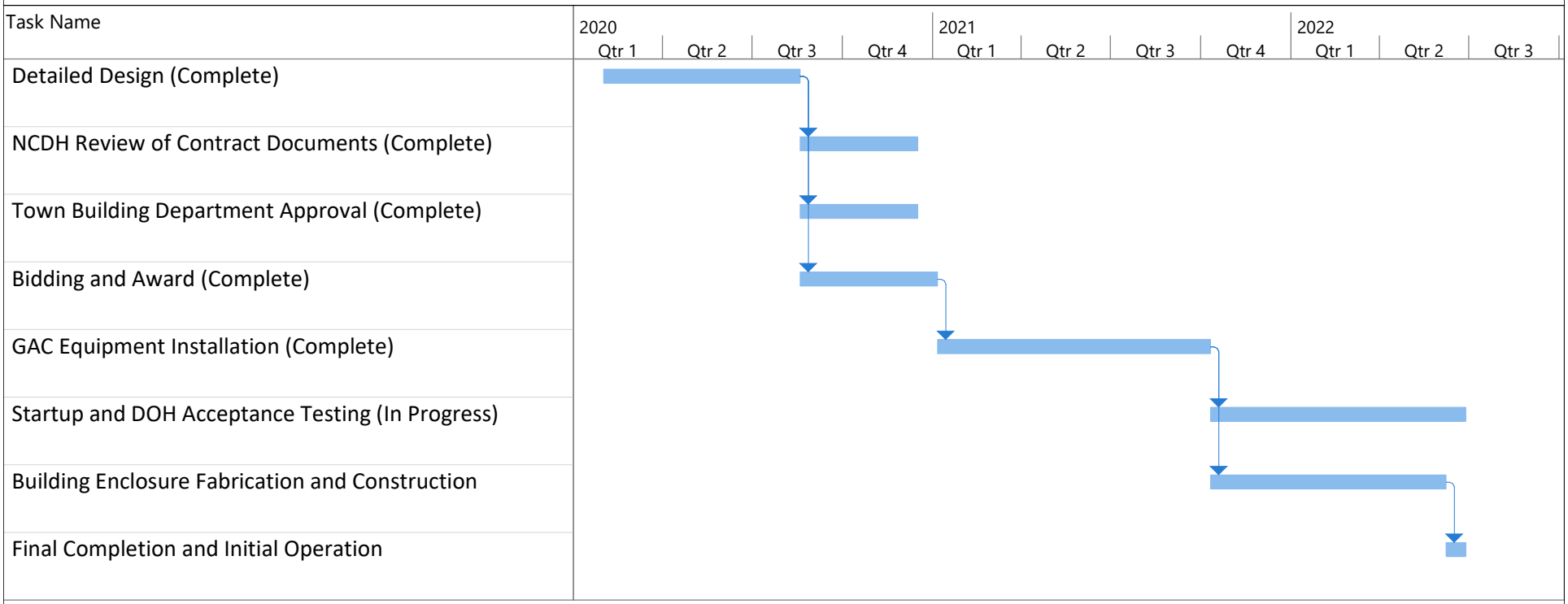
PRS/LOt/kb
Enclosures
cc: K. Wheeler (NYSDOH)
B. Rogers (NYSDOH)
W. Provoncha (NCDH)
P. Young (NCDH)
R. Putnam (NCDH)
C. Alario (Liberty)
J. Kilpatrick (Liberty)
R. Fernandez (Liberty)
L. Ortiz (D&B)
P. Connell (D&B)
♦5446\PRS040822_SeaCliff

ATTACHMENT A

MCL Deferral Project Schedule

New York American Water
Sea Cliff Operations District
MCL Deferral Extension Request

GAC System at the Glen Head Pump Station
Project Schedule



ATTACHMENT B

Public Notification Documentation

2020 WATER QUALITY REPORT

Service Area 2–South Shore: Merrick Operations District

Public Water Supply ID# NY2902840

This report complies with Part 5-1.72, New York State Sanitary Code (10 NYCCR) and federal Consumer Confidence Report regulations (40 CFR Part 141, Subpart O).

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

本报告与您的饮用水有关。
如果您不了解其内容，应请别人为您翻译解说。

이 보고서에는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다.
만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.

A Message from the New York American Water President

To Our Valued Customer:

Thank you for the opportunity to serve you. I am pleased to share our **Annual Water Quality Report** with you – this is our report card on the quality of the drinking water delivered to our customers. The report shows that we continue to supply you with water that meets or surpasses all county, state, and federal water quality standards. We encourage our customers to review this report as it provides important details about the source and quality of your drinking water between January and December 2020.

New York American Water (NYAW) invests in our infrastructure to deliver quality drinking water to our customers. This includes the facilities and technology needed to draw water from the source and treat it, along with miles and miles of pipeline hidden below the ground to bring water to your tap. In addition, our plant operators, water quality experts, engineers and maintenance crews work around the clock to provide you with quality water.

Delivering safe, reliable water service requires significant investment to maintain and upgrade aging facilities. **In 2020, we invested approximately $62 million in system improvements.** NYAW is also making important investments in water treatment technology to comply with New York State Department of Health's (NYSDOH) new drinking water standards for emerging compounds, specifically 1,4-Dioxane, PFOA, and PFOS.

The COVID-19 public health emergency highlighted how essential water is for public health. We remain steadfast in our commitment to delivering safe and reliable water service while maintaining a safe environment for our employees and customers. NYAW extends our sincerest gratitude to our field employees as well as all frontline workers and essential employees who are on the job and keeping life flowing. Thank you!

Sincerely,

Lynda DiMenna
President, New York American Water

Public Participation – How You Can Get Involved

Customers can participate in decisions that may affect the quality of water by:

- Reading the information provided in bill inserts and special mailings
- Contacting the company directly with questions or to discuss issues
- Attending open houses conducted by the company
- Responding to survey requests
- Attending presentations by the company made to local community and civic associations
- Contacting agencies such as the Nassau County Health Department (NCDOH) at 516-227-9692

Be Water Smart – Think Conservation

The New York State Department of Environmental Conservation requested that all Long Island water suppliers reduce their peak pumpage by 15 percent to protect the long-term sustainability of the Long Island aquifer. Our customers must conserve water to help us achieve this goal. When our customers conserve, not only do they reduce their water bill, but NYAW is able to defer infrastructure investment projects that are needed to meet peak water demand, which can reach as high as 50 million gallons of water a day in the summer.

The following suggestions will help you make your home "water efficient" without sacrificing comfort or changing lifestyles:

- Install smart irrigation technology on your irrigation system to irrigate as efficiently as possible.
- Install a moisture sensor on your irrigation system to prevent wasteful watering during or just after a rain.
- Use native, drought-resistant shrubs, trees, plants, and grasses in your landscape.
- Run dishwashers and washing machines only with full loads.
- Turn off the tap when brushing your teeth or shaving.
- Check every faucet for leaks. Even a slow drip can waste 15 to 20 gallons a day, or about 6,000 gallons a year.
- If you suspect that you have a water leak, order our free Leak Detection Kit. The kit contains information, and dye tablets to help you determine if you have a wasteful water loss. Call our customer call center or 516-632-2244 to order.
- Replace older devices with water-saving showerheads, faucets, or low flush toilets. A normal showerhead uses 5 to 7 gallons a minute. Switching to a low-flow model that uses 1.5 gallons a minute can save a family thousands of gallons of water a year.

What is a Water Quality Report?

To assure that water is safe to drink, the U.S. Environmental Protection Agency (USEPA), and the Health Departments of New York State and Nassau County, set regulations for water quality and indicate the levels of various substances that are acceptable in public drinking water. This report explains how our water measures up to those standards. As you can see by the results, our water quality is excellent.

The NYSDOH) and the U.S. Food & Drug Administration regulate and set limits for substances in bottled water, which must also provide protection for public health.

During 2020, our system was in compliance with applicable NYS drinking water operating, monitoring and reporting requirements. If you have questions about this report, please contact our Water Quality Manager at 516-632-2239.

Share This Report:

Landlords, businesses, schools, hospitals, and others are encouraged to share this important water quality information with water users at their location who are not direct customers of NYAW. Additional copies of this report are available by contacting us at 516-632-2239.

How to Contact Us

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers protect our water sources, which are the heart of our community. Please call our Customer Call Center toll-free if you have questions:

NYAW:

Customer Call Center: 1-877-426-6999 (M-F; 7am-7pm)
Emergencies: 1-877-426-6909 (24 hours)
TDD (Hearing/Speech impaired): 1-800-300-6202
Online: www.newyorkamwater.com

Merrick Administrative Office:
New York American Water
60 Brooklyn Avenue, Merrick, NY 11566
516-632-2232

Billing Payment Address:
New York American Water
PO BOX 371332
Pittsburgh, PA 15250-7332

Water Information Sources :

NYSDOH
1-518-473-8600 • www.health.state.ny.us
NCDOH
516-227-9692 • www.co.nassau.ny.us/health
New York State Department of Public Service
1-800-342-3377 • www.dps.state.ny.us
USEPA
www.epa.gov/safewater
EPA Safe Drinking Water Hotline
1-800-426-4791
American Water Works Association
www.awwa.org
Water Quality Association
www.wqa.org

About NYAW

NYAW, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water company in New York, providing high-quality and reliable water and/or wastewater services to approximately 350,000 people.

About American Water

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water,

wastewater, and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable, and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Communities Served

Bellmore
East Massapequa*
Levittown*
Massapequa*
Merrick
North Bellmore
North Merrick
North Seaford
North Wantagh
Seaford
Wantagh
**community partially served*

Average Residential Usage & Cost

In 2020, the average residential household used approximately 105,353 gallons of water at a cost of about $646, or $1.77 a day. With an average of 3.0 persons per household, the cost of water was about 59¢ a day per person.

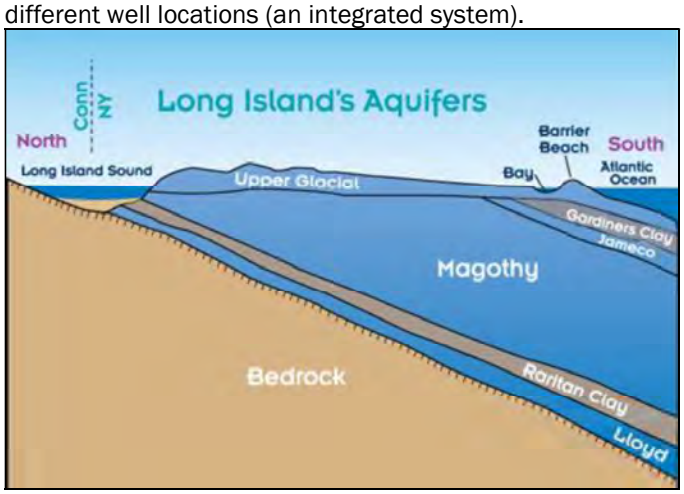
Source, Quality & Quantity

Groundwater is the source of your drinking water supply. It is drawn from 16 wells located in the aquifer system beneath the land surface.

The Aquifers

The aquifers are water-bearing geologic deposits of sand and clay that absorb and store about 45 percent of the rain and snow that fall on Long Island. NYAW– Merrick Operations Center has wells in the Magothy aquifer.

Not all wells are operating at the same time, which means that the water you receive is a blend of treated water from different well locations (an integrated system).



Not to scale

If you have a private well which is unregulated and untested, you should not use the water for drinking or cooking. (Source: NCDOH)

Source Water Assessment

The NYSDOH, with assistance from the local health department and a consulting firm, has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is or will become contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected (if any). The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from 16 wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents and a high susceptibility to nitrates. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/ industrial facilities and related activities in the assessment area. The high susceptibility to nitrate contamination is attributable to residential, commercial, and institutional land use and related practices in the assessment area, such as fertilizing lawns.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting our Water Quality Manager at 516-632-2239.

How is Your Water Treated?

Our water supply is obtained from wells located throughout our service area, and average about 500 feet in depth. In our area of southeastern Nassau County, the soil has naturally high iron and mineral content. The water dissolves these naturally occurring minerals, and while they are not health hazards, they can cause discolored water issues. Bacteriological pollutants are not usually present in wells at the average depth of 500 feet and, consequently, water directly from the well is drinkable. However, water treatment is required to protect the water in the distribution system and to minimize discolored water conditions.

Treatment consists of:

1. Chlorination for bacteriological disinfection (using Sodium Hypochlorite)

2. Caustic Soda (Sodium Hydroxide) to raise pH and minimize corrosivity to water mains and household plumbing
3. Filtration to remove iron at three well locations
4. Calciquest (Phosphate compound) to stabilize or sequester the iron not removed by filtration, and to act as a corrosion control inhibitor.
5. Granular Activated Carbon (GAC) to remove organics at one well location (US Navy / Northrop-Grumman plume site).

   We take steps to reduce the potential for lead to leach from your pipes into the water. This is accomplished by adding a corrosion inhibitor (Calciquest is an Orthophosphate compound) to the water leaving our treatment facilities. There are steps that you can take to reduce your household's exposure to lead in drinking water. For more information, please review our Lead and Drinking Water Fact Sheet at: www.nyamwater.com/water-quality/lead-and-drinking-water

System Improvements

In 2020, we continued to make significant upgrades to our system and infrastructure. These improvements include:

- Replaced 14,893 feet of water main throughout the service territory.
- Replaced 10 fire hydrants.
- Replaced 114 service lines.
- Replaced 8,014 water meters.
- Completed replacement of the iron filtration media and drilled a new 3 Million-Gallon-Per-Day water supply well at the Newbridge Road Treatment Plant in North Bellmore.
- Drilled a new 3 Million-Gallon-Per-Day water supply well at the Jefferson Plant in Merrick.
- Completed design of a 6 Million-Gallon-Per-Day Advanced Oxidation Plant for removal of 1,4-Dioxane at the Seaman's Neck Treatment Plant in Wantagh.

Improvements planned for 2021 include:

- Replace approximately 14,700 feet of water main.
- Replace 5 fire hydrants.
- Replace 120 service lines.
- Replace approximately 1,500 water meters.
- Construct new well buildings at the Jefferson St. Plant in Merrick, and the Newbridge Plant in North Bellmore.
- Breaking ground on construction of the 6 Million-Gallon-Per-Day Advanced Oxidation Plant for removal of 1,4-Dioxane at the Seaman's Neck Treatment Plant in Wantagh.
- Drilling of a replacement 3 Million-Gallon-Per-Day water supply well at the Sunrise Mall Well Site in Massapequa.

Do I Need to Take Special Precautions?

To ensure that tap water is safe to drink, the USEPA prescribes regulations limiting the number of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Although our drinking water meets all state and federal regulations, some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water.

If you have questions, contact the NCDOH at 516-227-9692. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Substances Expected to be in Drinking Water

In general terms, the sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities.

<u>Substances that may be present in source water include:</u>

- **Microbiological Contaminants:** Such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.
- **Inorganic Contaminants (IOC's):** Such as salts and metals which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides (SOC's):** Which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- **Organic Chemical Contaminants (VOC's):** Including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive Contaminants:** Which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Cryptosporidiosis & Giardiasis

Although there have been no cases of Cryptosporidiosis in Nassau County attributable to the water supply, you should be aware of the risks to people with severely weakened immune systems. Cryptosporidiosis and Giardiasis are intestinal illnesses caused by microscopic parasites that can be transmitted several ways including through drinking water. Cryptosporidiosis can be very serious for people with weak immune systems, such as transplant patients; individuals receiving chemotherapy or dialysis, and people with Crohn's disease or HIV infection. Individuals who think they may have been exposed to Cryptosporidiosis or Giardiasis should contact their health care providers immediately.

Immuno-compromised patients who may have been advised by their health care provider that they may be at risk, especially when traveling, should observe the following:

- One minute of boiling water at a rolling boil will kill *Cryptosporidium* parvum and Giardia lamblia.
- Drinking bottled water does not guarantee that the water is free from Cryptosporidiosis or Giardiasis.

Contact your health care provider about your options. If you have questions, contact the NCDOHat 516-227-9692.

Lead & Copper Rule Statements

The Lead and Copper Rule requires sampling for lead and copper at the tap. In 1992, the first-year testing was required; tap water was sampled in compliance with EPA regulations. Test results were excellent: at least 90 percent of the lead tests were well below 10 parts per billion, and for copper, below 0.5 parts per million, indicating that the company's corrosion control treatment processes continue to be effective. The same tests were done roughly every three years from 1997 through 2020 with similar results. We are on an approved reduced monitoring schedule, and the next round of homeowner monitoring for the Lead and Copper Rule was completed in the summer of 2023.
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. New York American Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

How do I read the Water Quality Table?

The Water Quality Table – "**Table of Detected Contaminants**" is the most important section in this report, containing details on New York American Water's comprehensive testing program for drinking water at the tap. It compares the results from tests we performed in 2020 (and earlier) with the health standards established by federal, state, and local health authorities. Of approximately 165 substances or parameters tested, detectable levels were found for about 35; and these levels are trace amounts, well below the levels set to protect public health.

To review the quality of your drinking water, compare the result in the "**Maximum Amount Detected**" column with the **Standard** in the "**MCL**" column**.** That **Standard** is the highest level that is considered safe for drinking water. To be in compliance, the **High** result in the "**Range: Low-High**" column should be lower than the **MCL Standard**. For example, under **Metals & Inorganic Substances**, the "**MCL**" standard for **Barium** is **2,000 ppb** and the "**Maximum Amount Detected**" result is **120 ppb**, well below the maximum allowed level (or "**MCL**")**.**

Also review the "**Compliance Achieved**" and "**Violation**" columns to determine if New York American Water violated any standards. As you can see, our system had no violations. Further evidence of the quality of our water can be seen in the "**Listing of Non-Detected (ND) Contaminants**" — An extensive list of substances that we tested for and did not find in our distribution system and/or water sources.

The **Definition of Terms** below provides further explanation of the data.

Definitions of Terms Used in This Report

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MGD** = Million Gallons per Day
- **90th Percentile Value:** The values reported in the "Lead and Copper Rule" section represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90 percent of the lead and copper values detected in your water system.
- **N/A:** Not applicable

- **None Detected (ND):** Laboratory analysis indicates that the constituent is not present at the method detection level.
- **Parts Per Million (ppm):** Corresponds to one part of liquid in one million parts of liquid [Equivalent to "milligrams per liter" (mg/L)].
- **Parts per Billion (ppb):** Corresponds to one part of liquid in one billion parts of liquid [Equivalent to "micrograms per liter" (µg/L)].
- **Parts per Trillion (ppt):** Corresponds to one part of liquid in one trillion parts of liquid [Equivalent to "nanograms per liter"; or one second in approximately 31,506 years].
- **Picocuries per liter (pCi/L):** A measure of the radioactivity in water.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Total Dissolved Solids (TDS):** An overall indicator of the amount of minerals in the water.

Water Quality Facts

To provide high quality water, individual water samples are taken each year for chemical, physical, and microbiological tests. Testing can pinpoint a potential problem so that preventive action may be taken.

Tests are done on water taken from the well ("raw water"), water within our treatment facilities, water exiting our treatment plants at the point-of-entry to the distribution system, and from sites located throughout our distribution system after treatment. These tests are conducted in the company's state certified laboratory, by the NCDOH Laboratory, and by independent, certified laboratories approved by the state, who report results simultaneously to the company and to the Health Department. NYS allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year-to-year. Some of the data, though representative of the water quality, are more than one year old.

For a copy of the Water Supplement containing detailed data on testing at the source water wells before treatment, call us at 516-632-2239 and request a copy.

2020 STATISTICS AT-A-GLANCE

Wells Closed/Restricted	None
Violations of Standards	None
Typical Well Depth	500 Feet
Aquifers	Magothy
Pumping Stations	12
Service Area	20 Square Miles
Total Water Withdrawn	5,055,053,000 Gal.
Total Water Sales	4,837,659,000 Gal.
Total Water Lost from System*	259,890,000 Gal.
Population Served (approx.)	135,000
Customers Served (accounts)	45,018
Miles of Mains	433

* Total water lost from the system includes "Accounted For" and "Unaccounted For" water. Non-revenue water is approx. 9.4% of total water delivered to the system; of which, approximately 5.1% is accounted for and 4.3% is unaccounted for.

Water Quality Table – Table of Detected Contaminants 2020 (SA2 - Merrick Operations)

REGULATED SUBSTANCES

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Violation (Yes/No)	Typical Source
Microbiological							
Total Coliform (% positive samples in any given month)[1]	2020 (highest month was August 2020)	TT=>5% samples positive	N/A	1.6%[1] (2 POS out of 126 total samples in August 2020)	ND (0%) – 1.6%	No	Naturally present in the environment
Disinfection By-Products							
TTHM's (Total Trihalomethanes) (ppb) [2]	Quarterly 2020	80	0	4.8	<1.0 – 4.8	No	By-product of drinking water disinfection
HAA5's (Total Haloacetic acids) (ppb) [3]		60	0	<2.0	<2.0 - <2.0	No	
Disinfectants							
Chlorine (ppm) [4]	2020	N/A	N/A	2.20	<0.10 - 2.20	No	Water additive used to control microbes
Radiological [5]							
Gross Alpha Activity (pCi/L)	10/2018	15	0	8.06	ND – 8.06	No	Erosion of natural deposits
Gross Beta Activity (pCi/L)	10/2018	50	0	4.23	0.171 – 4.23	No	
Combined Radium-226 and Radium-228 (pCi/L)	09/2018	5	0	4.61	0.280 – 4.61	No	
Uranium (ug/L)	10/2018	30	0	0.187	ND – 0.187	No	

Lead and Copper Rule (Tap water samples were collected from 54 homes in the service area)

Contaminant (units)	Date Sampled	Action Level	MCLG	Amount Detected (90th %tile)	Range (Low-High)	Violation (Yes/No)	Typical Source
Copper (ppm) [6]	07-09/ 2020	1.3	1.3	0.270	0.021– 0.340	No	Corrosion of household plumbing systems
Lead (ppb) [7]		15	0	1.4	ND – 6.6	No	

Metals & Inorganic Substances

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Violation (Yes/No)	Typical Source
Barium (ppb)	10/2020	2,000	2,000	120	ND – 120	No	Erosion of natural deposits
Calcium (ppm)	06/2020	N/A	N/A	5.4	ND – 5.4	No	Naturally occurring
Chlorides (ppm)	06/2020	250	N/A	26.7	ND – 26.7	No	Naturally occurring or indicative of road salt contamination
Iron (ppb) [8]	06/2020	300	N/A	940	ND - 940	No	Naturally occurring
Manganese (ppb)[8]	05/2020	300	N/A	89	ND – 89	No	Naturally occurring
Nickel (ppb)	11/2020	N/A	N/A	25.0	1.2– 25.0	No	Naturally occurring
Nitrates as N (ppm)	07/2020	10	10	0.320	ND – 0.320	No	Erosion of natural deposits; Runoff from fertilizers and septic tanks
Sodium (ppm) [9]	10/2020	N/A	N/A	37.5	2.6 – 37.5	No	Naturally occurring; Road salt; Water softeners
Sulfate (ppm)	06/2020	250	N/A	59.3	ND – 59.3	No	Naturally occurring; Road salt; Water softeners

Organic Substances

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Violation (Yes/No)	Typical Source
Trichloroethene (TCE)-(ppb)*	12/2020	5	0	22.5	ND – 22.5	No	Discharges from metal degreasing sites and other factories. Grumman-NAVY plume
Specific Organic Compounds							
1,4 dioxane (ppb)*	11/2020	1.0	N/A	1.50	ND – 1.50	No	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites

Physical Parameters & Unregulated Substances

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Alkalinity (ppm)	2020	48.5	27.9 – 48.35	N/A
Calcium Hardness (ppm)	2020	3.7	0.9 – 3.7	N/A
Color Index (units)	2020	15	ND - 15	Presence of metals such as copper, iron and manganese. Results greater than 15 units are considered 'discolored'.
Corrosivity (Langelier Index) [10]	2020	(-2.31)	(-3.27) - (-2.31)	N/A
Hardness, Total (ppm)	2020	10.1	1.7 – 10.1	N/A
Magnesium (ppm)	2020	1.9	ND – 1.10	Naturally occurring
pH (units) [11]	2020	7.1	7.0 – 7.1	N/A
Total Dissolved Solids (TDS) (ppm)	2020	123	42 – 123	N/A

Footnotes:

[1] A total of 1,449 distribution system bacteriological samples were taken in 2020, with 3 positive Total Coliform results = 0.21% positives for the year.
[2] TTHM's mean the sum of: Bromoform, Bromodichloromethane, Dibromochloromethane, and Chloroform. The highest 'Locational Running Annual Average" was 4.8 ppb in 2020.
[3] HAA5's includes the sum of: Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Bromoacetic acid, and Dibromoacetic acid. The highest 'Locational Running Annual Average" was less than 2.0 ppb ("<2.0") in 2020.
[4] The running annual average of all Chlorine Residual readings (1,459) in the distribution system was **1.50 ppm** for 2020.
[5] Radiological results are from individual raw water wells, and not distribution locations, as required by the NCDOH.
[6] The level presented represents the 90th percentile of 54 sites tested. The "action level" for copper was not exceeded at any of 54 sites tested.
[7] The level presented represents the 90th percentile of 54 sites tested. The "action level" for lead was not exceeded at any of 54 sites tested.
[8] Higher levels of iron (up to 1,000 ppb) may be allowed by the state when justified by the water supplier, as is the case with NYAW - Merrick Operations district. The Total of iron and manganese should not exceed 500 ppb, unless allowed by the state, as is the case with NYAW - Merrick Operations district.

[9] Water containing more than 20 mg/L of sodium should not be used for drinking by persons on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.
[10] The NCDOH recommends that the Langelier Saturation Index (for corrosivity) be as close to zero as possible.
[11] NCDOH guidelines recommend a pH range of 7.0 – 8.5. The running annual average of all pH readings in the distribution system taken during routine bacteriological testing was **7.10 units** in 2020.
*See public notification attached for 1,4 dioxane information.

Unregulated Contaminant Monitoring Rule (UCMR4):

The following parameters were tested for as per a required USEPA monitoring program (2018 – 2020) to try to quantify the presence and amount of emerging or unregulated compounds to see if any should be regulated by the EPA in the future. Unregulated contaminants are those for which USEPA has not established drinking water standards for. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of these constituents in drinking water and whether future regulation is warranted. (No Federal MCL's exist for these parameters to-date, although some might be already regulated by the NYSDOH.)

The following contaminants that we tested for on the treated water exiting our treatment plants ("Entry Point" locations) were detected as follows:

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Manganese (ppb)	2018	37	ND - 37	Naturally occurring
Germanium (ppb)	2018	0.41	ND – 0.41	Naturally occurring

The following contaminants that we tested for on the raw water wells were detected as follows:

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Bromide (ppb)	2018	190	ND - 190	Naturally occurring
Total Organic Carbon (ppb)	2018	901.5	ND – 901.5	Naturally occurring

The following contaminants that we tested for on distribution system locations were detected as follows:

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Total Haloacetic Acids – UCMR4 (ppb)	2018	0.83	ND – 0.83	By-product of drinking water disinfection
Total Haloacetic Acids – Bromide-related (ppb)	2018	0.38	ND – 0.38	By-product of drinking water disinfection

Total Haloacetic Acids for UCMR4 include the sum of the following contaminant combinations: Monochloroacetic acid, Monobromoacetic acid, Dichloroacetic acid, Trichloroacedic acid, Bromochloroacetic acid, Dibromoacetic acid, Bromodichloroacetic acid, Chlorodibromoacetic acid, Tribromoacetic acid.

Unregulated Contaminant Monitoring Rule (UCMR4) – Listing of Non-Detected (ND) Contaminants (2018):

The following contaminants that we tested for under UCMR4 Monitoring Program were "Non-detected" (ND):

Alcohols:
1-butanol
2-methoxyethanol
2-propen-1-ol

Semi-Volatile Chemicals:
Butylated hydroxyanisole (BHA)
o-toluidine
Quinolone

Pesticides and byproducts:
Alpha-Hexachlorocyclohexane
Chlorpyrifos
Dimethipin
Ethoprop
Oxyfluorfen
Profenofos
Tebuconazole
Total Permethrin (cis- & trans-)
Tribufos

Unregulated Contaminant Monitoring Rule (UCMR3):

The following parameters were tested for as per a required USEPA monitoring program (2013 - 2015) to try to quantify the presence and amount of emerging or unregulated compounds to see if any or all of them should be regulated by the USEPA in the future (No MCL's for these parameters to-date).

The following contaminants that we tested for on the treated water exiting our treatment plants ("Entry Point" locations) were detected as follows:

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
1,4-Dioxane (ppb) *	2017-2019	1.35	ND – 1.35	Manufacturing solvent

*NYS guidance level for 1,4-dioxane was 1.0 ppb before new regulations were put into effect in August of 2020. Special 1,4-dioxane sampling was performed on raw water wells in 2017-2019 by the water company for proactive, informational, and quality control purposes only, and not due to any regulatory requirement.

USEPA Health Advisory Definitions:

Health advisories provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's Health Advisories are non-enforceable and non-regulatory and provide technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

Special Message about new Regulations on Emerging Contaminants by NYSDOH:

On August 26, 2020, NYS adopted new drinking water standards for public water systems that set maximum contaminant levels (MCLs) of 10 parts per trillion (ppt) each for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and 1 part per billion (ppb) for 1,4-dioxane.

About Drinking Water Standards and MCLs

A MCL is the highest level of a contaminant allowed in drinking water delivered by public water systems. They are enforceable regulatory limits. MCLs are set far below levels that cause health effects. According to the NYSDOH, because MCLs are set at levels with a large margin of protection, an exceedance of an MCL does not mean that water is unsafe for use while the public water system takes actions to reduce the levels.

The USEPA has also established guidance for the presence of PFOA and PFOS in drinking water. The EPA has established a non-enforceable health advisory level of 70 parts per trillion (ppt) for the sum of PFOA and PFOS. An MCL for 1,4-Dioxane in drinking water has not been established by the EPA.

What Are Emerging Compounds?

1,4-Dioxane is a synthetic industrial chemical that is present in many goods, including paint strippers, dyes, greases, antifreeze, and aircraft deicing fluids, and in some consumer products such as deodorants, shampoos and cosmetics.

PFOA/PFOS are per- and polyfluoroalkyl substances (PFAS), which are a group of man-made chemicals that can be found in food packaging; commercial household products, including stain- and water-repellent fabrics (ex: Scotchgard), nonstick products (e.g., Teflon), polishes, waxes, paints, and cleaning products; and fire-fighting foams.

Emerging compounds can enter our water resources after being landfilled, spilled, discharged as waste, or by seepage and infiltration into the water table, eventually entering water supplies.

NYAW's Action Plan

In advance of the adoption of these new standards by the State, New York American Water tested its entire water supply to determine the presence of these emerging compounds.

NYAW determined that, of the 55 sites that supply water across NYAW's service areas in Long Island and upstate New York, one site in your district has detections of emerging compounds above the NYS MCLs. Detections of 1,4-Dioxane at the Seamans Neck Well Station in North Wantagh/Levittown at 1.4 ppb. NYAW is pursuing Advanced Oxidation Process (AOP) treatment for 1,4-Dioxane at the Seamans Neck Well Station. NYAW has completed our AOP pilot testing and is working closely with the NCDOH on final treatment design. While AOP treatment will take time to fully install, NYAW's proactive approach has significantly reduced the time needed to install the right treatment system for our customers served by the Seamans Neck Well Station. Please see Public Notification below.

NYAW is pursuing the appropriate treatment where needed. While new treatment will take time to fully install, NYAW's proactive approach has significantly reduced the time needed to install the right treatment system for our customers.

When a public water system (PWS) is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new PFOS, PFOA, or 1,4-dioxane MCL's. In exchange, the NYSDOH agrees to defer enforcement actions, such as assessing fines, if the PWS is meeting established deadlines. Deferral recipients are required to update the Department and the NCDOH each calendar quarter on the status of the established deadlines. The Department can resume enforcement if the agreed upon deadlines are not met. Information about our deferral and established timelines can be found at the following site: https://www.amwater.com/nyaw/water-quality/Emerging-Compounds/seamans-neck

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Deferral Issued for 1,4-Dioxane to New York American Water (NYAW) – Merrick

Why are you receiving this notice/information?
You are receiving this notice because testing of our public water system found the chemical 1,4-Dioxane in your drinking water above New York State's maximum contaminant level (MCL) of 1 ppb for 1,4-dioxane. The MCLs are set well below levels known to cause health effects in animal studies. Therefore, consuming water with 1,4-dioxane at the level detected does not pose a significant health risk. Your water continues to be acceptable for all uses.

NYAW - Merrick has submitted, and the New York State Department of Health (Department) has issued, a deferral to NYAW - Merrick. When a public water system is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new MCLs. In exchange, the Department agrees to defer enforcement actions, such as assessing fines, if the water system is meeting the established deadlines. We are required to update the Department and the Nassau County Department of Health each calendar quarter on the status of our projects. If we do not meet the agreed upon deadlines, the Department can resume enforcement.

What are the health effects of 1,4-dioxane?
Laboratory studies show that 1,4-dioxane caused liver cancer in animals exposed at high levels throughout their lifetime. Other types of cancer have also been reported, although less consistently than liver cancer. There is no evidence of 1,4-dioxane cancer effects in humans. The United States Environmental Protection Agency considers 1,4- dioxane a likely human carcinogen based upon studies of animals exposed to high levels of this chemical over their entire lifetimes. At the level of 1,4-dioxane detected in your water, exposure from drinking water and food preparation is well below 1,4-dioxane exposures associated with health effects.

What is New York State doing about 1,4-Dioxane in public drinking water?
The New York State Department of Health (NYS DOH) has adopted a drinking water regulation that requires all public water systems to test for 1,4-dioxane. If found above the MCLs, the water supplier must take steps to lower the level to meet the standard. Exceedances of the MCL signal that steps should be taken by the water system to reduce contaminant levels.

What is being done to remove these contaminants?
NYAW - Merrick is in the process of installing treatment to remove 1,4-dioxane at our Seamans Neck Road Facility and will operate impacted wells in a last on first off sequence to minimize exposure to 1,4-Dioxane. Additional information will be shared as further testing and progress occurs. This process is similar for any chemical detected in public drinking water that requires mitigation. The compliance timetable will ensure that your drinking water will meet the MCL as rapidly as possible. The deferral is effective until August 25, 2022.

Where can I get more information?
For more information, please contact our Customer Service Center at 1-877-426-6999 or Natasha Niola, Water Quality Manager at 516-632-2239. You can also contact the Nassau County Health Department at (516) 227-9692. If you have additional questions about these contaminants and your health, talk to your health care provider who is most familiar with your health history and can provide advice and assistance about understanding how drinking water may affect your personal health.

Public Water System ID#: NY2902840
Date: January 21, 2021

Listing of Non-Detected (ND) Contaminants – 2020 (SA2 - Merrick Operations):

None of the following compounds that we analyzed for were detected in your drinking water at the respective method detection levels:

Microbiological:

E.coli

Inorganics & Physical:

Ammonia as N
Cyanide, free
Fluoride
Nitrite as N
Perchlorate
Surfactants (as MBAS)
Turbidity

Metals:

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Mercury
Selenium
Silver
Thallium
Zinc

Miscellaneous:

Asbestos fibers

Volatile Organic Compounds (VOC's):

Benzene
Bromobenzene
Bromochloromethane
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloromethane
Chlorodifluoromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4- Dichlorobenzene (Meta)
Dichlorodifluormethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethane
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadinene
Isopropylbenzene
4-Isopropyltoluene
Methyl Tert Butyl Ether (MTBE)
Methylene Chloride (Dichloromethane)
n-Propylbenzene
Styrene
1,1,2-trichloro 1,2,2-trifluoroethane
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene (PCE)
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
M-Xylene
O-Xylene
P-Xylene
Vinyl Chloride

Synthetic (Specific) Organic Compounds (SOC's)*

Regulated Group #1:

Alachlor
Aldicarb
Aldicarb Sulfone
Aldicarb Sulfoxide
Atrazine
Carbofuran
Chlordane, Total
1,2-Dibromo-3-Chloropropane (DBCP)
2,4-D
Endrin
1,2-Dibromomethane (EDB)
Heptachlor
Heptachlor Epoxide
Lindane
Methoxychlor
PCB's
Pentachlorophenol
Toxaphene
2,4,5-TP (Silvex)

Regulated Group #2:

Aldrin
Benzo(a)pyrene
Butachlor
Carbaryl
Dalapon
Di (2-Ethylhexyl) adipate
Di (2-Ethylhexyl) phthalalte
Dicamba
Dieldrin
Dinoseb
Diquat
Endothall
Glyphosate
Hexachlorobenzene
Hexachlorocyclopentadiene
3-Hydroxycarbofuran
Methomyl
Metolachlor
Metribuzin
Oxamyl (Vydate)
Picloram
Propachlor
Simazine
2,3,7,8-TCDD (Dioxin)

** Synthetic (Specific) Organic Compounds (SOC's) are mainly Pesticides and Herbicides, and are required to be tested on raw water wells, and not on distribution locations, as per NCDOH requirements.*

Unregulated Contaminant Monitoring Rule (UCMR3):

The following parameters were tested for as per a required USEPA monitoring program (2013 - 2015) to try to quantify the presence and amount of emerging or unregulated compounds to see if any should be regulated by the EPA in the future.

The following contaminants that we tested for on the treated water exiting our treatment plants ("point of entry" locations) were "Non-detected" (ND):

UCMR3 Volatile Organic Compounds (VOC's) Group (all ND):

1,1-Dichloroethane
1,2,3-Trichloropropane
1,3-Butadiene
Bromochloromethane (halon1011)
Bromomethane
Chlorodifluoromethane
Chloromethane

UCMR# Perfluorinated Compounds Group (all ND):

Perfluorooctanesulfonin acid (PFOS)
Perfluorooctonoic acid (PFOA)
Perfluorononanoic acid (PFNA)
Perfluorohexanesulfonic acid (PFHxS)
Perfluoroheptanoic acid (PFHpA)
Perfluorobutanesulfonic acid (PFBS)

UCMR3 Hormones Group (all ND):

Estradiol (17beta-)
Equilin
4-Androstene-3,17-dione
Estrone
Ethynylestradiol (ethinyl estradiol)
Hydroxyestradiol
Testosterone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A PENNY
PER GALLON
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PROVIDING SAFE, QUALITY WATER SERVICE

- Our drinking water meets or surpasses all primary state and federal standards, including regulations related to lead.
- Statewide, we perform thousands of tests each year on the water before it leaves our treatment plants, plus a significant number of tests in the distribution system.
- Our team of water quality experts sample and interpret data regularly, following state quality control standards. Our team utilizes certified labs across the state to process and analyze these samples. We sample above and beyond the required regulations provided by the USEPA and the local health departments.

See how we're doing in your community.

Every year, we provide a detailed analysis of the water we deliver to our communities in our Water Quality Reports. To learn more about our commitment to water quality or to view the Water Quality Report for your area, visit us online at **newyorkamwater.com**. Under Water Quality, select Water Quality Reports.

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WA220i

ATTACHMENT C

Water Quality Data

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

Sample Information:

Type: Drinking Water
Origin: Raw Well
Routine

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
Merrick, NY 11566
Attn To : Natasha Niola
Federal ID : 2902853
Collected : 02/16/2022 10:00 AM Point N-14340
Received : 02/16/2022 02:53 PM Location Well #1-A
Collected By CLIENT

Lab No. : 70204384001
Client Sample ID.: N-14340

Analytical Method: EPA 120.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Specific Conductance	71.5		1	umhos/cm		02/18/2022 7:40 AM	001 BP3U1/1

Analytical Method: EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Calcium	2.4		1	mg/L		02/21/2022 8:00 PM	001 BP3N1/1

Analytical Method: Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	11.2	N3	1	deg C		02/16/2022 10:00	001 BP3U1/1
Field pH	7.15	N3	1	Std. Units		02/16/2022 10:00	001 BP3U1/1

Analytical Method: SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	27.6		1	mg/L		02/24/2022 6:07 PM	001 BP3U1/1

Analytical Method: SM22 4500-P E

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Orthophosphate as P	<0.050		1	mg/L		02/17/2022 11:38	001 BP3U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected
See qualifiers page for additional qualifier definitions.

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

Sample Information:

Type: Drinking Water
Origin: Raw Well
Routine

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
Merrick, NY 11566
Attn To : Natasha Niola

Lab No. : 70204384002
Client Sample ID.: N-14340

Federal ID : 2902853
Collected : 02/16/2022 10:02 AM Point N-14340
Received : 02/16/2022 02:53 PM Location Well #1-A
Collected By CLIENT

Analytical Method: EPA 180.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Turbidity	<1.0		1	NTU	5	02/16/2022 7:13 PM	002 BP3U1/1

Analytical Method: EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Iron	<0.020		1	mg/L	0.3	02/21/2022 8:02 PM	002 BP3N1/1

Analytical Method: EPA 300.0

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Chloride	4.4		1	mg/L	250	02/28/2022 12:44	002 BP3U1/1

Qualifiers:
DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.Estimated value - below calibration range
U - Indicates the compound was analyzed for, but not detected

Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Date Reported: 03/10/2022

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
Merrick, NY 11566
Attn To : Natasha Niola
Federal ID : 2902853
Collected : 02/16/2022 10:45 AM Point N-05792
Received : 02/16/2022 02:53 PM Location Glen Head Well
Collected By CLIENT
Sample Comments:
RUN TO WASTE

Lab No. : 70204384003
Client Sample ID.: N-05792

Analytical Method: EPA 120.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Specific Conductance	188		1	umhos/cm		02/18/2022 7:41 AM	003 BP3U1/1

Analytical Method: EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Calcium	10.4		1	mg/L		02/21/2022 8:04 PM	003 BP3N1/1

Analytical Method: Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	9.8	N3	1	deg C		02/16/2022 10:45	003 BP3U1/1
Field pH	6.81	N3	1	Std. Units		02/16/2022 10:45	003 BP3U1/1

Analytical Method: SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	21.8		1	mg/L		02/24/2022 6:13 PM	003 BP3U1/1

Analytical Method: SM22 4500-P E

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Orthophosphate as P	0.17		1	mg/L		02/17/2022 11:41	003 BP3U1/1

Qualifiers:
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Result(s) reported meet(s) NYS Regulatory Limit(s).
Result(s) flagged with * Exceed NYS Regulatory Limit(s). Limit Noted.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
www.pacelabs.com

Laboratory Results

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests

Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
Merrick, NY 11566
Attn To : Natasha Niola

Lab No. : 70204384004
Client Sample ID.: N-05792

Federal ID : 2902853
Collected : 02/16/2022 11:15 AM Point N-05792
Received : 02/16/2022 02:53 PM Location Glen Head Well
Collected By CLIENT

Sample Comments:
RUN TO WASTE

Analytical Method:EPA 300.0

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Chloride	25.2		1	mg/L	250	02/28/2022 12:58	004 BP3U1/2

Analytical Method:EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrate as N	3.4		5	mg/L	10	02/17/2022 2:23 AM	004 BP3U1/2
Nitrate-Nitrite (as N)	3.4		5	mg/L		02/17/2022 2:23 AM	004 BP3U1/2

Analytical Method:EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrite as N	<0.050		1	mg/L	1	02/17/2022 12:19	004 BP3U1/2

Analytical Method:EPA 524.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,1,1,2-Tetrachloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1,1-Trichloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,L1	1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1-Dichloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1-Dichloroethene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Benzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2

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Laboratory Results

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Sample Information:
Type: Drinking Water
Origin: Raw Well
Routine

Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
Merrick, NY 11566
Attn To : Natasha Niola
Federal ID : 2902853
Collected : 02/16/2022 11:15 AM Point N-05792
Received : 02/16/2022 02:53 PM Location Glen Head Well
Collected By CLIENT

Lab No. : 70204384004
Client Sample ID.: N-05792

Sample Comments:
RUN TO WASTE

Bromobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Bromochloromethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		02/24/2022 6:46 PM	004 VG9C1/2
Bromoform	<0.50		1	ug/L		02/24/2022 6:46 PM	004 VG9C1/2
Bromomethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Chlorobenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Chlorodifluoromethane	<0.50	N3	1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Chloroform	<0.50		1	ug/L		02/24/2022 6:46 PM	004 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Dibromochloromethane	<0.50	L1	1	ug/L		02/24/2022 6:46 PM	004 VG9C1/2
Dibromomethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Dichlorodifluoromethane	<0.50	L2	1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Ethylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Hexachloro-1,3-butadiene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Isopropylbenzene (Cumene)	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Methyl-tert-butyl ether	<0.50		1	ug/L	10	02/24/2022 6:46 PM	004 VG9C1/2
Methylene Chloride	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Styrene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Tetrachloroethene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Toluene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Total Trihalomethanes (Calc.)	<0.50		1	ug/L	80	02/24/2022 6:46 PM	004 VG9C1/2
Trichloroethene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Trichlorofluoromethane	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Vinyl chloride	<0.50		1	ug/L	2	02/24/2022 6:46 PM	004 VG9C1/2
cis-1,2-Dichloroethene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
cis-1,3-Dichloropropene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
m&p-Xylene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
n-Butylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
n-Propylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
o-Xylene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
p-Isopropyltoluene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
sec-Butylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
tert-Butylbenzene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
trans-1,2-Dichloroethene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
trans-1,3-Dichloropropene	<0.50		1	ug/L	5	02/24/2022 6:46 PM	004 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	103%		1	%REC		02/24/2022 6:46 PM	004 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	89%		1	%REC		02/24/2022 6:46 PM	004 VG9C1/2

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Routine

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Liberty-NY - Sea Cliff OPS
60 Brooklyn Avenue
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Attn To : Natasha Niola
Federal ID : 2902853
Collected : 02/16/2022 11:17 AM Point N-05792
Received : 02/16/2022 02:53 PM Location Glen Head Well
Collected By CLIENT
Sample Comments:
RUN TO WASTE

Lab No. : 70204384005
Client Sample ID.: N-05792

Analytical Method:EPA 522 Prep Method: EPA 522 Prep Date: 02/22/2022 9:12 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.064		1	ug/L	1	02/22/2022 6:44 PM	005 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	93%		1	%REC		02/22/2022 6:44 PM	005 AG2R1/2

Analytical Method:EPA 537.1 Prep Method: EPA 537.1 Prep Date: 02/24/2022 5:30 PM

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.9	P4	1	ng/L		02/28/2022 4:34 AM	005 BP3T1/2
Perfluoroheptanoic acid	<1.9	P4	1	ng/L		02/28/2022 4:34 AM	005 BP3T1/2
Perfluorohexanesulfonic acid	<1.9	P4	1	ng/L		02/28/2022 4:34 AM	005 BP3T1/2
Perfluorononanoic acid	<1.9	P4	1	ng/L		02/28/2022 4:34 AM	005 BP3T1/2
Perfluorooctanesulfonic acid	2.3	P4	1	ng/L	10	02/28/2022 4:34 AM	005 BP3T1/2
Perfluorooctanoic acid	<1.9	P4	1	ng/L	10	02/28/2022 4:34 AM	005 BP3T1/2
Surr: 13C2-PFDA (S)	92%		1	%REC		02/28/2022 4:34 AM	005 BP3T1/2
Surr: 13C2-PFHxA (S)	91%		1	%REC		02/28/2022 4:34 AM	005 BP3T1/2
Surr: HFPO-DAS (S)	89%		1	%REC		02/28/2022 4:34 AM	005 BP3T1/2

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Date Reported: 03/10/2022

Jennifer Aracri

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WorkOrder :
70204384

Laboratory Certifications

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services Long Island

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WorkOrder :
70204384

Laboratory Certifications

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

575 Broad Hollow Road, Melville, NY 11747
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WorkOrder :
70204384

Additional Qualifiers

L1 - Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2 - Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
N3 - Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

ACCREDITED
CERTIFICATE #'s 5890.01 & 5890.02

Laboratory Report

for

Pace Analytical Services, Inc.
575 Broad Hollow Road
Melville, NY 11747
Attention: Jennifer Aracri
Fax: 631-420-8436

Date of Issue
03/09/2022

EUROFINS EATON ANALYTICAL, LLC

NELAP ACCREDITED TNI LABORATORY
Utah ELCP CA00006

Report: 989045
Project: JARACRI
Group: PFC, CLO4, ACRYL

WV6M: Rosalynn Dang

Project Manager

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.
* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.
* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.
* Test results relate only to the sample(s) tested.
* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).
* This report shall not be reproduced except in full, without the written approval of the laboratory.
* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	NE-OS-21-13
Arkansas	CA00006	Nevada	CA00006
California	2813	New Hampshire *	2959
Colorado	CA00006	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	CA00006
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	21-008R	Ohio - 537.1	87786
Hawaii	CA00006	Oregon *	4034
Idaho	CA00006	Pennsylvania *	68-00565
Illinois	200033	Puerto Rico	CA00006
Indiana	C-CA-01	Rhode Island	LAO00326
Iowa – Asbestos	413	South Carolina	87016
Kansas *	E-10268	South Dakota	CA11320
Kentucky	90107	Tennessee	TN02839
Louisiana *	LA008	Texas *	T104704230-20-18
Maine	CA00006	Utah (Primary AB) *	CA00006
Maryland	224	Vermont	VT0114
Marianas Islands	MP0004	Virginia *	460260
Massachusetts	M-CA006	Washington	C838
Michigan	9906	EPA Region 5	CA00006
Mississippi	CA00006	Los Angeles County Sanitation Districts	10264

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List
The test listed below are accredited and met the requirements of ISO/IEC 17025 as verify by A2LA.
Refer to our certificates and scope of accreditations (no. 5890-1 and 5890-2) found at:
https://www.eurofinsus.com/Eaton

Test(s)	Method(s)	Potable Water *	Waste Water
Enterococci	Enterolert	x	x
Escherichia coli (Enumeration)	SM 9221 B.1 SM 9221 F	x	
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x
Heterotrophic Bacteria	SM 9215 B	x	
Legionella	Legiolert®	x	
Pseudomonas aeruginosa	Idexx Pseudalert	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x	
Total Microcystins and Nodularins	EPA 546	X	
Yeast and Mold	SM 9610	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x	
1,4-Dioxane	EPA 522	x	
2,3,7,8-TCDD	Modified EPA 1613 B	X	
Acrylamide	+LCMS 2440)	x	
Algal Toxins/Microcystin	+ LCMS 3570	x	
Alkalinity	SM 2320B	x	x
Ammonia	EPA 350.1, SM 4500-NH3 H		x
Asbestos	EPA 100.2	x	x
Bicarbonate Alkalinity as HCO3	SM 2330 B	x	x
BOD/CBOD	SM 5210 B		x
Bromate	+LCMS- 2447	x	
Carbonate as CO3	SM 2330 B	x	x
Carbonyls	EPA 556	x	x
Chemical Oxygen Demand	EPA 410.4, SM 5220D		x
Chlorinated Acids	EPA 515.4	x	
Chlorine Dioxide	Palin Test Chlordio X Plus, SM 4500-CLO2 D	x	
Chlorine, Free, Combined, Total Residual, Chloramines	SM 4500-Cl G	x	
Color	SM2120B	x	
Conductivity	EPA 120.1, SM 2510B	x	x
Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated	SM 2330 B	x	
Cyanide (Amenable)	SM 4500-CN G	x	x
Cyanide (Free)	SM 4500CN F	x	x
Cyanide (Total)	EPA 335.4	x	x
Cyanogen Chloride (Screen)	+335 Mod (WC-24467)	x	
Diquat and Paraquat	EPA 549.2	x	
DBP and HAA	SM 6251 B	x	
Dissolved Organic Carbon	SM 5310 C	x	
Dissolved Oxygen	SM 4500-O G		x
EDB/DCBP/TCP	EPA 504.1	x	
EDB/DBCP and Disinfection Byproducts	EPA 551.1	x	
EDTA and NTA	+ WC-2454	x	
Endothall	EPA 548.1, +(LCMS-2445)	x	
Fluoride	SM 4500F C	x	x
Glyphosate	EPA 547	x	
Glyphosate and AMPA	+LCMS-3618	x	
Gross Alpha and Gross Beta	EPA 900.0	x	x

Test(s)	Method(s)	Potable Water *	Waste Water
Gross Alpha coprecipitation	SM 7110 C	x	x
Hardness	SM 2340 B	x	x
Hexavalent Chromium	EPA 218.6,	x	x
Hexavalent Chromium	EPA 218.7,	x	
Hexavalent Chromium	SM 3500-Cr B		x
Inorganic Anions and DBPs	EPA 300.0	x	x
Norganic Anions and DBPs	EPA 300.1	x	
Kjeldahl Nitrogen	EPA 351.2		x
Metals	EPA 200.7, EPA200.8	x	x
Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x
Odor	SM2150B	x	
Organohalide Pesticides and PCB	EPA 505	x	
Ortho Phosphate	SM 4500P E	x	
Oxyhalides Disinfection Byproducts	EPA 317.0	x	
Perchlorate	EPA 331.0	x	
Perchlorate (Low and High Levels)	EPA 314.0	x	
Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	x	
PPCP and EDC	+LCMS-2443	x	
pH	EPA 150.1 SM 4500-H+ B	x	x
Phenolics – Low Level	+WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
Phenylurea Pesticides/Herbicides	+LCMS-2448	x	
Radium-226, Radium-228	GA Tech (Rad-2374)	x	
Radon-222	SM 7500RN	x	
Residue (Filterable)	SM 2540C	x	x
Residue (Non-Filterable)	SM 2540D		x
Residue (Total)	SM 2540B		x
Residue (Volatile)	EPA 160.4		x
Semi-Volatile Compounds	EPA 525.2	x	
Silica	SM 4500-SiO2 C	x	x
Sulfide	SM 4500-S D		x
Sulfite	SM 4500-SO3 B	x	x
Surfactants	SM 5540C	x	x
Taste and Odor	SM 6040 E	x	
Total Organic Carbon	SM 5310 C	x	x
Total Phenols	EPA 420.1		x
Total Phenols	EPA 420.4	x	x
Triazine Pesticides and their Degradates	+LCMS-3617	x	
Turbidity	EPA 180.1	x	x
Uranium by ICP/MS	EPA 200.8	x	
UV 254 Organic Constituents	SM 5910B	x	
VOCs	EPA 524.2	x	
VOCs	+ (GCMS 2412) by EPA 524.2 modified	x	

(*) includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage.
(+) In-House Method

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Acknowledgement of Samples Received

Addr: **Pace Analytical Services, Inc.**
575 Broad Hollow Road
Melville, NY 11747

Attn: Jennifer Aracri
Phone: 631-694-3040

Client ID: PACE-NY
Folder #: 989045
Project: JARACRI
Sample Group: PFC, CLO4, ACRYL

Project Manager: Rosalynn Dang
Phone: 626-386-1250
PO #: 70204384 JSA

The following samples were received from you on **February 22, 2022** at **1951**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202202230951	N-05792	02/16/2022 1115
	Variable ID: 70204384004	
	L-CLO4	

Test Description

484045

Chain of Custody

PASI New York Laboratory

Workorder: 70204384 **Workorder Name:** WQP/TURB/CL/FE/PFA/1,4/NO3/PER **Results Requested By:** 3/2/2022

Pace Analytical®
www.pacelabs.com

Report / Invoice To

Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040
Email: jennifer.aracri@pacelabs.com

Subcontract To

Eurofins Eaton Analytical
750 Royal Oaks Dr., Suite 100
Monrovia, CA 91016

P.O. 70204384 JSA

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Requested Analysis: 3140 Perchlorate by IC												LAB USE ONLY
1	N-05792	2/16/2022 11:15	70204384004	Drinking							X												
2																							
3																							
4																							
5																							

Transfers	Released By	Date/Time	Received By	Date/Time
1	L. Lewmey Pace LI	2/21/22 1800	[signature] 2-22-22	1951
2				
3				

Comments

Please report in ug/L.

Cooler Temperature on Receipt ____ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

6

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INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 984045

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 1.0 °C) (Corr.Factor -0.2 °C) (Final = 0.8 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: ____
5678 9607 9186

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ____ Lot Number: ____ pH strip type: 0 - 14 or ____ Expiration Date ____ Results: ____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ____ Expiration Date: ____ Results ____

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ____

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY	Chris Brock	Chris Brock	Eurofins Eaton Analytical	2-22-22	1951
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

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Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 989045
Project: JARACRI
Group: PFC, CLO4, ACRYL

Pace Analytical Services, Inc.
Jennifer Aracri
575 Broad Hollow Road
Melville, NY 11747

The Comments Report may be blank if there are no comments for this report.

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Tel: (626) 386-1100
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1 800 566 LABS (1 800 566 5227)

Laboratory Hits

Report: 989045
Project: JARACRI
Group: PFC, CLO4, ACRYL

Pace Analytical Services, Inc.
Jennifer Aracri
575 Broad Hollow Road
Melville, NY 11747

Samples Received on:
02/22/2022 1951

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

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Laboratory Data

Report: 989045
Project: JARACRI
Group: PFC, CLO4, ACRYL

Pace Analytical Services, Inc.
Jennifer Aracri
575 Broad Hollow Road
Melville, NY 11747

Samples Received on:
02/22/2022 1951

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
N-05792 (202202230951)							**Sampled on 02/16/2022 1115**		
	Variable ID: 70204384004								
	EPA 314.0 - Perchlorate with 2 ug/L MRL								
	03/03/22 21:54	(1)	1390342	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1

Rounding on totals after summation.
(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Pace Analytical Services, Inc.

Perchlorate with 2 ug/L MRL

Analytical Batch: 1390342 **Analysis Date: 03/03/2022**

202202230951 N-05792 Analyzed by: YHP7

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Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 989045
Project: JARACRI
Group: PFC, CLO4, ACRYL

Pace Analytical Services, Inc.

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Perchlorate with 2 ug/L MRL by EPA 314.0									
Analytical Batch: 1390342						**Analysis Date: 03/03/2022**			
LCS1	Perchlorate- Low Level		10	9.90	ug/L	99	(85-115)		
LCS2	Perchlorate- Low Level		10	10.0	ug/L	100	(85-115)	15	1.0
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	1.82	ug/L	91	(75-125)		
MS_202202190117	Perchlorate- Low Level	4.8	4	8.71	ug/L	99	(80-120)		
MSD_202202190117	Perchlorate- Low Level	4.8	4	8.12	ug/L	84	(80-120)	15	7.0

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

WO#: 70204384

70204384

Sample Request Form
PUBLIC WATER SUPPLIER

Date: 2-16-22

Collected By: J. Palmer

Accepted By: 2/16/22 14:53

Cooler Temp: 6.0 °C (B)

❑ WELL OFF LINE GH well ran t/u

❑ WELL RUN TO SYSTEM ~~GH well~~ JP
SC well 1A

☑ YES ❑ NO VOC'S PRESERVED WITH HC

Client Info:

Name or Code: NY-Liberty Sea Cliff OPS

Address: 60 Brooklyn Ave
Merrick, NY 11566

Phone #: 516-632-2239

Attn: Natasha Viola

Proj. # or (Name):

Bill To:

Copies To:

Sample Types	Purpose	Origin	Treatment Types
PW - Potable Water	RO - Routine	D - Distribution	AST - Air Stripper
GW - Groundwater	RE - Resample	RW - Raw Well	GAC - Granular Activated Charcoal
SW - Surface Water	S - Special	TW - Treated Well	N - Nitrate Removal Plant
WW - Waste Water		T - Tank	FE - Iron Removal Plant
AQ - Aqueous		MW - Monitoring Well	O - Other
S - Soil		I - Influent	
		E - Effluent	

Sample Info:

Date/Time Collected:	Sample Type	Location	Origin	Treatment Type	Purpose	Field Readings Cl_2	Field Readings pH/Temp	Analysis	Lab No.
2/16/22 1000	GW	SC well 1A (N-14340)	TW	O	RO	0.81	7.15 / 11.2	WQP w/orthophosphate	
1002	↓	↓ ↓	↓	↓	↓			Turbidity⊕Chlorides⊕Fe	
1045	↓	GH well (N-05792)	↓	↓	↓	0.42	6.81 / 9.8	WQP w/orthophosphate	
1115	↓	↓ ↓	↓	↓	↓			POC⊕Chlorides⊕Nitrate/Nitrite⊕Perchlorate	
1117	↓	↓ ↓	↓	↓	↓			PFC⊕1,4-Dioxane	

Remarks:

Pace Analytical®

Sample Condition Upon Rec

WO#: 70204384

PM: JSA **Due Date: 02/25/22**

CLIENT: SCAW

Client Name: SCAW Proje

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☑ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Thermometer Used: TH091 Correction Factor: ±0.0

Cooler Temperature(°C): 6.0 Cooler Temperature Corrected(°C): 6.0

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Temperature Blank Present: ☐ Yes ☑ No

Type of Ice: Wet Blue None

☑ Samples on ice, cooling process has begun

Date/Time 5035A kits placed in freezer :

Date and Initials of person examining contents: MW 2/16/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/ Matrix: SL WT OIL				
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC155968				
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				
Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☐ Yes	☐ No	☑ N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024 01