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July 8, 2022

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

In accordance with the deferral extension ending in June 2022, the Glen Head Station GAC project is completed. The Nassau County Department of Health (NCDH) approved this treatment system to be placed in service on May 6, 2022 and it has been in service since that date.

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

**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(AWQR)/Consumer Confidence Report released in May 2021, posted on the former NYAW website at [libertyutilities.com](http://libertyutilities.com) and publicized via newspaper ads and bill insert. The most recent 2021 AWQR specific to the Liberty-Sea Cliff Operations District provides public notification of the deferral as well and is available at [https://new-york-water.libertyutilities.com/uploads/Sea%20Cliff\\_CCR.pdf](https://new-york-water.libertyutilities.com/uploads/Sea%20Cliff_CCR.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 the AWQR public notifications is contained in **Attachment B**.

**Analytical Sampling**

Raw water sample results for the well for which the deferral was granted (Glen Head Well, PWS# NY2902853), taken in the second quarter of 2022, are contained in the table below.

The full laboratory report for the raw sample is contained in **Attachment C**.

**Second 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 – Raw*	N-05792	06/06/2022	Pace	ND	3.0

*ND: Non Detect*

\*Note – Liberty is awaiting results for treated sample analysis; however, samples showing non-detect levels of PFAS in the treated effluent were collected in the first quarter of 2022.

**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-Sea Cliff Operations District has completed the treatment facility and placed it into operation. The deferral is no longer needed as of May 2022.

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

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

Very truly yours,

Philip R. 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)

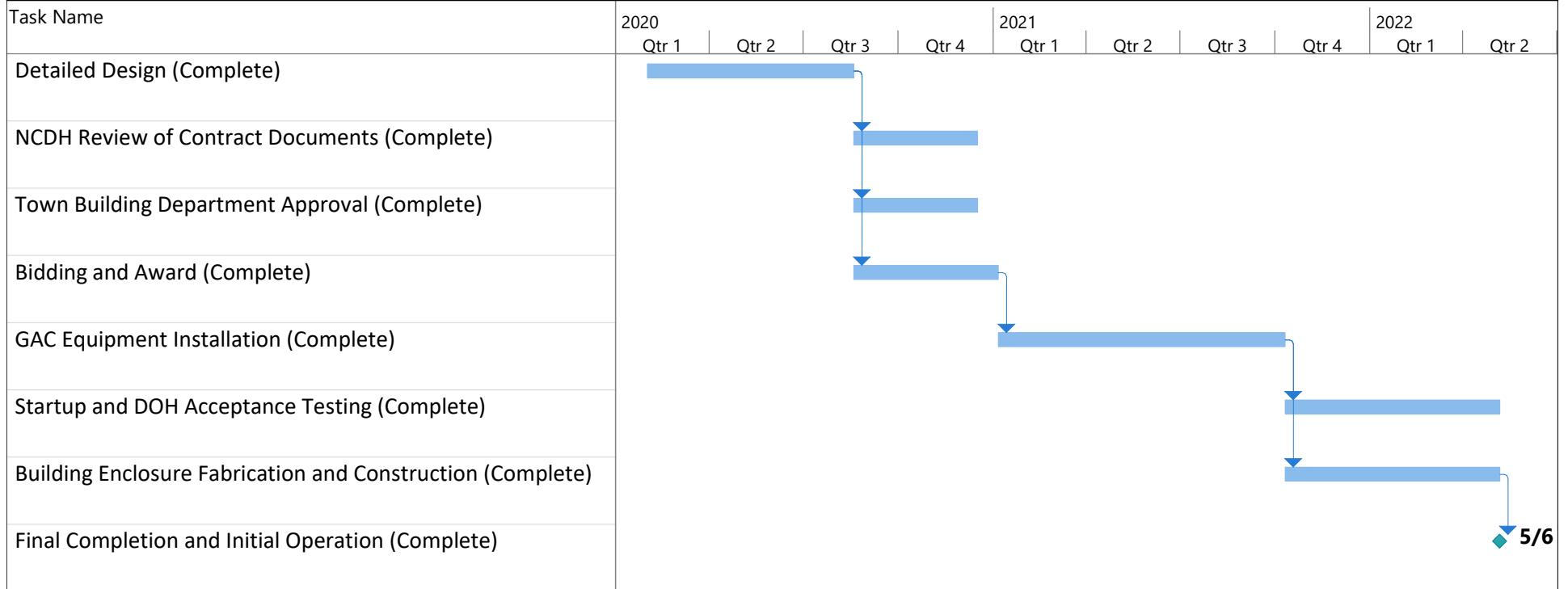
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**ATTACHMENT A**

**MCL Deferral Project Schedule**

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

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 NYCRR) 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](http://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](http://www.health.state.ny.us)

### **NCDOH**

516-227-9692 • [www.co.nassau.ny.us/health](http://www.co.nassau.ny.us/health)

### **New York State Department of Public Service**

1-800-342-3377 • [www.dps.state.ny.us](http://www.dps.state.ny.us)

### **USEPA**

[www.epa.gov/safewater](http://www.epa.gov/safewater)

### **EPA Safe Drinking Water Hotline**

1-800-426-4791

### **American Water Works Association**

[www.awwa.org](http://www.awwa.org)

### **Water Quality Association**

[www.wqa.org](http://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](http://amwater.com) and follow American Water on [Twitter](#), [Facebook](#) and [LinkedIn](#).

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

## 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.

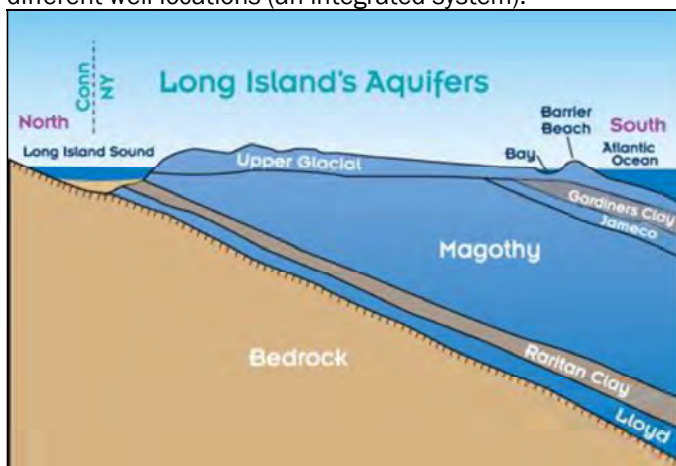
## Source, Quality & Quantity

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

## 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)



WE CARE ABOUT WATER. IT'S WHAT WE DO.®

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](http://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.

**Substances that may be present in source water include:**

- **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 NCDOH at 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.

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.

<b>2020 STATISTICS AT-A-GLANCE</b>	
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 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

## 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
<b>Microbiological</b>							
Total Coliform (% positive samples in any given month) <sup>1</sup>	2020 (highest month was August 2020)	TT=>5% samples positive	N/A	1.6% <sup>1</sup> (2 POS out of 126 total samples in August 2020)	ND (0%) – 1.6%	No	Naturally present in the environment
<b>Disinfection By-Products</b>							
TTHM's (Total Trihalomethanes) (ppb) <sup>2</sup>	Quarterly 2020	80	0	4.8	<1.0 – 4.8	No	By-product of drinking water disinfection
HAA5's (Total Haloacetic acids) (ppb) <sup>3</sup>		60	0	<2.0	<2.0 - <2.0	No	
<b>Disinfectants</b>							
Chlorine (ppm) <sup>4</sup>	2020	N/A	N/A	2.20	<0.10 - 2.20	No	Water additive used to control microbes
<b>Radiological<sup>5</sup></b>							
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) <sup>6</sup>	07-09/ 2020	1.3	1.3	0.270	0.021- 0.340	No	Corrosion of household plumbing systems
Lead (ppb) <sup>7</sup>		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) <sup>8</sup>	06/2020	300	N/A	940	ND - 940	No	Naturally occurring
Manganese (ppb) <sup>8</sup>	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) <sup>9</sup>	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
<b>Specific Organic Compounds</b>							
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) <sup>10</sup>	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) <sup>11</sup>	2020	7.1	7.0 - 7.1	N/A
Total Dissolved Solids (TDS) (ppm)	2020	123	42 - 123	N/A

### Footnotes:

- <sup>1</sup> 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.
- <sup>2</sup> TTHM's mean the sum of: Bromoform, Bromodichloromethane, Dibromochloromethane, and Chloroform. The highest 'Locational Running Annual Average' was 4.8 ppb in 2020.
- <sup>3</sup> 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.
- <sup>4</sup> The running annual average of all Chlorine Residual readings (1,459) in the distribution system was **1.50 ppm** for 2020.
- <sup>5</sup> Radiological results are from individual raw water wells, and not distribution locations, as required by the NCDOH.
- <sup>6</sup> 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.
- <sup>7</sup> 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.
- <sup>8</sup> 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.



<sup>9</sup> 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.

<sup>10</sup> The NCDOH recommends that the Langelier Saturation Index (for corrosivity) be as close to zero as possible.

<sup>11</sup> 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, Trichloroacetic 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

#### Pesticides and byproducts:

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

#### Semi-Volatile Chemicals:

Butylated hydroxyanisole (BHA)  
o-toluidine  
Quinolone

### 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)  
Dichlorodifluoromethane  
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) phthalate  
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):

Perfluorooctanesulfonic acid (PFOS)  
Perfluorooctanoic 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  
Ethinylestradiol (ethinyl estradiol)  
Hydroxyestradiol  
Testosterone





**WE CARE ABOUT WATER. IT'S WHAT WE DO.®**



## **WATER QUALITY YOU CAN TRUST**

### **RESULTS TO PROVE IT**

We have an exceptional track record when it comes to water quality and drinking water regulatory compliance. That's why we invite you to read our latest Water Quality Report, specifically for your local community.



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**AMERICAN WATER**

**WE KEEP LIFE FLOWING®**





## 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](https://www.newyorkamwater.com). Under Water Quality, select Water Quality Reports.

**QUALITY. ONE MORE WAY  
WE KEEP LIFE FLOWING.**

# Annual Water Quality Report

Sea Cliff

Operations District

Public Water Supply ID# NY2902853



## Message from the President

Providing customers with safe, quality drinking water is a top priority for Liberty, and we are proud to present this Water Quality Report (Consumer Confidence Report) that shares detailed information regarding local water service and our compliance with state and federal quality standards during the 2021 calendar year.

Liberty makes significant investments each year to ensure the water we deliver to customers meets all Safe Drinking Water Act (SDWA) standards established by the United States Environmental Protection Agency (EPA) and New York State Department of Health (NYSDOH). We invest responsibly in order to maintain the local water infrastructure, because strong infrastructure is a key factor in delivering quality water. Additionally, we have a top-notch water quality program that ensures the water delivered to your home or business is thoroughly tested by independent laboratories and the data is provided to the state to verify compliance with all applicable SDWA and NYSDOH water regulations.

We know our customers rely on us to make sure the water at their tap is safe to drink, and we take that responsibility seriously. Our employees live in the local community and take great pride in providing quality water and reliable service to you and your neighbors.

If you have any questions about the information within this report, please don't hesitate to contact us anytime at 1-877-426-6999 TDD:711. We encourage you to visit our website at [www.libertyenergyandwater.com](http://www.libertyenergyandwater.com) to stay up-to-date and receive tips about water conservation and more.

On behalf of the entire Liberty family, thank you for being a valued customer and neighbor. We are proud to be your water provider.

Sincerely,  
Chris Alario  
President, Liberty New York Water

To request a printed copy of this report, please call us at 1-877-426-6999 TDD:711. This report can also be found at [www.libertyenergyandwater.com](http://www.libertyenergyandwater.com).





## Where Does My Water Come From?

### Communities Served

- Village of Sea Cliff
- Glenwood Landing\*
- Glen Head\*
- Glen Cove\*
- Old Brookville\*
- Roslyn Harbor\*

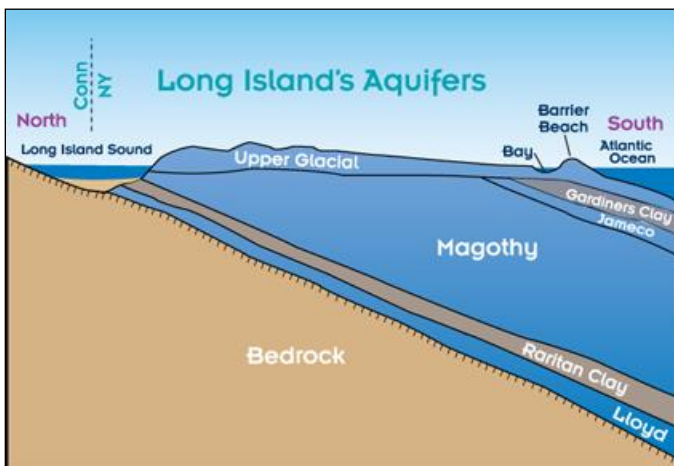
\*community partially served

### Source, Quality & Quantity

Groundwater is the source of your drinking water supply. It is drawn from two 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. Sea Cliff Operations has two wells in the Magothy and Lloyd aquifers.



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 the CDM 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 2 wells. The source water assessment has rated 1 of the wells as having a very high susceptibility to industrial solvents and a high susceptibility to nitrates. The very high susceptibility to industrial solvents is due primarily to point sources of contamination related to commercial/ industrial facilities and related activities in the assessment area. The high susceptibility to nitrate contamination is attributable to unsewered high density residential land use practices in the assessment area, such as fertilizing lawns.

### **How is Your Water Treated?**

Our water supply is obtained from two wells located throughout our service area. One well is 610 feet deep (in the Lloyd aquifer), while the other is 310 feet deep (in the Magothy aquifer).

Bacteriological pollutants are usually not present in wells at these depths. However, water treatment is required to protect the water flowing through the distribution system.

#### **Treatment consists of:**

1. Chlorination for bacteriological disinfection (using Calcium Hypochlorite and Sodium Hypochlorite)
2. Caustic Soda (Sodium Hydroxide) to raise pH and minimize corrosivity to water mains and household plumbing
3. Calciquest (Phosphate compound) to maintain optimum treatment and inhibit the corrosion of plumbing materials; and to stabilize naturally occurring iron and manganese that can cause discolored water conditions.

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: <https://new-york-water.libertyutilities.com/all/residential/safety/lead-in-drinking-water-new-york-water.html#navbar-safety-water-quality-res>.

### **What are Drinking Water Standards?**

Drinking water standards are the regulations set by the USEPA to control the level of contamination in the nation's drinking water. The USEPA and the NYSDOH are the agencies responsible for establishing drinking water quality standards in New York. This approach includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated by qualified operators; ensuring the integrity of the distribution system; and making information about water quality available to the public. The water delivered to your home meets the standards required by the USEPA and the NYSDOH.

This report describes those contaminants that have been detected in the analyses of almost 200 different potential contaminants, nearly 100 of which are regulated by the USEPA and the NYSDOH.

Liberty is proud to tell you that there have been no contaminants detected that exceed any federal

or state drinking water standards. Hundreds of samples analyzed every year by Liberty's contract certified laboratory assures that all primary (health-related) drinking water standards are being met. Sample results are available on the Table in this report.

This report is intended to provide information for all water users. If received by an absentee landlord, a business, or a school, please share the information with tenants, employees, or students. We are happy to make additional copies of this report available. You may also access this report on the Liberty web page at [www.libertyenergyandwater.com](http://www.libertyenergyandwater.com).

## Substances That Could be in Water

The sources of drinking water (both tap water 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the NYSDOH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (USFDA) also establishes limits for contaminants in bottled water that 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 USEPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting their website at <https://www.ground-water-and-drinking-water/national-primary-drinking-water-regulations>. For information on bottled water visit the USFDA website at [www.fda.gov](http://www.fda.gov).

## Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general



population. Immunocompromised 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 about drinking water from their health care providers. The USEPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the 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, we thought 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 NCDOH at 516-227-9692.

## **System Improvements**

In 2021, we continued to make significant upgrades to our system and infrastructure. Those improvements include:

- Replaced approximately 4,390 feet of water main located throughout the service territory.
- Replaced approximately 9 service lines.
- Replacement of 5 fire hydrants.
- Replaced approximately 1,720 water service meters.
- Completed construction and began operation of the new 500,000-gallon elevated potable water storage tank in Glen Head.
- Began construction of 2 Million-Gallon-Per-Day Granular Activated Carbon (GAC) treatment system for the Glen Head Well Station.

Improvements planned for 2022 include:

- Replacement of approximately 300 feet of water main located throughout the service territory.
- Replacement of 5 service line connections.
- Replacement of 1 fire hydrants.
- Replace approximately 1,820 water service meters.
- Complete construction and begin operation of the new 2 Million-Gallon-Per-Day Granular Activated Carbon (GAC) treatment system for the Glen Head Well Station for removal of PFOS/PFOA.

## **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 ensure 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 Liberty 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, hints and dye tablets to help you determine if you have a wasteful water loss. Call our customer call center or 516-632-2236 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.

## 2021 STATISTICS AT-A-GLANCE

Wells Closed/Restricted	None
Violations of Standards	None
Typical Well Depth	310 & 610 Feet
Aquifers	Magothy/Lloyd

Pumping Stations	2
Service Area	4.4 mi <sup>2</sup>
Total Water Withdrawn	435,622,000 Gal
Total Water Imported	0 Gal
Total Water Delivered to System	423,276,140 Gal
Total Water Sales	389,547,300 Gal
Population Served (approx.)	13,400
Customers Served (approx.)	4,369
Miles of Mains	55

## Average Residential Usage & Cost

In 2021, the average residential household used approximately 89,161 gallons of water at a cost of \$890, or \$2.44 a day. With an average of 3.0 persons per household, the cost of water was about 81¢ a day per person.



## Important Health Information

### Lead

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 0.3 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. The next round of homeowner monitoring for the Lead and Copper Rule will be completed in the summer of 2023.

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. We are responsible for providing high-quality drinking water, but we 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### **PFOS**

PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high level exposures to PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOS as having

suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOS in animals.

### **How Might I Become Actively 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
- 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

### **Is Our Water System Meeting Other Rules That Govern Our Operations?**

During 2021, 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.

## Testing Results

During the year, Liberty collects water samples to determine the presence of any radioactive, biological, inorganic, or organic contaminants. All of the substances listed in the table below tested under the Maximum Contaminant Level (MCL). Liberty believes it is important you know what was detected, and how much of the substance was present. The state allows the monitoring of certain substances less than once a year because the concentrations of these substances do not change frequently. If a substance was tested and there was no detection, it is not listed in this table. You can find Definitions, Terms and Abbreviations related to this Table in the next section for easy reference.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Microbiological</b>							
Total Coliform (% positive samples in any given month)	N	2021 (One positive sample on 10/06/21)	5.26% in October	units	N/A	TT => 5% samples positive in a month	Naturally present in the environment.
<b>Inorganic Contaminants</b> (source: raw water wells)							
Barium	N	11/2021	ND – 0.024	mg/L	2	2	Erosion of natural deposits.
Chloride	N	09/2021	3.3 – 33.8	mg/L	N/A	250	Natural occurring or indicative of road salt contamination.
Copper	N	09/2021	0.0024 – 0.0060	mg/L	N/A	1.3	Erosion of natural deposits.
Sodium	N	11/2021	3.3 – 18.6	mg/L	N/A	See Health Effects <sup>1</sup>	Naturally occurring; Road salt; Water softeners.
Color	N	11/2021	ND – 6	units	N/A	15	Natural color may be caused by decaying leaves, plants, and soil organic matter.
Manganese <sup>2</sup>	N	11/2021	ND – 0.11	mg/L	N/A	0.3	Naturally occurring.
Nickel	N	09/2021	0.0006 – 0.0011	ug/L	N/A	N/A	Naturally occurring.
Zinc	N	09/2021	ND – 0.039	mg/L	N/A	5	Naturally occurring.
Sulfate	N	09/2021	ND – 20.5	mg/L	N/A	250	Naturally occurring.
Nitrate	N	12/2021	0.085 – 4.5	mg/L	10	10	Erosion of natural deposits, fertilizers, sanitary waste systems.
<b>Organic Contaminants</b> (source: raw water wells)							
1,4 dioxane	N	Quarterly 2021	Avg- 0.073 ND – 0.085	ug/L	N/A	1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorooctanoic acid - (PFOA)	N	Quarterly 2021	Avg- 2.9 ND – 3.3	ng/L	0	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanesulfonic acid - (PFOS)	N	Quarterly 2021	Avg- 6.58 ND – 8.8	ng/L	0	10	
<b>Radiological Contaminants</b> (footnote 3) (source: raw water wells)							
Gross Alpha	N	12/2021	0.071 – 0.178	pCi/L	0	15	Erosion and decay of natural deposits.
Combined Radium- 226 and 228	N	12/2021	0.284 – 1.285	pCi/L	0	5	
Gross Beta	N	12/2021	0.598 – 4.320	pCi/L	0	50 (a)	
Uranium	N	12/2021	0.053 – 0.071	ug/L	0	30 (b)	

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Disinfectant/ Disinfection By-product (D/DBP) Parameters (footnote 4)</b>							
TTHMs	N	Quarterly 2021	Avg- 1.75 ND – 3.30 (August)	mg/L	0	80	By-product of drinking water disinfection.
HAA5's	N		Avg- ND ND - ND	mg/L	0	60	
Chlorine	N	2021	0.80	mg/L	N/A	4	Water additive used to control microbes.
<b>Lead and Copper (Tap water at homeowner's premise) (footnote 5)</b>							
Copper	N	06-09/2020	90 <sup>th</sup> - 0.34 (ND – 1.10)	mg/L	1.3	1.3	Corrosion of household plumbing systems.
Lead	N	06-09/2020	90 <sup>th</sup> - ND (ND – ND)	ug/L	0	15	
<b>Unregulated Substances and Physical Parameters</b>							
Alkalinity	N	09/2021	11.7 – 76.2	mg/L	N/A	N/A	N/A
Calcium Hardness	N	09/2021	5.8 – 40.0	mg/L	N/A	N/A	N/A
Calcium	N	09/2021	2.0 – 16.0	mg/L	N/A	N/A	N/A
Corrosivity <sup>6</sup>	N	09/2021	(-3.44) – (-2.33)	Langelier Index	N/A	N/A	N/A
Hardness, Total	N	09/2021	10.9 – 62.6	mg/L	N/A	N/A	N/A
Magnesium	N	11/2021	1.2 – 5.7	mg/L	N/A	N/A	N/A
pH <sup>7</sup>	N	11/2021	6.6 – 6.8	units	N/A	N/A	N/A
TDS	N	09/2021	18 - 166	mg/L	N/A	N/A	N/A
Turbidity	N	10/2021	ND – 10	NTU	N/A	N/A	N/A
Perfluorobutanesulfonic acid- (PFBS)	N	10/2021	ND – 2.1	ng/L	N/A	N/A	N/A
Perfluorohexanesulfonic acid- (PFHxS)	N	10/2021	ND – 8.1	ng/L	N/A	N/A	N/A

**Notes:**

- 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.
- Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.
- Radiological results are from raw water wells, and not distribution locations, as required by the NCDOH. (a) The State considers 50 pCi/L to be the level of concern for beta particles. (b) 30 µg/l of uranium is approximately 20.1 pCi/L.
- TTHM's mean the sum of: Bromoform, Bromodichloromethane, Dibromochloromethane, and Chloroform. The highest 'Locational Running Annual Average" was 2.15 pbb in 2021. HAA5's include the sum of: Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Bromoacetic acid, and Dibromoacetic acid. The highest 'Locational Running Annual Average" was <2.0 pbb in 2021. The running annual average of all Chlorine Residual readings in the distribution system was 0.80 ppm for 2021.
- The level presented represents the 90th percentile of 32 sites tested. The "action level" for copper was not exceeded at any of 32 sites tested. The level presented represents the 90th percentile of 32 sites tested. The "action level" for lead was not exceeded at any of the 32 sites tested.
- The NCDOH recommends that the Langelier Saturation Index (for corrosivity) be as close to zero as possible.
- NCDOH guidelines recommend a pH range of 7.5 – 8.5. The running annual average of all pH readings in the distribution system was 7.56 units in 2021.



## Definitions, Terms and Abbreviations

**90th percentile:** For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.

**AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**HAA5:** Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di- bromoacetic acid) as a group.

**Healthy Advisory (HA):** 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.

**MCLG:** Maximum Contaminant Level Goal, or 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.

**MCL:** Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL:** Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG:** Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** not applicable.

**ND:** not detectable at testing limits.

**NTU:** Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

**pCi/L:** picocuries per liter, a measure of radioactivity

**ppb:** parts per billion or micrograms per liter.

**ppm:** parts per million or milligrams per liter.

**RAA:** Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

**Total Dissolved Solids (TDS):** An overall indicator of the amount of minerals in the water.

**TTHM:** Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

### What Does This Information Mean?

As you can see by the table, our system had no sample limit violations in 2021. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.



## Why Save Water And How To Avoid Wasting It?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

## Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources. For questions concerning this report or your water quality, please contact Natasha Niola, Water Quality Manager, at 516-632-2239 or Liberty Customer Service at 1-877-426-6999 TDD:711; or on the web at [www.libertyenergyandwater.com](http://www.libertyenergyandwater.com).

### Liberty – New York Water

60 Brooklyn Avenue

Merrick, NY 11566

## Listing of Non-Detected (ND) Contaminants – 2021 (Sea Cliff 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  
Odor  
Perchlorate  
Surfactants (as MBAS)

### Metals:

Antimony  
Arsenic  
Beryllium  
Cadmium  
Chromium  
Iron  
Mercury  
Selenium  
Silver  
Thallium

### Miscellaneous:

Asbestos fibers

### Volatile Organic Compounds (VOC's):

Benzene  
Bromobenzene  
Bromochloromethane  
Bromomethane  
n-Butylbenzene  
sec-Butylbenzene  
tert-Butylbenzene  
Carbon Tetrachloride  
Chlorobenzene  
Chloroethane  
Chloromethane  
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  
Hexachlorobutadiene  
Isopropylbenzene  
4-Isopropyltoluene  
Methylene Chloride (Dichloromethane)  
Methyl Tertiary Butyl Ether (MTBE)  
n-Propylbenzene  
Styrene  
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  
Trichloroethene (TCE)  
Trichlorofluoromethane  
1,2,3-Trichloropropane  
1,2,4-Trimethylbenzene  
1,3,5-Trimethylbenzene  
M-Xylene  
O-Xylene  
P-Xylene  
Vinyl Chloride

### Synthetic 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) phthalate  
Dicamba  
Dieldrin  
Dinoseb  
Diquat  
Endothall  
Glyphosate  
Hexachlorobenzene  
Hexachlorocyclopentadiene  
3-Hydroxycarbofuran  
Methomyl  
Metolachlor  
Metribuzin  
Oxamyl (Vydate)  
Picloram  
Propachlor  
Simazine  
2,3,7,8-TCDD (Dioxin)

#### Unregulated Compounds

PFAS Compounds:  
Perfluoronononic Acid (PFNA)  
Perfluoroheptanoic Acid (PFHpA)

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Deferral Issued for PFOA and PFOS at Liberty New York Water – Sea Cliff

### Why are you receiving this notice/information?

You are receiving this notice because testing of our public water system found the chemical perfluorooctanesulfonic acid (PFOS) in your drinking water above the New York State's maximum contaminant level (MCL) of 10 parts per trillion (ppt). Perfluorooctanoic Acid (PFOA) was also detected at levels below the MCL of 10 ppt. The MCL is set well below levels known or estimated to cause health effects. Consuming drinking water with PFOA and PFOS at or somewhat above the MCL does not pose a significant health risk. Your water continues to be acceptable for all uses.

Liberty – Sea Cliff is working on a strict timetable to reduce levels below the MCL. Liberty – Sea Cliff has submitted, and the New York State Department of Health (Department) has issued, a deferral to Liberty – Sea Cliff. 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 district 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 PFOA/PFOS?**

The available information on the health effects associated with PFOA and PFOS, like many chemicals, comes from studies of high-level exposure in animals or humans. Less is known about the chances of health effects occurring from lower levels of exposure, such as those that might occur in drinking water. As a result, finding lower levels of chemicals in drinking water prompts water suppliers and regulators to take precautions that include notifying consumers and steps to reduce exposure.

PFOA and PFOS has caused a wide range of health effects when studied in animals that were exposed to high levels. Additional studies of high-level exposures of PFOA and PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The most consistent findings in animals were effects on the liver and immune system and impaired fetal growth and development. The United States Environmental Protection Agency considers PFOA and PFOS as having suggestive evidence for causing cancer based on studies of animals exposed to high levels of this chemical over their entire lifetimes.

At the level of PFOA and PFOS detected in your water, exposure from drinking water and food preparation is well below PFOA and PFOS exposures associated with health effects.

**What is New York State doing about PFOA and PFOS 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 PFOA, PFOS. 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?**

The Water Authority will make every effort to operationally minimize the concentration of PFOA and PFOS in the distribution system at any given time. 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 June 25, 2022.

**Where can I get more information?**

For more information, please contact Natasha Niola at 516-273-5670 or [Natasha.Niola@libertyutilities.com](mailto:Natasha.Niola@libertyutilities.com). 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# NY2902830

Date January 28, 2022

For quarterly updates, please go to <https://new-york-water.libertyutilities.com/all/residential/safety/glen-head-public-notification.html>

## **ATTACHMENT C**

### **Water Quality Data**



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

**Lab No. : 70217394001**  
**Client Sample ID.: N-05792**

**Attn To : Natasha Niola**

Federal ID : 2902853

Collected : 06/06/2022 11:10 AM Point N-05792

Received : 06/06/2022 02:20 PM Location Glen Head Well

Collected By CLIENT

**Sample Comments:**

RUN TO WASTE

Analytical Method:EPA 120.1

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Specific Conductance	212		1	umhos/cm		06/09/2022 12:31	001 BP3U1/1

Analytical Method:EPA 200.7

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Calcium	13.0		1	mg/L		06/14/2022 6:44 PM	001 BP4N1/1

Analytical Method:Field Method

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Field Temperature	14.3	N3	1	deg C		06/06/2022 11:10	001 BP3U1/1
Field pH	7.5	N3	1	Std. Units		06/06/2022 11:10	001 BP3U1/1

Analytical Method:SM22 2320B

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Alkalinity, Total as CaCO3	70.0		1	mg/L		06/09/2022 9:19 AM	001 BP3U1/1

Analytical Method:SM22 4500-P E

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Orthophosphate as P	0.27	H1	1	mg/L		06/08/2022 12:08	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.

Jennifer Aracri

Test results meet the requirements of NELAC unless otherwise noted.

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



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 TEL: (631) 694-3040 FAX: (631) 420-8436  
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# Laboratory Results

Results for the samples and analytes requested  
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## Sample Information:

Type: Drinking Water  
 Origin: Raw Well  
 Routine

**Liberty-NY - Sea Cliff OPS**  
**60 Brooklyn Avenue**  
**Merrick, NY 11566**

**Lab No. : 70217394002**  
**Client Sample ID.: N-05792**

**Attn To :** Natasha Niola  
 Federal ID : 2902853  
 Collected : 06/06/2022 11:15 AM Point N-05792  
 Received : 06/06/2022 02:20 PM Location Glen Head Well  
 Collected By CLIENT

**Sample Comments:**  
 RUN TO WASTE

Analytical Method:EPA 300.0

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Limit</u>	<u>Analyzed:</u>	<u>Container:</u>
Chloride	26.6		1	mg/L	250	06/14/2022 8:15 AM	002 BP4U1/1

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.  
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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**

**Lab No. : 70217394003**  
**Client Sample ID.: N-05792**

**Attn To :** Natasha Niola  
 Federal ID : 2902853  
 Collected : 06/06/2022 11:17 AM Point N-05792  
 Received : 06/06/2022 02:20 PM Location Glen Head Well  
 Collected By CLIENT

**Sample Comments:**  
 RUN TO WASTE

Analytical Method:EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrate as N	4.3		5	mg/L	10	06/07/2022 5:22 PM	003 BP3U1/1
Nitrate-Nitrite (as N)	4.3		5	mg/L		06/07/2022 5:22 PM	003 BP3U1/1

Analytical Method:EPA 353.2

Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Nitrite as N	<0.050		1	mg/L	1	06/07/2022 12:33	003 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.  
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Jennifer Aracri

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Date Reported: 06/22/2022



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# Laboratory Results

Results for the samples and analytes requested  
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## Sample Information:

Type: Drinking Water  
 Origin: Raw Well  
 Routine

**Liberty-NY - Sea Cliff OPS**  
**60 Brooklyn Avenue**  
**Merrick, NY 11566**

**Lab No. : 70217394004**  
**Client Sample ID.: N-05792**

**Attn To : Natasha Niola**

Federal ID : 2902853

Collected : 06/06/2022 11:18 AM Point N-05792

Received : 06/06/2022 02:20 PM Location Glen Head Well

Collected By CLIENT

**Sample Comments:**

RUN TO WASTE

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	06/19/2022 4:30 PM	004 VG9C1/2
1,1,1-Trichloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1,2,2-Tetrachloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1,2-Trichloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1,2-Trichlorotrifluoroethane	<0.50	N3,L1	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1-Dichloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1-Dichloroethene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,1-Dichloropropene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2,3-Trichlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2,3-Trichloropropane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2,4-Trichlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2,4-Trimethylbenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2-Dichlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2-Dichloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,2-Dichloropropane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,3,5-Trimethylbenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,3-Dichlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,3-Dichloropropane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
1,4-Dichlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
2,2-Dichloropropane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
2-Chlorotoluene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
4-Chlorotoluene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Benzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Bromobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Bromochloromethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Bromodichloromethane	<0.50		1	ug/L		06/19/2022 4:30 PM	004 VG9C1/2
Bromoform	<0.50		1	ug/L		06/19/2022 4:30 PM	004 VG9C1/2
Bromomethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Carbon tetrachloride	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Chlorobenzene	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Chlorodifluoromethane	<0.50	N3,L1,IL	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Chloroethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Chloroform	<0.50		1	ug/L		06/19/2022 4:30 PM	004 VG9C1/2
Chloromethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Dibromochloromethane	<0.50		1	ug/L		06/19/2022 4:30 PM	004 VG9C1/2
Dibromomethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Dichlorodifluoromethane	<0.50		1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2

Qualifiers:

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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.

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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**

**Lab No. : 70217394004**  
**Client Sample ID.: N-05792**

**Attn To : Natasha Niola**

Federal ID : 2902853

Collected : 06/06/2022 11:18 AM Point N-05792

Received : 06/06/2022 02:20 PM Location Glen Head Well

Collected By CLIENT

**Sample Comments:**

RUN TO WASTE

Ethylbenzene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Hexachloro-1,3-butadiene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Isopropylbenzene (Cumene)	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Methyl-tert-butyl ether	<0.50	1	ug/L	10	06/19/2022 4:30 PM	004 VG9C1/2
Methylene Chloride	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Styrene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Tetrachloroethene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Toluene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Total Trihalomethanes (Calc.)	<0.50	1	ug/L	80	06/19/2022 4:30 PM	004 VG9C1/2
Trichloroethene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Trichlorofluoromethane	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Vinyl chloride	<0.50	1	ug/L	2	06/19/2022 4:30 PM	004 VG9C1/2
cis-1,2-Dichloroethene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
cis-1,3-Dichloropropene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
m&p-Xylene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
n-Butylbenzene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
n-Propylbenzene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
o-Xylene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
p-Isopropyltoluene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
sec-Butylbenzene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
tert-Butylbenzene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
trans-1,2-Dichloroethene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
trans-1,3-Dichloropropene	<0.50	1	ug/L	5	06/19/2022 4:30 PM	004 VG9C1/2
Surr: 1,2-Dichlorobenzene-d4 (S)	93%	1	%REC		06/19/2022 4:30 PM	004 VG9C1/2
Surr: 4-Bromofluorobenzene (S)	89%	1	%REC		06/19/2022 4:30 PM	004 VG9C1/2

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J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit. Estimated value - below calibration range

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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.

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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**

**Lab No. : 70217394005**  
**Client Sample ID.: N-05792**

**Attn To :** Natasha Niola  
 Federal ID : 2902853  
 Collected : 06/06/2022 11:22 AM Point N-05792  
 Received : 06/06/2022 02:20 PM Location Glen Head Well  
 Collected By CLIENT

**Sample Comments:**  
 RUN TO WASTE

Analytical Method:EPA 522		Prep Method: EPA 522			Prep Date: 06/10/2022 11:02		
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
1,4-Dioxane (p-Dioxane)	0.065		1	ug/L	1	06/10/2022 11:52	005 AG2R1/2
Surr: 1,4-Dioxane-d8 (S)	98%		1	%REC		06/10/2022 11:52	005 AG2R1/2

Analytical Method:EPA 537.1		Prep Method: EPA 537.1			Prep Date: 06/13/2022 10:46		
Parameter(s)	Results	Qualifier	D.F.	Units	Limit	Analyzed:	Container:
Perfluorobutanesulfonic acid	<1.8		1	ng/L		06/20/2022 5:49 PM	005 BP3T1/2
Perfluoroheptanoic acid	<1.8		1	ng/L		06/20/2022 5:49 PM	005 BP3T1/2
Perfluorohexanesulfonic acid	2.5		1	ng/L		06/20/2022 5:49 PM	005 BP3T1/2
Perfluorononanoic acid	<1.8		1	ng/L		06/20/2022 5:49 PM	005 BP3T1/2
Perfluorooctanesulfonic acid	3.0		1	ng/L	10	06/20/2022 5:49 PM	005 BP3T1/2
Perfluorooctanoic acid	<1.8		1	ng/L	10	06/20/2022 5:49 PM	005 BP3T1/2
Surr: 13C2-PFDA (S)	98%		1	%REC		06/20/2022 5:49 PM	005 BP3T1/2
Surr: 13C2-PFHxA (S)	99%		1	%REC		06/20/2022 5:49 PM	005 BP3T1/2
Surr: HFPO-DAS (S)	92%		1	%REC		06/20/2022 5:49 PM	005 BP3T1/2

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Jennifer Aracri

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Date Reported: 06/22/2022





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**WorkOrder :**  
70217394

## Laboratory Certifications

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### **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  
Massachusetts Certification #: M-FL1264  
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



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**WorkOrder :**  
70217394

## 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



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[www.pacelabs.com](http://www.pacelabs.com)

**WorkOrder :**

70217394

**Additional Qualifiers**

---

H1 - Analysis conducted outside the EPA method holding time.

IL - This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.

L1 - Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

N3 - Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

WO#: 70217394



70217394

# Sample Request Form PUBLIC WATER SUPPLIER

Date: 06/06/2022

Collected By: Lexi Christensen

Accepted By: Sara Rivas

Cooler Temp: 4.1 °C

WELL OFF LINE \_\_\_\_\_

Glen Head well Ran to waste

WELL RUN TO SYSTEM \_\_\_\_\_

YES  NO VOC'S PRESERVED WITH HCl

**Client Info:**

Name or Code: NY-Liberty-Seacliff operations

Address: 60 Brooklyn Avenue  
Memph, NY 11566

Phone #: (516)-273-5670

Attn: Natasha Niola

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		Analysis	Lab No.
						Cl <sub>2</sub>	pH/Temp °C		
6/6/22 11:10 am	GW	GH well (N-05792)	TW	O	Ro	1.04	7.5 / 14.3	WQP w/ orthophosphate	001
11:15 am	↓	↓	↓	↓	↓	↓	↓	Chlorides	002
11:17 am	↓	↓	↓	↓	↓	↓	↓	Nitrates / Nitrites	003
11:18 am	↓	↓	↓	↓	↓	↓	↓	PoCS	004
11:20 am	↓	↓	↓	↓	↓	↓	↓	U-D	005
11:22 am	↓	↓	↓	↓	↓	↓	↓	PFCs	↓
6/6/22 12:10 pm	PW	Sc-station 7028	D	O	Ro	0.81	7.2 / 18.0	Ioc w/ perchlorate	
12:20 pm	↓	↓	↓	↓	↓	↓	↓	VOCs	
6/6/22 12:50 pm	PW	Sc-station 7041	D	O	Ro	0.31	7.4 / 21.0	Ioc w/ perchlorate	
1:00 pm	↓	↓	↓	↓	↓	↓	↓	VOCs	

Remarks:  perchlorates were filtered in the field.

Seacliff well bleach pump not working properly - will need to come back to sample



Sample Condition Upon Receipt

W07#: 70217394

Client Name:

Project

PM: JSA

Due Date: 06/13/22

SCAW

CLIENT: SCAW

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other

Tracking #:

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

Temperature Blank Present:  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other

Type of Ice:  Wet  Blue  None

Thermometer Used: ~~TH09~~ TH189 Correction Factor: + 0.1

Samples on ice, cooling process has begun

Cooler Temperature(°C): 4.1 Cooler Temperature Corrected(°C): 4.2

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil ( N/A, water sample)

Date and Initials of person examining contents: KN 6/10/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC,

Did samples originate from a foreign source

NM, NY, OK, OR, SC, TN, TX, or VA (check map)?  Yes  No

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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for I)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID, Matrix: SL (W) OIL		
All containers needing preservation have been checked?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot # KC160342		Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
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: KI starch test strips Lot #	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #		
SM 4500 CN samples checked for sulfide?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15. Positive for Sulfide? Y N
Lead Acetate Strips Lot #		
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.