12 December 2022

Mr. Scott Sokolowski
Remedial Project Manager
Naval Facilities Engineering Command, Mid Atlantic
9324 Virginia Avenue, Building N-26
Norfolk, VA 23511-3095

Subject: **November 2022 Sampling Report**
Full Scale Liquid-Phase Granular Activated Carbon Treatment System
Liberty New York Water, Seamans Neck Road Water Plant
NWIRP Bethpage, New York
Contract No. N40085-16-D-2288, Task Order 5125

Dear Mr. Sokolowski,

The Full Scale Liquid-Phase Granulated Activated Carbon (GAC) Treatment System is located at the Liberty New York Water (LNYW), formerly New York American Water (NYAW), Seamans Neck Road water treatment plant in Levittown, NY. The GAC System was installed at the effluent of the potable water treatment plant and consists of six GAC vessels operating in parallel to remove low levels of trichloroethene (TCE) from Well No. 3A and Well No. 4S. After GAC treatment, the water receives chemical injection of sodium hypochlorite and sodium tripolyphosphate before going to distribution. Startup of the Full Scale GAC Treatment System occurred on 8 January 2015 under CH2MHill. KOMAN Government Solutions, LLC (KGS) began routine operation and maintenance (O&M) activities in March 2015.

The purpose of this report is to document the sampling activities performed at the GAC Treatment System in November 2022 and present the associated analytical results.

Sampling Requirements

Nassau County Department of Health (NCDH) and the approved Sampling Plan outline the following sampling requirements at the Full Scale GAC System:

- Monthly Sampling: Principal Organic Compound (POC) sampling will be performed once a month at the effluent from the GAC treatment system – one sample location, plus associated quality assurance / quality control (QA/QC) samples. POCs will be analyzed via EPA Method 542.2.
- Quarterly Sampling: POC sampling will be performed at the influent to the GAC treatment system on a quarterly basis at Well No. 3A and Well No. 4S raw water – two sample locations. The monthly POC sample collected at the effluent of the GAC Treatment System (described above) will also serve as the quarterly POC GAC effluent sample. Associated QA/QC samples will also be collected. In addition, microbiological (MIC) samples will be collected on a quarterly basis. Samples will be collected from the

system influent (Well No. 3A and Well No. 4S raw water) and from the effluent of each GAC vessel over a timed sequence. The sampling occurs after the wells and vessels are shut-down for a minimum of 12 hours. Samples will be analyzed via the Colilert method to determine if any *E. Coli* or Total Coliform bacteria are present.

- Annual Sampling: Annual sampling will be performed for Physical and Inorganic Constituents (IOCs) at the system influent (Well No. 3A and Well No. 4S raw water) and effluent – three sampling locations, plus associated QA/QC samples. IOCs include a specified list of metals analyzed via EPA Method 200.7.

November 2022 Sampling Summary

Monthly POC Sampling

On 7 November 2022 monthly POC samples were collected from the GAC system influent from Well No. 3A and Well No. 4S and the system effluent; a field duplicate and matrix spike / matrix spike duplicate (MS/MSD) from the system effluent were also collected. **Attachment 1** provides the analytical data report for POC samples collected in November 2022. **Table 1**, below, presents the trichloroethene (TCE) analytical results. TCE was not detected in the GAC effluent or GAC effluent duplicate samples. Results for TCE are in compliance with NCDH requirements.

Table 1 - *TCE Analytical Results[(1)] – November 2022*

Date	**Well 3A Raw** [N-14347 (Seaman Neck 3A Well)]	**Well 4S Raw** [N-09338 (Seaman Neck 4S Well)]	**Effluent from GAC System** [GAC-3S/4S (Seaman Neck GAC Effluent)]	**Effluent from GAC System (Duplicate)** [GAC-3S/4S (Seaman Neck GAC Effluent)-D]
11/07/2022	26.6	4.2	ND	ND

Notes:
(1) All concentrations reported in ug/L (ppb).
ND – Not Detected above the reporting limit (0.50 ug/L)

Annual Physical and Inorganic Constituents (IOC) Sampling

On 7 November 2022, annual IOC samples were collected from Well 3A, Well 4S, and the GAC System effluent. A field duplicate was also collected from the effluent location. **Attachment 2** provides the analytical results for IOC samples collected in November 2022. Results are summarized in **Table 2**, below. All GAC System effluent results are in compliance with NCDH requirements.

Table 2 – ***IOC Analytical Results – November 2022***

Analytical Parameter	**Units**	**Well 3A Raw** [N-14347 (Seamans Neck 3 Well)]	**Wells 4S Raw** [N-09338 (Seamans Neck 4 Well)]	**Effluent from GAC System** [GAC-3S/4S (Seamans Neck GAC Effluent)]	**Effluent from GAC System (Duplicate)** [GAC-3S/4S (Seamans Neck GAC Effluent)-D]	**Maximum Contaminant Level (mg/L)***
Alkalinity, Total as CaCO3	mg/L	<1.0	<1.0	61.2	60.1	--
Antimony	ug/L	<0.40	0.77	<0.40	<0.40	0.006
Apparent Color	units	<5.0	18.0	<5.0	<5.0	15 units
Arsenic	ug/L	<1.0	<1.0	<1.0	<1.0	0.010
Barium	mg/L	0.0061	0.0066	0.0059	0.0058	2.0
Beryllium	ug/L	<0.30	<0.30	<0.30	<0.30	0.004
Cadmium	ug/L	<1.0	<1.0	<1.0	<1.0	0.005
Calcium	mg/L	3.6	4.8	4.9	4.8	--
Chloride	mg/L	20.1	20.6	24.6	24.7	250
Chromium	mg/L	<0.0070	<0.0070	<0.0070	<0.0070	0.10
Copper	mg/L	0.030	<0.0020	0.019	0.018	1.3
Corrosivity	--	-7.27	-7.04	-2.28	-2	--
Cyanide, Free	ug/L	<10.0	<10.0	<10.0	<10.0	0.2
Fluoride	mg/L	<0.10	<0.10	<0.10	<0.10	2.2
Hardness, Calcium	mg/L	9.0	12.1	12.2	12.0	--
Iron	mg/L	1.3	2.0	0.23	0.11	0.3
LAS Molecular	--	320	320	320	320	--
Lead	ug/L	1.2	<1.0	<1.0	<1.0	0.015
Magnesium	mg/L	1.5	1.8	1.8	1.8	--
Manganese	mg/L	0.032	0.025	<0.010	<0.010	0.3
MBAS, Calculated as LAS	mg/L	<0.080	<0.080	<0.080	<0.080	--
Mercury	ug/L	<0.20	<2.0	<0.20	<0.20	0.002
Nickel	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	--
Nitrate as N	mg/L	0.24	<0.050	0.065	0.064	10.0
Nitrate-Nitrite (as N)	mg/L	0.24	0.056	0.065	0.064	--
Nitrite as N	mg/L	<0.050	<0.050	<0.050	<0.050	1.0
Nitrogen, Ammonia	mg/L	<0.10	<0.10	<0.10	<0.10	--
Odor @ 60 Degrees C	--	No Odor Observed	No Odor Observed	1	No Odor Observed	3 units
pH	Std. Units	4.3	4.5	7.5	7.4	<7.5 - 8.5<
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	0.05
Silver	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.1

Analytical Parameter	**Units**	**Well 3A Raw** [N-14347 (Seamans Neck 3 Well)]	**Wells 4S Raw** [N-09338 (Seamans Neck 4 Well)]	**Effluent from GAC System** [GAC-3S/4S (Seamans Neck GAC Effluent)]	**Effluent from GAC System (Duplicate)** [GAC-3S/4S (Seamans Neck GAC Effluent)-D]	**Maximum Contaminant Level (mg/L)***
Sodium	mg/L	9.7	11.6	40.8	40.1	20 / 270**
Sulfate	mg/L	17.0	25.5	28.1	28.2	250
Thallium	ug/L	<0.30	0.36	<0.30	<0.30	0.002
Total Dissolved Solids	mg/L	77.0	78.0	141	144	--
Total Hardness	mg/L	15.1	19.7	19.9	19.6	--
Turbidity	NTU	5.6	<1.0	<1.0	<1.0	5 units
Zinc	mg/L	0.082	<0.020	0.023	<0.020	5.0

-- No level specified.
* NCDH Monitoring Requirements for 2022.
** <20 mg/L recommended for severely restricted sodium diets; <270 mg/L for moderately restricted sodium diets.

Please contact me at 610-400-0636 or rgregory@komangs.com with any questions or concerns regarding this report.

Sincerely,
KOMAN Government Solutions, LLC

Robert Gregory, P.G.
Project Manager

Cc: W. Provoncha – Nassau County
M. Alarcon – Nassau County
C. Johnson – Nassau County
R. Castle – Nassau County
J. Pelton – NYSDEC
K. Granzen – NYSDEC
M. Travis - NYSDEC
C. Shukis – NAVFAC
V. Varricchio – NWIRP Bethpage Facilities Management
R. Kern – LNYW
N. Niola – LNYW
J. Palmer - LNYW

D. Brayack – Tetra Tech
R. Hoffmaster – KGS
P. Schauble – KGS

ATTACHMENT 1

POC ANALYTICAL RESULTS FOR NOVEMBER 2022

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

November 16, 2022

Robert G. Gregory
KOMAN Government Services, LLC
180 Gordon Dr.
Suite 110
Exton, PA 19341

RE: Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Dear Robert Gregory:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kimberley Mack

Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Ericka Seiler, KOMAN Government Services, LLC

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

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

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE SUMMARY

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70235965001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	Drinking Water	11/07/22 07:50	11/07/22 10:08
70235965002	**GAC-3S/4S (SEAMAN NECK GAC -D**	Drinking Water	11/07/22 08:00	11/07/22 10:08
70235965003	**WELL 3A N-14347 (INFLUENT)**	Drinking Water	11/07/22 08:40	11/07/22 10:08
70235965004	**WELL 4A N-09338 (INFLUENT)**	Drinking Water	11/07/22 08:15	11/07/22 10:08

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70235965001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	EPA 522	IMH	2
		EPA 524.2	KGG	62
70235965002	**GAC-3S/4S (SEAMAN NECK GAC -D**	EPA 524.2	KGG	62
70235965003	**WELL 3A N-14347 (INFLUENT)**	EPA 522	IMH	2
		EPA 524.2	KGG	62
70235965004	**WELL 4A N-09338 (INFLUENT)**	EPA 522	IMH	2
		EPA 524.2	KGG	62

PACE-MV = Pace Analytical Services - Melville

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: GAC-3S/4S (SEAMAN NECK GAC EFF **Lab ID: 70235965001** Collected: 11/07/22 07:50 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
522 MSS 1,4 Dioxane (SIM)	Analytical Method: EPA 522 Preparation Method: EPA 522								
	Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**2.0**	ug/L	0.020		1	11/09/22 15:44	11/10/22 11:46	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	111	%	70-130		1	11/09/22 15:44	11/10/22 11:46		
524.2 MSV	Analytical Method: EPA 524.2								
	Pace Analytical Services - Melville								
Benzene	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	71-43-2	
Bromobenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	108-86-1	
Bromochloromethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 18:42	75-27-4	
Bromoform	**<0.50**	ug/L	0.50	80	1		11/15/22 18:42	75-25-2	
Bromomethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	104-51-8	
sec-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	135-98-8	
tert-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	56-23-5	
Chlorobenzene	**<0.50**	ug/L	0.50	100	1		11/15/22 18:42	108-90-7	
Chlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	75-45-6	N3
Chloroethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	75-00-3	
Chloroform	**<0.50**	ug/L	0.50	80	1		11/15/22 18:42	67-66-3	
Chloromethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	95-49-8	
4-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	106-43-4	
Dibromochloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 18:42	124-48-1	
Dibromomethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	0.50	600	1		11/15/22 18:42	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	0.50	75	1		11/15/22 18:42	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	75-71-8	L2
1,1-Dichloroethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	75-34-3	
1,2-Dichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	107-06-2	
1,1-Dichloroethene	**<0.50**	ug/L	0.50	7	1		11/15/22 18:42	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/L	0.50	70	1		11/15/22 18:42	156-59-2	
trans-1,2-Dichloroethene	**<0.50**	ug/L	0.50	100	1		11/15/22 18:42	156-60-5	
1,2-Dichloropropane	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	142-28-9	
2,2-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	594-20-7	
1,1-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	10061-01-5	
trans-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	10061-02-6	
Ethylbenzene	**<0.50**	ug/L	0.50	700	1		11/15/22 18:42	100-41-4	
Hexachloro-1,3-butadiene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	87-68-3	
Isopropylbenzene (Cumene)	**<0.50**	ug/L	0.50		1		11/15/22 18:42	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: GAC-3S/4S (SEAMAN NECK GAC EFF **Lab ID: 70235965001** Collected: 11/07/22 07:50 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Methylene Chloride	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	75-09-2	
Methyl-tert-butyl ether	**<0.50**	ug/L	0.50		1		11/15/22 18:42	1634-04-4	
n-Propylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	103-65-1	
Styrene	**<0.50**	ug/L	0.50	100	1		11/15/22 18:42	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	127-18-4	
Toluene	**<0.50**	ug/L	0.50	1000	1		11/15/22 18:42	108-88-3	
Total Trihalomethanes (Calc.)	**<0.50**	ug/L	0.50	80	1		11/15/22 18:42		
1,2,3-Trichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	87-61-6	
1,2,4-Trichlorobenzene	**<0.50**	ug/L	0.50	70	1		11/15/22 18:42	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	0.50	200	1		11/15/22 18:42	71-55-6	
1,1,2-Trichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	79-00-5	
Trichloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 18:42	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<0.50**	ug/L	0.50		1		11/15/22 18:42	76-13-1	N3
1,2,4-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	108-67-8	
Vinyl chloride	**<0.50**	ug/L	0.50	2	1		11/15/22 18:42	75-01-4	
m&p-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	179601-23-1	
o-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 18:42	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	96	%	70-130		1		11/15/22 18:42	2199-69-1	
4-Bromofluorobenzene (S)	96	%	70-130		1		11/15/22 18:42	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: GAC-3S/4S (SEAMAN NECK GAC -D **Lab ID: 70235965002** Collected: 11/07/22 08:00 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Benzene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	71-43-2	
Bromobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	108-86-1	
Bromochloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:04	75-27-4	
Bromoform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:04	75-25-2	
Bromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	104-51-8	
sec-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	135-98-8	
tert-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	56-23-5	
Chlorobenzene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:04	108-90-7	
Chlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	75-45-6	N3
Chloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	75-00-3	
Chloroform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:04	67-66-3	
Chloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	95-49-8	
4-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	106-43-4	
Dibromochloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:04	124-48-1	
Dibromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	0.50	600	1		11/15/22 19:04	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	0.50	75	1		11/15/22 19:04	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	75-71-8	L2
1,1-Dichloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	75-34-3	
1,2-Dichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	107-06-2	
1,1-Dichloroethene	**<0.50**	ug/L	0.50	7	1		11/15/22 19:04	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:04	156-59-2	
trans-1,2-Dichloroethene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:04	156-60-5	
1,2-Dichloropropane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	142-28-9	
2,2-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	594-20-7	
1,1-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	10061-01-5	
trans-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	10061-02-6	
Ethylbenzene	**<0.50**	ug/L	0.50	700	1		11/15/22 19:04	100-41-4	
Hexachloro-1,3-butadiene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	87-68-3	
Isopropylbenzene (Cumene)	**<0.50**	ug/L	0.50		1		11/15/22 19:04	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	99-87-6	
Methylene Chloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	75-09-2	
Methyl-tert-butyl ether	**<0.50**	ug/L	0.50		1		11/15/22 19:04	1634-04-4	
n-Propylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	103-65-1	
Styrene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: GAC-3S/4S (SEAMAN NECK GAC -D **Lab ID: 70235965002** Collected: 11/07/22 08:00 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Tetrachloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	127-18-4	
Toluene	**<0.50**	ug/L	0.50	1000	1		11/15/22 19:04	108-88-3	
Total Trihalomethanes (Calc.)	**<0.50**	ug/L	0.50	80	1		11/15/22 19:04		
1,2,3-Trichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	87-61-6	
1,2,4-Trichlorobenzene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:04	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	0.50	200	1		11/15/22 19:04	71-55-6	
1,1,2-Trichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	79-00-5	
Trichloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:04	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:04	76-13-1	N3
1,2,4-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	108-67-8	
Vinyl chloride	**<0.50**	ug/L	0.50	2	1		11/15/22 19:04	75-01-4	
m&p-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	179601-23-1	
o-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:04	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	96	%	70-130		1		11/15/22 19:04	2199-69-1	
4-Bromofluorobenzene (S)	96	%	70-130		1		11/15/22 19:04	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: WELL 3A N-14347 (INFLUENT) **Lab ID: 70235965003** Collected: 11/07/22 08:40 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
522 MSS 1,4 Dioxane (SIM)	Analytical Method: EPA 522 Preparation Method: EPA 522 Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**2.6**	ug/L	0.020		1	11/09/22 15:44	11/10/22 12:04	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	110	%	70-130		1	11/09/22 15:44	11/10/22 12:04		
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Benzene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	71-43-2	
Bromobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	108-86-1	
Bromochloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:26	75-27-4	
Bromoform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:26	75-25-2	
Bromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	104-51-8	
sec-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	135-98-8	
tert-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	56-23-5	
Chlorobenzene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:26	108-90-7	
Chlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	75-45-6	N3
Chloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	75-00-3	
Chloroform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:26	67-66-3	
Chloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	95-49-8	
4-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	106-43-4	
Dibromochloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:26	124-48-1	
Dibromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	0.50	600	1		11/15/22 19:26	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	0.50	75	1		11/15/22 19:26	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	75-71-8	L2
1,1-Dichloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	75-34-3	
1,2-Dichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	107-06-2	
1,1-Dichloroethene	**0.89**	ug/L	0.50	7	1		11/15/22 19:26	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:26	156-59-2	
trans-1,2-Dichloroethene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:26	156-60-5	
1,2-Dichloropropane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	142-28-9	
2,2-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	594-20-7	
1,1-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	10061-01-5	
trans-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	10061-02-6	
Ethylbenzene	**<0.50**	ug/L	0.50	700	1		11/15/22 19:26	100-41-4	
Hexachloro-1,3-butadiene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	87-68-3	
Isopropylbenzene (Cumene)	**<0.50**	ug/L	0.50		1		11/15/22 19:26	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: WELL 3A N-14347 (INFLUENT) **Lab ID: 70235965003** Collected: 11/07/22 08:40 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Methylene Chloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	75-09-2	
Methyl-tert-butyl ether	**<0.50**	ug/L	0.50		1		11/15/22 19:26	1634-04-4	
n-Propylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	103-65-1	
Styrene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:26	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	127-18-4	
Toluene	**<0.50**	ug/L	0.50	1000	1		11/15/22 19:26	108-88-3	
Total Trihalomethanes (Calc.)	**<0.50**	ug/L	0.50	80	1		11/15/22 19:26		
1,2,3-Trichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	87-61-6	
1,2,4-Trichlorobenzene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:26	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	0.50	200	1		11/15/22 19:26	71-55-6	
1,1,2-Trichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:26	79-00-5	
Trichloroethene	**26.6**	ug/L	0.50	5	1		11/15/22 19:26	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	**1.1**	ug/L	0.50		1		11/15/22 19:26	76-13-1	N3
1,2,4-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	108-67-8	
Vinyl chloride	**<0.50**	ug/L	0.50	2	1		11/15/22 19:26	75-01-4	
m&p-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	179601-23-1	
o-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:26	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	96	%	70-130		1		11/15/22 19:26	2199-69-1	
4-Bromofluorobenzene (S)	99	%	70-130		1		11/15/22 19:26	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: WELL 4A N-09338 (INFLUENT) **Lab ID: 70235965004** Collected: 11/07/22 08:15 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
522 MSS 1,4 Dioxane (SIM)	Analytical Method: EPA 522 Preparation Method: EPA 522								
	Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**2.0**	ug/L	0.020		1	11/09/22 15:44	11/10/22 12:21	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	111	%	70-130		1	11/09/22 15:44	11/10/22 12:21		
524.2 MSV	Analytical Method: EPA 524.2								
	Pace Analytical Services - Melville								
Benzene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	71-43-2	
Bromobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	108-86-1	
Bromochloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:48	75-27-4	
Bromoform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:48	75-25-2	
Bromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	104-51-8	
sec-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	135-98-8	
tert-Butylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	56-23-5	
Chlorobenzene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:48	108-90-7	
Chlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	75-45-6	N3
Chloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	75-00-3	
Chloroform	**<0.50**	ug/L	0.50	80	1		11/15/22 19:48	67-66-3	
Chloromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	95-49-8	
4-Chlorotoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	106-43-4	
Dibromochloromethane	**<0.50**	ug/L	0.50	80	1		11/15/22 19:48	124-48-1	
Dibromomethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	0.50	600	1		11/15/22 19:48	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	0.50	75	1		11/15/22 19:48	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	75-71-8	L2
1,1-Dichloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	75-34-3	
1,2-Dichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	107-06-2	
1,1-Dichloroethene	**<0.50**	ug/L	0.50	7	1		11/15/22 19:48	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:48	156-59-2	
trans-1,2-Dichloroethene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:48	156-60-5	
1,2-Dichloropropane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	142-28-9	
2,2-Dichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	594-20-7	
1,1-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	10061-01-5	
trans-1,3-Dichloropropene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	10061-02-6	
Ethylbenzene	**<0.50**	ug/L	0.50	700	1		11/15/22 19:48	100-41-4	
Hexachloro-1,3-butadiene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	87-68-3	
Isopropylbenzene (Cumene)	**<0.50**	ug/L	0.50		1		11/15/22 19:48	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Sample: WELL 4A N-09338 (INFLUENT) **Lab ID: 70235965004** Collected: 11/07/22 08:15 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2 Pace Analytical Services - Melville								
Methylene Chloride	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	75-09-2	
Methyl-tert-butyl ether	**<0.50**	ug/L	0.50		1		11/15/22 19:48	1634-04-4	
n-Propylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	103-65-1	
Styrene	**<0.50**	ug/L	0.50	100	1		11/15/22 19:48	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	127-18-4	
Toluene	**<0.50**	ug/L	0.50	1000	1		11/15/22 19:48	108-88-3	
Total Trihalomethanes (Calc.)	**<0.50**	ug/L	0.50	80	1		11/15/22 19:48		
1,2,3-Trichlorobenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	87-61-6	
1,2,4-Trichlorobenzene	**<0.50**	ug/L	0.50	70	1		11/15/22 19:48	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	0.50	200	1		11/15/22 19:48	71-55-6	
1,1,2-Trichloroethane	**<0.50**	ug/L	0.50	5	1		11/15/22 19:48	79-00-5	
Trichloroethene	**4.2**	ug/L	0.50	5	1		11/15/22 19:48	79-01-6	
Trichlorofluoromethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<0.50**	ug/L	0.50		1		11/15/22 19:48	76-13-1	N3
1,2,4-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	108-67-8	
Vinyl chloride	**<0.50**	ug/L	0.50	2	1		11/15/22 19:48	75-01-4	
m&p-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	179601-23-1	
o-Xylene	**<0.50**	ug/L	0.50		1		11/15/22 19:48	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		11/15/22 19:48	2199-69-1	
4-Bromofluorobenzene (S)	95	%	70-130		1		11/15/22 19:48	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

QC Batch: 282211
QC Batch Method: EPA 524.2
Analysis Method: EPA 524.2
Analysis Description: 524.2 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235965001, 70235965002, 70235965003, 70235965004

METHOD BLANK: 1426417 Matrix: Water
Associated Lab Samples: 70235965001, 70235965002, 70235965003, 70235965004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,1,1-Trichloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,1,2-Trichloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.50	0.50	11/15/22 12:13	N3
1,1-Dichloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,1-Dichloroethene	ug/L	<0.50	0.50	11/15/22 12:13	
1,1-Dichloropropene	ug/L	<0.50	0.50	11/15/22 12:13	
1,2,3-Trichlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,2,3-Trichloropropane	ug/L	<0.50	0.50	11/15/22 12:13	
1,2,4-Trichlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,2,4-Trimethylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,2-Dichlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,2-Dichloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
1,2-Dichloropropane	ug/L	<0.50	0.50	11/15/22 12:13	
1,3,5-Trimethylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,3-Dichlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
1,3-Dichloropropane	ug/L	<0.50	0.50	11/15/22 12:13	
1,4-Dichlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
2,2-Dichloropropane	ug/L	<0.50	0.50	11/15/22 12:13	
2-Chlorotoluene	ug/L	<0.50	0.50	11/15/22 12:13	
4-Chlorotoluene	ug/L	<0.50	0.50	11/15/22 12:13	
Benzene	ug/L	<0.50	0.50	11/15/22 12:13	
Bromobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
Bromochloromethane	ug/L	<0.50	0.50	11/15/22 12:13	
Bromodichloromethane	ug/L	<0.50	0.50	11/15/22 12:13	
Bromoform	ug/L	<0.50	0.50	11/15/22 12:13	
Bromomethane	ug/L	<0.50	0.50	11/15/22 12:13	
Carbon tetrachloride	ug/L	<0.50	0.50	11/15/22 12:13	
Chlorobenzene	ug/L	<0.50	0.50	11/15/22 12:13	
Chlorodifluoromethane	ug/L	<0.50	0.50	11/15/22 12:13	N3
Chloroethane	ug/L	<0.50	0.50	11/15/22 12:13	
Chloroform	ug/L	<0.50	0.50	11/15/22 12:13	
Chloromethane	ug/L	<0.50	0.50	11/15/22 12:13	
cis-1,2-Dichloroethene	ug/L	<0.50	0.50	11/15/22 12:13	
cis-1,3-Dichloropropene	ug/L	<0.50	0.50	11/15/22 12:13	
Dibromochloromethane	ug/L	<0.50	0.50	11/15/22 12:13	
Dibromomethane	ug/L	<0.50	0.50	11/15/22 12:13	
Dichlorodifluoromethane	ug/L	<0.50	0.50	11/15/22 12:13	
Ethylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

METHOD BLANK: 1426417 Matrix: Water
Associated Lab Samples: 70235965001, 70235965002, 70235965003, 70235965004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<0.50	0.50	11/15/22 12:13	
Isopropylbenzene (Cumene)	ug/L	<0.50	0.50	11/15/22 12:13	
m&p-Xylene	ug/L	<0.50	0.50	11/15/22 12:13	
Methyl-tert-butyl ether	ug/L	<0.50	0.50	11/15/22 12:13	
Methylene Chloride	ug/L	<0.50	0.50	11/15/22 12:13	
n-Butylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
n-Propylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
o-Xylene	ug/L	<0.50	0.50	11/15/22 12:13	
p-Isopropyltoluene	ug/L	<0.50	0.50	11/15/22 12:13	
sec-Butylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
Styrene	ug/L	<0.50	0.50	11/15/22 12:13	
tert-Butylbenzene	ug/L	<0.50	0.50	11/15/22 12:13	
Tetrachloroethene	ug/L	<0.50	0.50	11/15/22 12:13	
Toluene	ug/L	<0.50	0.50	11/15/22 12:13	
Total Trihalomethanes (Calc.)	ug/L	<0.50	0.50	11/15/22 12:13	
trans-1,2-Dichloroethene	ug/L	<0.50	0.50	11/15/22 12:13	
trans-1,3-Dichloropropene	ug/L	<0.50	0.50	11/15/22 12:13	
Trichloroethene	ug/L	<0.50	0.50	11/15/22 12:13	
Trichlorofluoromethane	ug/L	<0.50	0.50	11/15/22 12:13	
Vinyl chloride	ug/L	<0.50	0.50	11/15/22 12:13	
1,2-Dichlorobenzene-d4 (S)	%	101	70-130	11/15/22 12:13	
4-Bromofluorobenzene (S)	%	101	70-130	11/15/22 12:13	

LABORATORY CONTROL SAMPLE: 1426418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	10	10.4	104	70-130	
1,1,1-Trichloroethane	ug/L	10	10.8	108	70-130	
1,1,2,2-Tetrachloroethane	ug/L	10	10.4	104	70-130	
1,1,2-Trichloroethane	ug/L	10	11.0	110	70-130	
1,1,2-Trichlorotrifluoroethane	ug/L	10	10.9	109	70-130	N3
1,1-Dichloroethane	ug/L	10	10.7	107	70-130	
1,1-Dichloroethene	ug/L	10	10.3	103	70-130	
1,1-Dichloropropene	ug/L	10	10.5	105	70-130	
1,2,3-Trichlorobenzene	ug/L	10	10.8	108	70-130	
1,2,3-Trichloropropane	ug/L	10	11.6	116	70-130	
1,2,4-Trichlorobenzene	ug/L	10	10.5	105	70-130	
1,2,4-Trimethylbenzene	ug/L	10	11.1	111	70-130	
1,2-Dichlorobenzene	ug/L	10	10.8	108	70-130	
1,2-Dichloroethane	ug/L	10	10.8	108	70-130	
1,2-Dichloropropane	ug/L	10	10.6	106	70-130	
1,3,5-Trimethylbenzene	ug/L	10	10.5	105	70-130	
1,3-Dichlorobenzene	ug/L	10	11.0	110	70-130	
1,3-Dichloropropane	ug/L	10	10.5	105	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

LABORATORY CONTROL SAMPLE: 1426418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	10	10.3	103	70-130	
2,2-Dichloropropane	ug/L	10	10.2	102	70-130	
2-Chlorotoluene	ug/L	10	11.0	110	70-130	
4-Chlorotoluene	ug/L	10	10.6	106	70-130	
Benzene	ug/L	10	10.3	103	70-130	
Bromobenzene	ug/L	10	10.6	106	70-130	
Bromochloromethane	ug/L	10	11.0	110	70-130	
Bromodichloromethane	ug/L	10	11.1	111	70-130	
Bromoform	ug/L	10	11.1	111	70-130	
Bromomethane	ug/L	10	9.7	97	70-130	
Carbon tetrachloride	ug/L	10	10.3	103	70-130	
Chlorobenzene	ug/L	10	10.7	107	70-130	
Chlorodifluoromethane	ug/L	10	7.8	78	70-130	N3
Chloroethane	ug/L	10	9.9	99	70-130	
Chloroform	ug/L	10	10.9	109	70-130	
Chloromethane	ug/L	10	10.7	107	70-130	
cis-1,2-Dichloroethene	ug/L	10	10.2	102	70-130	
cis-1,3-Dichloropropene	ug/L	10	10.7	107	70-130	
Dibromochloromethane	ug/L	10	11.2	112	70-130	
Dibromomethane	ug/L	10	10.6	106	70-130	
Dichlorodifluoromethane	ug/L	10	6.2	62	70-130	L2
Ethylbenzene	ug/L	10	10.8	108	70-130	
Hexachloro-1,3-butadiene	ug/L	10	10.9	109	70-130	
Isopropylbenzene (Cumene)	ug/L	10	10.4	104	70-130	
m&p-Xylene	ug/L	20	21.2	106	70-130	
Methyl-tert-butyl ether	ug/L	10	11.1	111	70-130	
Methylene Chloride	ug/L	10	10.9	109	70-130	
n-Butylbenzene	ug/L	10	11.4	114	70-130	IH
n-Propylbenzene	ug/L	10	11.0	110	70-130	
o-Xylene	ug/L	10	10.6	106	70-130	
p-Isopropyltoluene	ug/L	10	10.5	105	70-130	
sec-Butylbenzene	ug/L	10	10.7	107	70-130	
Styrene	ug/L	10	10.9	109	70-130	
tert-Butylbenzene	ug/L	10	10.5	105	70-130	
Tetrachloroethene	ug/L	10	10.6	106	70-130	
Toluene	ug/L	10	10.5	105	70-130	
Total Trihalomethanes (Calc.)	ug/L		44.4			
trans-1,2-Dichloroethene	ug/L	10	10.3	103	70-130	
trans-1,3-Dichloropropene	ug/L	10	11.2	112	70-130	
Trichloroethene	ug/L	10	10.6	106	70-130	
Trichlorofluoromethane	ug/L	10	10.4	104	70-130	
Vinyl chloride	ug/L	10	9.6	96	70-130	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

SAMPLE DUPLICATE: 1427603

Parameter	Units	70235832001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50		20	
1,1,1-Trichloroethane	ug/L	0.50	0.50	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50		20	
1,1,2-Trichloroethane	ug/L	<0.50	<0.50		20	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.50	<0.50		20	N3
1,1-Dichloroethane	ug/L	3.9	4.0	1	20	
1,1-Dichloroethene	ug/L	1.5	1.4	3	20	
1,1-Dichloropropene	ug/L	<0.50	<0.50		20	
1,2,3-Trichlorobenzene	ug/L	<0.50	<0.50		20	
1,2,3-Trichloropropane	ug/L	<0.50	<0.50		20	
1,2,4-Trichlorobenzene	ug/L	<0.50	<0.50		20	
1,2,4-Trimethylbenzene	ug/L	<0.50	<0.50		20	
1,2-Dichlorobenzene	ug/L	<0.50	<0.50		20	
1,2-Dichloroethane	ug/L	<0.50	<0.50		20	
1,2-Dichloropropane	ug/L	<0.50	<0.50		20	
1,3,5-Trimethylbenzene	ug/L	<0.50	<0.50		20	
1,3-Dichlorobenzene	ug/L	<0.50	<0.50		20	
1,3-Dichloropropane	ug/L	<0.50	<0.50		20	
1,4-Dichlorobenzene	ug/L	<0.50	<0.50		20	
2,2-Dichloropropane	ug/L	<0.50	<0.50		20	
2-Chlorotoluene	ug/L	<0.50	<0.50		20	
4-Chlorotoluene	ug/L	<0.50	<0.50		20	
Benzene	ug/L	<0.50	<0.50		20	
Bromobenzene	ug/L	<0.50	<0.50		20	
Bromochloromethane	ug/L	<0.50	<0.50		20	
Bromodichloromethane	ug/L	<0.50	<0.50		20	
Bromoform	ug/L	<0.50	<0.50		20	
Bromomethane	ug/L	<0.50	<0.50		20	
Carbon tetrachloride	ug/L	<0.50	<0.50		20	
Chlorobenzene	ug/L	<0.50	<0.50		20	
Chlorodifluoromethane	ug/L	<0.50	<0.50		20	N3
Chloroethane	ug/L	<0.50	<0.50		20	
Chloroform	ug/L	<0.50	<0.50		20	
Chloromethane	ug/L	<0.50	<0.50		20	
cis-1,2-Dichloroethene	ug/L	0.90	0.81	10	20	
cis-1,3-Dichloropropene	ug/L	<0.50	<0.50		20	
Dibromochloromethane	ug/L	<0.50	<0.50		20	
Dibromomethane	ug/L	<0.50	<0.50		20	
Dichlorodifluoromethane	ug/L	<0.50	<0.50		20	
Ethylbenzene	ug/L	<0.50	<0.50		20	
Hexachloro-1,3-butadiene	ug/L	<0.50	<0.50		20	
Isopropylbenzene (Cumene)	ug/L	<0.50	<0.50		20	
m&p-Xylene	ug/L	<0.50	<0.50		20	
Methyl-tert-butyl ether	ug/L	<0.50	<0.50		20	
Methylene Chloride	ug/L	<0.50	<0.50		20	
n-Butylbenzene	ug/L	<0.50	<0.50		20	
n-Propylbenzene	ug/L	<0.50	<0.50		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

SAMPLE DUPLICATE: 1427603

Parameter	Units	70235832001 Result	Dup Result	RPD	Max RPD	Qualifiers
o-Xylene	ug/L	<0.50	<0.50		20	
p-Isopropyltoluene	ug/L	<0.50	<0.50		20	
sec-Butylbenzene	ug/L	<0.50	<0.50		20	
Styrene	ug/L	<0.50	<0.50		20	
tert-Butylbenzene	ug/L	<0.50	<0.50		20	
Tetrachloroethene	ug/L	3.2	2.9	9	20	
Toluene	ug/L	<0.50	<0.50		20	
Total Trihalomethanes (Calc.)	ug/L	<0.50	<0.50		20	
trans-1,2-Dichloroethene	ug/L	<0.50	<0.50		20	
trans-1,3-Dichloropropene	ug/L	<0.50	<0.50		20	
Trichloroethene	ug/L	2.5	2.5	0	20	
Trichlorofluoromethane	ug/L	<0.50	<0.50		20	
Vinyl chloride	ug/L	<0.50	<0.50		20	
1,2-Dichlorobenzene-d4 (S)	%	97	96		20	
4-Bromofluorobenzene (S)	%	94	97		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

QC Batch: 281368
QC Batch Method: EPA 522
Analysis Method: EPA 522
Analysis Description: 522 MSS 1,4 Dioxane
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235965001, 70235965003, 70235965004

METHOD BLANK: 1422323 Matrix: Drinking Water
Associated Lab Samples: 70235965001, 70235965003, 70235965004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.020	0.020	11/10/22 10:05	
1,4-Dioxane-d8 (S)	%	97	70-130	11/10/22 10:05	

LABORATORY CONTROL SAMPLE: 1422324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	2	2.1	103	70-130	
1,4-Dioxane-d8 (S)	%			103	70-130	

MATRIX SPIKE SAMPLE: 1422325

Parameter	Units	70235990009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.085	2	2.2	106	70-130	
1,4-Dioxane-d8 (S)	%				106	70-130	

SAMPLE DUPLICATE: 1422326

Parameter	Units	70235990010 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.16	0.15	8	30	
1,4-Dioxane-d8 (S)	%	108	110		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NYAW-MERRICK OPS POC/1,4D 11/7
Pace Project No.: 70235965

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70235965001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	EPA 522	281368	EPA 522	281464
70235965003	**WELL 3A N-14347 (INFLUENT)**	EPA 522	281368	EPA 522	281464
70235965004	**WELL 4A N-09338 (INFLUENT)**	EPA 522	281368	EPA 522	281464
70235965001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	EPA 524.2	282211		
70235965002	**GAC-3S/4S (SEAMAN NECK GAC -D**	EPA 524.2	282211		
70235965003	**WELL 3A N-14347 (INFLUENT)**	EPA 524.2	282211		
70235965004	**WELL 4A N-09338 (INFLUENT)**	EPA 524.2	282211		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be c

WO# : 70235965

70235965

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	KOMAN Government Solutions, LLC	Report To:	Stephane Roy	Attention:	Accounts Payable
Address:	180 Gordon Dr., Suite 110	Copy To:	NCDOH	Company Name:	KOMAN Government Solutions, LL
	Exton, PA			Address:	accountspayable@komangs.com
Email To:	sroy@komangs.com	Purchase Order No.:		Pace Quote Reference:	00016758
Phone:	610-400-0622 Fax	Project Name:	NYAW-MERRICK OPS FACILITY	Pace Project Manager:	Stuart Murrell
Requested Due Date/TAT:		Project Number:	02607-004	Pace Profile #:	

REGULATORY AGENCY

NPDES | GROUND WATER [✓] | DRINKING WATER

UST | RCRA | OTHER

Site Location STATE: NY

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: N	POC (VOCs by 524.2)	1,4-dioxane (522)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	GAC-3S/4S (Seaman Neck GAC Effluent)	DW	G			11.7.22	7:50		6				X						X			MS/MSD
2	GAC-3S/4S (Seaman Neck GAC Effluent)-D	DW	G			11.7.22	8:00		2				X						X			
3	Well 3A N-14347 (Influent)	DW	G			11.7.22	8:40		1						X					X		
4	Well 4 N-09338 (Influent)	DW	G			11.7.22	8:15		1						X					X		
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
MS/MSD collected at GAC-3S/4S (Seaman Neck GAC Effluent)	Randy Hoffmaster	11-7-22	10:03	GNA PACCLI	11/07/22	10:08	3.8	(W)	N/A	Y

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Randy Hoffmaster					
SIGNATURE of SAMPLER:	Randy Hoffmaster	DATE Signed (MM/DD/YY): 11.7.2022				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

Pace Analytical®

Sample Condition Upon Rece

WO#: 70235965

PM: KMM **Due Date: 11/16/22**

CLIENT: KGS

Client Name: Project

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: T#148 Correction Factor: + 0.1

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.8 Cooler Temperature Corrected(°C): 3.9

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: SAR 11/7

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

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

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

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/ Matrix: SL WT OIL	☑ Yes SAR	☐ No		12. 1,4 Diox analysis not marked for First Sample on COC
All containers needing preservation have been checked? SAR 11/7 pH paper Lot #	☑ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) SAR 11/7 Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☑ Yes	☐ No	☑ N/A	Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐ Yes	☐ No	☑ N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot #	☐ Yes	☐ No	☑ N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☑ No	☐ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable):				

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

Person Contacted: Date/Time:

Comments/ Resolution:

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

ENV-FRM-MELV-0024 01

ATTACHMENT 2

IOC ANALYTICAL RESULTS FOR NOVEMBER 2022

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

November 21, 2022

Robert G. Gregory
KOMAN Government Services, LLC
180 Gordon Dr.
Suite 110
Exton, PA 19341

RE: Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Dear Robert Gregory:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kimberley Mack

Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Ericka Seiler, KOMAN Government Services, LLC

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

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

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE SUMMARY

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70235961001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	Drinking Water	11/07/22 07:30	11/07/22 10:08
70235961002	**GAC-3S/4S SEAMAN NECK GAC EF-D**	Drinking Water	11/07/22 07:45	11/07/22 10:08
70235961003	**WELL 3A N-14347 (INFLUENT)**	Drinking Water	11/07/22 08:40	11/07/22 10:08
70235961004	**WELL 4 N-09338 (INFLUENT)**	Drinking Water	11/07/22 08:15	11/07/22 10:08

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70235961001	**GAC-3S/4S (SEAMAN NECK GAC EFF**	EPA 200.7	JWT	8
		EPA 200.8	JJS	13
		EPA 180.1	JWM	1
		SM22 2120B	SM2	2
		SM22 2150B	RESE	1
		SM22 2320B	JWM	1
		SM22 2540C	AKM	1
		SM22 4500-H+B	CEA	2
		SM22 5540C	SM2	2
		SM22 2330 LSI	SDO	1
		EPA 300.0	SPM	3
		EPA 353.2	DJM	2
		EPA 353.2	DJM	1
		SM22 4500 NH3 H	SPM	1
		ASTM D7237-10	RESE	1
70235961002	**GAC-3S/4S SEAMAN NECK GAC EF-D**	EPA 200.7	JWT	8
		EPA 200.8	JJS	13
		EPA 180.1	JWM	1
		SM22 2120B	SM2	2
		SM22 2150B	RESE	1
		SM22 2320B	JWM	1
		SM22 2540C	AKM	1
		SM22 4500-H+B	CEA	2
		SM22 5540C	SM2	2
		SM22 2330 LSI	SDO	1
		EPA 300.0	SPM	3
		EPA 353.2	DJM	2
		EPA 353.2	DJM	1
		SM22 4500 NH3 H	SPM	1
		ASTM D7237-10	RESE	1
70235961003	**WELL 3A N-14347 (INFLUENT)**	EPA 200.7	JWT	8
		EPA 200.8	JJS	13
		EPA 180.1	JWM	1
		SM22 2120B	SM2	2
		SM22 2150B	RESE	1
		SM22 2320B	JWM	1
		SM22 2540C	AKM	1

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM22 4500-H+B	CEA	2
		SM22 5540C	SM2	2
		SM22 2330 LSI	SDO	1
		EPA 300.0	SPM	3
		EPA 353.2	DJM	2
		EPA 353.2	DJM	1
		SM22 4500 NH3 H	SPM	1
		ASTM D7237-10	RESE	1
70235961004	**WELL 4 N-09338 (INFLUENT)**	EPA 200.7	JWT	8
		EPA 200.8	JJS	13
		EPA 180.1	JWM	1
		SM22 2120B	SM2	2
		SM22 2150B	RESE	1
		SM22 2320B	JWM	1
		SM22 2540C	AKM	1
		SM22 4500-H+B	CEA	2
		SM22 5540C	SM2	2
		SM22 2330 LSI	SDO	1
		EPA 300.0	SPM	3
		EPA 353.2	DJM	2
		EPA 353.2	DJM	1
		SM22 4500 NH3 H	SPM	1
		ASTM D7237-10	RESE	1

PACE-MV = Pace Analytical Services - Melville

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: GAC-3S/4S (SEAMAN NECK GAC EFF **Lab ID: 70235961001** Collected: 11/07/22 07:30 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, Drinking Water	Analytical Method: EPA 200.7 Pace Analytical Services - Melville								
Calcium	**4.9**	mg/L	0.20		1		11/09/22 13:20	7440-70-2	
Ca Hardness as CaCO3 (SM 2340B	**12.2**	mg/L	0.50		1		11/09/22 13:20		
Iron	**0.23**	mg/L	0.020		1		11/09/22 13:20	7439-89-6	
Magnesium	**1.8**	mg/L	0.20		1		11/09/22 13:20	7439-95-4	
Manganese	**<0.010**	mg/L	0.010		1		11/09/22 13:20	7439-96-5	
Sodium	**40.8**	mg/L	0.20		1		11/09/22 13:20	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**19.9**	mg/L	0.83		1		11/09/22 13:20		N3
Zinc	**0.023**	mg/L	0.020		1		11/09/22 13:20	7440-66-6	
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8 Pace Analytical Services - Melville								
Antimony	**<0.40**	ug/L	0.40	6	1		11/14/22 20:46	7440-36-0	
Arsenic	**<1.0**	ug/L	1.0	10	1		11/14/22 20:46	7440-38-2	
Barium	**0.0059**	mg/L	0.0020	2	1		11/14/22 20:46	7440-39-3	
Beryllium	**<0.30**	ug/L	0.30	4	1		11/14/22 20:46	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	5	1		11/14/22 20:46	7440-43-9	
Chromium	**<0.0070**	mg/L	0.0070	.1	1		11/14/22 20:46	7440-47-3	
Copper	**0.019**	mg/L	0.0020	1.3	1		11/14/22 20:46	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		11/14/22 20:46	7439-92-1	
Mercury	**<0.20**	ug/L	0.20	2	1		11/14/22 20:46	7439-97-6	
Nickel	**<0.00050**	mg/L	0.00050		1		11/14/22 20:46	7440-02-0	
Selenium	**<2.0**	ug/L	2.0	50	1		11/14/22 20:46	7782-49-2	
Silver	**<0.0010**	mg/L	0.0010		1		11/14/22 20:46	7440-22-4	
Thallium	**<0.30**	ug/L	0.30	2	1		11/14/22 20:46	7440-28-0	
180.1 Turbidity	Analytical Method: EPA 180.1 Pace Analytical Services - Melville								
Turbidity	**<1.0**	NTU	1.0		1		11/08/22 16:37		
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville								
Apparent Color	**<5.0**	units	5.0		1		11/08/22 22:32		
pH	**7.5**	Std. Units	0.10		1		11/08/22 22:32		
2150B Threshold Odor Number	Analytical Method: SM22 2150B Pace Analytical Services - Melville								
Odor @ 60 Degrees C	**1**		1.0		1		11/07/22 19:21		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville								
Alkalinity, Total as CaCO3	**61.2**	mg/L	1.0		1		11/18/22 16:52		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: GAC-3S/4S (SEAMAN NECK GAC EFF **Lab ID: 70235961001** Collected: 11/07/22 07:30 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville								
Total Dissolved Solids	**141**	mg/L	10.0		1		11/10/22 19:08		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B Pace Analytical Services - Melville								
pH	**6.9**	Std. Units	0.10		1		11/10/22 16:09		H3,H6, N3
Temperature, Water (C)	**12.8**	deg C	0.10		1		11/10/22 16:09		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C Pace Analytical Services - Melville								
LAS Molecular Weight, g/mol	**320**				1	11/09/22 00:11	11/09/22 01:02		
MBAS, Calculated as LAS	**<0.080**	mg/L	0.080		1	11/09/22 00:11	11/09/22 01:02		
Langelier Saturation Index	Analytical Method: SM22 2330 LSI Pace Analytical Services - Melville								
Corrosivity	**-2.28**				1		11/21/22 14:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Chloride	**24.6**	mg/L	2.0		1		11/16/22 07:48	16887-00-6	
Fluoride	**<0.10**	mg/L	0.10	4	1		11/16/22 07:48	16984-48-8	
Sulfate	**28.1**	mg/L	5.0		1		11/16/22 07:48	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	**0.065**	mg/L	0.050	10	1		11/08/22 22:21	14797-55-8	
Nitrate-Nitrite (as N)	**0.065**	mg/L	0.050		1		11/08/22 22:21	7727-37-9	M1
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrite as N	**<0.050**	mg/L	0.050	1	1		11/08/22 21:02	14797-65-0	M1
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville								
Nitrogen, Ammonia	**<0.10**	mg/L	0.10		1		11/11/22 14:43	7664-41-7	
Cyanide, Free	Analytical Method: ASTM D7237-10 Pace Analytical Services - Melville								
Cyanide, Free	**<10.0**	ug/L	10.0		1		11/15/22 14:21	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: GAC-3S/4S SEAMAN NECK GAC EF-D **Lab ID: 70235961002** Collected: 11/07/22 07:45 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, Drinking Water	Analytical Method: EPA 200.7 Pace Analytical Services - Melville								
Calcium	**4.8**	mg/L	0.20		1		11/09/22 13:23	7440-70-2	
Ca Hardness as CaCO3 (SM 2340B	**12.0**	mg/L	0.50		1		11/09/22 13:23		
Iron	**0.11**	mg/L	0.020		1		11/09/22 13:23	7439-89-6	
Magnesium	**1.8**	mg/L	0.20		1		11/09/22 13:23	7439-95-4	
Manganese	**<0.010**	mg/L	0.010		1		11/09/22 13:23	7439-96-5	
Sodium	**40.1**	mg/L	0.20		1		11/09/22 13:23	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**19.6**	mg/L	0.83		1		11/09/22 13:23		N3
Zinc	**<0.020**	mg/L	0.020		1		11/09/22 13:23	7440-66-6	
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8 Pace Analytical Services - Melville								
Antimony	**<0.40**	ug/L	0.40	6	1		11/14/22 20:50	7440-36-0	
Arsenic	**<1.0**	ug/L	1.0	10	1		11/14/22 20:50	7440-38-2	
Barium	**0.0058**	mg/L	0.0020	2	1		11/14/22 20:50	7440-39-3	
Beryllium	**<0.30**	ug/L	0.30	4	1		11/14/22 20:50	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	5	1		11/14/22 20:50	7440-43-9	
Chromium	**<0.0070**	mg/L	0.0070	.1	1		11/14/22 20:50	7440-47-3	
Copper	**0.018**	mg/L	0.0020	1.3	1		11/14/22 20:50	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		11/14/22 20:50	7439-92-1	
Mercury	**<0.20**	ug/L	0.20	2	1		11/14/22 20:50	7439-97-6	M1
Nickel	**<0.00050**	mg/L	0.00050		1		11/14/22 20:50	7440-02-0	M1
Selenium	**<2.0**	ug/L	2.0	50	1		11/14/22 20:50	7782-49-2	
Silver	**<0.0010**	mg/L	0.0010		1		11/14/22 20:50	7440-22-4	M1
Thallium	**<0.30**	ug/L	0.30	2	1		11/14/22 20:50	7440-28-0	
180.1 Turbidity	Analytical Method: EPA 180.1 Pace Analytical Services - Melville								
Turbidity	**<1.0**	NTU	1.0		1		11/08/22 16:38		
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville								
Apparent Color	**<5.0**	units	5.0		1		11/08/22 22:34		
pH	**7.4**	Std. Units	0.10		1		11/08/22 22:34		
2150B Threshold Odor Number	Analytical Method: SM22 2150B Pace Analytical Services - Melville								
Odor @ 60 Degrees C	**No odor observed**		1.0		1		11/07/22 19:21		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville								
Alkalinity, Total as CaCO3	**60.1**	mg/L	1.0		1		11/18/22 16:59		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: GAC-3S/4S SEAMAN NECK GAC EF-D **Lab ID: 70235961002** Collected: 11/07/22 07:45 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville								
Total Dissolved Solids	**144**	mg/L	10.0		1		11/10/22 19:09		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B Pace Analytical Services - Melville								
pH	**7.2**	Std. Units	0.10		1		11/10/22 16:10		H3,H6, N3
Temperature, Water (C)	**12.7**	deg C	0.10		1		11/10/22 16:10		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C Pace Analytical Services - Melville								
LAS Molecular Weight, g/mol	**320**				1	11/09/22 00:19	11/09/22 01:06		
MBAS, Calculated as LAS	**<0.080**	mg/L	0.080		1	11/09/22 00:19	11/09/22 01:06		
Langelier Saturation Index	Analytical Method: SM22 2330 LSI Pace Analytical Services - Melville								
Corrosivity	**-2**				1		11/21/22 14:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Chloride	**24.7**	mg/L	2.0		1		11/16/22 08:02	16887-00-6	
Fluoride	**<0.10**	mg/L	0.10	4	1		11/16/22 08:02	16984-48-8	
Sulfate	**28.2**	mg/L	5.0		1		11/16/22 08:02	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	**0.064**	mg/L	0.050	10	1		11/08/22 22:24	14797-55-8	
Nitrate-Nitrite (as N)	**0.064**	mg/L	0.050		1		11/08/22 22:24	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrite as N	**<0.050**	mg/L	0.050	1	1		11/08/22 21:06	14797-65-0	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville								
Nitrogen, Ammonia	**<0.10**	mg/L	0.10		1		11/11/22 14:44	7664-41-7	
Cyanide, Free	Analytical Method: ASTM D7237-10 Pace Analytical Services - Melville								
Cyanide, Free	**<10.0**	ug/L	10.0		1		11/15/22 14:25	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: WELL 3A N-14347 (INFLUENT) **Lab ID: 70235961003** Collected: 11/07/22 08:40 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, Drinking Water	Analytical Method: EPA 200.7 Pace Analytical Services - Melville								
Calcium	**3.6**	mg/L	0.20		1		11/09/22 13:25	7440-70-2	
Ca Hardness as CaCO3 (SM 2340B	**9.0**	mg/L	0.50		1		11/09/22 13:25		
Iron	**1.3**	mg/L	0.020		1		11/09/22 13:25	7439-89-6	
Magnesium	**1.5**	mg/L	0.20		1		11/09/22 13:25	7439-95-4	
Manganese	**0.032**	mg/L	0.010		1		11/09/22 13:25	7439-96-5	
Sodium	**9.7**	mg/L	0.20		1		11/09/22 13:25	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**15.1**	mg/L	0.83		1		11/09/22 13:25		N3
Zinc	**0.082**	mg/L	0.020		1		11/09/22 13:25	7440-66-6	
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8 Pace Analytical Services - Melville								
Antimony	**<0.40**	ug/L	0.40	6	1		11/14/22 20:58	7440-36-0	
Arsenic	**<1.0**	ug/L	1.0	10	1		11/14/22 20:58	7440-38-2	
Barium	**0.0061**	mg/L	0.0020	2	1		11/14/22 20:58	7440-39-3	
Beryllium	**<0.30**	ug/L	0.30	4	1		11/14/22 20:58	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	5	1		11/14/22 20:58	7440-43-9	
Chromium	**<0.0070**	mg/L	0.0070	.1	1		11/14/22 20:58	7440-47-3	
Copper	**0.030**	mg/L	0.0020	1.3	1		11/14/22 20:58	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		11/14/22 20:58	7439-92-1	
Mercury	**<0.20**	ug/L	0.20	2	1		11/14/22 20:58	7439-97-6	M1
Nickel	**<0.00050**	mg/L	0.00050		1		11/14/22 20:58	7440-02-0	M1
Selenium	**<2.0**	ug/L	2.0	50	1		11/14/22 20:58	7782-49-2	
Silver	**<0.0010**	mg/L	0.0010		1		11/14/22 20:58	7440-22-4	
Thallium	**<0.30**	ug/L	0.30	2	1		11/14/22 20:58	7440-28-0	
180.1 Turbidity	Analytical Method: EPA 180.1 Pace Analytical Services - Melville								
Turbidity	**5.6**	NTU	1.0		1		11/08/22 16:40		
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville								
Apparent Color	**<5.0**	units	5.0		1		11/08/22 22:37		
pH	**4.3**	Std. Units	0.10		1		11/08/22 22:37		
2150B Threshold Odor Number	Analytical Method: SM22 2150B Pace Analytical Services - Melville								
Odor @ 60 Degrees C	**No odor observed**		1.0		1		11/07/22 19:21		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville								
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0		1		11/18/22 17:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: WELL 3A N-14347 (INFLUENT) **Lab ID: 70235961003** Collected: 11/07/22 08:40 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville								
Total Dissolved Solids	**77.0**	mg/L	10.0		1		11/10/22 19:09		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B Pace Analytical Services - Melville								
pH	**3.8**	Std. Units	0.10		1		11/10/22 16:10		H3,H6, N3
Temperature, Water (C)	**14.0**	deg C	0.10		1		11/10/22 16:10		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C Pace Analytical Services - Melville								
LAS Molecular Weight, g/mol	**320**				1	11/09/22 00:23	11/09/22 01:08		
MBAS, Calculated as LAS	**<0.080**	mg/L	0.080		1	11/09/22 00:23	11/09/22 01:08		
Langelier Saturation Index	Analytical Method: SM22 2330 LSI Pace Analytical Services - Melville								
Corrosivity	**-7.27**				1		11/21/22 14:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Chloride	**20.1**	mg/L	2.0		1		11/16/22 08:15	16887-00-6	
Fluoride	**<0.10**	mg/L	0.10	4	1		11/16/22 08:15	16984-48-8	
Sulfate	**17.0**	mg/L	5.0		1		11/16/22 08:15	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	**0.24**	mg/L	0.050	10	1		11/08/22 22:27	14797-55-8	
Nitrate-Nitrite (as N)	**0.24**	mg/L	0.050		1		11/08/22 22:27	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrite as N	**<0.050**	mg/L	0.050	1	1		11/08/22 21:08	14797-65-0	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville								
Nitrogen, Ammonia	**<0.10**	mg/L	0.10		1		11/11/22 14:45	7664-41-7	
Cyanide, Free	Analytical Method: ASTM D7237-10 Pace Analytical Services - Melville								
Cyanide, Free	**<10.0**	ug/L	10.0		1		11/15/22 14:29	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: WELL 4 N-09338 (INFLUENT) **Lab ID: 70235961004** Collected: 11/07/22 08:15 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP, Drinking Water	Analytical Method: EPA 200.7 Pace Analytical Services - Melville								
Calcium	**4.8**	mg/L	0.20		1		11/09/22 13:28	7440-70-2	
Ca Hardness as CaCO3 (SM 2340B	**12.1**	mg/L	0.50		1		11/09/22 13:28		
Iron	**2.0**	mg/L	0.020		1		11/09/22 13:28	7439-89-6	
Magnesium	**1.8**	mg/L	0.20		1		11/09/22 13:28	7439-95-4	
Manganese	**0.025**	mg/L	0.010		1		11/09/22 13:28	7439-96-5	
Sodium	**11.6**	mg/L	0.20		1		11/09/22 13:28	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**19.7**	mg/L	0.83		1		11/09/22 13:28		N3
Zinc	**<0.020**	mg/L	0.020		1		11/09/22 13:28	7440-66-6	
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8 Pace Analytical Services - Melville								
Antimony	**0.77**	ug/L	0.40	6	1		11/14/22 21:03	7440-36-0	
Arsenic	**<1.0**	ug/L	1.0	10	1		11/14/22 21:03	7440-38-2	
Barium	**0.0066**	mg/L	0.0020	2	1		11/14/22 21:03	7440-39-3	
Beryllium	**<0.30**	ug/L	0.30	4	1		11/14/22 21:03	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	5	1		11/14/22 21:03	7440-43-9	
Chromium	**<0.0070**	mg/L	0.0070	.1	1		11/14/22 21:03	7440-47-3	
Copper	**<0.0020**	mg/L	0.0020	1.3	1		11/14/22 21:03	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		11/14/22 21:03	7439-92-1	
Mercury	**<0.20**	ug/L	0.20	2	1		11/14/22 21:03	7439-97-6	
Nickel	**<0.00050**	mg/L	0.00050		1		11/14/22 21:03	7440-02-0	
Selenium	**<2.0**	ug/L	2.0	50	1		11/14/22 21:03	7782-49-2	
Silver	**<0.0010**	mg/L	0.0010		1		11/14/22 21:03	7440-22-4	
Thallium	**0.36**	ug/L	0.30	2	1		11/14/22 21:03	7440-28-0	
180.1 Turbidity	Analytical Method: EPA 180.1 Pace Analytical Services - Melville								
Turbidity	**<1.0**	NTU	1.0		1		11/08/22 16:39		
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville								
Apparent Color	**18.0**	units	5.0		1		11/08/22 22:35		
pH	**4.5**	Std. Units	0.10		1		11/08/22 22:35		
2150B Threshold Odor Number	Analytical Method: SM22 2150B Pace Analytical Services - Melville								
Odor @ 60 Degrees C	**No odor observed**		1.0		1		11/07/22 19:21		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville								
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0		1		11/18/22 17:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Sample: WELL 4 N-09338 (INFLUENT) **Lab ID: 70235961004** Collected: 11/07/22 08:15 Received: 11/07/22 10:08 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville								
Total Dissolved Solids	**78.0**	mg/L	20.0		1		11/10/22 19:10		
4500H+ pH, Electrometric	Analytical Method: SM22 4500-H+B Pace Analytical Services - Melville								
pH	**3.9**	Std. Units	0.10		1		11/10/22 16:10		H3,H6, N3
Temperature, Water (C)	**13.9**	deg C	0.10		1		11/10/22 16:10		H3,H6
5540C MBAS Surfactants	Analytical Method: SM22 5540C Preparation Method: SM22 5540C Pace Analytical Services - Melville								
LAS Molecular Weight, g/mol	**320**				1	11/09/22 00:21	11/09/22 01:07		
MBAS, Calculated as LAS	**<0.080**	mg/L	0.080		1	11/09/22 00:21	11/09/22 01:07		
Langelier Saturation Index	Analytical Method: SM22 2330 LSI Pace Analytical Services - Melville								
Corrosivity	**-7.04**				1		11/21/22 14:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Chloride	**20.6**	mg/L	2.0		1		11/16/22 08:29	16887-00-6	
Fluoride	**<0.10**	mg/L	0.10	4	1		11/16/22 08:29	16984-48-8	
Sulfate	**25.5**	mg/L	5.0		1		11/16/22 08:29	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	**<0.050**	mg/L	0.050	10	1		11/08/22 22:26	14797-55-8	
Nitrate-Nitrite (as N)	**0.056**	mg/L	0.050		1		11/08/22 22:26	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrite as N	**<0.050**	mg/L	0.050	1	1		11/08/22 21:07	14797-65-0	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville								
Nitrogen, Ammonia	**<0.10**	mg/L	0.10		1		11/11/22 14:46	7664-41-7	
Cyanide, Free	Analytical Method: ASTM D7237-10 Pace Analytical Services - Melville								
Cyanide, Free	**<10.0**	ug/L	10.0		1		11/15/22 14:34	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281390
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 MET No Prep Drinking Water
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1422430 Matrix: Drinking Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L	<0.50	0.50	11/09/22 12:24	
Calcium	mg/L	<0.20	0.20	11/09/22 12:24	
Iron	mg/L	<0.020	0.020	11/09/22 12:24	
Magnesium	mg/L	<0.20	0.20	11/09/22 12:24	
Manganese	mg/L	<0.010	0.010	11/09/22 12:24	
Sodium	mg/L	<0.20	0.20	11/09/22 12:24	
Tot Hardness asCaCO3 (SM 2340B	mg/L	<0.83	0.83	11/09/22 12:24	N3
Zinc	mg/L	<0.020	0.020	11/09/22 12:24	

LABORATORY CONTROL SAMPLE: 1422431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L		64.4			
Calcium	mg/L	25	25.8	103	85-115	
Iron	mg/L	12.5	12.5	100	85-115	
Magnesium	mg/L	25	24.9	100	85-115	
Manganese	mg/L	0.5	0.49	98	85-115	
Sodium	mg/L	25	25.1	100	85-115	
Tot Hardness asCaCO3 (SM 2340B	mg/L		167			N3
Zinc	mg/L	0.5	0.51	102	85-115	

MATRIX SPIKE SAMPLE: 1422433

Parameter	Units	70235990009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L	42900 ug/L		76.4			
Calcium	mg/L	17200 ug/L	12.5	30.6	107	70-130	
Iron	mg/L	23.8 ug/L	5	5.2	105	70-130	
Magnesium	mg/L	3540 ug/L	12.5	16.3	102	70-130	
Manganese	mg/L	<10.0 ug/L	0.5	0.51	102	70-130	
Sodium	mg/L	42400 ug/L	12.5	55.9	108	70-130	
Tot Hardness asCaCO3 (SM 2340B	mg/L	57500 ug/L		144			N3
Zinc	mg/L	<20.0 ug/L	0.5	0.55	109	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

MATRIX SPIKE SAMPLE: 1422435

Parameter	Units	70235990010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L	19900 ug/L		53.4			
Calcium	mg/L	7970 ug/L	12.5	21.4	107	70-130	
Iron	mg/L	2630 ug/L	5	7.5	97	70-130	
Magnesium	mg/L	3660 ug/L	12.5	16.0	99	70-130	
Manganese	mg/L	77.9 ug/L	0.5	0.57	98	70-130	
Sodium	mg/L	41200 ug/L	12.5	54.2	104	70-130	
Tot Hardness asCaCO3 (SM 2340B	mg/L	35000 ug/L		119			N3
Zinc	mg/L	<20.0 ug/L	0.5	0.55	107	70-130	

SAMPLE DUPLICATE: 1422432

Parameter	Units	70235990009 Result	Dup Result	RPD	Max RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L	42900 ug/L	43.4	1	20	
Calcium	mg/L	17200 ug/L	17.4	1	20	
Iron	mg/L	23.8 ug/L	0.024	0	20	
Magnesium	mg/L	3540 ug/L	3.5	0	20	
Manganese	mg/L	<10.0 ug/L	<0.010		20	
Sodium	mg/L	42400 ug/L	42.9	1	20	
Tot Hardness asCaCO3 (SM 2340B	mg/L	57500 ug/L	58.0	1	20	N3
Zinc	mg/L	<20.0 ug/L	<0.020		20	

SAMPLE DUPLICATE: 1422434

Parameter	Units	70235990010 Result	Dup Result	RPD	Max RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	mg/L	19900 ug/L	19.9	0	20	
Calcium	mg/L	7970 ug/L	8.0	0	20	
Iron	mg/L	2630 ug/L	2.6	0	20	
Magnesium	mg/L	3660 ug/L	3.6	0	20	
Manganese	mg/L	77.9 ug/L	0.078	0	20	
Sodium	mg/L	41200 ug/L	41.3	0	20	
Tot Hardness asCaCO3 (SM 2340B	mg/L	35000 ug/L	35.0	0	20	N3
Zinc	mg/L	<20.0 ug/L	<0.020		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 282017
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET No Prep Drinking Water
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001

METHOD BLANK: 1425413 Matrix: Water
Associated Lab Samples: 70235961001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	<0.40	0.40	11/14/22 20:01	
Arsenic	ug/L	<1.0	1.0	11/14/22 20:01	
Barium	mg/L	<0.0020	0.0020	11/14/22 20:01	
Beryllium	ug/L	<0.30	0.30	11/14/22 20:01	
Cadmium	ug/L	<1.0	1.0	11/14/22 20:01	
Chromium	mg/L	<0.0070	0.0070	11/14/22 20:01	
Copper	mg/L	<0.0020	0.0020	11/14/22 20:01	
Lead	ug/L	<1.0	1.0	11/14/22 20:01	
Mercury	ug/L	<0.20	0.20	11/14/22 20:01	
Nickel	mg/L	<0.00050	0.00050	11/14/22 20:01	
Selenium	ug/L	<2.0	2.0	11/14/22 20:01	
Silver	mg/L	<0.0010	0.0010	11/14/22 20:01	
Thallium	ug/L	<0.30	0.30	11/14/22 20:01	

LABORATORY CONTROL SAMPLE: 1425414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	48.1	96	85-115	
Arsenic	ug/L	50	47.5	95	85-115	
Barium	mg/L	0.05	0.048	96	85-115	
Beryllium	ug/L	50	48.7	97	85-115	
Cadmium	ug/L	50	49.0	98	85-115	
Chromium	mg/L	0.05	0.048	97	85-115	
Copper	mg/L	0.05	0.046	93	85-115	
Lead	ug/L	50	50.3	101	85-115	
Mercury	ug/L	1	0.94	94	85-115	
Nickel	mg/L	0.05	0.050	100	85-115	
Selenium	ug/L	50	48.2	96	85-115	
Silver	mg/L	0.025	0.024	95	85-115	
Thallium	ug/L	25	24.8	99	85-115	

MATRIX SPIKE SAMPLE: 1425416

Parameter	Units	70235871007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.40	50	36.0	72	70-130	
Arsenic	ug/L	<1.0	50	48.5	95	70-130	
Barium	mg/L	197 ug/L	0.05	0.24	78	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

MATRIX SPIKE SAMPLE: 1425416

Parameter	Units	70235871007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Beryllium	ug/L	<0.30	50	46.4	93	70-130	
Cadmium	ug/L	<1.0	50	47.8	95	70-130	
Chromium	mg/L	<7.0 ug/L	0.05	0.051	100	70-130	
Copper	mg/L	411 ug/L	0.05	0.44	53	70-130	M1
Lead	ug/L	5.4	50	63.3	116	70-130	
Mercury	ug/L	<0.20	1	0.72	70	70-130	M1
Nickel	mg/L		0.05	0.024	48	70-130	M1
Selenium	ug/L	<2.0	50	52.4	101	70-130	
Silver	mg/L	<1.0 ug/L	0.025	0.035	141	70-130	M1
Thallium	ug/L	<0.30	25	29.0	116	70-130	

MATRIX SPIKE SAMPLE: 1425418

Parameter	Units	70235871008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	0.87	50	35.9	70	70-130	
Arsenic	ug/L	<1.0	50	47.0	92	70-130	
Barium	mg/L	150 ug/L	0.05	0.19	73	70-130	
Beryllium	ug/L	<0.30	50	45.6	91	70-130	
Cadmium	ug/L	<1.0	50	46.7	93	70-130	
Chromium	mg/L	<7.0 ug/L	0.05	0.050	98	70-130	
Copper	mg/L	143 ug/L	0.05	0.18	73	70-130	
Lead	ug/L	<1.0	50	55.1	110	70-130	
Mercury	ug/L	<0.20	1	0.72	71	70-130	M1
Nickel	mg/L		0.05	0.016	31	70-130	M1
Selenium	ug/L	<2.0	50	51.5	100	70-130	
Silver	mg/L	<1.0 ug/L	0.025	0.036	145	70-130	M1
Thallium	ug/L	<0.30	25	27.3	109	70-130	

SAMPLE DUPLICATE: 1425415

Parameter	Units	70235871007 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	<0.40	<0.40		20	
Arsenic	ug/L	<1.0	<1.0		20	
Barium	mg/L	197 ug/L	0.20	0	20	
Beryllium	ug/L	<0.30	<0.30		20	
Cadmium	ug/L	<1.0	<1.0		20	
Chromium	mg/L	<7.0 ug/L	<0.0070		20	
Copper	mg/L	411 ug/L	0.41	0	20	
Lead	ug/L	5.4	5.3	2	20	
Mercury	ug/L	<0.20	<0.20		20	
Nickel	mg/L		<0.00050		20	
Selenium	ug/L	<2.0	<2.0		20	
Silver	mg/L	<1.0 ug/L	<0.0010		20	
Thallium	ug/L	<0.30	<0.30		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

SAMPLE DUPLICATE: 1425417

Parameter	Units	70235871008 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	0.87	<0.40		20	
Arsenic	ug/L	<1.0	<1.0		20	
Barium	mg/L	150 ug/L	0.15	1	20	
Beryllium	ug/L	<0.30	<0.30		20	
Cadmium	ug/L	<1.0	<1.0		20	
Chromium	mg/L	<7.0 ug/L	<0.0070		20	
Copper	mg/L	143 ug/L	0.14	0	20	
Lead	ug/L	<1.0	<1.0		20	
Mercury	ug/L	<0.20	<0.20		20	
Nickel	mg/L		<0.00050		20	
Selenium	ug/L	<2.0	<2.0		20	
Silver	mg/L	<1.0 ug/L	<0.0010		20	
Thallium	ug/L	<0.30	<0.30		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 282018
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET No Prep Drinking Water
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961002, 70235961003, 70235961004

METHOD BLANK: 1425419 Matrix: Water
Associated Lab Samples: 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	<0.40	0.40	11/14/22 20:47	
Arsenic	ug/L	<1.0	1.0	11/14/22 20:47	
Barium	mg/L	<0.0020	0.0020	11/14/22 20:47	
Beryllium	ug/L	<0.30	0.30	11/14/22 20:47	
Cadmium	ug/L	<1.0	1.0	11/14/22 20:47	
Chromium	mg/L	<0.0070	0.0070	11/14/22 20:47	
Copper	mg/L	<0.0020	0.0020	11/14/22 20:47	
Lead	ug/L	<1.0	1.0	11/14/22 20:47	
Mercury	ug/L	<0.20	0.20	11/14/22 20:47	
Nickel	mg/L	<0.00050	0.00050	11/14/22 20:47	
Selenium	ug/L	<2.0	2.0	11/14/22 20:47	
Silver	mg/L	<0.0010	0.0010	11/14/22 20:47	
Thallium	ug/L	<0.30	0.30	11/14/22 20:47	

LABORATORY CONTROL SAMPLE: 1425420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	46.4	93	85-115	
Arsenic	ug/L	50	48.2	96	85-115	
Barium	mg/L	0.05	0.047	95	85-115	
Beryllium	ug/L	50	48.4	97	85-115	
Cadmium	ug/L	50	48.8	98	85-115	
Chromium	mg/L	0.05	0.048	96	85-115	
Copper	mg/L	0.05	0.047	94	85-115	
Lead	ug/L	50	49.2	98	85-115	
Mercury	ug/L	1	0.96	96	85-115	
Nickel	mg/L	0.05	0.045	91	85-115	
Selenium	ug/L	50	48.3	97	85-115	
Silver	mg/L	0.025	0.023	93	85-115	
Thallium	ug/L	25	24.3	97	85-115	

MATRIX SPIKE SAMPLE: 1425422

Parameter	Units	70235961002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.40	50	47.5	95	70-130	
Arsenic	ug/L	<1.0	50	46.5	92	70-130	
Barium	mg/L	0.0058	0.05	0.050	88	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

MATRIX SPIKE SAMPLE: 1425422

Parameter	Units	70235961002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Beryllium	ug/L	<0.30	50	47.1	94	70-130	
Cadmium	ug/L	<1.0	50	48.9	98	70-130	
Chromium	mg/L	<0.0070	0.05	0.051	100	70-130	
Copper	mg/L	0.018	0.05	0.062	87	70-130	
Lead	ug/L	<1.0	50	55.4	111	70-130	
Mercury	ug/L	<0.20	1	0.77	76	70-130	M1
Nickel	mg/L	<0.00050	0.05	0.020	41	70-130	M1
Selenium	ug/L	<2.0	50	48.6	93	70-130	
Silver	mg/L	<0.0010	0.025	0.039	157	70-130	M1
Thallium	ug/L	<0.30	25	27.4	108	70-130	

MATRIX SPIKE SAMPLE: 1425424

Parameter	Units	70235961003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.40	50	38.0	76	70-130	
Arsenic	ug/L	<1.0	50	46.4	92	70-130	
Barium	mg/L	0.0061	0.05	0.053	93	70-130	
Beryllium	ug/L	<0.30	50	47.4	94	70-130	
Cadmium	ug/L	<1.0	50	49.0	98	70-130	
Chromium	mg/L	<0.0070	0.05	0.050	99	70-130	
Copper	mg/L	0.030	0.05	0.073	86	70-130	
Lead	ug/L	1.2	50	55.9	110	70-130	
Mercury	ug/L	<0.20	1	0.63	62	70-130	M1
Nickel	mg/L	<0.00050	0.05	0.024	48	70-130	M1
Selenium	ug/L	<2.0	50	47.3	91	70-130	
Silver	mg/L	<0.0010	0.025	0.029	115	70-130	
Thallium	ug/L	<0.30	25	27.3	108	70-130	

SAMPLE DUPLICATE: 1425421

Parameter	Units	70235961002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	<0.40	<0.40		20	
Arsenic	ug/L	<1.0	<1.0		20	
Barium	mg/L	0.0058	0.0058	0	20	
Beryllium	ug/L	<0.30	<0.30		20	
Cadmium	ug/L	<1.0	<1.0		20	
Chromium	mg/L	<0.0070	<0.0070		20	
Copper	mg/L	0.018	0.018	1	20	
Lead	ug/L	<1.0	<1.0		20	
Mercury	ug/L	<0.20	<0.20		20	
Nickel	mg/L	<0.00050	<0.00050		20	
Selenium	ug/L	<2.0	2.5		20	
Silver	mg/L	<0.0010	<0.0010		20	
Thallium	ug/L	<0.30	<0.30		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

SAMPLE DUPLICATE: 1425423

Parameter	Units	70235961003 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	<0.40	<0.40		20	
Arsenic	ug/L	<1.0	<1.0		20	
Barium	mg/L	0.0061	0.0064	5	20	
Beryllium	ug/L	<0.30	<0.30		20	
Cadmium	ug/L	<1.0	<1.0		20	
Chromium	mg/L	<0.0070	<0.0070		20	
Copper	mg/L	0.030	0.030	1	20	
Lead	ug/L	1.2	1.1	4	20	
Mercury	ug/L	<0.20	<0.20		20	
Nickel	mg/L	<0.00050	<0.00050		20	
Selenium	ug/L	<2.0	<2.0		20	
Silver	mg/L	<0.0010	<0.0010		20	
Thallium	ug/L	<0.30	<0.30		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281269 | Analysis Method: EPA 180.1
QC Batch Method: EPA 180.1 | Analysis Description: 180.1 Turbidity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1421793 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Turbidity	NTU	<1.0	1.0	11/08/22 16:36	

LABORATORY CONTROL SAMPLE: 1421794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Turbidity	NTU	10	10.0	100	90-110	

SAMPLE DUPLICATE: 1421795

Parameter	Units	70235961003 Result	Dup Result	RPD	Max RPD	Qualifiers
Turbidity	NTU	5.6	5.2	7	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Melville, NY 11747
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QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281300 | Analysis Method: SM22 2120B
QC Batch Method: SM22 2120B | Analysis Description: 2120B Color
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1421931 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Apparent Color	units	<5.0	5.0	11/08/22 22:30	

LABORATORY CONTROL SAMPLE: 1421932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Apparent Color	units	40	40.0	100	90-110	

SAMPLE DUPLICATE: 1421933

Parameter	Units	70235961001 Result	Dup Result	RPD	Max RPD	Qualifiers
Apparent Color	units	<5.0	<5.0		20	
pH	Std. Units	7.5	7.5	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281267
QC Batch Method: SM22 2150B
Analysis Method: SM22 2150B
Analysis Description: 2150B Threshold Odor Number
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1421770 Matrix: Drinking Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Odor @ 60 Degrees C		No odor	1.0	11/07/22 19:21	

SAMPLE DUPLICATE: 1421771

Parameter	Units	70235961002 Result	Dup Result	RPD	Max RPD	Qualifiers
Odor @ 60 Degrees C		No odor observed	1		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 282776 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1429050 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	11/18/22 15:26	

LABORATORY CONTROL SAMPLE: 1429051

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	26.6	106	85-115	

MATRIX SPIKE SAMPLE: 1429331

Parameter	Units	70235659001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	198	50	247	96	75-125	

SAMPLE DUPLICATE: 1429330

Parameter	Units	70235659001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	198	201	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281659 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1423828 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	11/10/22 18:47	

LABORATORY CONTROL SAMPLE: 1423829

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	496	99	85-115	

MATRIX SPIKE SAMPLE: 1423831

Parameter	Units	70235614001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	846	600	1320	79	75-125	

MATRIX SPIKE SAMPLE: 1423833

Parameter	Units	70236039003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	192	600	720	88	75-125	

SAMPLE DUPLICATE: 1423830

Parameter	Units	70235614001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	846	904	7	5	D6

SAMPLE DUPLICATE: 1423832

Parameter	Units	70236039003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	192	176	9	5	D6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281612
QC Batch Method: SM22 4500-H+B
Analysis Method: SM22 4500-H+B
Analysis Description: 4500H+B pH
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

SAMPLE DUPLICATE: 1423595

Parameter	Units	30533746001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	6.3	6.3	0	5	H3,H6,N3
Temperature, Water (C)	deg C	16.1	16.1	0	5	H3,H6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281262 | Analysis Method: SM22 5540C
QC Batch Method: SM22 5540C | Analysis Description: 5540C MBAS Surfactants
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1421741 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
LAS Molecular Weight, g/mol		320		11/09/22 00:59	
MBAS, Calculated as LAS	mg/L	ND	0.080	11/09/22 00:59	

LABORATORY CONTROL SAMPLE: 1421742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
LAS Molecular Weight, g/mol			320			
MBAS, Calculated as LAS	mg/L	0.24	0.23	98	85-115	

MATRIX SPIKE SAMPLE: 1421743

Parameter	Units	70235961001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
LAS Molecular Weight, g/mol				320			
MBAS, Calculated as LAS	mg/L	<0.080	0.24	0.23	80	75-125	

SAMPLE DUPLICATE: 1421744

Parameter	Units	70235961001 Result	Dup Result	RPD	Max RPD	Qualifiers
LAS Molecular Weight, g/mol		320	320			
MBAS, Calculated as LAS	mg/L	<0.080	<0.080		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 282144 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1426132 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	11/16/22 03:17	
Fluoride	mg/L	<0.10	0.10	11/16/22 03:17	
Sulfate	mg/L	<5.0	5.0	11/16/22 03:17	

LABORATORY CONTROL SAMPLE: 1426133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.9	99	90-110	
Fluoride	mg/L	1	1.1	108	90-110	
Sulfate	mg/L	10	9.8	98	90-110	

MATRIX SPIKE SAMPLE: 1426134

Parameter	Units	70235389001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	42.7	10	53.0	104	90-110	
Fluoride	mg/L	<0.10	1	1.1	107	90-110	
Sulfate	mg/L	27.9	10	39.2	113	90-110	M1

MATRIX SPIKE SAMPLE: 1426136

Parameter	Units	70235389002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	42.6	10	55.3	127	90-110	M1
Fluoride	mg/L	<0.10	1	1.1	114	90-110	M1
Sulfate	mg/L	27.3	10	41.5	142	90-110	M1

SAMPLE DUPLICATE: 1426135

Parameter	Units	70235389001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	42.7	42.6	0	15	
Fluoride	mg/L	<0.10	<0.10		15	
Sulfate	mg/L	27.9	27.8	0	15	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

SAMPLE DUPLICATE: 1426137

Parameter	Units	70235389002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	42.6	42.8	0	15	
Fluoride	mg/L	<0.10	<0.10		15	
Sulfate	mg/L	27.3	27.3	0	15	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281315 | Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 | Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1422119 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.050	11/08/22 21:00	

LABORATORY CONTROL SAMPLE: 1422120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	106	90-110	

MATRIX SPIKE SAMPLE: 1422121

Parameter	Units	70235961001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.19	39	90-110	M1

MATRIX SPIKE SAMPLE: 1422123

Parameter	Units	70236039001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.54	107	90-110	

SAMPLE DUPLICATE: 1422122

Parameter	Units	70235961001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		20	

SAMPLE DUPLICATE: 1422124

Parameter	Units	70236039001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281317 — Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 — Analysis Description: 353.2 Nitrate, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1422165 — Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	ND	0.050	11/08/22 22:18	

LABORATORY CONTROL SAMPLE: 1422166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 1422167

Parameter	Units	70235961001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.065	0.5	0.63	113	90-110	M1

MATRIX SPIKE SAMPLE: 1422169

Parameter	Units	70236039001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	6.1	2.5	8.6	104	90-110	

SAMPLE DUPLICATE: 1422168

Parameter	Units	70235961001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.065	0.063	3	20	

SAMPLE DUPLICATE: 1422170

Parameter	Units	70236039001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	6.1	5.8	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281776 | Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H | Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1424387 Matrix: Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	11/11/22 14:18	

LABORATORY CONTROL SAMPLE: 1424388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	110	90-110	

MATRIX SPIKE SAMPLE: 1424389

Parameter	Units	70235659001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	27.1	10	37.4	102	75-125	

SAMPLE DUPLICATE: 1424390

Parameter	Units	70235659001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	27.1	30.1	11	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

QC Batch: 281971 | Analysis Method: ASTM D7237-10
QC Batch Method: ASTM D7237-10 | Analysis Description: Cyanide, Free
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

METHOD BLANK: 1425284 Matrix: Drinking Water
Associated Lab Samples: 70235961001, 70235961002, 70235961003, 70235961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Free	ug/L	<10.0	10.0	11/15/22 13:57	

LABORATORY CONTROL SAMPLE: 1425285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Free	ug/L	100	97.7	98	85-114	

MATRIX SPIKE SAMPLE: 1425286

Parameter	Units	70235574001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Free	ug/L	<10.0	50	10.2	20	79-121	M1

SAMPLE DUPLICATE: 1425287

Parameter	Units	70235574001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Free	ug/L	<10.0	<10.0		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 200.7	281390		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 200.7	281390		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 200.7	281390		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 200.7	281390		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 200.8	282017		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 200.8	282018		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 200.8	282018		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 200.8	282018		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 180.1	281269		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 180.1	281269		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 180.1	281269		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 180.1	281269		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 2120B	281300		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 2120B	281300		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 2120B	281300		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 2120B	281300		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 2150B	281267		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 2150B	281267		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 2150B	281267		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 2150B	281267		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 2320B	282776		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 2320B	282776		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 2320B	282776		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 2320B	282776		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 2540C	281659		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 2540C	281659		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 2540C	281659		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 2540C	281659		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 4500-H+B	281612		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 4500-H+B	281612		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 4500-H+B	281612		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 4500-H+B	281612		

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NYAW-MERRICK OPS IOC 11/7
Pace Project No.: 70235961

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 5540C	281262	SM22 5540C	281323
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 5540C	281262	SM22 5540C	281323
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 5540C	281262	SM22 5540C	281323
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 5540C	281262	SM22 5540C	281323
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 2330 LSI	283073		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 2330 LSI	283073		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 2330 LSI	283073		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 2330 LSI	283073		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 300.0	282144		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 300.0	282144		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 300.0	282144		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 300.0	282144		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 353.2	281317		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 353.2	281317		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 353.2	281317		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 353.2	281317		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	EPA 353.2	281315		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	EPA 353.2	281315		
70235961003	WELL 3A N-14347 (INFLUENT)	EPA 353.2	281315		
70235961004	WELL 4 N-09338 (INFLUENT)	EPA 353.2	281315		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	SM22 4500 NH3 H	281776		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	SM22 4500 NH3 H	281776		
70235961003	WELL 3A N-14347 (INFLUENT)	SM22 4500 NH3 H	281776		
70235961004	WELL 4 N-09338 (INFLUENT)	SM22 4500 NH3 H	281776		
70235961001	GAC-3S/4S (SEAMAN NECK GAC EFF	ASTM D7237-10	281971		
70235961002	GAC-3S/4S SEAMAN NECK GAC EF-D	ASTM D7237-10	281971		
70235961003	WELL 3A N-14347 (INFLUENT)	ASTM D7237-10	281971		
70235961004	WELL 4 N-09338 (INFLUENT)	ASTM D7237-10	281971		

WO# : 70235961

70235961

CHAIN-OF-CUSTODY / Ana

The Chain-of-Custody is a LEGAL DOCUM

Page 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	KOMAN Government Solutions, LLC	Report To:	Robert Gregory	Attention:	Accounts Payable
Address:	150 Gordon Dr., Suite 110	Copy To:	NCDOH	Company Name:	KOMAN Government Solutions, LLC
	Exton, PA			Address:	accountspayable@komangs.com
Email:	RGregory@Komangs.com	Purchase Order #:	02607-005	Pace Quote:	
Phone:	(610) 400-0630 Fax:	Project Name:	NYAW-MERRICK OPS FACILITY	Pace Project Manager:	Kimberley.Mack@Pacelabs.com
Requested Due Date:		Project #:	02607-005	Pace Profile #:	

Regulatory Agency	State / Location
	NY

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N): Analyses Test Y/N	IOCs (NCDOH Table 4-3)	Residual Chlorine (Y/N)
1	GAC-3S/4S (Seaman Neck GAC Effluent)	DW	G			11.1.22	7:30		4	X		X		X					X	
2	GAC-3S/4S (Seaman Neck GAC Effluent)-D	DW	G			11.1.22	7:45		4	X		X		X					X	
3	Well 3A N-14347 (Influent)	DW	G			11.1.22	8:40		4	X		X		X					X	
4	Well 4 N-09338 (Influent)	DW	G			11.1.22	8:15		4	X		X		X					X	
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

MATRIX: Drinking Water DW; Water WT; Waste Water WW; Product PD; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Randy Hoffmaster	11.2.22	10:03	Pace LT	11/07/22	10.08	3.8	(w)	N/A	Y

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Randy Hoffmaster		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:	Randy Hoffmaster	DATE Signed: 11.7.2022				

Pace Analytical®

Sample Condition Upon Rec

WO#: 70235961

PM: KMM **Due Date: 11/17/22**

CLIENT: KGS

Client Name: Projec

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: TH148 Correction Factor: + 0.1

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.8 Cooler Temperature Corrected(°C): 3.9

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: SAR 11/17

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

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

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

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/ Matrix: SL (WT) OIL	☑ Yes	☐ No		12.
All containers needing preservation have been checked? pH paper Lot # 212521	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐ Yes	☐ No	☐ N/A	Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐ Yes	☐ No	☑ N/A	14. Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot # 19-862	☑ Yes	☐ No	☑ N/A SAR	15. Positive for Sulfide? Y (N)
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☐ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

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

Person Contacted: Date/Time:

Comments/ Resolution:

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