



8 July 2022

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

**Subject: June 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 June 2022 and present the associated analytical results.

Sampling Requirements

Nassau County Department of Health (NCDOH) 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.

June 2022 Sampling Summary

Monthly POC Sampling

On 8 June 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 June 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 NCDOH requirements.

Table 1 - TCE Analytical Results⁽¹⁾ – June 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]
06/08/2022	13.3	2.7	ND	ND

Notes:

(1) All concentrations reported in ug/L (ppb).

ND – Not Detected above the reporting limit (0.50 ug/L)

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 JUNE 2022

June 20, 2022

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

RE: Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

Dear Robert Gregory:

Enclosed are the analytical results for sample(s) received by the laboratory on June 09, 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 M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Ericka Seiler, KOMAN Government Services, LLC



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747

Connecticut Certification #: PH-0435

Delaware Certification # NY 10478

Maryland Certification #: 208

Massachusetts Certification #: M-NY026

New Hampshire Certification #: 2987

New Jersey Certification #: NY158

New York Certification #: 10478 Primary Accrediting Body

Pennsylvania Certification #: 68-00350

Rhode Island Certification #: LAO00340

Virginia Certification # 460302

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SAMPLE SUMMARY

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70217555001	GAC-3S/4S	Drinking Water	06/08/22 06:30	06/09/22 11:30
70217555002	GAC-3S/4S - D	Drinking Water	06/08/22 06:45	06/09/22 11:30
70217555003	WELL 3A N-14347	Drinking Water	06/08/22 07:40	06/09/22 11:30
70217555004	WELL 4 N-09338	Drinking Water	06/08/22 07:20	06/09/22 11:30

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SAMPLE ANALYTE COUNT

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70217555001	GAC-3S/4S	EPA 522	AI1	2
		EPA 524.2	KGG	62
70217555002	GAC-3S/4S - D	EPA 524.2	KGG	62
70217555003	WELL 3A N-14347	EPA 522	AI1	2
		EPA 524.2	KGG	62
70217555004	WELL 4 N-09338	EPA 522	AI1	2
		EPA 524.2	KGG	62

PACE-MV = Pace Analytical Services - Melville

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: GAC-3S/4S Lab ID: 7021755001 Collected: 06/08/22 06:30 Received: 06/09/22 11:30 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)	1.7	ug/L	0.020		1	06/10/22 11:02	06/11/22 04:02	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	101	%	70-130		1	06/10/22 11:02	06/11/22 04:02		
524.2 MSV									
Analytical Method: EPA 524.2									
Pace Analytical Services - Melville									
Benzene	<0.50	ug/L	0.50		5		06/19/22 19:08	71-43-2	
Bromobenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	108-86-1	
Bromochloromethane	<0.50	ug/L	0.50		1		06/19/22 19:08	74-97-5	
Bromodichloromethane	<0.50	ug/L	0.50	80	1		06/19/22 19:08	75-27-4	
Bromoform	<0.50	ug/L	0.50	80	1		06/19/22 19:08	75-25-2	
Bromomethane	<0.50	ug/L	0.50		1		06/19/22 19:08	74-83-9	
n-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	104-51-8	
sec-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	135-98-8	
tert-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	98-06-6	
Carbon tetrachloride	<0.50	ug/L	0.50		5		06/19/22 19:08	56-23-5	
Chlorobenzene	<0.50	ug/L	0.50	100	1		06/19/22 19:08	108-90-7	
Chlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:08	75-45-6	N3
Chloroethane	<0.50	ug/L	0.50		1		06/19/22 19:08	75-00-3	
Chloroform	<0.50	ug/L	0.50	80	1		06/19/22 19:08	67-66-3	
Chloromethane	<0.50	ug/L	0.50		1		06/19/22 19:08	74-87-3	
2-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 19:08	95-49-8	
4-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 19:08	106-43-4	
Dibromochloromethane	<0.50	ug/L	0.50	80	1		06/19/22 19:08	124-48-1	
Dibromomethane	<0.50	ug/L	0.50		1		06/19/22 19:08	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	0.50	600	1		06/19/22 19:08	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	0.50	75	1		06/19/22 19:08	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:08	75-71-8	L2,v3
1,1-Dichloroethane	<0.50	ug/L	0.50		1		06/19/22 19:08	75-34-3	
1,2-Dichloroethane	<0.50	ug/L	0.50		5		06/19/22 19:08	107-06-2	
1,1-Dichloroethene	<0.50	ug/L	0.50		7		06/19/22 19:08	75-35-4	
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	70	1		06/19/22 19:08	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	100	1		06/19/22 19:08	156-60-5	
1,2-Dichloropropane	<0.50	ug/L	0.50	5	1		06/19/22 19:08	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:08	142-28-9	
2,2-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:08	594-20-7	
1,1-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:08	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:08	10061-01-5	
trans-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:08	10061-02-6	
Ethylbenzene	<0.50	ug/L	0.50	700	1		06/19/22 19:08	100-41-4	
Hexachloro-1,3-butadiene	<0.50	ug/L	0.50		1		06/19/22 19:08	87-68-3	
Isopropylbenzene (Cumene)	<0.50	ug/L	0.50		1		06/19/22 19:08	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	0.50		1		06/19/22 19:08	99-87-6	
Methylene Chloride	<0.50	ug/L	0.50		5		06/19/22 19:08	75-09-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: GAC-3S/4S Lab ID: 7021755001 Collected: 06/08/22 06:30 Received: 06/09/22 11:30 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									
Methyl-tert-butyl ether	<0.50	ug/L	0.50		1		06/19/22 19:08	1634-04-4	
n-Propylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	103-65-1	
Styrene	<0.50	ug/L	0.50	100	1		06/19/22 19:08	100-42-5	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 19:08	630-20-6	
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 19:08	79-34-5	
Tetrachloroethene	<0.50	ug/L	0.50		5	1	06/19/22 19:08	127-18-4	
Toluene	<0.50	ug/L	0.50	1000	1		06/19/22 19:08	108-88-3	
Total Trihalomethanes (Calc.)	<0.50	ug/L	0.50		80	1	06/19/22 19:08		
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	87-61-6	
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	70	1		06/19/22 19:08	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	0.50	200	1		06/19/22 19:08	71-55-6	
1,1,2-Trichloroethane	<0.50	ug/L	0.50		5	1	06/19/22 19:08	79-00-5	
Trichloroethene	<0.50	ug/L	0.50		5	1	06/19/22 19:08	79-01-6	
Trichlorofluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:08	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.50	ug/L	0.50		1		06/19/22 19:08	76-13-1	N3
1,2,4-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:08	108-67-8	
Vinyl chloride	<0.50	ug/L	0.50		2	1	06/19/22 19:08	75-01-4	
m&p-Xylene	<0.50	ug/L	0.50		1		06/19/22 19:08	179601-23-1	
o-Xylene	<0.50	ug/L	0.50		1		06/19/22 19:08	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	81	%	70-130		1		06/19/22 19:08	2199-69-1	
4-Bromofluorobenzene (S)	93	%	70-130		1		06/19/22 19:08	460-00-4	

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: GAC-3S/4S - D									
Lab ID: 7021755002									
Collected: 06/08/22 06:45									
Received: 06/09/22 11:30									
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		06/19/22 19:35	71-43-2	
Bromobenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	108-86-1	
Bromochloromethane	<0.50	ug/L	0.50		1		06/19/22 19:35	74-97-5	
Bromodichloromethane	<0.50	ug/L	0.50	80	1		06/19/22 19:35	75-27-4	
Bromoform	<0.50	ug/L	0.50	80	1		06/19/22 19:35	75-25-2	
Bromomethane	<0.50	ug/L	0.50		1		06/19/22 19:35	74-83-9	
n-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	104-51-8	
sec-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	135-98-8	
tert-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	98-06-6	
Carbon tetrachloride	<0.50	ug/L	0.50	5	1		06/19/22 19:35	56-23-5	
Chlorobenzene	<0.50	ug/L	0.50	100	1		06/19/22 19:35	108-90-7	
Chlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:35	75-45-6	N3
Chloroethane	<0.50	ug/L	0.50		1		06/19/22 19:35	75-00-3	
Chloroform	<0.50	ug/L	0.50	80	1		06/19/22 19:35	67-66-3	
Chloromethane	<0.50	ug/L	0.50		1		06/19/22 19:35	74-87-3	
2-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 19:35	95-49-8	
4-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 19:35	106-43-4	
Dibromochloromethane	<0.50	ug/L	0.50	80	1		06/19/22 19:35	124-48-1	
Dibromomethane	<0.50	ug/L	0.50		1		06/19/22 19:35	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	0.50	600	1		06/19/22 19:35	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	0.50	75	1		06/19/22 19:35	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:35	75-71-8	L2,v3
1,1-Dichloroethane	<0.50	ug/L	0.50		1		06/19/22 19:35	75-34-3	
1,2-Dichloroethane	<0.50	ug/L	0.50	5	1		06/19/22 19:35	107-06-2	
1,1-Dichloroethene	<0.50	ug/L	0.50	7	1		06/19/22 19:35	75-35-4	
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	70	1		06/19/22 19:35	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	100	1		06/19/22 19:35	156-60-5	
1,2-Dichloropropane	<0.50	ug/L	0.50	5	1		06/19/22 19:35	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:35	142-28-9	
2,2-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:35	594-20-7	
1,1-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:35	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:35	10061-01-5	
trans-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 19:35	10061-02-6	
Ethylbenzene	<0.50	ug/L	0.50	700	1		06/19/22 19:35	100-41-4	
Hexachloro-1,3-butadiene	<0.50	ug/L	0.50		1		06/19/22 19:35	87-68-3	
Isopropylbenzene (Cumene)	<0.50	ug/L	0.50		1		06/19/22 19:35	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	0.50		1		06/19/22 19:35	99-87-6	
Methylene Chloride	<0.50	ug/L	0.50	5	1		06/19/22 19:35	75-09-2	
Methyl-tert-butyl ether	<0.50	ug/L	0.50		1		06/19/22 19:35	1634-04-4	
n-Propylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	103-65-1	
Styrene	<0.50	ug/L	0.50	100	1		06/19/22 19:35	100-42-5	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 19:35	630-20-6	
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 19:35	79-34-5	
Tetrachloroethene	<0.50	ug/L	0.50	5	1		06/19/22 19:35	127-18-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

Sample: GAC-3S/4S - D Lab ID: 7021755002 Collected: 06/08/22 06:45 Received: 06/09/22 11:30 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									
Toluene	<0.50	ug/L	0.50	1000	1		06/19/22 19:35	108-88-3	
Total Trihalomethanes (Calc.)	<0.50	ug/L	0.50	80	1		06/19/22 19:35		
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	87-61-6	
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	70	1		06/19/22 19:35	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	0.50	200	1		06/19/22 19:35	71-55-6	
1,1,2-Trichloroethane	<0.50	ug/L	0.50	5	1		06/19/22 19:35	79-00-5	
Trichloroethene	<0.50	ug/L	0.50	5	1		06/19/22 19:35	79-01-6	
Trichlorofluoromethane	<0.50	ug/L	0.50		1		06/19/22 19:35	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	0.50		1		06/19/22 19:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.50	ug/L	0.50		1		06/19/22 19:35	76-13-1	N3
1,2,4-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 19:35	108-67-8	
Vinyl chloride	<0.50	ug/L	0.50		2		06/19/22 19:35	75-01-4	
m&p-Xylene	<0.50	ug/L	0.50		1		06/19/22 19:35	179601-23-1	
o-Xylene	<0.50	ug/L	0.50		1		06/19/22 19:35	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	78	%	70-130		1		06/19/22 19:35	2199-69-1	
4-Bromofluorobenzene (S)	94	%	70-130		1		06/19/22 19:35	460-00-4	

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: WELL 3A N-14347 **Lab ID: 70217555003** Collected: 06/08/22 07:40 Received: 06/09/22 11:30 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)	1.9	ug/L	0.020		1	06/10/22 11:02	06/11/22 04:19	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	100	%	70-130		1	06/10/22 11:02	06/11/22 04:19		
524.2 MSV									
Analytical Method: EPA 524.2									
Pace Analytical Services - Melville									
Benzene	<0.50	ug/L	0.50		5		06/19/22 20:02	71-43-2	
Bromobenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	108-86-1	
Bromochloromethane	<0.50	ug/L	0.50		1		06/19/22 20:02	74-97-5	
Bromodichloromethane	<0.50	ug/L	0.50	80	1		06/19/22 20:02	75-27-4	
Bromoform	<0.50	ug/L	0.50	80	1		06/19/22 20:02	75-25-2	
Bromomethane	<0.50	ug/L	0.50		1		06/19/22 20:02	74-83-9	
n-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	104-51-8	
sec-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	135-98-8	
tert-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	98-06-6	
Carbon tetrachloride	<0.50	ug/L	0.50		5		06/19/22 20:02	56-23-5	
Chlorobenzene	<0.50	ug/L	0.50	100	1		06/19/22 20:02	108-90-7	
Chlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:02	75-45-6	N3
Chloroethane	<0.50	ug/L	0.50		1		06/19/22 20:02	75-00-3	
Chloroform	<0.50	ug/L	0.50	80	1		06/19/22 20:02	67-66-3	
Chloromethane	<0.50	ug/L	0.50		1		06/19/22 20:02	74-87-3	
2-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 20:02	95-49-8	
4-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 20:02	106-43-4	
Dibromochloromethane	<0.50	ug/L	0.50	80	1		06/19/22 20:02	124-48-1	
Dibromomethane	<0.50	ug/L	0.50		1		06/19/22 20:02	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	0.50	600	1		06/19/22 20:02	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	0.50	75	1		06/19/22 20:02	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:02	75-71-8	L2,v3
1,1-Dichloroethane	<0.50	ug/L	0.50		1		06/19/22 20:02	75-34-3	
1,2-Dichloroethane	<0.50	ug/L	0.50		5		06/19/22 20:02	107-06-2	
1,1-Dichloroethene	<0.50	ug/L	0.50		7		06/19/22 20:02	75-35-4	
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	70	1		06/19/22 20:02	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	100	1		06/19/22 20:02	156-60-5	
1,2-Dichloropropane	<0.50	ug/L	0.50		5		06/19/22 20:02	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:02	142-28-9	
2,2-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:02	594-20-7	
1,1-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:02	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:02	10061-01-5	
trans-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:02	10061-02-6	
Ethylbenzene	<0.50	ug/L	0.50	700	1		06/19/22 20:02	100-41-4	
Hexachloro-1,3-butadiene	<0.50	ug/L	0.50		1		06/19/22 20:02	87-68-3	
Isopropylbenzene (Cumene)	<0.50	ug/L	0.50		1		06/19/22 20:02	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	0.50		1		06/19/22 20:02	99-87-6	
Methylene Chloride	<0.50	ug/L	0.50		5		06/19/22 20:02	75-09-2	

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: WELL 3A N-14347 **Lab ID: 70217555003** Collected: 06/08/22 07:40 Received: 06/09/22 11:30 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									
Methyl-tert-butyl ether	<0.50	ug/L	0.50		1		06/19/22 20:02	1634-04-4	
n-Propylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	103-65-1	
Styrene	<0.50	ug/L	0.50	100	1		06/19/22 20:02	100-42-5	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 20:02	630-20-6	
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 20:02	79-34-5	
Tetrachloroethene	<0.50	ug/L	0.50		5	1	06/19/22 20:02	127-18-4	
Toluene	<0.50	ug/L	0.50	1000	1		06/19/22 20:02	108-88-3	
Total Trihalomethanes (Calc.)	<0.50	ug/L	0.50		80	1	06/19/22 20:02		
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	87-61-6	
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	70	1		06/19/22 20:02	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	0.50	200	1		06/19/22 20:02	71-55-6	
1,1,2-Trichloroethane	<0.50	ug/L	0.50		5	1	06/19/22 20:02	79-00-5	
Trichloroethene	13.3	ug/L	0.50		5	1	06/19/22 20:02	79-01-6	
Trichlorofluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:02	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:02	96-18-4	
1,1,2-Trichlorotrifluoroethane	0.53	ug/L	0.50		1		06/19/22 20:02	76-13-1	N3
1,2,4-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:02	108-67-8	
Vinyl chloride	<0.50	ug/L	0.50		2	1	06/19/22 20:02	75-01-4	
m&p-Xylene	<0.50	ug/L	0.50		1		06/19/22 20:02	179601-23-1	
o-Xylene	<0.50	ug/L	0.50		1		06/19/22 20:02	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	77	%	70-130		1		06/19/22 20:02	2199-69-1	
4-Bromofluorobenzene (S)	91	%	70-130		1		06/19/22 20:02	460-00-4	

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

Sample: WELL 4 N-09338 **Lab ID: 7021755004** Collected: 06/08/22 07:20 Received: 06/09/22 11:30 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)	1.4	ug/L	0.020		1	06/14/22 07:52	06/14/22 18:52	123-91-1	
Surrogates									
1,4-Dioxane-d8 (S)	91	%	70-130		1	06/14/22 07:52	06/14/22 18:52		
524.2 MSV									
Analytical Method: EPA 524.2 Pace Analytical Services - Melville									
Benzene	<0.50	ug/L	0.50		5		06/19/22 20:28	71-43-2	
Bromobenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	108-86-1	
Bromochloromethane	<0.50	ug/L	0.50		1		06/19/22 20:28	74-97-5	
Bromodichloromethane	<0.50	ug/L	0.50	80	1		06/19/22 20:28	75-27-4	
Bromoform	<0.50	ug/L	0.50	80	1		06/19/22 20:28	75-25-2	
Bromomethane	<0.50	ug/L	0.50		1		06/19/22 20:28	74-83-9	
n-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	104-51-8	
sec-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	135-98-8	
tert-Butylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	98-06-6	
Carbon tetrachloride	<0.50	ug/L	0.50	5	1		06/19/22 20:28	56-23-5	
Chlorobenzene	<0.50	ug/L	0.50	100	1		06/19/22 20:28	108-90-7	
Chlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:28	75-45-6	N3
Chloroethane	<0.50	ug/L	0.50		1		06/19/22 20:28	75-00-3	
Chloroform	<0.50	ug/L	0.50	80	1		06/19/22 20:28	67-66-3	
Chloromethane	<0.50	ug/L	0.50		1		06/19/22 20:28	74-87-3	
2-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 20:28	95-49-8	
4-Chlorotoluene	<0.50	ug/L	0.50		1		06/19/22 20:28	106-43-4	
Dibromochloromethane	<0.50	ug/L	0.50	80	1		06/19/22 20:28	124-48-1	
Dibromomethane	<0.50	ug/L	0.50		1		06/19/22 20:28	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	0.50	600	1		06/19/22 20:28	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	0.50	75	1		06/19/22 20:28	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:28	75-71-8	L2,v3
1,1-Dichloroethane	<0.50	ug/L	0.50		1		06/19/22 20:28	75-34-3	
1,2-Dichloroethane	<0.50	ug/L	0.50	5	1		06/19/22 20:28	107-06-2	
1,1-Dichloroethene	<0.50	ug/L	0.50	7	1		06/19/22 20:28	75-35-4	
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	70	1		06/19/22 20:28	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	100	1		06/19/22 20:28	156-60-5	
1,2-Dichloropropane	<0.50	ug/L	0.50	5	1		06/19/22 20:28	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:28	142-28-9	
2,2-Dichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:28	594-20-7	
1,1-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:28	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:28	10061-01-5	
trans-1,3-Dichloropropene	<0.50	ug/L	0.50		1		06/19/22 20:28	10061-02-6	
Ethylbenzene	<0.50	ug/L	0.50	700	1		06/19/22 20:28	100-41-4	
Hexachloro-1,3-butadiene	<0.50	ug/L	0.50		1		06/19/22 20:28	87-68-3	
Isopropylbenzene (Cumene)	<0.50	ug/L	0.50		1		06/19/22 20:28	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	0.50		1		06/19/22 20:28	99-87-6	
Methylene Chloride	<0.50	ug/L	0.50	5	1		06/19/22 20:28	75-09-2	

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ANALYTICAL RESULTS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

Sample: WELL 4 N-09338 **Lab ID: 70217555004** Collected: 06/08/22 07:20 Received: 06/09/22 11:30 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									
Methyl-tert-butyl ether	<0.50	ug/L	0.50		1		06/19/22 20:28	1634-04-4	
n-Propylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	103-65-1	
Styrene	<0.50	ug/L	0.50	100	1		06/19/22 20:28	100-42-5	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 20:28	630-20-6	
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50		1		06/19/22 20:28	79-34-5	
Tetrachloroethene	<0.50	ug/L	0.50		5	1	06/19/22 20:28	127-18-4	
Toluene	<0.50	ug/L	0.50	1000	1		06/19/22 20:28	108-88-3	
Total Trihalomethanes (Calc.)	<0.50	ug/L	0.50		80	1	06/19/22 20:28		
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	87-61-6	
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	70	1		06/19/22 20:28	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	0.50	200	1		06/19/22 20:28	71-55-6	
1,1,2-Trichloroethane	<0.50	ug/L	0.50	5	1		06/19/22 20:28	79-00-5	
Trichloroethene	2.7	ug/L	0.50	5	1		06/19/22 20:28	79-01-6	
Trichlorofluoromethane	<0.50	ug/L	0.50		1		06/19/22 20:28	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	0.50		1		06/19/22 20:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.50	ug/L	0.50		1		06/19/22 20:28	76-13-1	N3
1,2,4-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50		1		06/19/22 20:28	108-67-8	
Vinyl chloride	<0.50	ug/L	0.50	2	1		06/19/22 20:28	75-01-4	
m&p-Xylene	<0.50	ug/L	0.50		1		06/19/22 20:28	179601-23-1	
o-Xylene	<0.50	ug/L	0.50		1		06/19/22 20:28	95-47-6	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	77	%	70-130		1		06/19/22 20:28	2199-69-1	
4-Bromofluorobenzene (S)	87	%	70-130		1		06/19/22 20:28	460-00-4	

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

QC Batch:	261310	Analysis Method:	EPA 524.2
QC Batch Method:	EPA 524.2	Analysis Description:	524.2 MSV
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70217555001, 70217555002, 70217555003, 70217555004

METHOD BLANK: 1319482 Matrix: Water
Associated Lab Samples: 70217555001, 70217555002, 70217555003, 70217555004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,1,1-Trichloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,1,2-Trichloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.50	0.50	06/19/22 15:50	N3
1,1-Dichloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,1-Dichloroethene	ug/L	<0.50	0.50	06/19/22 15:50	
1,1-Dichloropropene	ug/L	<0.50	0.50	06/19/22 15:50	
1,2,3-Trichlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,2,3-Trichloropropane	ug/L	<0.50	0.50	06/19/22 15:50	
1,2,4-Trichlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,2,4-Trimethylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,2-Dichlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,2-Dichloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
1,2-Dichloropropane	ug/L	<0.50	0.50	06/19/22 15:50	
1,3,5-Trimethylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,3-Dichlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
1,3-Dichloropropane	ug/L	<0.50	0.50	06/19/22 15:50	
1,4-Dichlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
2,2-Dichloropropane	ug/L	<0.50	0.50	06/19/22 15:50	
2-Chlorotoluene	ug/L	<0.50	0.50	06/19/22 15:50	
4-Chlorotoluene	ug/L	<0.50	0.50	06/19/22 15:50	
Benzene	ug/L	<0.50	0.50	06/19/22 15:50	
Bromobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
Bromochloromethane	ug/L	<0.50	0.50	06/19/22 15:50	
Bromodichloromethane	ug/L	<0.50	0.50	06/19/22 15:50	
Bromoform	ug/L	<0.50	0.50	06/19/22 15:50	
Bromomethane	ug/L	<0.50	0.50	06/19/22 15:50	
Carbon tetrachloride	ug/L	<0.50	0.50	06/19/22 15:50	
Chlorobenzene	ug/L	<0.50	0.50	06/19/22 15:50	
Chlorodifluoromethane	ug/L	<0.50	0.50	06/19/22 15:50	N3
Chloroethane	ug/L	<0.50	0.50	06/19/22 15:50	
Chloroform	ug/L	<0.50	0.50	06/19/22 15:50	
Chloromethane	ug/L	<0.50	0.50	06/19/22 15:50	
cis-1,2-Dichloroethene	ug/L	<0.50	0.50	06/19/22 15:50	
cis-1,3-Dichloropropene	ug/L	<0.50	0.50	06/19/22 15:50	
Dibromochloromethane	ug/L	<0.50	0.50	06/19/22 15:50	
Dibromomethane	ug/L	<0.50	0.50	06/19/22 15:50	
Dichlorodifluoromethane	ug/L	<0.50	0.50	06/19/22 15:50	v3
Ethylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

METHOD BLANK: 1319482 Matrix: Water
Associated Lab Samples: 70217555001, 70217555002, 70217555003, 70217555004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<0.50	0.50	06/19/22 15:50	
Isopropylbenzene (Cumene)	ug/L	<0.50	0.50	06/19/22 15:50	
m&p-Xylene	ug/L	<0.50	0.50	06/19/22 15:50	
Methyl-tert-butyl ether	ug/L	<0.50	0.50	06/19/22 15:50	
Methylene Chloride	ug/L	<0.50	0.50	06/19/22 15:50	
n-Butylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
n-Propylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
o-Xylene	ug/L	<0.50	0.50	06/19/22 15:50	
p-Isopropyltoluene	ug/L	<0.50	0.50	06/19/22 15:50	
sec-Butylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
Styrene	ug/L	<0.50	0.50	06/19/22 15:50	
tert-Butylbenzene	ug/L	<0.50	0.50	06/19/22 15:50	
Tetrachloroethene	ug/L	<0.50	0.50	06/19/22 15:50	
Toluene	ug/L	<0.50	0.50	06/19/22 15:50	
Total Trihalomethanes (Calc.)	ug/L	<0.50	0.50	06/19/22 15:50	
trans-1,2-Dichloroethene	ug/L	<0.50	0.50	06/19/22 15:50	
trans-1,3-Dichloropropene	ug/L	<0.50	0.50	06/19/22 15:50	
Trichloroethene	ug/L	<0.50	0.50	06/19/22 15:50	
Trichlorofluoromethane	ug/L	<0.50	0.50	06/19/22 15:50	
Vinyl chloride	ug/L	<0.50	0.50	06/19/22 15:50	
1,2-Dichlorobenzene-d4 (S)	%	82	70-130	06/19/22 15:50	
4-Bromofluorobenzene (S)	%	95	70-130	06/19/22 15:50	

LABORATORY CONTROL SAMPLE: 1319483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	10	10.1	101	70-130	
1,1,1-Trichloroethane	ug/L	10	9.6	96	70-130	
1,1,2,2-Tetrachloroethane	ug/L	10	10.1	101	70-130	
1,1,2-Trichloroethane	ug/L	10	10.9	109	70-130	
1,1,2-Trichlorotrifluoroethane	ug/L	10	12.7	127	70-130	N3
1,1-Dichloroethane	ug/L	10	9.9	99	70-130	
1,1-Dichloroethene	ug/L	10	10.2	102	70-130	
1,1-Dichloropropene	ug/L	10	9.6	96	70-130	
1,2,3-Trichlorobenzene	ug/L	10	9.9	99	70-130	
1,2,3-Trichloropropane	ug/L	10	11.1	111	70-130	
1,2,4-Trichlorobenzene	ug/L	10	9.5	95	70-130	
1,2,4-Trimethylbenzene	ug/L	10	9.9	99	70-130	
1,2-Dichlorobenzene	ug/L	10	9.3	93	70-130	
1,2-Dichloroethane	ug/L	10	11.4	114	70-130	
1,2-Dichloropropane	ug/L	10	10.6	106	70-130	
1,3,5-Trimethylbenzene	ug/L	10	9.8	98	70-130	
1,3-Dichlorobenzene	ug/L	10	9.5	95	70-130	
1,3-Dichloropropane	ug/L	10	10.9	109	70-130	

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

LABORATORY CONTROL SAMPLE: 1319483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	10	9.6	96	70-130	
2,2-Dichloropropane	ug/L	10	10.1	101	70-130	
2-Chlorotoluene	ug/L	10	10.5	105	70-130	
4-Chlorotoluene	ug/L	10	10.9	109	70-130	
Benzene	ug/L	10	10.3	103	70-130	
Bromobenzene	ug/L	10	9.0	90	70-130	
Bromochloromethane	ug/L	10	9.4	94	70-130	
Bromodichloromethane	ug/L	10	11.1	111	70-130	
Bromoform	ug/L	10	10.3	103	70-130	
Bromomethane	ug/L	10	10.6	106	70-130	
Carbon tetrachloride	ug/L	10	9.3	93	70-130	
Chlorobenzene	ug/L	10	10.0	100	70-130	
Chlorodifluoromethane	ug/L	10	11.0	110	70-130	N3
Chloroethane	ug/L	10	10.3	103	70-130	
Chloroform	ug/L	10	10.8	108	70-130	
Chloromethane	ug/L	10	8.1	81	70-130	
cis-1,2-Dichloroethene	ug/L	10	9.1	91	70-130	
cis-1,3-Dichloropropene	ug/L	10	10.7	107	70-130	
Dibromochloromethane	ug/L	10	10.2	102	70-130	
Dibromomethane	ug/L	10	10.2	102	70-130	
Dichlorodifluoromethane	ug/L	10	5.6	56	70-130	L2,v3
Ethylbenzene	ug/L	10	9.9	99	70-130	
Hexachloro-1,3-butadiene	ug/L	10	10.6	106	70-130	
Isopropylbenzene (Cumene)	ug/L	10	9.9	99	70-130	
m&p-Xylene	ug/L	20	20.4	102	70-130	
Methyl-tert-butyl ether	ug/L	10	10.6	106	70-130	
Methylene Chloride	ug/L	10	10.1	101	70-130	
n-Butylbenzene	ug/L	10	12.2	122	70-130	
n-Propylbenzene	ug/L	10	10.8	108	70-130	
o-Xylene	ug/L	10	10.3	103	70-130	
p-Isopropyltoluene	ug/L	10	10.2	102	70-130	
sec-Butylbenzene	ug/L	10	10.2	102	70-130	
Styrene	ug/L	10	10.7	107	70-130	
tert-Butylbenzene	ug/L	10	10.3	103	70-130	
Tetrachloroethene	ug/L	10	8.3	83	70-130	
Toluene	ug/L	10	10.5	105	70-130	
Total Trihalomethanes (Calc.)	ug/L		42.5			
trans-1,2-Dichloroethene	ug/L	10	9.7	97	70-130	
trans-1,3-Dichloropropene	ug/L	10	11.4	114	70-130	
Trichloroethene	ug/L	10	9.7	97	70-130	
Trichlorofluoromethane	ug/L	10	10.3	103	70-130	
Vinyl chloride	ug/L	10	7.2	72	70-130	
1,2-Dichlorobenzene-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

SAMPLE DUPLICATE: 1319490

Parameter	Units	70217504011 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		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	<0.50	<0.50		20	
1,1-Dichloroethene	ug/L	<0.50	<0.50		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	<0.50	<0.50		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	v3
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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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

SAMPLE DUPLICATE: 1319490

Parameter	Units	70217504011 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	<0.50	<0.50		20	
Toluene	ug/L	2.8	2.8	0	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	<0.50	<0.50		20	
Trichlorofluoromethane	ug/L	<0.50	<0.50		20	
Vinyl chloride	ug/L	<0.50	<0.50		20	
1,2-Dichlorobenzene-d4 (S)	%	76	76		20	
4-Bromofluorobenzene (S)	%	90	91		20	

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

QC Batch: 260171 Analysis Method: EPA 522
QC Batch Method: EPA 522 Analysis Description: 522 MSS 1,4 Dioxane
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70217555001, 70217555003

METHOD BLANK: 1313587 Matrix: Drinking Water
Associated Lab Samples: 70217555001, 70217555003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.020	0.020	06/10/22 21:22	
1,4-Dioxane-d8 (S)	%	93	70-130	06/10/22 21:22	

LABORATORY CONTROL SAMPLE: 1313588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	4	3.8	94	70-130	
1,4-Dioxane-d8 (S)	%			102	70-130	

MATRIX SPIKE SAMPLE: 1313589

Parameter	Units	70217197003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.72	4	3.8	77	70-130	
1,4-Dioxane-d8 (S)	%				87	70-130	

SAMPLE DUPLICATE: 1313590

Parameter	Units	70217197004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.66	0.65	1	30	
1,4-Dioxane-d8 (S)	%	98	96		30	

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QUALITY CONTROL DATA

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

QC Batch: 260506

Analysis Method: EPA 522

QC Batch Method: EPA 522

Analysis Description: 522 MSS 1,4 Dioxane

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70217555004

METHOD BLANK: 1315381

Matrix: Drinking Water

Associated Lab Samples: 70217555004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.020	0.020	06/14/22 15:14	
1,4-Dioxane-d8 (S)	%	95	70-130	06/14/22 15:14	

LABORATORY CONTROL SAMPLE: 1315382

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.02	0.021	104	70-130	
1,4-Dioxane-d8 (S)	%			89	70-130	

MATRIX SPIKE SAMPLE: 1315383

Parameter	Units	70217720001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.042	0.02	0.067	123	70-130	
1,4-Dioxane-d8 (S)	%				94	70-130	

SAMPLE DUPLICATE: 1315384

Parameter	Units	70217720001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.020	<0.020		30	
1,4-Dioxane-d8 (S)	%	87	94		30	

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QUALIFIERS

Project: NYAW MERRICK OPS 6/8

Pace Project No.: 70217555

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.

SAMPLE QUALIFIERS

Sample: 1315383

[1] 522U Method: MS accepted based on low level criteria of 50-150%

ANALYTE QUALIFIERS

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.

v3 The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NYAW MERRICK OPS 6/8
Pace Project No.: 70217555

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70217555001	GAC-3S/4S	EPA 522	260171	EPA 522	260288
70217555003	WELL 3A N-14347	EPA 522	260171	EPA 522	260288
70217555004	WELL 4 N-09338	EPA 522	260506	EPA 522	260660
70217555001	GAC-3S/4S	EPA 524.2	261310		
70217555002	GAC-3S/4S - D	EPA 524.2	261310		
70217555003	WELL 3A N-14347	EPA 524.2	261310		
70217555004	WELL 4 N-09338	EPA 524.2	261310		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO#: 70217555

Client Name: Roman Govt. Solution

PM: KMM Due Date: 06/20/22 CLIENT: KGS

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: Th189 Correction Factor: + 0.1

Samples on ice, cooling process has begun

Cooler Temperature: 5.6 Cooler Temperature Corrected: 5.7

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: SH 6/9/22

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

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

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

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

Table with 17 rows and 3 columns: Question, Yes/No/N/A, and Comments. Includes items like Chain of Custody Present, Samples Arrived within Hold Time, and pH paper Lot #.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

* PM [Project Manager] review is documented electronically in LIMS.