Pelton, Jason M (DEC)

From: Zahradnik, Art <Art.Zahradnik@arcadis.com>
Sent: Friday, January 25, 2019 5:49 PM
To: Pelton, Jason M (DEC)
Cc: Scharf, Steven (DEC); Hesler, Donald (DEC); Hannon, ED [US] (AS); Stern, David; Wolfert, Mike; brian.s.murray@navy.mil; Brayack, David
Subject: DELIVERABLE - Form 1 Data - Northrop Grumman Bethpage - OU2 4Q-2018 Groundwater Sampling
Attachments: Form1_012519.pdf

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear Jason,

On behalf of Northrop Grumman, Arcadis is submitting the attached Form 1 data. As per discussions between Northrop Grumman and NYSDEC, NYSDEC requested that Northrop Grumman submit the validated Form 1s as soon as the information is available.

The attached Form 1's are for the OU2 4Q 2018 routine sampling event (samples collected between 11/13/18 and 11/16/18) per the OU2 Groundwater Monitoring Plan (Arcadis 2016).

Field replicate sample REP111518LV1 was collected from BPOW3-4.

This submittal completes the transmittal of Form 1 data associated with Northrop Grumman's OU2 4Q 2018 routine sampling event.

Please let us know if you have any questions and have a good weekend.
-Art

Art Zahradnik, P.G. | Associate Project Manager / Senior Hydrogeologist | art.zahradnik@arcadis.com
Arcadis | Arcadis of New York, Inc.
Two Huntington Quadrangle, Suite 1S10 Melville NY | 11747 | USA
T. +1 631 391 5208 | M. +1 516 903 9452

Professional Geologist / PG-NY, 000971

Connect with us! https://protect2.fireeye.com/url?k=844d97de-d87530bc-844f6eeb-000babd9f75c-784313ce12dd6207&u=http://www.arcadis.com/ | LinkedIn | Twitter | Facebook

Be green, leave it on the screen.

This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

Report of Analysis

Client Sample ID:	BP0W2-3		
Lab Sample ID:	JC78002-1R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117312.D	1	11/29/18 20:50	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	UJ
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W2-3		
Lab Sample ID:	JC78002-1R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	UJ
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	UJ
	m,p-Xylene	ND	0.50	0.14	ug/l	UJ
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	91%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples. Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W2-2		
Lab Sample ID:	JC78002-2R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117313.D	1	11/29/18 21:22	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	UJ
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W2-2		
Lab Sample ID:	JC78002-2R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	UJ
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	UJ
	m,p-Xylene	ND	0.50	0.14	ug/l	UJ
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	90%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples. Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W2-1		
Lab Sample ID:	JC78002-3R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117314.D	1	11/29/18 21:53	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	UJ
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W2-1		
Lab Sample ID:	JC78002-3R	**Date Sampled:**	11/13/18
Matrix:	AQ - Ground Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	UJ
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	UJ
	m,p-Xylene	ND	0.50	0.14	ug/l	UJ
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples. Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111318ALH1		
Lab Sample ID:	JC78002-4R	**Date Sampled:**	11/13/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117315.D	1	11/29/18 22:24	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	UJ
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111318ALH1		
Lab Sample ID:	JC78002-4R	**Date Sampled:**	11/13/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/14/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	UJ
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	UJ
	m,p-Xylene	ND	0.50	0.14	ug/l	UJ
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	99%		70-130%
460-00-4	4-Bromofluorobenzene	85%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples. Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78002X**	**Date Collected:**	**11/13/2018 13:40**	**Matrix:**	**WATER**
Lab Sample ID:	**465054001**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**1X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW2-3**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 15:47**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0913.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		4.40	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78002X**	**Date Collected:**	**11/13/2018 12:55**	**Matrix:**	**WATER**
Lab Sample ID:	**465054002**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**2X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW2-2**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 16:39**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0915.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		0.374	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78002X**	**Date Collected:**	**11/13/2018 14:45**	**Matrix:**	**WATER**
Lab Sample ID:	**465054003**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**3X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW2-1**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 17:30**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0917.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		0.389	ug/L	0.100	0.100	0.200

Report of Analysis

Client Sample ID:	BPOW3-3		
Lab Sample ID:	JC78202-1	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117142.D	1	11/20/18 19:49	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-3		
Lab Sample ID:	JC78202-1	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		70-130%
460-00-4	4-Bromofluorobenzene	75%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-4		
Lab Sample ID:	JC78202-2	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117260.D	1	11/28/18 13:22	CSF	n/a	n/a	V1B5654
Run #2 [a]	1B117261.D	10	11/28/18 13:54	CSF	n/a	n/a	V1B5654

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	1.4	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	1.3	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	0.36	0.50	0.22	ug/l	J
75-35-4	1,1-Dichloroethylene	2.8	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.7	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	2.3	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	0.25	0.50	0.22	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	1.1	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-4		
Lab Sample ID:	JC78202-2	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	139 [b]	5.0	2.0	ug/l	D
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	88%	89%	70-130%
460-00-4	4-Bromofluorobenzene	86%	85%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111518LV1		
Lab Sample ID:	JC78202-3	**Date Sampled:**	11/15/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117137.D	1	11/20/18 17:10	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111518LV1		
Lab Sample ID:	JC78202-3	**Date Sampled:**	11/15/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	91%		70-130%
460-00-4	4-Bromofluorobenzene	77%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	REP111518LV1		
Lab Sample ID:	JC78202-4	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117220.D	1	11/27/18 14:26	CSF	n/a	n/a	V1B5652
Run #2 [a]	1B117221.D	10	11/27/18 14:58	CSF	n/a	n/a	V1B5652

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	0.20	0.50	0.18	ug/l	J
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	1.3	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	1.3	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	0.34	0.50	0.22	ug/l	J
75-35-4	1,1-Dichloroethylene	2.8	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.7	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	2.3	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	0.26	0.50	0.22	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	0.94	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	REP111518LV1		
Lab Sample ID:	JC78202-4	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	131 [b]	5.0	2.0	ug/l	D
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	95%	95%	70-130%
460-00-4	4-Bromofluorobenzene	91%	94%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-1		
Lab Sample ID:	JC78202-5	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117144.D	1	11/20/18 20:54	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-1		
Lab Sample ID:	JC78202-5	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	91%		70-130%
460-00-4	4-Bromofluorobenzene	78%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-2		
Lab Sample ID:	JC78202-6	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117145.D	1	11/20/18 21:25	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW3-2		
Lab Sample ID:	JC78202-6	**Date Sampled:**	11/15/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		70-130%
460-00-4	4-Bromofluorobenzene	77%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111518DC1		
Lab Sample ID:	JC78202-7	**Date Sampled:**	11/15/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117138.D	1	11/20/18 17:42	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111518DC1		
Lab Sample ID:	JC78202-7	**Date Sampled:**	11/15/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	92%		70-130%
460-00-4	4-Bromofluorobenzene	77%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB111518DC1		
Lab Sample ID:	JC78202-8	**Date Sampled:**	11/15/18
Matrix:	AQ - Field Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117139.D	1	11/20/18 18:13	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB111518DC1		
Lab Sample ID:	JC78202-8	**Date Sampled:**	11/15/18
Matrix:	AQ - Field Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	87%		70-130%
460-00-4	4-Bromofluorobenzene	73%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 12:45**	**Matrix:**	**WATER**
Lab Sample ID:	**465232001**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**1X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW3-3**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 18:22**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0919.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		5.74	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 13:25**	**Matrix:**	**WATER**
Lab Sample ID:	**465232002**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**2X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW3-4**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 19:14**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0921.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		4.43	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**465232003**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**4X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**REP111518LV1**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 20:57**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0925.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		4.29	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 13:25**	**Matrix:**	**WATER**
Lab Sample ID:	**465232004**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**5X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW3-1**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 21:49**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0927.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		0.796	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 12:15**	**Matrix:**	**WATER**
Lab Sample ID:	**465232005**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**6X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW3-2**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 22:41**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0929.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		3.35	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78202X**	**Date Collected:**	**11/15/2018 13:50**	**Matrix:**	**WATER**
Lab Sample ID:	**465232006**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**8X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**FB111518DC1**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1830372**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/12/2018 14:38**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/12/2018 10:15**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s121218.B\s6L1208.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200

Report of Analysis

Client Sample ID:	BP0W1-1		
Lab Sample ID:	JC78073-1	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117111.D	1	11/19/18 21:16	CSF	n/a	n/a	V1B5648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	0.23	0.50	0.19	ug/l	J
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [c]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	0.23	0.50	0.22	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-1		
Lab Sample ID:	JC78073-1	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	0.87	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	95%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-2		
Lab Sample ID:	JC78073-2	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117112.D	1	11/19/18 21:49	CSF	n/a	n/a	V1B5648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [c]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-2		
Lab Sample ID:	JC78073-2	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	0.57	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	88%		70-130%
460-00-4	4-Bromofluorobenzene	78%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-3		
Lab Sample ID:	JC78073-3	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117113.D	1	11/19/18 22:21	CSF	n/a	n/a	V1B5648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [c]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-3		
Lab Sample ID:	JC78073-3	**Date Sampled:**	11/14/18
Matrix:	AQ - Ground Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	94%		70-130%
460-00-4	4-Bromofluorobenzene	81%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB11418PP1		
Lab Sample ID:	JC78073-4	**Date Sampled:**	11/14/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117110.D	1	11/19/18 20:45	CSF	n/a	n/a	V1B5648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [c]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB11418PP1		
Lab Sample ID:	JC78073-4	**Date Sampled:**	11/14/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/15/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		70-130%
460-00-4	4-Bromofluorobenzene	81%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78073X**	**Date Collected:**	**11/14/2018 14:20**	**Matrix:**	**WATER**
Lab Sample ID:	**465053001**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**1X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-1**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 13:12**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0907.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78073X**	**Date Collected:**	**11/14/2018 13:50**	**Matrix:**	**WATER**
Lab Sample ID:	**465053002**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**2X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-2**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 14:03**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0909.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78073X**	**Date Collected:**	**11/14/2018 15:30**	**Matrix:**	**WATER**
Lab Sample ID:	**465053003**	**Date Received:**	**11/20/2018 09:30**		
Client Sample:	**3X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-3**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/09/2018 14:54**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0911.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	J	0.179	ug/L	0.100	0.100	0.200

Report of Analysis

Client Sample ID:	BPOW4-1R		
Lab Sample ID:	JC78201-1	**Date Sampled:**	11/16/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117302.D	1	11/29/18 15:32	BK	n/a	n/a	V1B5657
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	J
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	J
75-25-2	Bromoform	ND	0.50	0.27	ug/l	J
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	J
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	J
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	0.28	0.50	0.17	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	0.32	0.50	0.24	ug/l	J
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	J
75-35-4	1,1-Dichloroethylene	0.77	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	J
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	J
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24	0.50	0.14	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	J
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	J
76-13-1	Freon 113	28.1	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	J
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	J
108-88-3	Toluene	ND	0.50	0.11	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW4-1R		
Lab Sample ID:	JC78201-1	**Date Sampled:**	11/16/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	0.58	0.50	0.20	ug/l	J
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	J
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	103%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW4-2R		
Lab Sample ID:	JC78201-2	**Date Sampled:**	11/16/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117218.D	1	11/27/18 13:23	CSF	n/a	n/a	V1B5652
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	0.49	0.50	0.19	ug/l	J
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	15.9	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	0.35	0.50	0.23	ug/l	J
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW4-2R		
Lab Sample ID:	JC78201-2	**Date Sampled:**	11/16/18
Matrix:	AQ - Ground Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	2.0	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	93%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111618ALH1		
Lab Sample ID:	JC78201-3	**Date Sampled:**	11/16/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117132.D	1	11/20/18 14:30	CSF	n/a	n/a	V1B5649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform [b]	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane [b]	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113 [b]	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111618ALH1		
Lab Sample ID:	JC78201-3	**Date Sampled:**	11/16/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/16/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	96%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78201X**	**Date Collected:**	**11/16/2018 12:30**	**Matrix:**	**WATER**
Lab Sample ID:	**465235003**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**1X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW4-1R**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1825876**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/10/2018 03:00**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/08/2018 08:30**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s120918.B\s6L0939.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	J	3.12	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78201X**	**Date Collected:**	**11/16/2018 13:30**	**Matrix:**	**WATER**
Lab Sample ID:	**465235004**	**Date Received:**	**11/21/2018 09:15**		
Client Sample:	**2X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW4-2R**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1830372**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/12/2018 15:02**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/12/2018 10:15**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s121218.B\s6L1209.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		1.47	ug/L	0.100	0.100	0.200

Report of Analysis

Client Sample ID:	BP0W1-4		
Lab Sample ID:	JC78364-1	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117305.D	1	11/29/18 17:08	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-4		
Lab Sample ID:	JC78364-1	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	100%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-5		
Lab Sample ID:	JC78364-2	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117306.D	1	11/29/18 17:40	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-5		
Lab Sample ID:	JC78364-2	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-6		
Lab Sample ID:	JC78364-3	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117307.D	1	11/29/18 18:11	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BP0W1-6		
Lab Sample ID:	JC78364-3	**Date Sampled:**	11/19/18
Matrix:	AQ - Ground Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	96%		70-130%
460-00-4	4-Bromofluorobenzene	86%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB111918DC1
Lab Sample ID: JC78364-4
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: Navy Wells OU2, Bethpage, NY

Date Sampled: 11/19/18
Date Received: 11/20/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1B117308.D	1	11/29/18 18:43	BK	n/a	n/a	V1B5658
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
78-93-3	2-Butanone	ND	5.0	0.43	ug/l	
71-43-2	Benzene	ND	0.50	0.16	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.13	ug/l	
75-25-2	Bromoform	ND	0.50	0.27	ug/l	
74-83-9	Bromomethane	ND	0.50	0.18	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.18	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.093	ug/l	
75-00-3	Chloroethane	ND	0.50	0.080	ug/l	
67-66-3	Chloroform	ND	0.50	0.17	ug/l	
74-87-3	Chloromethane	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.24	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.22	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.18	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.21	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.14	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.18	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.076	ug/l	
76-13-1	Freon 113	ND	1.0	0.34	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.24	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.22	ug/l	
100-42-5	Styrene	ND	0.50	0.069	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.19	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.23	ug/l	
108-88-3	Toluene	ND	0.50	0.11	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB111918DC1		
Lab Sample ID:	JC78364-4	**Date Sampled:**	11/19/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/20/18
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	Navy Wells OU2, Bethpage, NY		

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.20	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.15	ug/l	
	m,p-Xylene	ND	0.50	0.14	ug/l	
95-47-6	o-Xylene	ND	0.50	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	100%		70-130%
460-00-4	4-Bromofluorobenzene	86%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78364X**	**Date Collected:**	**11/19/2018 13:10**	**Matrix:**	**WATER**
Lab Sample ID:	**465500001**	**Date Received:**	**11/28/2018 09:00**		
Client Sample:	**1X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-4**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1829937**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/10/2018 18:47**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/10/2018 09:00**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s121018.B\s6L1007.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78364X**	**Date Collected:**	**11/19/2018 12:30**	**Matrix:**	**WATER**
Lab Sample ID:	**465500002**	**Date Received:**	**11/28/2018 09:00**		
Client Sample:	**2X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-5**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1829937**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/10/2018 19:36**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/10/2018 09:00**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s121018.B\s6L1009.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200

2

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**JC78364X**	**Date Collected:**	**11/19/2018 12:40**	**Matrix:**	**WATER**
Lab Sample ID:	**465500003**	**Date Received:**	**11/28/2018 09:00**		
Client Sample:	**3X**	**Client:**	**ACTL003**	**Project:**	**ACTL00316**
Client ID:	**BPOW1-6**	**Method:**	**EPA 522**	**SOP Ref:**	**GL-OA-E-073**
Batch ID:	**1829937**	**Inst:**	**MSD6.I**	**Dilution:**	**1**
Run Date:	**12/10/2018 20:27**	**Analyst:**	**JMB3**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/10/2018 09:00**	**Aliquot:**	**100 mL**	**Final Volume:**	**2 mL**
Data File:	**s121018.B\s6L1011.D**		**Rtx-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	U	0.100	ug/L	0.100	0.100	0.200