

MARCH 2018 GROUNDWATER SAMPLING DATA SUMMARY REPORT

**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP)
SITE 1 OPERABLE UNIT 2
BETHPAGE, NY**

Prepared for:



**Department of the Navy
Naval Facilities Engineering Command, Atlantic
9324 Virginia Avenue
Building 140
Norfolk, Virginia 23511**

March 2019

**MARCH 2018 GROUNDWATER SAMPLING
DATA SUMMARY REPORT**

**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
SITE 1 OPERABLE UNIT 2
BETHPAGE, NY**

Prepared for:



**Department of the Navy
Naval Facilities Engineering Command, Atlantic
9324 Virginia Avenue
Building 140
Norfolk, Virginia 23511**

Prepared by:



**Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510**

**Contract Number: N62470-11-D-8013
Contract Task Order WE15**

March 2019

A handwritten signature in black ink that reads "Brian Caldwell".

**Brian Caldwell
Contract Task Order Manager**

Table of Contents

List of Acronyms and Abbreviations	iii
1.0 PROJECT BACKGROUND	1
2.0 FIELD PROGRAM	2
2.1 Sampling	2
2.2 Investigation Derived Waste	3
3.0 SUMMARY	4
4.0 REFERENCES	5

Tables

Table 1	Monitoring Well Construction Summary
Table 2	Analytical Data Summary for Wells Sampled by Resolution Consultants
Table 3	Stabilized Field Parameters for Wells Sampled by Resolution Consultants
Table 4	Concentrations of Volatile Organic Compounds and 1,4-Dioxane in Outpost Wells BPOW5-1 through BPOW5-7, First Quarter 2018 Operable Unit 2 (Groundwater), Bethpage, New York
Table 5	Concentrations of Volatile Organic Compounds and 1,4-Dioxane in Outpost Wells BPOW6-1 through BPOW6-6, First Quarter 2018 Operable Unit 2 (Groundwater), Bethpage, New York

Figures

Figure 1	General Location Map
Figure 2	Location Map March 2018 Groundwater Sampling

Appendices

- Appendix A Groundwater Sampling Forms – Resolution Consultants
- Appendix B Analytical Data Validation – Resolution Consultants
- Appendix C Analytical Data Validation - ARCADIS
- Appendix D ARCADIS Separate and Ongoing OU2 Monitoring of Navy Wells
- Appendix E Synoptic Water Levels March 29, 2018

List of Acronyms and Abbreviations

bgs	below ground surface
DOT	Department of Transportation
IDW	Investigation Derived Waste
Katahdin	Katahdin Analytical Services
NG	Northrop Grumman
NWIRP	Naval Weapons Industrial Reserve Plant
ONCT	Onsite Containment System
OU	Operable Unit
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QC	Quality Control
SAP	Sampling and Analysis Plan
UFP	Uniform Federal Policy
VOC	Volatile Organic Compounds

1.0 PROJECT BACKGROUND

Resolution Consultants has prepared this Groundwater Sampling Data Summary Report for the Naval Facilities Engineering Command, Mid-Atlantic under contract task order WE15 Contract N62470-11-D-8013. The report describes quarterly sampling activities in March 2018, which is part of the Navy's ongoing Environmental Restoration Program for the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Operable Unit (OU) 2 Site 1 offsite plume. NWIRP Bethpage is located in east-central Nassau County, Long Island, New York, approximately 30 miles east of New York City (Figure 1).

This data summary report provides information on quarterly sampling of 50 Navy-owned monitoring wells by Resolution Consultants on behalf of the Navy, and by ARCADIS on behalf of the Navy at the direction of Northrop Grumman (NG) as part of an agreement between the Navy and NG. The purpose of this sampling is to provide information on the extent and magnitude of volatile organic compounds (VOCs) located in a narrow area immediately south of the Onsite Containment System (ONCT) in the western offsite plume, which could represent contamination that has bypassed the ONCT, to evaluate the southernmost extent of the OU2 plume, and to evaluate outpost wells intended to provide early warning of plume migration to public water supply wells. The locations of monitoring wells sampled as part of this effort are shown in Figure 2. Well construction information and sampling responsibility are listed in Table 1.

2.0 FIELD PROGRAM

Field tasks were conducted in March 2018 in accordance with the Uniform Federal Policy (UFP) Sampling and Analysis Plan (SAP) Addendum: *Groundwater Sampling Using Low Stress (Low Flow) Purging and Sampling Protocol* (Resolution Consultants, 2013). The field investigation included purging and sampling of monitoring wells in the quarterly groundwater sampling network.

The March 2018 quarterly sampling round consisted of a total of 50 wells (Table 1). Of these, 37 groundwater wells were sampled by Resolution Consultants and 13 were sampled by ARCADIS, the NG consultant. Synoptic water level measurements were also manually collected on March 29, 2018 at 183 Navy-owned wells within an eight hour period.

2.1 Sampling

Resolution Consultants purged monitoring wells using a bladder pump with the intake placed at the approximate midpoint of the screened interval. The following field water quality parameters were continuously measured during purging: water temperature, pH, conductivity, oxidation-reduction potential, dissolved oxygen and turbidity. Groundwater analytical samples were collected when field water quality parameters stabilized. Samples were analyzed for VOCs via Method 8260C and 1,4-dioxane via Method 8270D SIM by Katahdin Analytical Services (Katahdin). All purge water was managed as investigation derived waste (IDW). Quality assurance (QA) and quality control (QC) samples were collected during the sampling effort.

Analytical results and stabilized field parameters for wells sampled by Resolution Consultants are summarized in Table 2 and Table 3, respectively. Groundwater sample forms and data validation packages for wells sampled by Resolution Consultants are included in Appendix A and B, respectively.

Results for ARCADIS-sampled wells are provided in Table 4 and Table 5; data validation packages are included in Appendix C. Samples collected from outpost wells were analyzed for VOCs via method 524.2 and 1,4-dioxane via Method 522 by Accutest Laboratories. Samples collected from remaining wells were analyzed for VOCs via Method 8260C and 1,4-dioxane via Method 8270D SIM by Accutest Laboratories.

Additional Navy-owned wells are sampled by ARCADIS as part of separate and ongoing OU2 monitoring programs, as summarized in the sampling schedule in Appendix D. ARCADIS will

document these activities and results in their 2018 Annual Groundwater Monitoring Report, scheduled for submission to New York State Department of Environmental Conservation in the spring of 2019.

Synoptic water levels were measured at 183 monitoring wells on March 29, 2018 as part of a separate task. Tabulated data is presented in Appendix E along with three contoured water level maps for wells screened at shallow (<300 feet below ground surface [bgs]), intermediate (300-500 feet bgs) and deep (>500 feet bgs) intervals.

2.2 Investigation Derived Waste

Resolution Consultants utilized dedicated and disposable sampling equipment when possible to avoid the potential for cross-contamination of samples. The sampling equipment included dedicated disposable polyethylene tubing, disposable gloves, and laboratory supplied sample bottles. Hand held equipment was decontaminated using a luminox or micro 90 water wash, a potable water rinse, followed by a distilled water rinse. Purge water was collected in 5-gallon pails or 55-gallon drums.

Resolution Consultants transported purge water from point of generation to the designated staging area at NWIRP in Department of Transportation (DOT) approved 5-gallon pails. Purge water was then containerized in a frac tank and stored at NWIRP Bethpage for characterization and ultimate disposal to the Nassau County Publicly Owned Treatment Works (POTW) in accordance with the facility's existing discharge permit. All analytical criteria were met for disposal of water. No solid waste was generated during sampling.

3.0 SUMMARY

Well construction information for all wells sampled by Resolution Consultants and ARCADIS is summarized in Table 1.

Analytical results and stabilized field water quality parameters for wells sampled by Resolution Consultants are summarized in Tables 2 and 3, respectively. Groundwater sample forms and data validation packages for wells sampled by Resolution Consultants are included in Appendix A and B, respectively.

Analytical results for wells sampled by ARCADIS are summarized in Table 4 and Table 5. Data validation packages for wells sampled by ARCADIS are included in Appendix C.

The sampling schedule of additional Navy-owned wells by ARCADIS, as part of separate and ongoing OU2 monitoring programs, is summarized in Appendix D. Synoptic water levels measured on March 29, 2018 are summarized in Appendix E.

4.0 REFERENCES

Resolution Consultants, 2013. UFP SAP Addendum, *Groundwater Sampling Using Low Stress (Low Flow) Purging and Sampling Protocol*. November 2013.

Tables

TABLE 1
MONITORING WELL CONSTRUCTION SUMMARY
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Total Depth (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Mid-screen (ft bgs)	Sump Length (ft)	VPB Affiliation	Sampled By
BPOW5-1	515	480	510	495	5	VPB132	ARCADIS
BPOW5-2	585	540	580	560	5	VPB132	ARCADIS
BPOW5-3	665	620	660	640	5	VPB132	ARCADIS
BPOW5-4	575	545	570	557.5	5	VPB151	ARCADIS
BPOW5-5	545	515	540	527.5	5	VPB152	ARCADIS
BPOW5-6	615	585	610	597.5	5	VPB152	ARCADIS
BPOW5-7	555	525	550	537.5	5	VPB152	ARCADIS
BPOW6-1	580	550	575	562.5	5	VPB145	ARCADIS
BPOW6-2	785	755	780	767.5	5	VPB145	ARCADIS
BPOW6-3	780	750	775	762.5	5	VPB146	ARCADIS
BPOW6-4	575	545	570	557.5	5	VPB146	ARCADIS
BPOW6-5	555	525	550	537.5	5	VPB147	ARCADIS
BPOW6-6	800	770	795	782.5	5	VPB147	ARCADIS
RE103D1	645	625	640	632.5	5	VPB137	Resolution
RE103D2	673	653	673	663	0	VPB137	Resolution
RE103D3	735	715	730	722.5	5	VPB137	Resolution
RE104D1	375	350	370	360	5	VPB138	Resolution
RE104D2	735	710	730	720	5	VPB138	Resolution
RE104D3	785	760	780	770	5	VPB138	Resolution
RE105D1	555	530	550	540	5	VPB139	Resolution
RE105D2	755	730	750	740	5	VPB139	Resolution
RE108D1	555	530	550	540	5	VPB142	Resolution
RE108D2	655	630	650	640	5	VPB142	Resolution
RE109D1	540	515	535	525	5	VPB143	Resolution
RE109D2	575	550	570	560	5	VPB143	Resolution
RE109D3	605	580	600	590	5	VPB143	Resolution
RE116D1	595	570	590	580	5	VPB150	Resolution
RE117D1	760	730	755	742.5	5	VPB151	Resolution
RE117D2	810	780	805	792.5	5	VPB151	Resolution
RE120D1	655	630	650	640	5	VPB154	Resolution
RE120D2	713	690	710	700	3	VPB154	Resolution
RE120D3	765	740	760	750	5	VPB154	Resolution
RE122D1	545	520	540	530	5	VPB156	Resolution
RE122D2	615	590	610	600	5	VPB156	Resolution
RE122D3	740	715	735	725	5	VPB156	Resolution
RE123D1	505	480	500	490	5	VPB157	Resolution

TABLE 1
MONITORING WELL CONSTRUCTION SUMMARY
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Total Depth (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Mid-screen (ft bgs)	Sump Length (ft)	VPB Affiliation	Sampled By
RE123D2	660	635	655	645	5	VPB157	Resolution
RE123D3	840	815	835	825	5	VPB157	Resolution
RE125D1	345	320	340	330	5	VPB159	Resolution
RE125D2	605	580	600	590	5	VPB159	Resolution
RE125D3	695	670	690	680	5	VPB159	Resolution
RE126D1	525	500	520	510	5	VPB160	Resolution
RE126D2	580	555	575	565	5	VPB160	Resolution
RE126D3	665	640	660	650	5	VPB160	Resolution
RE131D1	455	430	450	440	5	VPB165	Resolution
RE131D2	595	565	590	577.5	5	VPB165	Resolution
RE131D3	685	660	680	670	5	VPB165	Resolution
TT101D	350	325	345	335	5	VPB129	Resolution
TT101D1	595	570	590	580	5	VPB129	Resolution
TT101D2	765	740	760	750	5	VPB129	Resolution

ft bgs - feet below ground surface

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE116D1	RE116D1	RE108D1	RE108D2
Sample Date		2/8/2018	2/8/2018	3/12/2018	3/12/2018
Sample ID		RE116D1-GW-020818	DUP01-GW-020818	RE108D1-GW-031218	RE108D2-GW-031218
Sample type code		N	FD	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	<0.5 U	0.69 J	6.3
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	6.6
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	4.4
1,1-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	8.4
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<3 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<2 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<2 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
1,2-DICHLOROETHENE, TOTAL	5	<1 U	<1 U	0.34 J	9.3
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<2 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<2 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<2 U
1,4-DIOXANE (Method 8270D_SIM)	NL	4.9 J	3.4 J	7.9	8.4
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<10 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<10 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<10 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<10 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<2 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<2 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<2 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<4 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<2 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	<0.5 U	1.3 J
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<4 U
CHLOROFORM	7	<0.5 U	<0.5 U	<0.5 U	3.6 J
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<4 U
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	0.34 J	9.3
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<2 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<2 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	<1 U	<4 U
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<4 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<3 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<2 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<2 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<10 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<2 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
TETRACHLOROETHENE	5	<0.5 U	<0.5 U	1.3	2.6 J
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<2 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<2 U
TRICHLOROETHENE	5	<0.5 U	<0.5 U	75	3800
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<4 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<4 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<6 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE122D1	RE122D2	RE122D3	RE103D1
Sample Date		3/12/2018	3/12/2018	3/12/2018	3/14/2018
Sample ID		RE122D1-GW-031218	RE122D2-GW-031218	RE122D3-GW-031218	RE103D1-GW-031418
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5.5	16	<0.5 U	9.4
1,1,2-TRICHLOROETHANE	1	<0.5 U	6.8	<0.5 U	1.7
1,1-DICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	0.66 J
1,1-DICHLOROETHENE	5	1.3	6.8	<0.5 U	6.7
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<3 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	2.6	5.1 J	<1 U	2.6
1,2-DICHLOROPROPANE	1	<0.5 U	<2 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	8.2	12	<0.17 U	15
2-BUTANONE	50	<2.5 U	<10 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<10 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<10 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<10 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<2 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<2 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<2 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<4 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<2 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	0.68 J	2 J	<0.5 U	0.25 J
CHLOROBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<4 U	<1 U	<1 U
CHLOROFORM	7	0.63 J	<2 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	2.2	5.1	<0.5 U	2.6
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<2 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<4 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<3 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<2 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<10 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	2.1	4.5	<0.5 U	7.3
TOLUENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	0.34 J	<2 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<2 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	550	4700	2.6	660 J+
TRICHLOROFLUOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<4 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<6 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE103D2	RE103D3	RE1104D1	RE104D2
Sample Date		3/14/2018	3/14/2018	3/14/2018	3/14/2018
Sample ID		RE103D2-GW-031418	RE103D3-GW-031418	RE104D1-GW-031418	RE104D2-GW-031418
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	3.4	2	2	<0.5 U
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	1	0.4 J	0.47 J	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	0.52 J
1,2-DICHLOROETHENE, TOTAL	5	1.2 J	0.86 J	0.71 J	9.3
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	1.8	0.73	7.8	0.65
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	3.4	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	0.25 J	<0.5 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	0.76 J	0.53 J	<0.5 U	1.2
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	1.2	0.86 J	0.71 J	9.3
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	0.77 J	0.48 J	2.8	<0.5 U
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	550 J+	380 J+	72	33
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE104D3	RE109D1	RE109D1	RE109D2
Sample Date		3/14/2018	3/15/2018	3/15/2018	3/15/2018
Sample ID		RE104D3-GW-031418	RE109D1-GW-031518	DUP01-GW-031518	RE109D2-GW-031518
Sample type code		N	N	FD	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	0.93 J	1	1.2
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	<1 U	<1 U	<1 U	<1 U
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	<0.18 U	6.4	5.8	5.9
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	<0.5 U	0.48 J	<0.5 U	<0.5 U
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	<0.5 U	24	24	26
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE109D3	RE126D1	RE126D2	RE126D3
Sample Date		3/15/2018	3/15/2018	3/15/2018	3/15/2018
Sample ID		RE109D3-GW-031518	RE126D1-GW-031518	RE126D2-GW-031518	RE126D3-GW-031518
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	0.4 J	<0.5 U	0.64 J	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	3.8	<0.5 U	1	0.7 J
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	1.6	<0.5 U
1,1-DICHLOROETHENE	5	0.4 J	<0.5 U	1.6	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	1.2 J	<1 U	2	<1 U
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	8.4	4.8	6.7	1.7
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	0.62 J	<0.5 U	0.68 J	<0.5 U
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	<0.5 U	<0.5 U	0.49 J	<0.5 U
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	1.2	<0.5 U	2	<0.5 U
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	0.47 J	1.2	0.81 J	3.1
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	65	50	500	3.5
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE131D1	RE131D2	RE131D3	TT101D1
Sample Date		3/16/2018	3/16/2018	3/16/2018	3/16/2018
Sample ID		RE131D1-GW-031618	RE131D2-GW-031618	RE131D3-GW-031618	TT101D1-GW-031618
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	0.5 J
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	5.1	220	180	20
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	1
1,1-DICHLOROETHENE	5	1.1	3.1	2.3	8
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	4.6	3.5	<1 U	1.9 J
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	13	13	2.4	9.6
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	0.36 J	<0.5 U	1.6
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	2.4	0.33 J	<0.5 U	0.87 J
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	4.6	3.5	<0.5 U	1.9
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	<1 U	1.2 J
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	12	11	3.1	<0.5 U
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	140	64	9.9	180
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	TT101D2	TT101D	RE123D1	RE123D2
Sample Date		3/16/2018	3/16/2018	3/19/2018	3/19/2018
Sample ID		TT101D2-GW-031618	TT101D-GW-031618	RE123D1-GW-031918	RE123D2-GW-031918
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	27	15	<0.5 U	<0.5 U
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	5.2	3.3	<0.5 U	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	1.9 J	2.5	<1 U	<1 U
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	2.7	10	4.3	0.84
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	1.3	<0.5 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	0.87 J	<0.5 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	1.9	2.5	<0.5 U	<0.5 U
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	1.8 J	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	1.3	<0.5 U	<0.5 U	1.6
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	650	69	6.9	1.6
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE123D3	RE125D1	RE125D2	RE125D2
Sample Date		3/19/2018	3/19/2018	3/19/2018	3/19/2018
Sample ID		RE123D3-GW-031918	RE125D1-GW-031918	RE125D2-GW-031918	DUP02-GW-031918
Sample type code		N	N	N	FD
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	0.43 J
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	14	21	24
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	2	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	<0.5 U	3.1	7.1	8
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	<1 U	3.8	3.4	3.9
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	<0.17 U	12	20	21
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	0.47 J	0.42 J
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	<0.5 U	0.79 J	0.48 J	0.55 J
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	<0.5 U	3.8	3.4	3.9
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	0.61 J	0.62 J
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	<0.5 U	7.3	2.8	2.4
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	<0.5 U	160	200	200
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE125D3	RE105D1	RE105D2	RE120D1
Sample Date		3/19/2018	3/20/2018	3/20/2018	3/20/2018
Sample ID		RE125D3-GW-031918	RE105D1-GW-032018	RE105D2-GW-032018	RE120D1-GW-032018
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<2 U	0.72 J
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	49	4.7	16	24
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<2 U	0.74 J
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<2 U	1.8
1,1-DICHLOROETHENE	5	1.3	0.79 J	7.8	15
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<3 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<2 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<2 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	1.9 J	0.91 J	1.7 J	2.5
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<2 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<2 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<2 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	4	8.9	11	21
2-BUTANONE	50	<2.5 U	<2.5 U	<10 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<10 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<10 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<10 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<2 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<2 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<2 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<4 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<2 U	<0.5 U
CARBON TETRACHLORIDE	5	0.38 J	<0.5 U	1.3 J	0.47 J
CHLOROBENZENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<4 U	<1 U
CHLOROFORM	7	0.41 J	<0.5 U	<2 U	0.62 J
CHLOROMETHANE	5	<1 U	<1 U	<4 U	<1 U
CIS-1,2-DICHLOROETHENE	5	1.9	0.91 J	1.7 J	2.5
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<2 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<2 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<1 UJ	<4 UJ	<1 UJ
ETHYLBENZENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<4 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<3 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<2 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<2 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<10 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<2 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
TETRACHLOROETHENE	5	2	0.45 J	<2 U	2.6
TOLUENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<2 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<2 U	<0.5 U
TRICHLOROETHENE	5	140	120	1600	830
TRICHLOROFLUOROMETHANE	5	<1 U	<1 UJ	<4 UJ	<1 UJ
VINYL CHLORIDE	2	<1 U	<1 U	<4 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<6 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE120D2	RE120D3	RE117D1	RE117D2
Sample Date		3/20/2018	3/20/2018	3/22/2018	3/22/2018
Sample ID		RE120D2-GW-032018	RE120D3-GW-032018	RE117D1-GW-032218	RE117D2-GW-032218
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	25	0.81 J	<0.5 U	<0.5 U
1,1,2-TRICHLOROETHANE	1	0.41 J	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	5.3	<0.5 U	<0.5 U	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	<0.75 U	<0.75 U	<0.75 U	<0.75 U
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	2.7	<1 U	<1 U	<1 U
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	<0.5 U
1,4-DIOXANE (Method 8270D_SIM)	NL	14	0.3	<0.17 U	<0.17 U
2-BUTANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<2.5 U	<2.5 U	<2.5 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<1 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	0.65 J	<0.5 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<1 U	<1 U	<1 U
CHLOROFORM	7	0.66 J	<0.5 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<1 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	2.7	<0.5 U	<0.5 U	<0.5 U
CIS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 UJ	<1 UJ	<1 UJ	<1 UJ
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	4.3	<0.5 U	<0.5 U	<0.5 U
TOLUENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U
TRICHLOROETHENE	5	620	27	9.6	<0.5 U
TRICHLOROFLUOROMETHANE	5	<1 UJ	<1 UJ	<1 UJ	<1 UJ
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	<1.5 U

TABLE 2
ANALYTICAL DATA SUMMARY FOR
WELLS SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION

Notes:

1 New York State Department of Environmental Conservation Division of Water Technical and Operation Guidance series (6 NYCRR 700-706, Part 703.5 summarized in TOGS 1.1.1)
Ambient water quality standards and groundwater effluent limitations, class GA; NL = Not Listed

Bold = Detected; **Bold and Italics**=Not detected exceeds NYS Groundwater Standards or guidance value
Yellow highlighted values exceed Groundwater Standards or guidance value

Sample type codes: N - normal environmental sample, FD - field duplicate

U = Undetected. The parameter was analyzed but undetected at the listed limit of quantitation or was qualified as undetected during data review due to blank artifacts.

UJ = Undetected and estimated. The analyte was analyzed but undetected at the listed limit of quantitation; one or more quality control parameters were outside control limits.

J = Estimated value. One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.

J+ = Estimated value. One or more quality control parameters were outside control limits and biased high. The result was an estimated quantity, but the result may be biased high.

U (for RE116D1 data only) = Nondetected result. The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

TABLE 3
STABILIZED FIELD PARAMETERS FOR WELLS
SAMPLED BY RESOLUTION CONSULTANTS
2018 OU2 GROUNDWATER INVESTIGATION
NWIRP BETHPAGE, NY

Well	Date	Temperature (°C)	Specific Conductance (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Purge Flow rate (ml/min)	Depth to water (ft bgs)
TT101D	3/16/2018	14.93	0.093	0.69	4.43	248.3	2.63	800	33.37
TT101D1	3/16/2018	14.72	0.098	0.50	4.86	303.1	3.91	900	34.41
TT101D2	3/16/2018	13.42	0.044	7.38	4.46	310.6	12.60	1000	34.99
RE103D1	3/14/2018	12.13	0.117	6.05	5.03	249.7	1.98	600	40.63
RE103D2	3/14/2018	13.76	0.037	6.24	5.46	247.2	1.97	550	40.41
RE103D3	3/14/2018	13.34	0.032	6.11	6.04	255.1	7.39	600	40.45
RE104D1	3/14/2018	11.99	0.087	8.28	4.86	286.6	2.90	650	37.51
RE104D2	3/14/2018	13.79	0.026	8.13	5.97	239.6	2.96	600	39.24
RE104D3	3/14/2018	13.45	0.023	4.48	5.16	266.4	12.94	600	39.69
RE105D1	3/20/2018	12.32	0.099	5.12	4.84	307.9	2.31	600	37.70
RE105D2	3/20/2018	13.71	0.066	5.55	5.11	292.4	1.71	600	38.68
RE108D1	3/12/2018	12.78	0.082	8.71	4.65	313.8	2.06	700	42.09
RE108D2	3/12/2018	14.07	0.077	7.31	5.32	279.2	2.01	600	42.55
RE109D1	3/15/2018	13.19	0.083	4.31	5.16	285.6	7.41	900	45.81
RE109D2	3/15/2018	10.85	0.092	2.91	5.52	210.1	17.9	600	46.32
RE109D3	3/15/2018	13.60	0.085	2.44	5.74	157.4	57.6	650	46.22
RE116D1	2/8/2018	13.39	0.096	3.95	3.62	103.0	630	500	31.02
RE117D1	3/22/2018	14.61	0.030	4.22	3.45	265.1	4.51	600	18.75
RE117D2	3/22/2018	12.39	0.022	4.15	5.18	238.6	13.30	450	19.71
RE120D1	3/20/2018	14.20	0.110	5.16	5.93	297.2	1.96	600	36.91
RE120D2	3/20/2018	13.12	0.074	6.47	4.89	280.2	1.34	700	36.50
RE120D3	3/20/2018	12.90	0.025	4.04	4.67	295.65	2.26	250	36.85
RE122D1	3/12/2018	14.36	0.086	7.34	5.48	238.8	2.11	650	43.75
RE122D2	3/12/2018	14.19	0.086	4.58	5.14	248.6	1.97	700	43.85
RE122D3	3/12/2018	12.39	0.022	3.46	4.31	316.3	3.61	625	44.08
RE123D1	3/19/2018	11.96	0.117	10.07	4.77	294.3	1.86	700	49.08
RE123D2	3/19/2018	11.41	0.028	9.54	5.60	229.8	2.34	700	50.50
RE123D3	3/19/2018	12.45	0.034	0.60	5.77	-32.8	18.0	600	49.92
RE125D1	3/19/2018	14.23	0.140	4.13	4.85	244.2	4.02	650	34.30
RE125D2	3/19/2018	12.42	0.079	4.91	4.51	303.6	3.16	800	36.70
RE125D3	3/19/2018	15.10	0.049	8.32	3.85	256.4	11.21	600	39.93
RE126D1	3/15/2018	14.90	0.101	8.34	5.00	274.1	1.94	800	46.61
RE126D2	3/15/2018	14.09	0.103	4.74	5.40	231.4	2.97	600	47.62
RE126D3	3/15/2018	15.41	0.040	5.40	5.55	246.4	2.36	650	47.31
RE131D1	3/16/2018	10.72	0.100	8.44	6.00	324.3	3.24	700	35.55
RE131D2	3/16/2018	10.26	0.073	5.71	4.31	312.1	2.0	900	37.00
RE131D3	3/16/2018	11.16	0.039	7.86	5.04	249.1	3.14	900	37.38

°C - degrees Celsius

µS/cm - Microsiemens per Centimeter

mg/L - milligrams per liter

mV - Millivolts

NTU - Nephelometric Turbidity Unit

ft bgs - feet below ground surface

ml/min - milliliters per minute

NM - not measured

After purging, wells were sampled at a flow rate of 200-250 ml/min.

Table 4.
Concentrations of Volatile Organic Compounds
and 1,4-Dioxane in Outpost Wells BPOW 5-1 through BPOW
5-7, First Quarter 2018
Operable Unit 2 (Groundwater),
Bethpage, New York

CONSTITUENT Units (ug/L)	Well: Sample ID: Date:	BPOW 5-1 BPOW 5-1 2/21/2018	BPOW 5-2 BPOW 5-2 2/21/2018	BPOW 5-3 BPOW 5-3 2/21/2018	BPOW 5-3 REP022118CK1 2/21/2018	BPOW 5-4 BPOW 5-4 2/22/2018
<u>Volatile Organic Compounds (VOCs) ⁽¹⁾</u>						
1,1,1-Trichloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,1,2-Tetrachloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-trichloro-1,2,2-trifluoroethane		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloropropane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Butanone (MEK)		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Hexanone		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
4-methyl-2-pentanone (MIK)		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromomethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon Disulfide		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon tetrachloride		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroform		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloromethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,2-dichloroethene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-dichloropropene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methylene Chloride		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Styrene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toluene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,2-dichloroethene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,3-dichloropropene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloroethylene		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Vinyl Chloride		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Xylene-o		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes - m,p		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total VOCs ⁽²⁾		0	0	0	0	0
1,4-Dioxane ⁽³⁾		0.144 J	< 0.200	2.69	2.64	1.32

See last page for Notes and Abbreviations

Table 4.
Concentrations of Volatile Organic Compounds
and 1,4-Dioxane in Outpost Wells BPOW 5-1 through BPOW
5-7, First Quarter 2018
Operable Unit 2 (Groundwater),
Bethpage, New York

CONSTITUENT Units (ug/L)	Well: Sample ID: Date:	BPOW 5-5 BPOW 5-5 2/20/2018	BPOW 5-6 BPOW 5-6 2/20/2018	BPOW 5-7 BPOW 5-7 2/23/2018
<u>Volatile Organic Compounds (VOCs) ⁽¹⁾</u>				
1,1,1-Trichloroethane		< 0.50	< 0.50	< 0.50
1,1,1,2-Tetrachloroethane		< 0.50	< 0.50	< 0.50
1,1,2-trichloro-1,2,2-trifluoroethane		< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane		< 0.50	< 0.50	< 0.50
1,1-Dichloroethane		< 0.50	< 0.50	< 0.50
1,1-Dichloroethene		< 0.50	< 0.50	< 0.50
1,2-Dichloroethane		< 0.50	< 0.50	< 0.50
1,2-Dichloropropane		< 0.50	< 0.50	< 0.50
2-Butanone (MEK)		< 5.0	< 5.0	< 5.0
2-Hexanone		< 2.0	< 2.0	< 2.0
4-methyl-2-pentanone (MIK)		< 5.0	< 5.0	< 5.0
Acetone		< 0.50	< 0.50	< 0.50
Benzene		< 0.50	< 0.50	< 0.50
Bromodichloromethane		< 0.50	< 0.50	< 0.50
Bromoform		< 0.50	< 0.50	< 0.50
Bromomethane		< 0.50	< 0.50	< 0.50
Carbon Disulfide		< 0.50	< 0.50	< 0.50
Carbon tetrachloride		< 0.50	< 0.50	< 0.50
Chlorobenzene		< 0.50	< 0.50	< 0.50
Chloroethane		< 0.50	< 0.50	< 0.50
Chloroform		< 0.50	< 0.50	< 0.50
Chloromethane		< 0.50	< 0.50	< 0.50
cis-1,2-dichloroethene		< 0.50	< 0.50	< 0.50
cis-1,3-dichloropropene		< 0.50	< 0.50	< 0.50
Dibromochloromethane		< 0.50	< 0.50	< 0.50
Ethylbenzene		< 2.0	< 2.0	< 2.0
Methylene Chloride		< 0.50	< 0.50	< 0.50
Styrene		< 0.50	< 0.50	< 0.50
Tetrachloroethene		< 0.50	< 0.50	< 0.50
Toluene		< 0.50	< 0.50	< 0.50
trans-1,2-dichloroethene		< 0.50	< 0.50	< 0.50
trans-1,3-dichloropropene		< 0.50	< 0.50	< 0.50
Trichloroethylene		< 0.50	< 0.50	< 0.50
Vinyl Chloride		< 0.50	< 0.50	< 0.50
Xylene-o		< 0.50	< 0.50	< 0.50
Xylenes - m,p		< 0.50	< 0.50	< 0.50
Total VOCs ⁽²⁾		0	0	0
1,4-Dioxane ⁽³⁾		1.48	< 0.200	< 0.200

See last page for Notes and Abbreviations

Table 4.
Concentrations of Volatile Organic Compounds
and 1,4-Dioxane in Outpost Wells BPOW 5-1 through BPOW
5-7, First Quarter 2018
Operable Unit 2 (Groundwater),
Bethpage, New York

Notes and Abbreviations:

- (1) Samples were analyzed for the TCL VOCs using USEPA Method 524.2.
 (2) Total VOCs are rounded to two significant figures.
 (3) Samples were analyzed for 1,4-Dioxane using USEPA Method 522.
 Results validated following protocols specified in OU2 Groundwater Monitoring Plan (ARCADIS 2016).

Bold	Constituent detected
TCL	Target Compound List
REP	Blind duplicate sample
VOC	Volatile Organic Compound
USEPA	United States Environmental Protection Agency
µg/L	Micrograms per liter
J	Constituent value is estimated
<0.50	Constituent not detected above its laboratory detection limit

Table 5.
Concentrations of Volatile Organic Compounds and
1,4-Dioxane in Outpost Wells BPOW 6-1 through BPOW 6-6, First Quarter 2018
Operable Unit 2 (Groundwater),
Bethpage, New York

Well: Sample ID: Date:	BPOW 6-1 BPOW 6-1 3/5/2018	BPOW 6-2 BPOW 6-2 3/5/2018	BPOW 6-3 BPOW 6-3 3/6/2018	BPOW 6-4 BPOW 6-4 3/6/2018	BPOW 6-5 BPOW 6-5 3/8/2018	BPOW 6-6 BPOW 6-6 3/8/2018
CONSTITUENT Units (ug/L)						
Volatile Organic Compounds (VOCs) ⁽¹⁾						
1,1,1-Trichloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-Tetrachloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-trichloro-1,2,2-trifluoroethane	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloropropane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Butanone (MEK)	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Hexanone	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
4-methyl-2-pentanone (MIK)	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromomethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon Disulfide	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon tetrachloride	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroform	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloromethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,2-dichloroethene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-dichloropropene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methylene Chloride	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Styrene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toluene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,2-dichloroethene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,3-dichloropropene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloroethylene	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Vinyl Chloride	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Xylene-o	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes - m,p	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total VOCs ⁽²⁾	0	0	0	0	0	0
1,4-Dioxane ⁽³⁾	0.119 J	< 0.200	< 0.200	0.139 J	< 0.200	< 0.200

See last page for Notes and Abbreviations.

Table 5.
Concentrations of Volatile Organic Compounds and
1,4-Dioxane in Outpost Wells BPOW 6-1 through BPOW 6-6, First Quarter 2018
Operable Unit 2 (Groundwater),
Bethpage, New York

Notes and Abbreviations:

(1) Samples were analyzed for the TCL VOCs using USEPA Method 524.2.

(2) Total VOCs are rounded to two significant figures.

(3) Samples were analyzed for 1,4-Dioxane using USEPA Method 522.

Results validated following protocols specified in OU2 Groundwater Monitoring Plan (ARCADIS 2016).

Bold Constituent detected

TCL Target Compound List

VOC Volatile Organic Compound

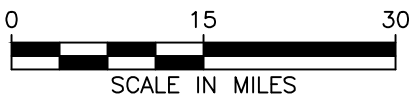
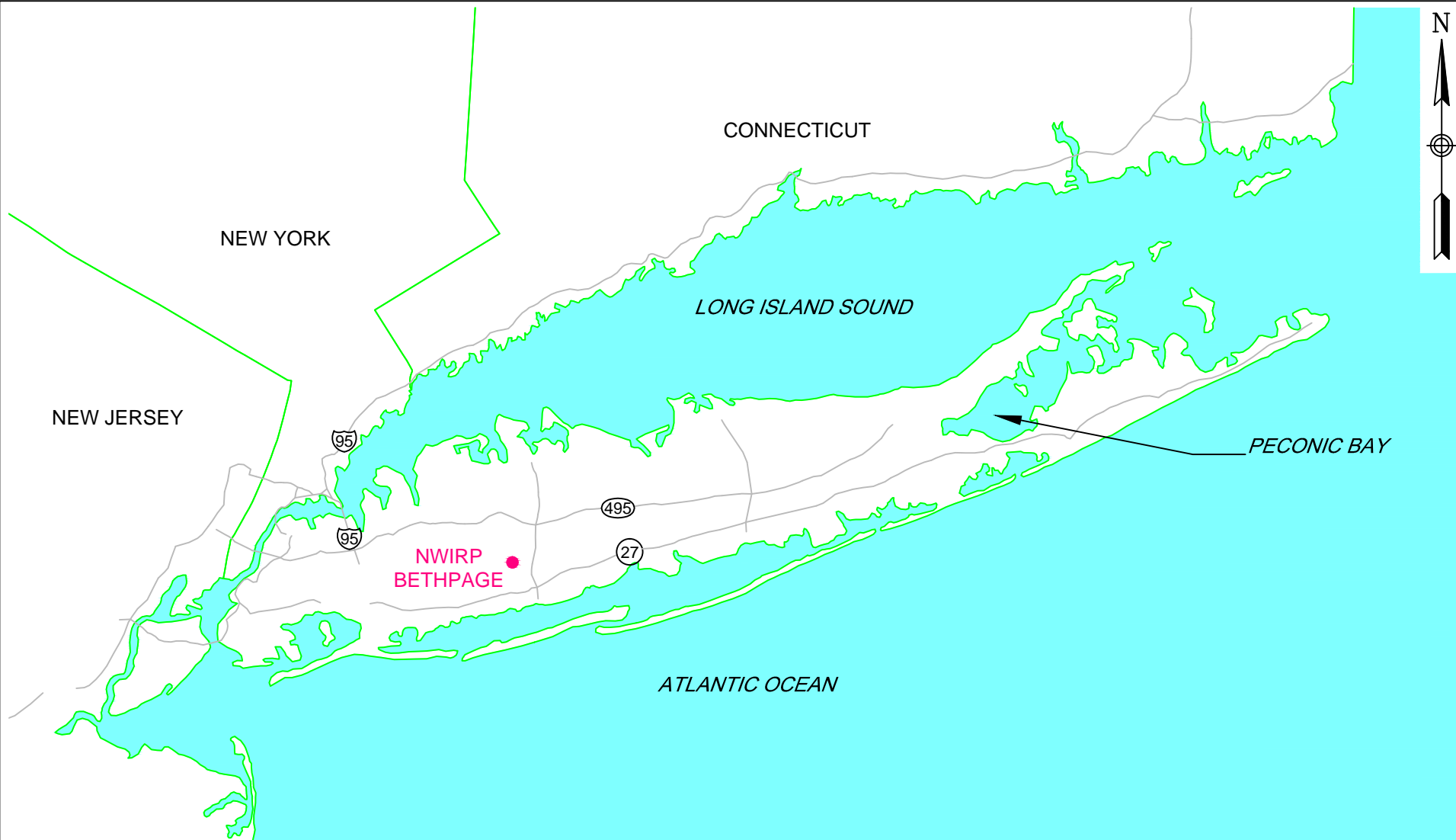
USEPA United States Environmental Protection Agency

µg/L Micrograms per liter

J Constituent value is estimated

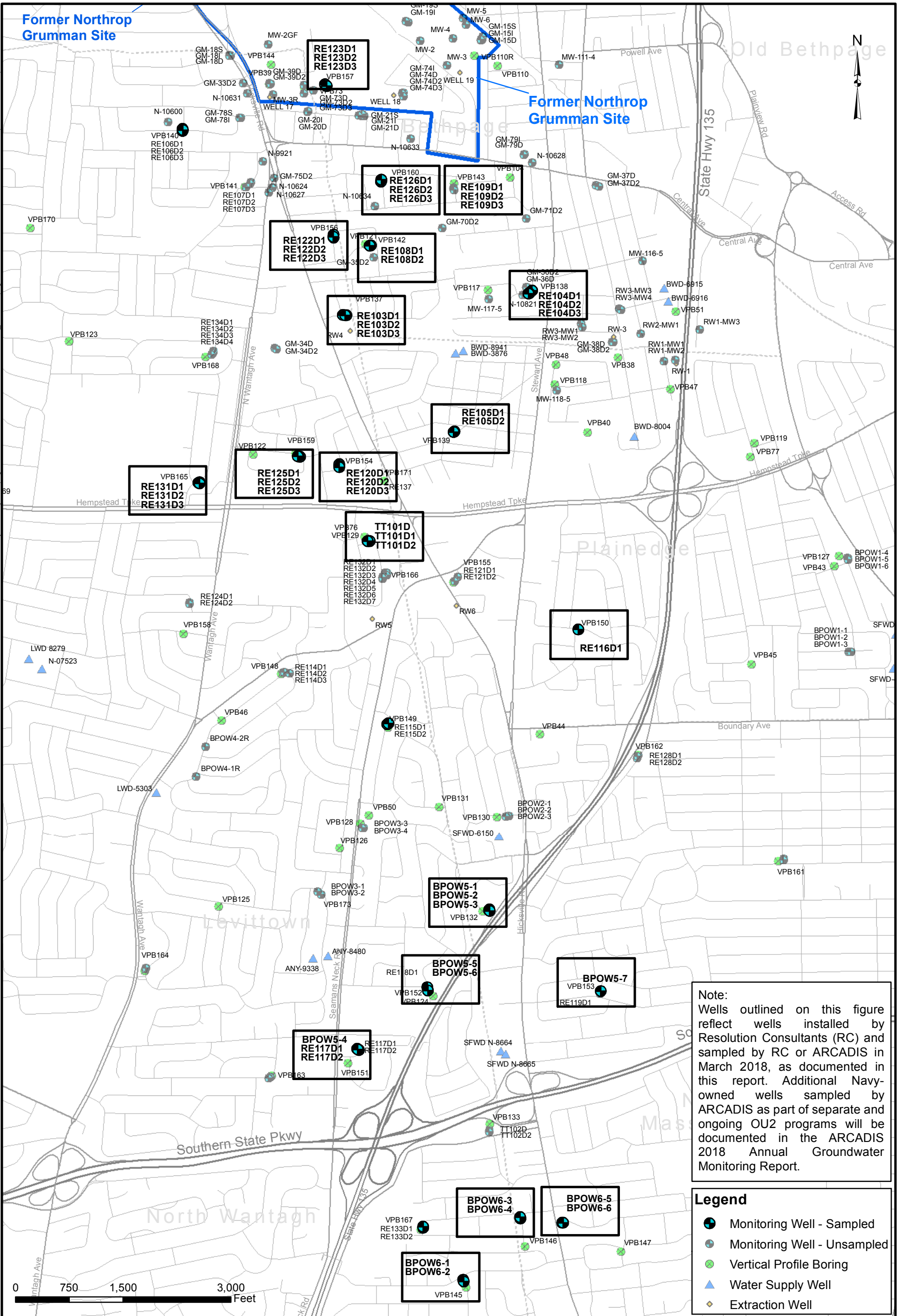
<0.50 Constituent not detected above its laboratory detection limit

Figures



GENERAL LOCATION MAP
NWIRP BETHPAGE
BETHPAGE, NEW YORK

CONTRACT NUMBER N62470-11-D-8013		CTO NUMBER WE15	
APPROVED BY ---		DATE ---	
APPROVED BY ---		DATE ---	
FIGURE NO. 1			REV 0



Note:
Wells outlined on this figure reflect wells installed by Resolution Consultants (RC) and sampled by RC or ARCADIS in March 2018, as documented in this report. Additional Navy-owned wells sampled by ARCADIS as part of separate and ongoing OU2 programs will be documented in the ARCADIS 2018 Annual Groundwater Monitoring Report.

Legend

- Monitoring Well - Sampled
- Monitoring Well - Unsampled
- Vertical Profile Boring
- Water Supply Well
- Extraction Well



LOCATION MAP
MARCH 2018 GROUNDWATER SAMPLING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE 15
APPROVED BY EV	DATE 12/10/2018
APPROVED BY	DATE
FIGURE NO. 2	REV 0

Appendices

Appendix A

Groundwater Sampling Forms – Resolution Consultants



Well ID: RE116-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 21 8 18 Time: Start 1115 am/pm
 Project No: 60266526 Finish _____ am/pm
 Site Location: _____
 Weather Conds: 30, SUN Collector(s): S. WRIGHT F. BELL

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 595 ft c. Length of Water Column 564 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 31.30 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1135	-	9.36	0.198	5.88	8.67	121.6	-	600	31.30	CLOUDY/NONE
1140		14.28	0.074	8.42	7.00	75.8	-	600	31.41	CLOUDY/NONE
1145		14.02	0.074	7.69	5.81	59.5	1000+	600	31.48	CLOUDY/NONE
1150		14.08	0.077	7.23	5.71	48.6	-	600	31.36	CLOUDY/NONE
1155		14.15	0.080	6.87	5.60	37.7	-	600	30.40	CLOUDY/NONE
1200		13.98	0.081	6.77	5.51	39.7	882	600	30.51	CLOUDY/NONE

d. Acceptance criteria pass/fail

- | | | | |
|-------------------------------------|---|-----------------------------|------------------------------|
| Has required volume been removed | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Has required turbidity been reached | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Have parameters stabilized | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE116-D1-020818</u>	40-mL vials	3	HCl	VOCs	1345
<u>RE116-D1-020818</u>	1-L amber	2	none	1,4-Dioxane	1345

Comments

DUPLICATE + MS/MSD + VERIFIED COLLECTED

Signature

Date

2-8-18



RESOLUTION CONSULTANTS

Well ID: RE122D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/12/18 Time: Start 0900 am/pm
 Project No: 60266526 Finish 1045 am/pm
 Site Location: Curtis Hayden Dr
 Weather Conds: 40, SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 545 ft c. Length of Water Column 501.47 ft (a-b) Casing Diameter/Material
 4-inch PVC
 b. Water Table Depth 43.53 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	13A101189

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0915	—	12.38	0.087	9.51	8.16	120.0	—	600	43.62	CLEAR/NONE
0920		13.40	0.090	9.59	7.32	132.2	—	650	43.63	CLEAR/NONE
0925		13.87	0.088	10.04	6.01	165.9	2.98	650	43.64	CLEAR/NONE
0930		13.93	0.086	9.62	5.72	187.4	—	650	43.66	CLEAR/NONE
0935		14.03	0.086	9.40	5.62	201.0	—	650	43.67	CLEAR/NONE
0940		14.18	0.086	9.27	5.56	212.8	2.86	650	43.69	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE122D1-^{6w-}031218</u>	40-mL vials	3	HCl	VOCs	1030
<u>RE122D1-^{6w-}031218</u>	1-L amber	2	none	1,4-Dioxane	1030

Comments: + MS/MSD
when sample 200 m/min

Signature: [Signature] Date: 3-12-18



RESOLUTION CONSULTANTS

Well ID: RE 122 D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/12/18 Time: Start 9:30 am/pm
 Project No: 60266526 Finish 11:10 am/pm
 Site Location: Curtis + Hayden D.
 Weather Conds: Cloudy / Sunny, 40°F Collector(s): Farnell, Steve, Alu

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 615 ft c. Length of Water Column 571.3 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 43.70 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	049556X
QED	MP10	250

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:10	4	14.07	0.084	3.83	5.20	226.4	0.69	650	43.78	clear
10:20	6	13.99	0.084	4.14	5.14	234.0		650	43.80	clear
10:25	7	13.92	0.084	4.31	5.13	238.1		650	43.80	"
10:30	7	13.96	0.085	4.17	5.13	240.7		"	43.80	"
10:35		13.94	0.084	4.18	5.13	242.9		"	43.82	"
10:40		14.02	0.085	4.44	5.13	245.4		"	43.82	"

d. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Have parameters stabilized	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE122D2-6W-031218	40-mL vials	3	HCl	VOCs	11:00
"	1-L amber	2	none	1,4-Dioxane	"

Comments: Water sampled 200 mg/L

Signature: [Signature] Date: 3/12/18



RESOLUTION
CONSULTANTS

Well ID: RF122-D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/12/18 Time: Start 08:30 am/pm
 Project No: 60266526 Finish _____ am/pm
 Site Location: Curtis + Hayden Rd
 Weather Conds: _____ Collector(s): F. B. A. H. S. W.

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 740 ft c. Length of Water Column 695.97 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 44.03 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature $\pm 3\%$ - Turbidity $\pm 10\%$ - D.O. $\pm 10\%$ (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10 mV Remove a minimum 1 screen volume
 - Conductivity $\pm 3\%$ - Drawdown $< 0.3'$

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	U84604X
MPIO	QED	U84800X

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1050	-	-	-	-	-	-	-	-	44.03	Clear
1055	-	12.31	0.024	8.81	4.51	244.1	4.64	600	44.04	clear
1105	-	12.25	0.024	8.51	4.53	254.3	-	600	44.04	"
1120	-	12.28	0.024	3.36	4.41	281.0	-	600	44.05	"
1125	-	12.30	0.024	3.41	4.35	290.5	-	600	44.06	"
1135	-	11.86	0.023	3.47	4.26	305.0	-	600	44.07	"

d. Acceptance criteria pass/fail

- | | Yes | No | N/A |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(continued on back)

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RF122-D3-GW-031218</u>	40-mL vials	3	HCl	VOCs	12:05
<u>RF122-D3-GW-031218</u>	1-L amber	2	none	1,4-Dioxane	12:05

Comments: When sampled 200 mL/min

Signature: _____

Date: 3/12/18



RESOLUTION CONSULTANTS

Well ID: RE108-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/12/18 Time: Start 230 am/pm
 Project No: 60266526 Finish 1600 am/pm
 Site Location: Coxsack St
 Weather Conds: 40, Sunny/Cloudy Collector(s): F.B, A.H

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 555 ft c. Length of Water Column 542.95 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 42.05 ft d. Calculated System Volume (see back) 23.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	084604X
QED	MP10	084800X

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1445	-	11.76	0.083	17.88	5.58	220.0	-	500	42.05	clear
1455	-	12.51	0.084	14.85	5.39	234.7	5.22	650	42.05	"
1500	-	12.78	0.083	10.83	4.77	277.1	-	650	42.08	"
1505	5 gal	12.76	0.083	9.97	4.94	277.6	-	675	42.09	"
1515	-	12.77	0.082	9.64	4.91	282.3	-	700	42.09	"
1530	-	12.79	0.082	9.16	4.64	305.9	-	700	42.09	"

d. Acceptance criteria pass/fail

- | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(continued on back)

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

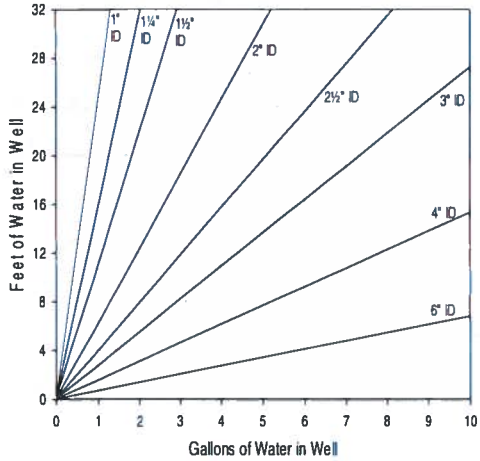
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE108DI-GW-03/12/18</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1600</u>
<u>" "</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1600</u>

Comments: water sampled 200mL/min

Signature: [Handwritten Signature]

Date: 3/12/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

1540

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
3:40	10 Gal	12.77	0.082	8.64	4.84	298.6	-	700	47.04	clear
15:45	-	12.77	0.082	8.63	4.56	316.6	2.36	700	47.09	clear
15:50	-	12.78	0.082	8.71	4.61	313.1	1.96	700	42.09	clear
15:55	15.5	12.78	0.082	8.71	4.85	313.8	2.06	700	42.09	clear
16:00	Sample time									



RESOLUTION CONSULTANTS

Well ID: RE108D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/12/18 Time: Start 1430 am/pm am
 Project No: 60266526 Finish 1615 am/pm am
 Site Location: Corona St. Collector(s): S WRIGHT
 Weather Conds: 40, sun

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 655 ft c. Length of Water Column 62.55 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 42.45 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	13A101189

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1450	-	11.98	0.087	13.74	5.57	192.5	-	600	42.55	CLEAR/NONE
1455		14.04	0.077	9.63	5.55	181.1	1.84	650	42.55	CLEAR/NONE
1500		14.03	0.075	9.44	5.42	208.3	-	650	42.55	CLEAR/NONE
1505		14.03	0.076	9.12	5.35	221.6	-	650	42.55	CLEAR/NONE
1510		14.04	0.076	8.88	5.33	241.6	1.92	650	42.55	CLEAR/NONE
1515		14.04	0.077	8.62	5.31	256.3	-	650	42.55	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

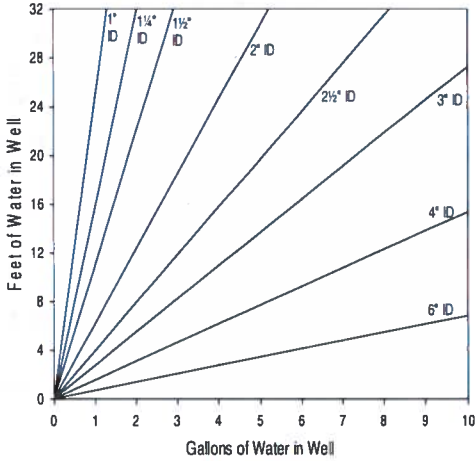
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE108D2-GW-031218	40-mL vials	3	HCl	VOCs	1610
RE108D2-GW-031218	1-L amber	2	none	1,4-Dioxane	1610

Comments: When sampled 200ml/min

Signature: [Signature] Date: 3-12-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1520	5	14.06	0.076	8.40	5.32	259.2	-	650	42.55	CLEAR/NONE
1525		14.06	0.076	8.03	5.33	260.2	1.95	650	42.55	CLEAR/NONE
1530		14.06	0.076	7.99	5.33	263.8	-	650	42.55	CLEAR/NONE
1535		14.06	0.077	7.97	5.32	266.3	-	650	42.55	CLEAR/NONE
1540		14.07	0.077	7.96	5.32	268.9	1.88	650	42.55	CLEAR/NONE
1545	10	14.05	0.077	7.70	5.33	272.9	-	650	42.55	CLEAR/NONE
1550		14.05	0.077	7.61	5.33	274.1	-	650	42.55	CLEAR/NONE
1555		14.05	0.077	7.50	5.32	276.4	2.01	600	42.55	CLEAR/NONE
1600		14.06	0.077	7.37	5.32	277.3	-	600	42.55	CLEAR/NONE
1605	13.5	14.07	0.077	7.31	5.32	279.2	-	600	42.55	CLEAR/NONE



Well ID: RE103-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/14/18 Time: Start 09:30 am/pm
 Project No: 60266526 Finish 11:00 am/pm
 Site Location: Avoca
 Weather Conds: 32° F Sunny, Wind 17 mph W Collector(s): F. B. A. H.

- 1. WATER LEVEL DATA: (measured from Top of Casing)**
- a. Total Well Length 673 ft c. Length of Water Column 632.7 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 40.30 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

- 2. WELL PURGE DATA**
- a. Purge Method: Geotech bladder pump with drop tube assembly
- b. Acceptance Criteria defined (see workplan)
- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume
- c. Field Testing Equipment used:
- | Make | Model | Serial Number |
|------|-------|---------------|
| YSI | 556 | U49556X |

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
9:50		13.47	0.040	24.60	5.71	183.5	2.17	550	40.31	Clear
10:00		13.60	0.040	15.56	5.55	207.0		550	11	11
10:05		13.70	0.045	11.46	5.71	225.9		550	11	11
10:20		13.65	0.038	6.93	5.48	242.6	3.18	575	40.32	11
10:25		13.74	0.038	6.64	5.48	243.9		550	11	11
10:35		13.73	0.038	6.64	5.47	246.1		550	40.33	

- d. Acceptance criteria pass/fail
- | | | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--|---------------------|
| Has required volume been removed | Yes | No | N/A | | (continued on back) |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
- If no or N/A - Explain below.

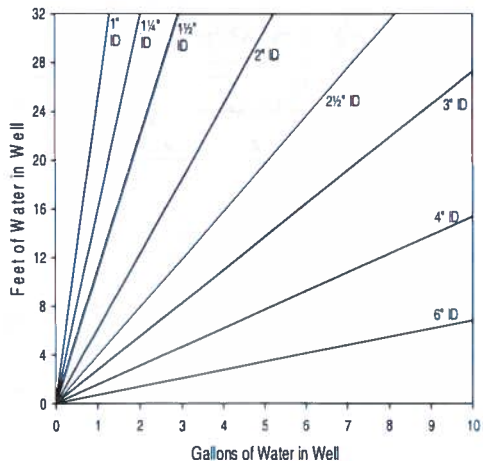
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE103D2-GW-031418</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1100</u>
<u>RE103D2-GW-031418</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1100</u>

Comments: Sample @ 2002 ft

Signature: [Handwritten Signature] Date: 3/14/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:46		13.80	0.038	6.41	5.47	246.5		550	40.33	Clear.
10:45		13.79	0.038	6.25	5.47	246.8		575	40.38	"
10:50		13.88	0.038	6.32	5.47	247.0	1.97	550	40.40	"
10:55	13.5	13.76	0.037	6.24	5.46	247.2		550	40.41	"
11:00	Sample Time									



RESOLUTION CONSULTANTS

Well ID: RE103-D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 31/11/18 Time: Start 0930 am/pm
 Project No: 60266526 Finish 1105 am/pm
 Site Location: Avoca
 Weather Conds: 30°F, Sunny, Wind 12 mph W Collector(s): F. B., A. H.

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 735 ft c. Length of Water Column 694.55 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 40.45 ft d. Calculated System Volume (see back) 12.8 gal. 15 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	077123X
MP10	ED-2.1	1847.02X

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0930	-	-	-	-	-	-	-	500	40.45	clear
0950	-	12.28	0.033	8.04	6.27	156.9	5.82	600	40.43	clear
0955	-	12.28	0.033	8.02	6.23	173.0	-	600	40.45	" "
1000	-	12.32	0.033	8.55	6.23	193.3	4.78	600	40.46	" "
1005	5 Gal	12.32	0.032	8.39	6.22	209.7	-	600	-	clear
1010	-	12.39	0.032	8.02	6.19	219.6	4.32	600	40.47	clear

- d. Acceptance criteria pass/fail
- | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- If no or N/A - Explain below.
- (continued on back)

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE103-D3-GW-031412</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1105</u>
<u>RE103D3-GW-031412</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1105</u>

Comments: Sample @ 200ml/min

Signature: [Signature] Date: 03/14/18



RESOLUTION CONSULTANTS

Well ID: RE103D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/14/18 Time: Start 0900 (am/pm) (?)
 Project No: 60266526 Finish 1045 (am/pm)
 Site Location: Ayoca
 Weather Conds: 30s, SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 645 ft c. Length of Water Column 604.52 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 40.48 ft d. Calculated System Volume (see back) 8.8 gal. 75 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature $\pm 3\%$
 - pH ± 0.1 unit
 - Conductivity $\pm 3\%$
 - Turbidity $\pm 10\%$
 - ORP ± 10 mV
 - Drawdown $< 0.3'$
 - D.O. $\pm 10\%$ (values > 0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	05D2720

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0920	—	8.78	0.118	46.94	8.53	162.7	—	650	40.52	CLEAR/none
0925		10.28	0.114	15.83	7.39	117.2	—	650	40.54	CLEAR/none
0930		11.52	0.115	12.31	5.83	145.8	1.88	700	40.56	CLEAR/none
0935		11.58	0.115	10.22	5.58	175.1	—	700	40.58	CLEAR/none
0940		11.69	0.115	9.16	5.47	197.3	—	700	40.60	CLEAR/none
0945		11.83	0.116	8.47	5.34	217.3	2.24	700	40.61	CLEAR/none

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE103D1-60-031418</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1045</u>
<u>RE103D1-60-031418</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1045</u>

Comments: when sample 200 mL in

Signature:  Date: 3-14-18



Well ID: RE104-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/14/18 Time: Start 1245 am/pm
 Project No: 60266526 Finish 1415 am/pm
 Site Location: Hilltop
 Weather Conds: 30s, sun Collector(s): S. WR (64T)

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 375 ft c. Length of Water Column 337.51 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 37.49 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	05D2720

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1255	—	10.98	0.084	32.15	5.57	189.9	—	650	37.49	CLEAR/NONE
1300		11.56	0.088	13.79	5.08	213.0	3.32	650	37.49	CLEAR/NONE
1305		11.59	0.089	11.36	4.90	232.8	—	650	37.49	CLEAR/NONE
1310		11.89	0.089	10.44	4.88	245.1	—	650	37.50	CLEAR/NONE
1315		11.87	0.089	10.07	4.86	253.0	3.18	650	37.50	CLEAR/NONE
1320		11.92	0.089	9.79	4.84	260.4	—	650	37.50	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE104D1-GW-031418</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1415</u>
<u>RE104D1-GW-031418</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1415</u>

Comments

5 pumps 200 mL / min.

Signature

Date

3-14-18



Well ID: RE104-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/14/18 Time: Start 1245 am/pm
 Project No: 60266526 Finish 1425 am/pm
 Site Location: Hilltop
 Weather Conds: 30+ Sun Collector(s): F.B, A.H

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 735 ft c. Length of Water Column 695.75 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 39.25 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly
- b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'
- c. Field Testing Equipment used:
- | Make | Model | Serial Number |
|------|-------|------------------|
| YSI | 556 | <u>13A101189</u> |

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
<u>1330</u>	<u>14.06</u>	<u>14.06</u>	<u>0.027</u>	<u>9.73</u>	<u>6.01</u>	<u>224.3</u>		<u>600</u>	<u>39.26</u>	<u>clear</u>
<u>1345</u>	<u>5</u>	<u>14.00</u>	<u>0.026</u>	<u>8.82</u>	<u>6.01</u>	<u>228.1</u>		<u>600</u>	<u>39.23</u>	<u>clear</u>
<u>1410</u>		<u>13.80</u>	<u>0.026</u>	<u>8.25</u>	<u>5.98</u>	<u>237.7</u>		<u>600</u>	<u>39.23</u>	<u>"</u>
<u>1415</u>	<u>109.1</u>	<u>13.84</u>	<u>0.026</u>	<u>8.14</u>	<u>5.98</u>	<u>237.5</u>	<u>3.02</u>	<u>600</u>	<u>39.24</u>	<u>"</u>
<u>1420</u>	<u>-</u>	<u>13.79</u>	<u>0.026</u>	<u>8.07</u>	<u>5.97</u>	<u>239.4</u>	<u>-</u>	<u>600</u>	<u>39.24</u>	<u>clear</u>
<u>1425</u>	<u>-</u>	<u>13.79</u>	<u>0.026</u>	<u>8.13</u>	<u>5.97</u>	<u>239.6</u>	<u>2.96</u>	<u>600</u>	<u>39.24</u>	<u>clear</u>

- d. Acceptance criteria pass/fail
- | | Yes | No | N/A |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- If no or N/A - Explain below.

3. SAMPLE COLLECTION:

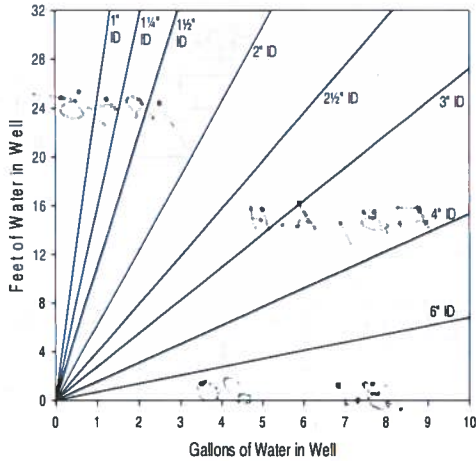
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE104D2-GW-031418</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1425</u>
<u>RE104D2-GW-031418</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1425</u>

Comments

Signature [Signature] Date 03/14/2018
 LowFlow-GWa - Mar 2018.xlsx

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)		Temp	Conduct.	DO	pH	ORP	Turbidity	Flow Rate	Depth to water	Color/Odor
Time (24 hr)	Volume Removed (gallons)	(°C)	(mS/cm)	(mg/L)		(mV)	(NTU)	(mL/min)	(ft)	



Well ID: RE104-D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/14/18 Time: Start 12:45 am/pm
 Project No: 60266526 Finish 1415 am/pm
 Site Location: Hilltop
 Weather Conds: 30s, Sunny Collector(s): A.H., F.B.

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 785 ft
 - b. Water Table Depth 39.70 ~~785~~ ft
 - c. Length of Water Column 745.3 ft (a-b)
 - d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)
- Casing Diameter/Material 4-inch PVC

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly
- b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	0502872 Ak

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1335	13.28	13.28	0.023	5.10	5.16	257.6		600	39.69	Clear
1345	6	14.41	0.023	4.98	5.15	261.1		600	39.69	Clear
1405		13.24	0.023	4.51	5.16	265.9		600	39.69	Clear
1415		13.45	0.023	4.48	5.16	266.4	12.94	600	39.69	"

- d. Acceptance criteria pass/fail
- | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- If no or N/A - Explain below.

3. SAMPLE COLLECTION:

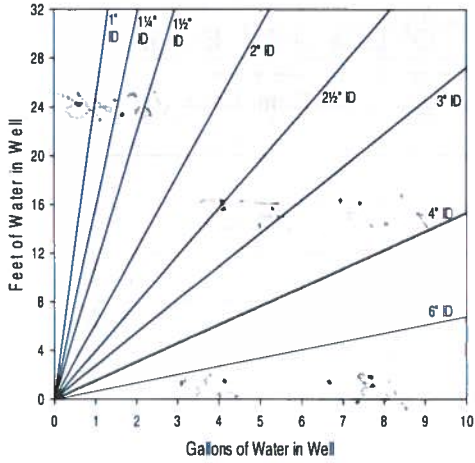
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE104D3-GW-031418</u>	40-mL vials	3	HCl	VOCs	<u>1415</u>
<u>RE104D3-GW-031418</u>	1-L amber	2	none	1,4-Dioxane	<u>1415</u>

Comments: Sampled @ 200 mL/min

Signature: [Signature] Date: 3/14/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor



RESOLUTION
CONSULTANTS

Well ID: RE109-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15/18 Time: Start 9:30 am/pm
 Project No: 60266526 Finish 12:00 am/pm
 Site Location: Bethpage, NY
 Weather Conds: COOL, Sunny - 35°F Collector(s): J. McCarthy

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 400 ft c. Length of Water Column 554.24 ft (a-b) Casing Diameter/Material
 4-inch PVC
 b. Water Table Depth 45.71 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make YSI Model 556 Serial Number 077123x

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:10	1	12.64	0.085	10.91	6.46	161.9	3.42	900	48.81	Clear
10:20	3	12.80	0.085	10.74	5.93	195.5	25.3	900	45.81	Clear
10:30	3-4	12.91	0.085	3.76	5.73	235.7	-	900	45.81	Clear
10:40	6	13.17	0.086	4.08	5.38	261.8	-	900	45.81	Clear
10:50	9	13.09	0.086	4.22	5.29	273.4	-	900	45.81	Clear
11:00	11.5	13.22	0.086	4.23	5.24	280.7	-	900	45.81	Clear

d. Acceptance criteria pass/fail

Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued on back)

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

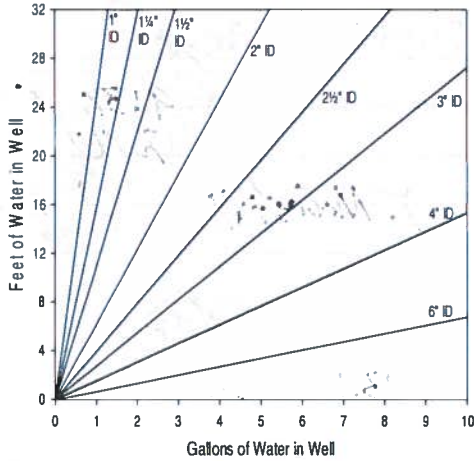
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE109D1-GW-031518</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>10:10</u>
<u>RE109D1-GW-031518</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>11:10</u>
<u>Dupe-GW-031518</u>					

Comments: Dupe collected at this well
Sample collected @ 200 mL/min

Signature: Thomas McCarthy Date: 03/15/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3920
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
11:10	13-14	13.19	6.083	4.31	5.16	285.6	7.41	900	45.81	Clear



RESOLUTION CONSULTANTS

Well ID: RE 109D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15/18 Time: Start 1020 am/pm
 Project No: 60266526 Finish 1200 am/pm
 Site Location: St. Martin
 Weather Conds: 48, SUN Collector(s): J. CHRISTOPHER

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 575 ft c. Length of Water Column 529 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 46.15 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	0502720

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1020	—	—	—	—	—	—	—	—	—	Pump On
1025	—	9.86	0.092	18.54	6.94	146.6	17.1	600	46.32	clear / none
1030	—	10.28	0.093	6.99	5.73	180.5	—	600	46.32	"
1035	—	10.41	0.092	6.21	5.61	188.7	12.6	600	46.32	"
1040	—	10.64	0.092	5.00	5.55	194.8	—	600	46.32	"
1050	59.1	10.70	0.092	3.94	5.54	208.4	19.1	600	46.32	"

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

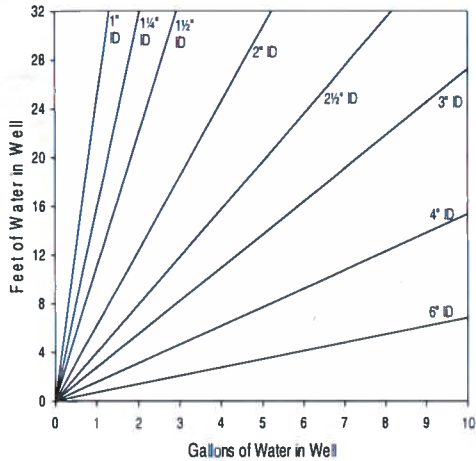
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE109D2-6W-031518</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1145</u>
<u>RE109D2-6W-031518</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1145</u>

Comments Sample collected @ 200 mL/min

Signature

Date 3/15/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID: **RE109D2**

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1100	—	10.75	0.092	3.57	5.53	208.7	18.6	600	46.32	clear / none
1110	—	10.82	0.092	3.46	5.53	208.9	—	600	46.32	"
1126	10.91	10.84	0.092	3.21	5.52	209.7	17.2	600	46.32	"
1130	—	10.84	0.092	3.09	5.52	209.9	—	600	46.32	"
1140	17.191	10.85	0.092	2.91	5.52	210.1	17.9	600	46.32	"



RESOLUTION CONSULTANTS

Well ID: RE10903

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15/18 Time: Start 0945 am/pm
 Project No: 60266526 Finish 1115 am/pm
 Site Location: St. Martin St
 Weather Conds: 40% SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 605 ft c. Length of Water Column 589 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 45.95 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

- b. Acceptance Criteria defined (see workplan)
- Temperature $\pm 3\%$
 - pH ± 0.1 unit
 - Conductivity $\pm 3\%$
 - Turbidity $\pm 10\%$
 - ORP $\pm 10mV$
 - Drawdown $< 0.3'$
 - D.O. $\pm 10\%$ (values > 0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	BLUE TAPE

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1000	—	12.11	0.082	19.27	6.60	141.8	—	650	46.00	CLEAR/NONE
1005		12.93	0.081	5.32	5.79	145.7	—	650	46.11	CLEAR/NONE
1010		13.01	0.081	4.51	5.65	160.2	491	650	46.15	CLEAR/NONE
1015		13.11	0.081	3.38	5.57	184.9	—	650	46.16	CLEAR/NONE
1020		13.23	0.087	3.65	5.86	178.8	—	650	46.17	CLEAR/NONE
1025		13.26	0.087	3.54	5.88	140.8	160	650	46.18	CLEAR/NONE

d. Acceptance criteria pass/fail

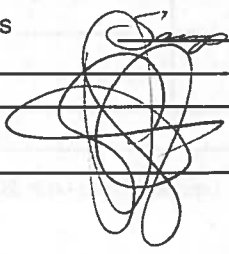
	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

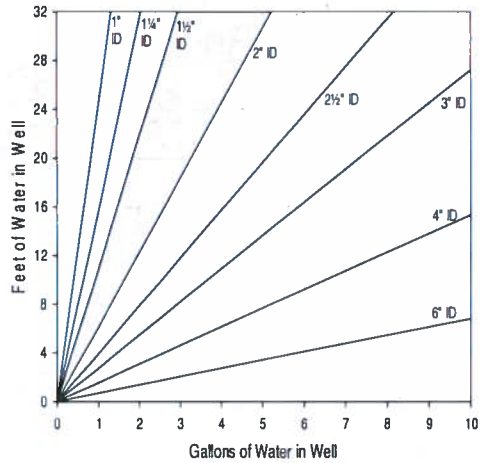
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE10903-600-031518</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1115</u>
<u>RE10903-600-031518</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1115</u>

Comments: Sample collected @ 200 mL/min

Signature:  Date: 3-15-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1030	5	13.32	0.087	3.03	5.91	123.4	—	650	46.19	CLOUDY/NONE
1035		13.41	0.087	2.92	5.91	123.6	—	650	46.20	CLOUDY/NONE
1040		13.48	0.088	2.88	5.91	123.6	123	650	46.21	CLOUDY/NONE
1045		13.48	0.087	2.73	5.90	126.0	—	650	46.21	CLOUDY/NONE
1050		13.50	0.086	2.68	5.85	129.1	—	650	46.21	CLOUDY/NONE
1055	10	13.52	0.086	2.64	5.82	135.1	102.9	650	46.21	CLOUDY/NONE
1100		13.55	0.085	2.55	5.78	145.3	—	650	46.22	CLOUDY/NONE
1105		13.64	0.085	2.48	5.75	152.0	—	650	46.22	CLOUDY/NONE
1110		13.63	0.085	2.47	5.75	155.4	57.6	650	46.22	CLOUDY/NONE
1115	13.5	13.60	0.085	2.44	5.74	157.4	—	650	46.22	CLOUDY/NONE



RESOLUTION CONSULTANTS

Well ID: RE126D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15 / 18 Time: Start 12:40 am/pm
 Project No: 60266526 Finish 14:20 am/pm
 Site Location: Bethpage, NY
 Weather Conds: Cool - Clear - 40°F Collector(s): J. McCarthy

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 525 ft c. Length of Water Column 478.96 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 46.04 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	586	3A101189

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
13:10	1-2	15.11	0.100	9.03	5.20	241.3	2.49	800	46.61	Clear
13:20	3	15.28	0.101	8.80	5.14	249.9	-	800	46.61	Clear
3:30	5	15.36	0.100	8.62	5.09	255.6	-	800	46.61	Clear
13:40	6-7	15.11	0.101	8.54	5.04	260.2	-	800	46.61	Clear
3:50	8-9	15.10	0.101	8.56	5.04	265.0	-	800	46.61	Clear
14:00	11	15.11	0.101	8.55	5.02	268.3	-	800	46.61	Clear

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

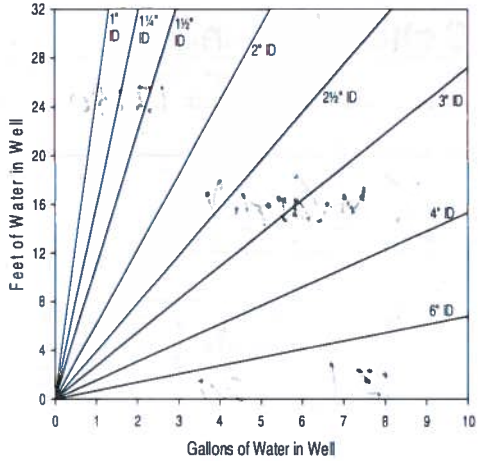
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE126D1 - Gw - 031518</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>14:20</u>
	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>14:20</u>

Comments: Sample taken @ flow rate 200 mL/min

Signature: Thomas McCarthy Date: 03/15/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
14:10	11.5-12	14.93	0.100	8.37	4.99	273.3	2.10	800	46.61	clear
14:20	13-14	14.90	0.101	8.34	5.00	274.1	1.94	800	46.61	clear



RESOLUTION
CONSULTANTS

Well ID: RE126D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15/18 Time: Start 1230 am/pm
 Project No: 60266526 Finish 1430 am/pm
 Site Location: _____
 Weather Conds: 40, SUN Collector(s): J. CHRISTOPHER

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 580 ft c. Length of Water Column 532.4 ft (a-b) Casing Diameter/Material
 b. Water Table Depth 47.60 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)
 4-inch PVC

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

- b. Acceptance Criteria defined (see workplan)
- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	1149556X

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1300	—	13.66	0.108	21.31	7.76	145.3	—	600	47.62	CLEAR/NONE
1305	—	14.02	0.103	11.73	5.67	190.6	—	600	47.62	CLEAR/NONE
1310	—	14.04	0.104	7.15	5.57	197.8	4.85	600	47.62	CLEAR/NONE
1315	—	14.09	0.104	6.22	5.55	200.4	—	600	47.62	CLEAR/NONE
1320	—	14.15	0.104	5.68	5.54	205.8	—	600	47.62	CLEAR/NONE
1325	—	14.18	0.104	5.37	5.44	215.4	3.20	600	47.62	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

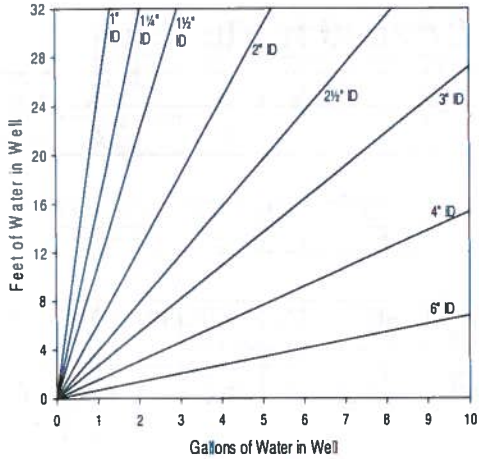
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE126D2-GW-031518</u>	40-mL vials	3	HCl	VOCs	1420
<u>RE126D2-GW-031518</u>	1-L amber	2	none	1,4-Dioxane	1420

Comments _____

Signature [Signature] Date 3-15-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe			One screen volume (4-inch well)
ID (in)	Gallon	Liter	
0.25	0.0025	0.0097	
0.375	0.0057	0.0217	
0.5	0.0102	0.0386	15 ft = 37.1 L / 9.8 G
0.75	0.0229	0.0869	20 ft = 49.4 L / 13.1 G
1	0.0408	0.1544	25 ft = 61.8 L / 16.3 G
1.25	0.0637	0.2413	30 ft = 74.3 L / 19.6 G
1.5	0.0918	0.3475	40 ft = 99.2 L / 26.1 G
2	0.1632	0.6178	50 ft = 123.6 L / 32.6 G
2.5	0.2550	0.9653	
3	0.3672	1.3900	
4	0.6528	2.4711	
6	1.4688	5.5600	

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1330	59.1	14.16	0.104	5.22	5.43	227.6	-	600	47.62	clear / none
1335	-	14.14	0.104	5.04	5.40	232.0	2.91	600	47.62	"
1340	-	14.04	0.104	5.04	5.39	233.2	-	600	47.62	"
1345	-	13.82	0.103	5.03	5.39	234.6	-	600	47.62	"
1350	-	13.98	0.104	4.91	5.41	234.6	2.77	600	47.62	"
1355	109.1	13.92	0.104	4.78	5.44	234.6	-	600	47.62	"
1400	-	13.81	0.103	4.80	5.43	234.9	-	600	47.62	"
1405	-	13.70	0.102	4.81	5.42	235.0	2.97	600	47.62	"
1410	-	14.09	0.103	4.74	5.40	231.4	-	600	47.62	"
1415	13.5							600	47.62	"



RESOLUTION CONSULTANTS

Well ID: RE12603

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/15/18 Time: Start 1230 am/pm (AM)
 Project No: 60266526 Finish 1415 am/pm (AM)
 Site Location: _____
 Weather Conds: 40, SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 665 ft c. Length of Water Column 618 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 47.28 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	BLUETAPE

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1250	-	11.33	0.045	8.14	6.86	146.3	-	650	47.30	CLEAR/NONE
1255		13.86	0.044	6.67	5.99	166.9	-	650	47.30	CLEAR/NONE
1300		15.89	0.043	4.63	5.66	194.8	2.63	650	47.30	CLEAR/NONE
1305		15.89	0.043	4.27	5.67	201.8	-	650	47.31	CLEAR/NONE
1310		15.86	0.042	4.19	5.67	206.9	-	650	47.31	CLEAR/NONE
1315		15.75	0.041	4.57	5.60	218.6	2.34	650	47.31	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

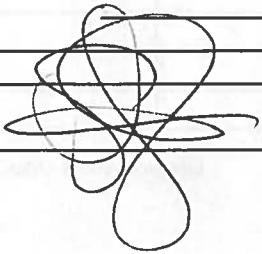
If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

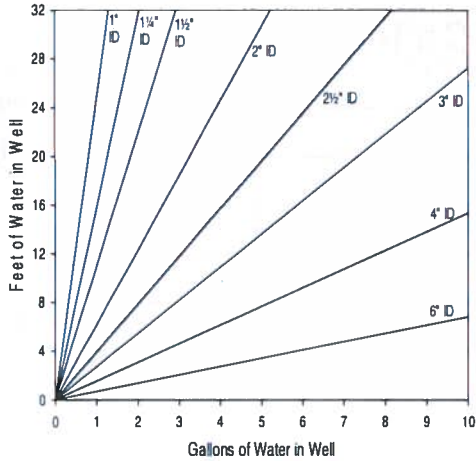
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE12603-BW-031518</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1410</u>
<u>RE12603-GW-031518</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1410</u>

Comments

Signature 

Date 3-15-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1320	5	15.69	0.040	5.85	5.57	219.9	—	650	47.31	CLEAR/NONE
1325		15.57	0.041	5.05	5.56	226.6	2.44	650	47.31	CLEAR/NONE
1330		15.52	0.040	5.15	5.55	231.3	—	650	47.31	CLEAR/NONE
1335		15.59	0.041	5.27	5.56	233.9	—	650	47.31	CLEAR/NONE
1340		15.57	0.041	5.32	5.55	237.5	2.52	650	47.31	CLEAR/NONE
1345	10	15.39	0.041	5.46	5.55	239.7	—	650	47.31	CLEAR/NONE
1350		15.50	0.041	5.41	5.55	241.7	—	650	47.31	CLEAR/NONE
1355		15.45	0.041	5.36	5.56	243.1	2.36	650	47.31	CLEAR/NONE
1400		15.42	0.040	5.24	5.55	244.4	—	650	47.31	CLEAR/NONE
1405	13.5	15.41	0.040	5.40	5.55	246.4	→	650	47.31	CLEAR/NONE



RESOLUTION CONSULTANTS

Well ID: REISIDI

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start 8:25 am/pm
 Project No: 60266526 Finish 8:45 am/pm
 Site Location: _____
 Weather Conds: 37° Sunny, Windy Collector(s): ALT

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 455 ft c. Length of Water Column 418.5 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 36.50 ft d. Calculated System Volume (see back) 15.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	13A101189
LaMotte	2020	65444

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
855		10.26	0.100	11.09	7.24	169.4	3.24	700	36.50	clear clear
900		10.38	0.100	10.46	6.73	207.9		700	36.56	"
905	4	10.38	0.100	10.28	6.58	226.8		700	36.55	"
910		10.52	0.100	9.91	6.48	246.2		700	36.55	"
915		10.30	0.099	9.89	6.40	267.0		700	36.56	"
920		10.60	0.100	9.45	6.27	288.7		700	36.55	"

- d. Acceptance criteria pass/fail
- | | | | | |
|-------------------------------------|---|-----------------------------|------------------------------|---------------------|
| Has required volume been removed | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> | (continued on back) |
| Has required turbidity been reached | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> | |
| Have parameters stabilized | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> | |
- If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
REISIDI-GW-031618	40-mL vials	3	HCl	VOCs	9:45
"	1-L amber	2	none	1,4-Dioxane	9:45

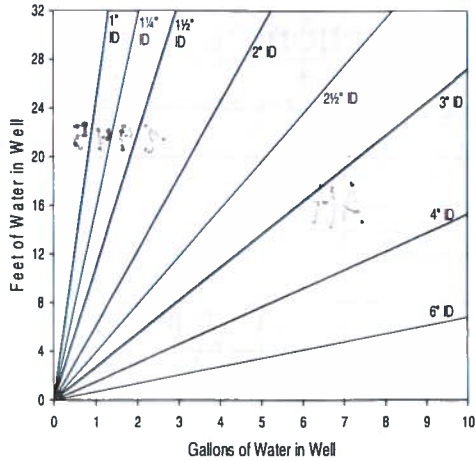
Comments _____

Signature _____

Date _____

3/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1.0	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
9:25	8	10.62	0.100	9.19	6.18	304.2	—	700	35.55	Clear
9:35	10	10.72	0.100	8.44	6.00	324.3	—	700	35.55	Clear



RESOLUTION
CONSULTANTS

Well ID: RE131DZ

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start 8:00 am/pm
 Project No: 60266526 Finish 10:45 am/pm
 Site Location: Bethpage, NY
 Weather Conds: 34°F windy Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 595 ft c. Length of Water Column 558.05 ft (a-b) Casing Diameter/Material
 4-inch PVC
 b. Water Table Depth 36.97 ft d. Calculated System Volume (see back) 16.2 gal. 25 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	U49556x

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
855	-	8.98	0.073	14.45	4.24	267.7	-	600	37.00	clear/none
900	-	8.84	0.072	12.66	4.30	267.5	-	600	37.00	"
910	-	8.49	0.071	12.27	4.22	274.3	6.41	600	37.00	"
920	-	8.47	0.069	11.29	4.11	288.8	-	400	37.00	"
940	8 gal	9.21	0.071	8.97	4.22	304.1	-	700	37.00	"
1010	10 gal	10.36	0.073	6.27	4.30	310.7	2.46	700	37.00	"

d. Acceptance criteria pass/fail (continued on back)

Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

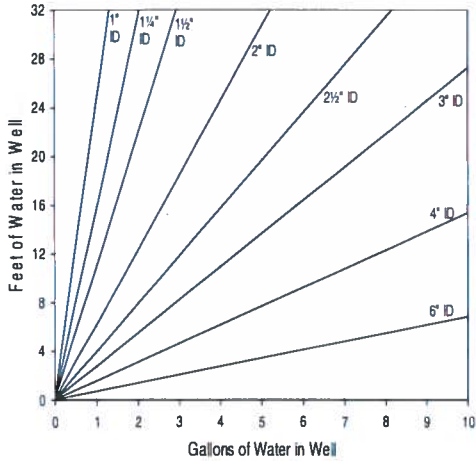
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE131DZ-GW-031618</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>10:45</u>
<u>RE131DZ-GW-031618</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>10:45</u>

Comments

Signature: [Signature] Date: 03/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume (4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)		Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
Time (24 hr)	Volume Removed (gallons)									
1020	—	10.33	0.073	6.04	4.31	310.9	—	900	37.00	clear / none
1030	—	10.28	0.073	5.89	4.31	311.8	2	900	37.00	" "
1040	16.5 gal	10.26	0.073	5.71	4.31	312.1	—	900	37.00	" "



RESOLUTION
CONSULTANTS

Well ID: RE131D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start 8:20 am/pm
 Project No: 60266526 Finish 9:45 am/pm
 Site Location: Bethpage, NY
 Weather Conds: Cool - 30°F Collector(s): V. McLarty

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 685 ft c. Length of Water Column 647.65 ft (a-b) Casing Diameter/Material
4-inch PVC
 b. Water Table Depth 37.37 ft d. Calculated System Volume (see back) 13.1 gal. 20' screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

- b. Acceptance Criteria defined (see workplan)
- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	0512372 AK

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
8:40	1	10.89	0.038	8.98	5.18	184.7	3.14	900	37.38	Clear
8:50	4	11.09	0.039	8.99	5.05	211.7	-	900	37.38	Clear
9:00	4-5	11.01	0.039	8.60	5.04	224.1	-	900	37.38	Clear
9:10	9	11.10	0.038	8.46	5.05	235.9	-	900	37.38	Clear
9:15	11	11.48	0.039	8.07	5.05	242.2	-	900	37.38	Clear
9:20	12-13	11.37	0.039	8.10	5.05	243.3	-	900	37.38	clear

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

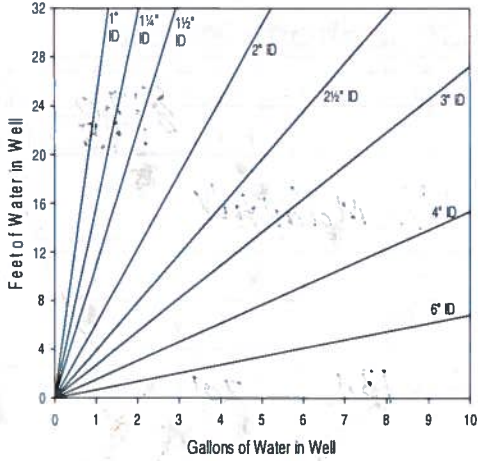
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE131D3-GW-031618</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>09:30</u>
<u>↓</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>09:30</u>

Comments _____

Signature Thomas McLarty Date 03/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20'ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID: **RE13103**

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
925	-	11.21	0.039	7.86	5.04	244.7	-	900	37.38	clear
930	14	11.16	20.039	7.86	5.04	249.1	-	900	37.38	clear



RESOLUTION
CONSULTANTS

Well ID: TT 101D

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start 11:40 am/pm
 Project No: 60266526 Finish _____ am/pm
 Site Location: Bethpage NY
 Weather Conds: Cool - windy - 35°F Collector(s): V. McCarthy

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 345 ft c. Length of Water Column 311.66 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 33.34 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
- pH ± 0.1 unit
- Conductivity ± 3%
- Turbidity ± 10%
- ORP ± 10mV
- Drawdown < 0.3'
- D.O. ± 10% (values >0.5 mg/L)
Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	05D2372 AK

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
11:55	2-3	15.00	0.092	1.66	4.42	276.8	-	800	33.37	Clear
12:05	4	14.95	0.093	0.87	4.52	255.6	-	800	33.37	Clear
12:15	6-7	14.98	0.093	0.81	4.49	250.1	-	800	33.37	Clear
12:25	9-10	14.90	0.093	0.79	4.48	247.2	-	800	33.37	Clear
12:35	11-12	14.91	0.093	0.72	4.46	248.1	-	800	33.37	Clear
12:45	12-13	14.93	0.093	0.69	4.45	248.3	2.63	800	33.37	Clear

- d. Acceptance criteria pass/fail (continued on back)
- | | Yes | No | N/A |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

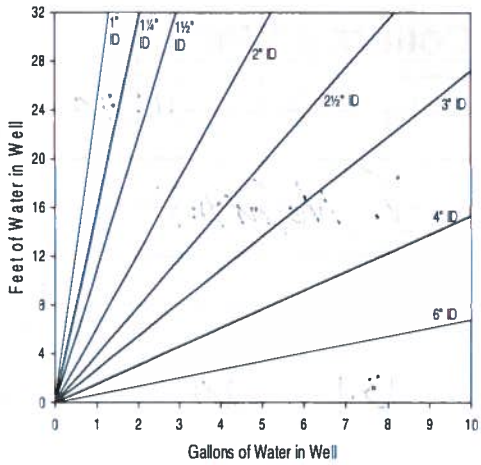
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>TT101D-GW-031618</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>12:45</u>
	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>12:45</u>

Comments _____

Signature Thomas McCarthy

Date 03/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor



RESOLUTION
CONSULTANTS

Well ID: TT101D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start 1140 am/pm
 Project No: 60266526 Finish 1240 am/pm
 Site Location: Wadsworth
 Weather Conds: _____ Collector(s): _____

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 595 ft c. Length of Water Column 560.6 ft (a-b) Casing Diameter/Material
4-inch PVC
 b. Water Table Depth 34.40 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly
- b. Acceptance Criteria defined (see workplan)
 - Temperature $\pm 3\%$ - Turbidity $\pm 10\%$ - D.O. $\pm 10\%$ (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10 mV Remove a minimum 1 screen volume
 - Conductivity $\pm 3\%$ - Drawdown $< 0.3'$
- c. Field Testing Equipment used:
- | Make | Model | Serial Number |
|------|-------|----------------|
| YSI | 556 | <u>U77123X</u> |

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1145	-	15.01	1.61	0.61	5.21	781.3	-	900	34.41	clear/none
1150	-	14.80	0.099	0.57	5.14	784.7	-	900	34.41	"
1200	5 gal	14.77	0.099	0.57	5.02	786.3	2.11	900	34.41	"
1210	-	14.77	0.099	0.56	4.99	788.6	-	900	34.41	"
1220	10 gal	14.75	0.098	0.54	4.91	798.6	-	900	34.41	"
1230	13.1 gal	14.72	0.098	0.50	4.86	703.1	3.91	900	34.41	"

- d. Acceptance criteria pass/fail
- | | Yes | No | N/A |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Has required volume been removed | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has required turbidity been reached | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have parameters stabilized | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- If no or N/A - Explain below.

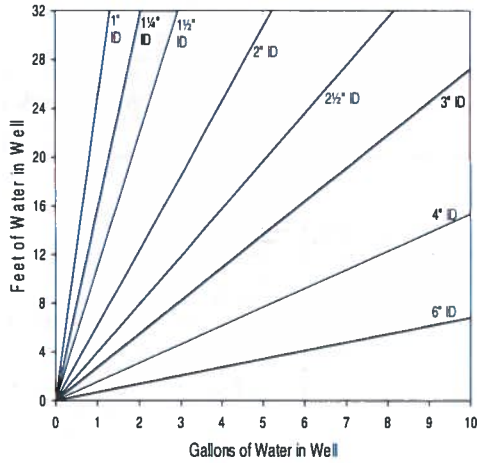
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>TT101D1-GW-031618</u>	40-mL vials	3	HCl	VOCs	1240
"	1-L amber	2	none	1,4-Dioxane	1240

Comments _____

Signature [Signature] Date 03/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor



RESOLUTION
CONSULTANTS

Well ID: TT101 DZ

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/16/18 Time: Start _____ am/pm
 Project No: 60266526 Finish 1235 am/pm
 Site Location: Wardsworth
 Weather Conds: 30s, windy, cloudy Collector(s): _____

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 765 ft c. Length of Water Column 730.08 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 34.92 ft d. Calculated System Volume (see back) 131 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly
 b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	050270
LaMotte	2020	65444

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1155	—	13.50	0.047	1.77	4.46	307.3	14.2	1100	34.96	Clear
1205	8	13.52	0.045	6.40	4.48	302.1	—	1100	34.99	"
1215	—	13.48	0.044	7.30	4.47	306.4	—	1000	34.99	"
1225	12.5	13.48	0.044	7.58	4.45	310.5	12.6	1000	34.99	"
1230	13.5	13.42	0.044	7.38	4.46	310.6	—	1000	34.99	"

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

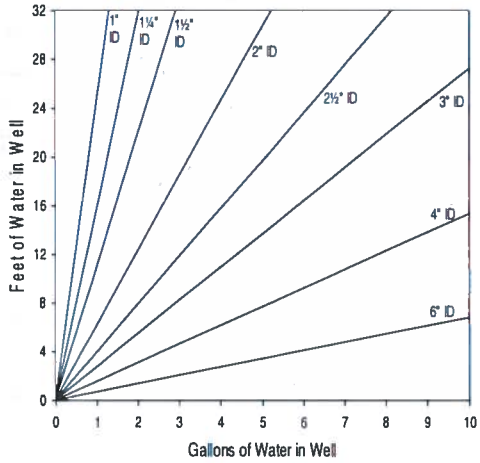
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
TT10102-GW-031618	40-mL vials	3	HCl	VOCs	1235
TT10102-GW-031618	1-L amber	2	none	1,4-Dioxane	1235

Comments MS/MSD

Signature [Signature] Date 3/16/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor



Well ID: RE123-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start 0915 am/pm
 Project No: 60266526 Finish 1045 am/pm
 Site Location: MTA yard
 Weather Conds: 42°F, Mostly Sunny, Wind 7 mph NW Collector(s): F. Bell

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 505 ft c. Length of Water Column 456 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 49.0 ft d. Calculated System Volume (see back) 131 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
- pH ± 0.1 unit
- Conductivity ± 3%
- Turbidity ± 10%
- ORP ± 10mV
- Drawdown < 0.3'
- D.O. ± 10% (values >0.5 mg/L)
Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	084604x
LaMotte	2030we	65744

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0920	-	-	-	-	-	-	-	700		clear
0940	-	11.05	0.107	10.64	5.36	213.4	-	700	49.03	clear
0945	-	11.39	0.112	10.74	4.89	246.4	3.71	700	49.04	clear
0950	5 Gal	11.44	0.111	10.57	4.96	252.6	-	700	49.05	clear
0955	-	11.23	0.111	10.56	4.94	258.7	2.40	700	49.06	clear
1000	-	11.27	0.114	10.57	4.88	273.3	-	700	49.07	clear

d. Acceptance criteria pass/fail (continued on back)

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

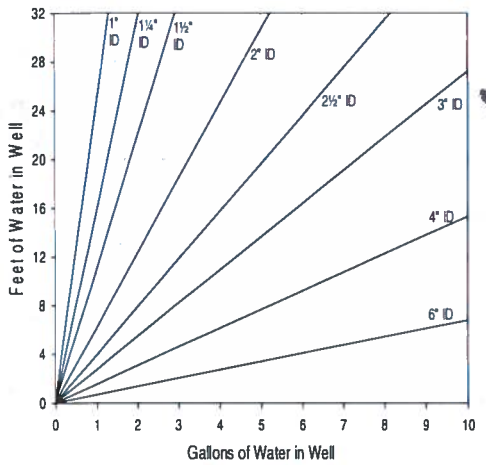
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE123D1-GW-031918</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1045</u>
<u>RE123D1-GW-031918</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1045</u>

Comments: when sampled 200 mL/min

Signature: [Signature]

Date: 3/19/2018

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume (4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:05	-	11.86	0.117	10.31	4.80	280.7	-	700	49.08	clear
10:10	-	11.81	0.117	10.23	4.81	281.7	1.86	700	49.10	clear
10:15	10.6	11.90	0.117	10.15	4.78	286.6	-	700	49.10	clear
10:20	-	11.91	0.117	10.10	4.76	289.7	1.78	700	49.09	clear
10:25	-	11.90	0.117	10.10	4.78	292.2	1.81	700	49.10	clear
10:30	13.5	11.96	0.117	10.07	4.77	294.3	1.86	700	49.08	clear
10:35										
10:40										
10:45	Sample time									



RESOLUTION CONSULTANTS

Well ID: RE123-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start _____ am/pm
 Project No: 60266526 Finish _____ am/pm
 Site Location: MTA yard
 Weather Conds: 42°F, Mostly Sunny Collector(s): _____

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 660 ft c. Length of Water Column 609.91 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 50.09 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make YSI Model 556 Serial Number 1341001189

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
9:35	1	10.83	0.029	10.81	6.87	135.4	-	800*	50.50	Clear
9:45	3	11.19	0.030	10.43	6.44	147.2	-	800*	50.50	Clear
9:55	5	11.14	0.029	10.15	6.12	170.3	2.34	800*	50.50	Clear
10:05	5-6	11.18	0.029	10.12	5.97	187.1	-	800*	50.50	Clear
10:15	7-8	11.10	0.029	10.22	5.82	207.1	-	700	50.50	Clear
10:25	10	11.20	0.029	11.20	5.76	205.3	-	700	50.50	Clear

d. Acceptance criteria pass/fail

Has required volume been removed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

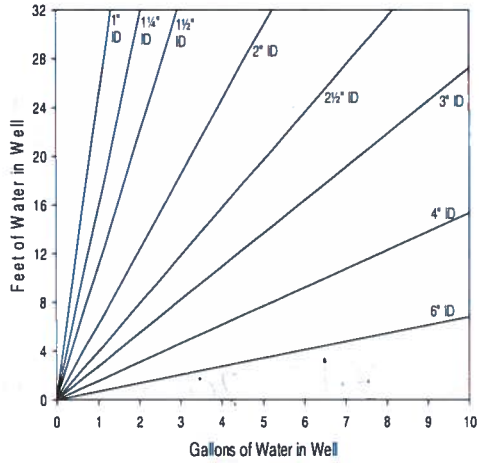
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE123D2-GW-031918</u>	40-mL vials	3	HCl	VOCs	1050
	1-L amber	2	none	1,4-Dioxane	1050

Comments: * Flow rates were 700 mL/min
When sampled flow rate 200 mL/min

Signature: [Signature] Date: 03/19/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:35	11-12	11.38	0.028	9.49	5.68	223.3	—	700	50.50	Clear
10:45	12-13	11.41	0.028	9.54	5.60	229.8	—	700	50.50	Clear



RESOLUTION CONSULTANTS

Well ID: RE123-D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start 0900 am/pm
 Project No: 60266526 Finish am/pm
 Site Location: N/A, just d
 Weather Conds: 40s, SUN Collector(s): J. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 840 ft c. Length of Water Column 790 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 49.81 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	BLUE TAPE

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0915	—	8.62	0.044	20.23	9.21	16.0	—	600	49.92	CLEAR/NONE
0920		9.22	0.029	19.99	8.09	40.4	—	600	49.92	CLEAR/NONE
0925		11.84	0.030	11.87	5.87	109.7	9.24	600	49.92	CLEAR/NONE
0930		12.11	0.032	8.29	5.75	-12.6	—	600	49.92	CLEAR/NONE
0935		12.01	0.031	6.24	5.73	-37.3	—	600	49.92	CLEAR/NONE
0940		11.80	0.032	4.84	5.75	-48.0	17.3	600	49.92	CLEAR/NONE

d. Acceptance criteria pass/fail (continued on back)

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

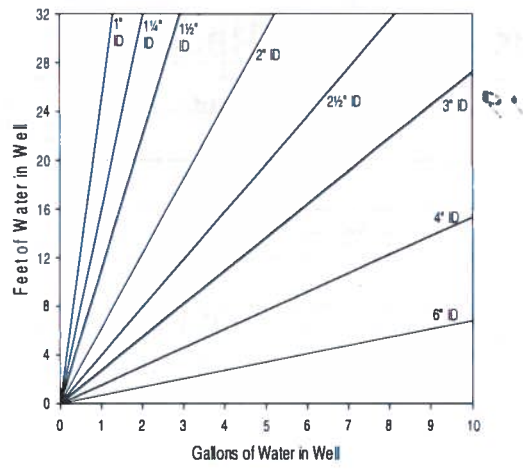
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE123D3-GW-031918</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1040</u>
<u>RE123D3-GW-031918</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1040</u>

Comments: Water sampled 200 ml per min

Signature: [Signature] Date: 3-19-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0945	5	12.01	0.037	4.01	5.88	-53.0	—	600	49.92	CLEAR/NONE
0950		11.99	0.039	3.51	5.93	-52.1	—	600	49.92	CLEAR/NONE
0955		11.94	0.040	2.44	5.96	-51.3	21.2	600	49.92	CLEAR/NONE
1000		12.09	0.039	1.94	5.95	-51.2	—	600	49.92	CLEAR/NONE
1005		12.03	0.038	1.28	5.91	-49.1	—	600	49.92	CLEAR/NONE
1010		12.11	0.037	0.98	5.89	-47.0	19.9	600	49.92	CLEAR/NONE
1015	10	12.27	0.037	0.91	5.87	-45.3	—	600	49.92	CLEAR/NONE
1020		12.34	0.036	0.81	5.84	-42.2	—	600	49.92	CLEAR/NONE
1025		12.19	0.035	0.72	5.81	-36.4	18.0	600	49.92	CLEAR/NONE
1030		12.38	0.035	0.63	5.79	-34.9	—	600	49.92	CLEAR/NONE
1035		12.45	0.034	0.60	5.77	-32.8	—	600	49.92	CLEAR/NONE
1040										



RESOLUTION
CONSULTANTS

Well ID: RE125-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start 1215 am/pm am
 Project No: 60266526 Finish 1400 am/pm am
 Site Location: Dianne St
 Weather Conds: 40s, SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 345 ft c. Length of Water Column 310 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 34.90 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature $\pm 3\%$
 - pH ± 0.1 unit
 - Conductivity $\pm 3\%$
 - Turbidity $\pm 10\%$
 - ORP $\pm 10\text{mV}$
 - Drawdown $< 0.3'$
 - D.O. $\pm 10\%$ (values > 0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	BLUE TAPE

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1230		13.11	0.137	9.68	6.08	113.7	—	650	34.90	CLEAR/NONE
1235		14.22	0.145	6.41	5.13	139.4	—	650	34.15	CLEAR/NONE
1240		14.14	0.143	5.68	4.85	163.8	2.98	650	34.05	CLEAR/NONE
1245		14.11	0.143	5.60	4.83	180.9	—	650	34.33	CLEAR/NONE
1250		14.23	0.143	5.59	4.83	190.0	—	650	34.94	CLEAR/NONE
1255		14.12	0.143	5.77	4.83	198.3	3.82	650	35.11	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE125D1-6w-031918</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1355</u>
<u>RE125D1-6w-031915</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1355</u>

Comments

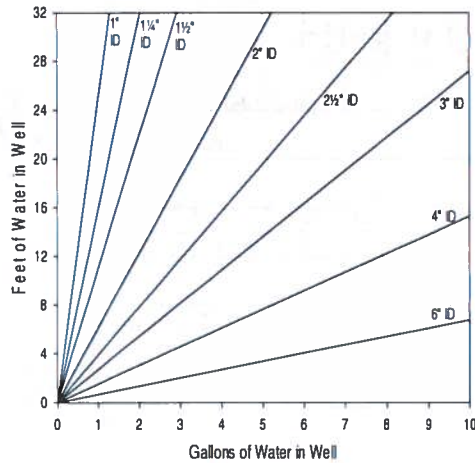
When sampled flow rate 200ml/min

Signature

Date

3-19-18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1300	5	14.27	0.144	5.65	4.83	207.0	-	650	34.31	CLEAR/NONE
1305		14.18	0.142	5.49	4.83	213.2	-	650	34.28	CLEAR/NONE
1310		14.19	0.141	5.35	4.83	218.6	3.64	650	34.28	CLEAR/NONE
1315		14.21	0.141	5.21	4.83	222.5	-	650	34.29	CLEAR/NONE
1320		14.29	0.141	4.82	4.84	229.5	-	650	34.29	CLEAR/NONE
1325		14.25	0.141	4.79	4.84	230.8	4.33	650	34.30	CLEAR/NONE
1330	10	14.32	0.141	4.63	4.84	233.4	-	650	34.30	CLEAR/NONE
1335		14.29	0.141	4.42	4.85	237.1	-	650	34.30	CLEAR/NONE
1340		14.33	0.141	4.28	4.85	239.2	4.02	650	34.30	CLEAR/NONE
1345		14.30	0.141	4.22	4.85	242.7	-	650	34.30	CLEAR/NONE
1350	13.5	14.23	0.140	4.13	4.85	244.2	-	650	34.30	CLEAR/NONE



RESOLUTION CONSULTANTS

Well ID: RE125-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start 12:30 am/pm
 Project No: 60266526 Finish 14:50 am/pm
 Site Location: Dianne Se
 Weather Conds: Sunny + Cool - 35°F Collector(s): T. McCarthy

1. WATER LEVEL DATA: (measured from Top of Casing)

- a. Total Well Length 605 ft c. Length of Water Column 568.32 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 36.68 ft d. Calculated System Volume (see back) 13.1 gal. 70 screen length (ft)

2. WELL PURGE DATA

- a. Purge Method: Geotech bladder pump with drop tube assembly
 b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'
 c. Field Testing Equipment used: Make YSI Model 556 Serial Number 05171720 AK

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
12:50	1	12.50	0.085	11.38	4.79	256.1	-	800	36.70	Clear
13:00	5-4	12.44	0.078	7.20	4.48	284.8	-	800	36.70	Clear
13:10	5-6	12.46	0.078	6.30	4.38	299.9	-	800	36.70	Clear
13:20	8	12.48	0.078	5.64	4.50	297.2	-	800	36.70	Clear
13:30	9-10	12.45	0.079	5.17	4.53	297.1	-	800	36.70	Clear
13:40	11-12	12.47	0.079	4.93	4.55	299.9	-	800	36.70	Clear

- d. Acceptance criteria pass/fail
- | | | | |
|-------------------------------------|---|-----------------------------|------------------------------|
| Has required volume been removed | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Has required turbidity been reached | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Have parameters stabilized | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
- If no or N/A - Explain below.

3. SAMPLE COLLECTION:

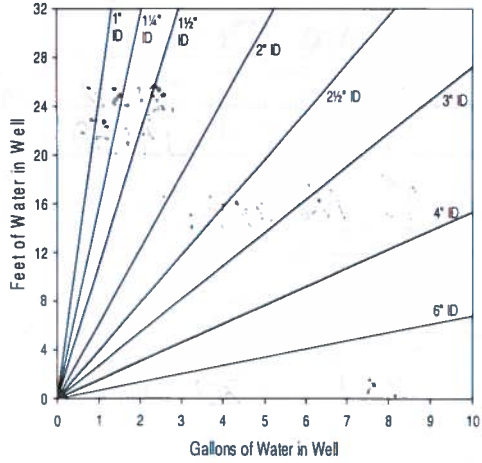
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE125D2-GW-031918	40-mL vials	3	HCl	VOCs	13:50
↓	1-L amber	2	none	1,4-Dioxane	13:50
Dupe 02-GW-031918	40-mL vials	3	HCl	VOC	-
Dupe 02-GW-031918	1-L amber	2	none	1,4-Dioxane	-

Comments: Dupe 02 was collected, when sample was collected fluorescent 200ml

Signature: Thomas McCarthy Date: 03/19/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
13:50	3-15	12.42	0.079	4.91	4.51	303.6	3.16	800	36.70	Clear
SAMPLE @							13:50			



RESOLUTION CONSULTANTS

Well ID: RE125-123

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/19/18 Time: Start 12:30 am/pm
 Project No: 60266526 Finish 1410 am/pm
 Site Location: Dianne St
 Weather Conds: Sunny 75°F, wind 12mph NW Collector(s): E. Bell

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 695 ft c. Length of Water Column 658.15 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 36.85 ft d. Calculated System Volume (see back) 13.1 gal 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	071103X

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1230	-	-	-	-	-	-	-	600	36.90	clear
1245	-	14.84	0.053	10.47	4.42	181.8	8.37	600	36.89	clear
1250	-	15.01	0.053	10.34	4.32	187.6	-	600	36.90	clear
1255	-	14.63	0.053	10.39	4.25	196.8	12.7	600	36.88	clear
1300	-	14.89	0.050	9.96	4.09	216.2	-	600	36.89	clear
1305	-	14.88	0.050	9.76	4.09	217.5	11.9	600	36.90	clear

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

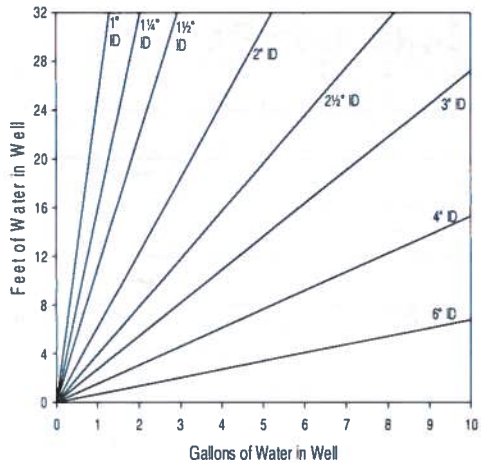
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE125D3-GW-031918	40-mL vials	3	HCl	VOCs	1410
RE125D3-GW-031918	1-L amber	2	none	1,4-Dioxane	1410

Comments: Samples collected @ 200 gals/min

Signature:

Date: 03/19/18

Purge Volume Calculation



ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
13:10	-	14.81	0.050	9.72	4.00	216.7	11.2	600	36.90	clear
13:15	5 Gal	14.80	0.050	9.70	3.96	232.4	-	600	36.90	clear
13:20	-	14.80	0.050	9.51	3.82	236.1	12.0	600	36.91	clear
13:25	-	14.79	0.049	8.99	3.79	240.3	11.21	600	36.92	clear
13:30	-	14.79	0.049	8.82	3.75	246.4	-	600	36.91	clear
13:35	-	14.78	0.049	8.80	3.75	250.6	-	600	36.92	clear
13:40	-	14.78	0.048	8.79	3.74	251.5	11.00	600	36.92	clear
13:45	10 Gal	15.03	0.049	8.58	3.90	253.0	11.22	600	39.92	clear
13:50	-	15.07	0.049	8.37	3.90	253.4	11.10	600	39.93	clear
13:55	-	15.10	0.049	8.40	3.82	253.9	11.31	600	39.93	clear
14:00	-	15.12	0.049	8.29	3.86	254.2	11.22	600	39.93	clear
14:05	13.5	15.10	0.049	8.32	3.85	256.4	11.21	600	39.93	clear
14:10	Sample time.									
14:15										
14:20										
14:25										



RESOLUTION CONSULTANTS

Well ID: RE120-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/20/18 Time: Start 0745 am/pm
 Project No: 60266526 Finish 1110 am/pm
 Site Location: Shelly D
 Weather Conds: 30s, CLOUDY Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 655 ft c. Length of Water Column 619 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 36.42 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	BLUE TAPE

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
0955	—	12.95	0.115	18.08	9.46	170.4	—	600	36.48	CLEAR/NONE
1000		13.77	0.114	9.57	8.62	170.7	—	600	36.53	CLEAR/NONE
1005		14.07	0.113	7.48	7.47	199.8	2.01	600	36.58	CLEAR/NONE
1010		13.97	0.112	7.26	7.29	209.0	—	600	36.65	CLEAR/NONE
1015		14.02	0.111	7.15	6.96	229.5	—	600	36.70	CLEAR/NONE
1020		14.15	0.111	6.96	6.66	253.5	2.67	600	36.75	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE120D1-6W-032018</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1110</u>
<u>RE120D1-6W-032018</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1110</u>

Comments: Samples analyzed

Signature: [Signature] Date: 3-20-18



RESOLUTION
CONSULTANTS

Low Flow Ground Water Sample Collection Record

Well ID: RE120-D2

Client: Navy NWIRP Bethpage Date: 3/20/18 Time: Start 0940 am/pm
 Project No: 60266526 Finish 11:25 am/pm
 Site Location: Shelly Dr
 Weather Conds: Cloudy 56°F 14 mph NE Collector(s): T. McCarthy

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 713 ft c. Length of Water Column 676.82 ft (a-b) Casing Diameter/Material
4-inch PVC
 b. Water Table Depth 36.18 ft d. Calculated System Volume (see back) 3.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)
 - Temperature ± 3% - Turbidity ± 10% - D.O. ± 10% (values >0.5 mg/L)
 - pH ± 0.1 unit - ORP ± 10mV Remove a minimum 1 screen volume
 - Conductivity ± 3% - Drawdown < 0.3'

c. Field Testing Equipment used: Make YSI Model 556 Serial Number 05D7720 AK

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:15	2-3	12.81	0.073	6.99	4.97	221.5	-	700	36.50	Clear
10:25	4	13.08	0.074	7.42	4.90	233.1	-	700	36.50	Clear
10:35	5-6	13.09	0.074	7.43	4.90	244.4	-	700	36.50	Clear
10:45	7-8	13.6	0.074	7.08	4.87	260.1	-	700	36.50	Clear
10:55	9-10	12.90	0.074	7.16	4.92	263.9	1.96	700	36.50	Clear
11:05	10-11	13.05	0.074	7.00	4.85	277.4	-	700	36.50	Clear

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

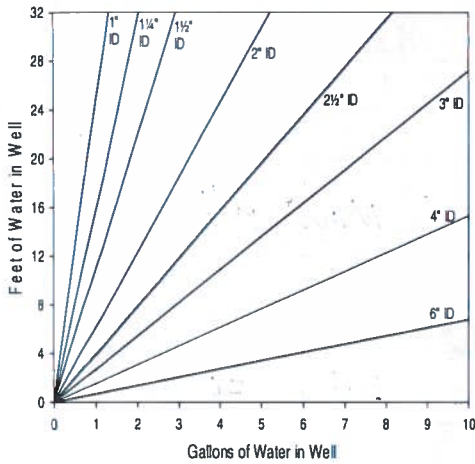
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE120D2-GW-032018</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>11:25</u>
<u>↓</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>11:25</u>

Comments: Sampled & documented

Signature: Thomas McCarthy Date: 3/20/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1:15	2-13	13.12	2.074	6.64	4.80	282.9	-	700	36.50	Clear
1:25	3-14	13.02	2.074	6.47	4.89	280.2	1.34	700	36.50	Clear

SAMPLE #4 11:25 am



RESOLUTION
CONSULTANTS

Well ID: RE120-DS

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/20/18 Time: Start 0940 am/pm
 Project No: 60266526 Finish 12:00 am/pm
 Site Location: Skullcracker
 Weather Conds: Cloudy, 36°F Wind 14 mph NE Collector(s): F. Bell

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 765 ft c. Length of Water Column 729 ft (a-b) Casing Diameter/Material
4-inch PVC
 b. Water Table Depth 36.0 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	<u>U-72556X</u>

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
<u>0940</u>	<u>0</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>36.00</u>	<u>-</u>
<u>1000</u>	<u>-</u>	<u>14.37</u>	<u>0.024</u>	<u>3.28</u>	<u>4.88</u>	<u>242.3</u>	<u>1.42</u>	<u>600</u>	<u>36.04</u>	<u>clear</u>
<u>1025</u>	<u>-</u>	<u>14.02</u>	<u>0.025</u>	<u>3.67</u>	<u>4.81</u>	<u>256.4</u>	<u>-</u>	<u>600</u>	<u>36.12</u>	<u>clear</u>
<u>1030</u>	<u>-</u>	<u>13.94</u>	<u>0.025</u>	<u>3.72</u>	<u>4.76</u>	<u>267.2</u>	<u>-</u>	<u>600</u>	<u>36.54</u>	<u>clear</u>
<u>1035</u>	<u>-</u>	<u>13.40</u>	<u>0.025</u>	<u>3.81</u>	<u>4.72</u>	<u>271.3</u>	<u>-</u>	<u>600</u>	<u>36.62</u>	<u>clear</u>
<u>1040</u>	<u>5 Gal</u>	<u>13.39</u>	<u>0.026</u>	<u>3.89</u>	<u>4.70</u>	<u>278.5</u>	<u>2.81</u>	<u>600</u>	<u>36.78</u>	<u>clear</u>

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued on back)

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

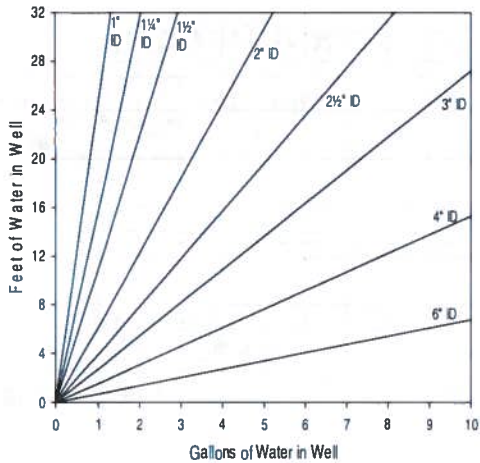
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE120DS-GW-032018</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>12:00</u>
<u>RE120DS-GW-032018</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>12:00</u>

Comments: When sampling flow rate 2000 ml/min -

Signature: [Signature]

Date: 3/20/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

15 ft = 37.1 L / 9.8 G
 20 ft = 49.4 L / 13.1 G
 25 ft = 61.8 L / 16.3 G
 30 ft = 74.3 L / 19.6 G
 40 ft = 99.2 L / 26.1 G
 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)											
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor	
10:45	-	12.90	0.025	3.99	4.68	290.6	-	250	36.82	clear	
10:50	-	12.91	0.025	4.03	4.68	294.6	2.26	250	36.83	clear	
10:55	-	12.90	0.025	4.04	4.67	295.0	-	250	36.85	clear	
11:00	↓										
11:05											
11:10		<i>pulled pump, to fix flow rate</i>									
11:15											
11:20											
11:25											
11:30											
11:35											
11:40	-	13.45	0.024	6.60	4.68	304.5	-	550	39.10	clear	
11:45	-	14.35	0.025	5.59	4.69	310.3	-	550	39.10	clear	
11:50	-	14.34	0.025	4.36	4.69	313.3	-	550	39.10	clear	
11:55	-	14.30	0.025	4.37	4.69	313.4	-	550	39.10	clear	
12:00	-	<i>Break time</i>									



RESOLUTION CONSULTANTS

Well ID: KE105 D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/20/18 Time: Start 1415 ~~1615~~ am/pm
 Project No: 60266526 Finish 1615 am/pm
 Site Location: Lincoln Blvd
 Weather Conds: Cloudy 39°F, 14 mph Collector(s): F. Bell

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 755 ft c. Length of Water Column 717.07 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 37.93 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	08-1604x

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1415	-	-	-	-	-	-	-	-	37.93	clear
1520	5 Gal	12.25	0.099	13.01	4.67	293.3	2.00	600	37.70	clear
1525	-	12.27	0.099	7.41	4.72	292.2	-	600	37.69	clear
1530	-	12.25	0.099	6.55	4.72	292.4	-	600	37.70	clear
1535	-	12.27	0.099	5.49	4.74	298.4	2.01	600	37.70	clear
1540	10 Gal	12.35	0.099	5.51	4.78	298.4	-	600	37.70	clear

d. Acceptance criteria pass/fail (continued on back)

- Has required volume been removed Yes No N/A
- Has required turbidity been reached Yes No N/A
- Have parameters stabilized Yes No N/A


If no or N/A - Explain below.

3. SAMPLE COLLECTION:

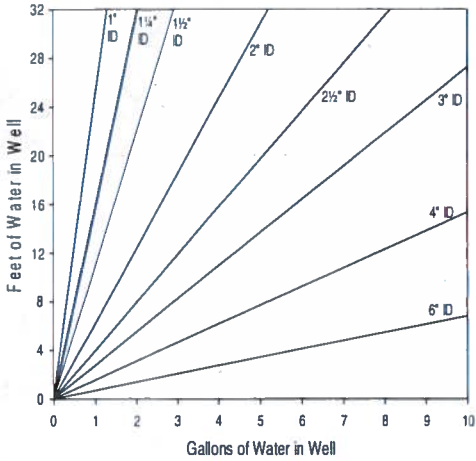
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>KE105D1-GW-032018</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1615</u>
<u>KE105D1-GW-032018</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1615</u>

Comments: Sampled with flow rate ~ 200 mL/min

Signature:  Date: 03/20/18
 LowFlow-GWa - Mar 2018.xlsx

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1545	12.27	12.28	0.099	5.19	4.70	305.7	2.36	600	37.70	clear
1550	-	12.27	0.099	5.30	4.85	293.9	-	600	37.70	clear
1555	-	12.30	0.099	5.10	4.86	305.1	2.47	600	37.69	clear
1600	-	12.30	0.099	5.15	4.82	306.8	2.96	600	37.70	clear
1605	13.56 gal	12.32	0.099	5.12	4.84	307.9	2.31	600	37.70	clear
1610										
1615	Sample time									
1620										
1625										



RESOLUTION CONSULTANTS

Well ID: RE105-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/20/18 Time: Start 7:15 am/pm
 Project No: 60266526 Finish 15:25 am/pm
 Site Location: Linden Blvd
 Weather Conds: 37° Cloudy, Wind 14 mph Collector(s): J. McLaughlin

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 655 ft c. Length of Water Column 66.3 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 38.70 ft d. Calculated System Volume (see back) 13.1 gal. 20 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make YSI Model 556 Serial Number 05D0372 AK

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
14:30	4	13.63	0.066	4.41	5.23	308.5	-	600	38.68	Clear
14:40	5	13.60	0.068	4.95	5.13	294.4	-	600	38.68	Clear
14:50	7	13.76	0.068	4.99	5.14	293.0	-	600	38.68	Clear
15:00	9-10	13.69	0.068	5.30	5.12	295.1	-	600	38.68	Clear
15:10	11	13.70	0.067	5.03	5.11	293.5	-	600	38.68	Clear
15:20	12-13	13.71	0.067	5.63	5.11	292.8	2.01	600	38.68	Clear

d. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Have parameters stabilized	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

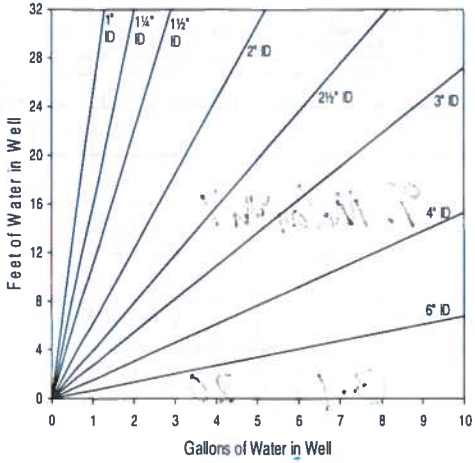
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE105-D2-GW-032018</u>	40-mL vials	3	HCl	VOCs	15:25
<u>RE105-D2-GW-032018</u>	1-L amber	2	none	1,4-Dioxane	15:25

Comments: sampled with flow rate @ 20 gpm

Signature: J. McLaughlin Date: 03/20/18

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

One screen volume
(4-inch well)

- 15 ft = 37.1 L / 9.8 G
- 20 ft = 49.4 L / 13.1 G
- 25 ft = 61.8 L / 16.3 G
- 30 ft = 74.3 L / 19.6 G
- 40 ft = 99.2 L / 26.1 G
- 50 ft = 123.6 L / 32.6 G

Well ID:

(continued from front)										
Time (24 hr)	Volume Removed (gallons)	Temp (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
15:25	13-14	13.71	0.066	5.55	5.11	292.4	1.71	600	38.68	clean
SAMPLE @										



RESOLUTION CONSULTANTS

Well ID: RE117-D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/22/18 Time: Start 1015 (am/pm) am
 Project No: 60266526 Finish 1215 (am/pm) am
 Site Location: Sycamore
 Weather Conds: 40s, SUN Collector(s): S. WRIGHT

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 57.5 ft c. Length of Water Column 55.5 ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 18.88 ft d. Calculated System Volume (see back) 16.3 gal. 25 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	13A101189

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
1020	1170	11.70	0.035	10.89	7.44	169.1	-	500	18.71	CLEAR/NONE
1025		12.94	0.029	10.46	6.10	149.7	-	600	18.75	CLEAR/NONE
1030		13.04	0.029	9.91	5.31	181.1	3.98	600	18.77	CLEAR/NONE
1035		13.02	0.029	9.57	4.98	217.0	-	600	18.75	CLEAR/NONE
1040		13.02	0.029	8.97	4.62	214.4	-	600	18.75	CLEAR/NONE
1045		13.89	0.029	8.48	4.40	287.8	5.86	600	18.75	CLEAR/NONE

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>RE117D2-GW-032218</u>	<u>40-mL vials</u>	<u>3</u>	<u>HCl</u>	<u>VOCs</u>	<u>1200</u>
<u>RE117D2-GW-032218</u>	<u>1-L amber</u>	<u>2</u>	<u>none</u>	<u>1,4-Dioxane</u>	<u>1200</u>

Comments

Signature

Date

3-22-18



RESOLUTION CONSULTANTS

Well ID: LE117-D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/22/18 Time: Start 1015 am/pm
 Project No: 60266526 Finish _____ am/pm
 Site Location: Susan & Lawrence Ct.
 Weather Conds: 001 - Snow - 40 F Collector(s): J. McArthur

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 760 ft c. Length of Water Column _____ ft (a-b) Casing Diameter/Material 4-inch PVC
 b. Water Table Depth 18.89 ft d. Calculated System Volume (see back) 16.3 gal. 25 screen length (ft)

2. WELL PURGE DATA

a. Purge Method: Geotech bladder pump with drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature ± 3%
 - pH ± 0.1 unit
 - Conductivity ± 3%
 - Turbidity ± 10%
 - ORP ± 10mV
 - Drawdown < 0.3'
 - D.O. ± 10% (values >0.5 mg/L)
- Remove a minimum 1 screen volume

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	0502372

Time (24hr)	Volume Removed (gallons)	Temp. (°C)	Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Depth to water (ft)	Color/Odor
10:30	1	12.45	0.026	4.56	5.43	207.1	-	450	19.71	Clear
10:40	2-2.5	12.47	0.025	6.78	5.34	217.4	-	450	19.71	Clear
10:50	3.0	12.83	0.025	5.83	5.24	228.1	-	450	19.71	Clear
11:00	4.5-5	12.62	0.023	5.30	5.18	232.1	-	450	19.71	Clear
11:10	5.5	12.44	0.022	5.00	5.18	247.3	5.58	450	19.71	Clear
11:20	6	12.56	0.022	5.02	5.18	252.0	-	450	19.71	Clear

d. Acceptance criteria pass/fail

Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
<u>LE117D2-GW-032218</u>	40-mL vials	3	HCl	VOCs	<u>1530</u>
	1-L amber	2	none	1,4-Dioxane	<u>1930</u>

Comments _____

Signature Thomas McArthur

Date 3/22/18

Appendix B
Analytical Data Validation – Resolution Consultants

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Groups:	SL2078, SL2296, and SL2439	
Analyses/Method:	Volatile Organic Compounds by United States Environmental Protection Agency (U.S. EPA) SW-846 Method 8260C, and 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring	
Validation Level:	Stage 3 Validation Electronic and Manual	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 05/07/2018

SUMMARY

This report summarizes data review findings for the March 2018 groundwater quarterly event (samples listed below) collected by Resolution Consultants from the Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Site on 12 to 22 March 2018 in accordance with the following Uniform Federal Policy (UFP) Sampling and Analysis Plans:

- *Sampling and Analysis Plan, Bethpage, New York.* (Resolution Consultants April 2013).
- *UFP SAP Addendum, Installation of Vertical Profile Borings and Monitoring Wells, Operable Unit 2, NWIRP Bethpage, New York.* (Resolution Consultants November 2013).
- *UFP SAP Addendum, Inclusion of Additional Target Analytes for Volatile Organics Analyses, NWIRP Bethpage OU2, Bethpage, New York.* (Resolution Consultants August 2014).

Sample Identification	Matrix/Sample Type	Analysis
TB01-WQ-031218	Trip blank	8260C
RE104D1-GW-031418	Groundwater	8260C/8270D_SIM
RE104D2-GW-031418	Groundwater	8260C/8270D_SIM
RE104D3-GW-031418	Groundwater	8260C/8270D_SIM
RE122D1-GW-031218	Groundwater	8260C/8270D_SIM
RE122D2-GW-031218	Groundwater	8260C/8270D_SIM
RE122D3-GW-031218	Groundwater	8260C/8270D_SIM
RE108D1-GW-031218	Groundwater	8260C/8270D_SIM
RE108D2-GW-031218	Groundwater	8260C/8270D_SIM
RE103D1-GW-031418	Groundwater	8260C/8270D_SIM

Sample Identification	Matrix/Sample Type	Analysis
RE103D2-GW-031418	Groundwater	8260C/8270D_SIM
RE103D3-GW-031418	Groundwater	8260C/8270D_SIM
TB02-WQ-031518	Trip blank	8260C
RE131D2-GW-031618	Groundwater	8260C/8270D_SIM
TT101D2-GW-031618	Groundwater	8260C/8270D_SIM
TT101D1-GW-031618	Groundwater	8260C/8270D_SIM
TT101D-GW-031618	Groundwater	8260C/8270D_SIM
FB01-WQ-031918	Field blank	8260C/8270D_SIM
RE123D3-GW-031918	Groundwater	8260C/8270D_SIM
RE123D1-GW-031918	Groundwater	8260C/8270D_SIM
RE123D2-GW-031918	Groundwater	8260C/8270D_SIM
RE125D2-GW-031918	Groundwater	8260C/8270D_SIM
RE125D1-GW-031918	Groundwater	8260C/8270D_SIM
RE109D1-GW-031518	Groundwater	8260C/8270D_SIM
RE125D3-GW-031918	Groundwater	8260C/8270D_SIM
DUP02-GW-031918	Duplicate of RE125D2-GW-031918	8260C/8270D_SIM
DUP01-GW-031518	Duplicate of RE109D1-GW-031518	8260C/8270D_SIM
RE109D3-GW-031518	Groundwater	8260C/8270D_SIM
RE109D2-GW-031518	Groundwater	8260C/8270D_SIM
RE126D3-GW-031518	Groundwater	8260C/8270D_SIM
RE126D2-GW-031518	Groundwater	8260C/8270D_SIM
RE126D1-GW-031518	Groundwater	8260C/8270D_SIM
RE131D3-GW-031618	Groundwater	8260C/8270D_SIM
RE131D1-GW-031618	Groundwater	8260C/8270D_SIM
TB03-WQ-032018	Trip blank	8260C
RE120D1-GW-032018	Groundwater	8260C/8270D_SIM
RE120D2-GW-032018	Groundwater	8260C/8270D_SIM
RE120D3-GW-032018	Groundwater	8260C/8270D_SIM
RE105D2-GW-032018	Groundwater	8260C/8270D_SIM
RE105D1-GW-032018	Groundwater	8260C/8270D_SIM
RE117D1-GW-032218	Groundwater	8260C/8270D_SIM
RE117D2-GW-032218	Groundwater	8260C/8270D_SIM
FB02-WQ-032218	Field blank	8260C/8270D_SIM

Note:

SIM = Selective Ion Monitoring

Data validation activities were conducted using the following guidance documents: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically Method 8260C,*

Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (U.S. EPA 2006), SW-846 Method 8270D, Semi volatile Organic Compounds by Gas Chromatograph/Mass Spectrometry (U.S. EPA 2014), National Functional Guidelines for Superfund Organic Methods Data Review (U.S. EPA January 2017), Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (U.S. EPA January 2009), Department of Defense (DoD) General Data Validation Guidelines (DoD February 2018), and DoD Quality Systems Manual for Environmental Laboratories, Version 4.2 (DoD October 2010). In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements, and/or professional judgment were used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

- ✓ Data completeness (chain-of-custody)/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas chromatography/Mass spectrometer performance checks
- ✗ Initial calibration /initial calibration verification /continuing calibration verification
- ✗ Laboratory blanks/field blanks/trip blanks
- ✗ Surrogate spike recovery
- ✓ Matrix spike and/or matrix spike duplicate result
- ✓ Laboratory control sample /laboratory control sample duplicate result
- ✓ Field duplicate
- ✓ Internal standard
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. Acceptable data parameters for which all criteria were met, no qualification was performed, and/or non-conformance or other issues that were noted during validation, but did not result in qualification of data are not discussed further. The symbol (✗) indicates that a QC non-conformance resulted in the qualification of data. Any QC non-conformance that resulted in the qualification of data is discussed below.

RESULTS

Initial Calibration/Initial Calibration Verification/Continuing Calibration Verification

The ICAL is evaluated to ensure that the instrument was capable of producing acceptable qualitative and quantitative data prior to the analysis of samples. The ICV is evaluated to assess the accuracy of ICAL standards. The CCV is evaluated to determine whether the instrument was within acceptable calibration throughout the period in which the samples were analyzed. Failure of the CCV indicates that the ICAL is no longer valid and should trigger recalibration and reanalysis of the associated samples in the analytical sequence. The ICAL and CCV calibration criteria were met. Data qualification to the analytes associated with the specific ICV was as follows:

Initial Calibration Verification Recovery Non-Conformance:

Criteria	Actions	
	Detected Results	Non-Detected Results
Recovery >120%	J	UJ
Recovery < 80%	J	UJ

Notes:

J = Estimated value

UJ = Undetected and estimated

ICV non-conformances are summarized in Attachment A in Tables A-1.

Surrogate Spike Recovery

Surrogates provide information needed to assess the accuracy of analyses. Known amounts of surrogate compounds, which are not likely to be found in the actual samples, are added to each organic sample to check for accuracy. If surrogate percent recoveries (%Rs) are close to the known concentrations, the reported target compound concentrations are assumed to be accurate. Data qualification on the basis of surrogate recovery was as follows:

Surrogate Spike Recovery Non-Conformance Chart:

Criteria	Action	
	Detected	Non-Detected
Lower Limit ≤ %R or RPD ≤ Upper Limit	No qualification	No qualification
% R > Upper Limit	J	No qualification
20% < %R < Lower Limit	J	UJ
% R < 20%	J	Rejected

Notes:

%R = Percent recovery

RPD = Relative percent difference

J = Estimated value

UJ = Undetected and estimated

Surrogate spike recovery non-conformance is summarized in Attachment A in Table A-2.

Laboratory Blanks/Field Blanks/Trip Blanks

Laboratory blanks, field blanks, and trip blanks were analyzed with samples to assess contamination imparted by sample preparation and/or analysis. All results associated with a particular blank were evaluated to determine whether there was an inherent variability in the data, or if a problem was an isolated occurrence that did not affect the data. Samples were flagged in accordance with *Functional Guidelines* (shown below) where detections were not believed to be site-related.

Blank Non-Conformance Chart:

Blank type	Blank result	Sample result	Action
	Detects	Not Detected	No Qualification
Method, Storage, Trip, Field, or Equipment	≤ LOQ	< LOQ	Report sample at LOQ and qualify as non-detect (U)
		≥ LOQ or ≥ 2x Blank Result for Methylene chloride, Acetone, and 2-Butanone	Use professional judgement
	≥ LOQ	< LOQ	Report sample at LOQ and qualify as non-detect (U)
		≥ LOD but < Blank Result	Report at sample result and qualify as non-detect (U) or reject the sample result as unusable (R)
		≥ LOQ and ≥ Blank Result or 2x Blank Result for Methylene chloride, Acetone, and 2-Butanone	Use professional judgement
	Gross Contamination	Detect	Report at sample result and qualify as unusable (R)

Notes:

LOQ = Limit of quantitation
 U = Undetected
 R = Rejected

Trip blank non-conformance is summarized in Attachment A in Table A-3.

Qualification Actions

The data were reviewed independently from the laboratory to assess data quality. All compounds detected at concentrations less than the limit of quantitation but greater than the method detection limit were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation. Any sample that was analyzed at a dilution because of high concentrations of target or non-target analytes was checked to confirm that the results and/or sample-specific limit of quantitation and limit of detections were adjusted accordingly by the laboratory.

No results were rejected; therefore, analytical completeness was calculated to be 100 percent. Data not qualified during data review are considered usable by the project. The remaining results qualified as estimated may be high or low, but the data are usable for their intended purpose, according to U.S. EPA and Department of Defense guidelines. Attachment B provides a summary of all qualified results during this data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Table

Attachment B: Qualified Results Summary after Data Review

Attachment C: Analytical Data Results

Attachment A
Non-Conformance Summary Table

**Table A-1
Initial Calibration Verification Non-Conformance**

SDG	Method	Analyte	ICV ID	%R	%R Limit	Associated Samples	Lab ID	Qualifiers
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	FB02-WQ-032218	SL2439-9	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE105D1-GW-032018	SL2439-6	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE105D2-GW-032018	SL2439-5DL2	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE117D1-GW-032218	SL2439-7	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE117D2-GW-032218	SL2439-8	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE120D1-GW-032018	SL2439-2	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE120D2-GW-032018	SL2439-3	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	RE120D3-GW-032018	SL2439-4	Detects: J Non-detects: UJ
SK2439	8260C	Dichlorodifluoromethane	P5042A.D	71.85	80-120	TB03-WQ-032018	SL2439-1	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	FB02-WQ-032218	SL2439-9	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE105D1-GW-032018	SL2439-6	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE105D2-GW-032018	SL2439-5DL2	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE117D1-GW-032218	SL2439-7	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE117D2-GW-032218	SL2439-8	Detects: J Non-detects: UJ
SK1820	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE120D1-GW-032018	SL2439-2	Detects: J Non-detects: UJ
SK1888	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE120D2-GW-032018	SL2439-3	Detects: J Non-detects: UJ
SK1888	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	RE120D3-GW-032018	SL2439-4	Detects: J Non-detects: UJ
SK1888	8260C	Trichlorofluoromethane	P5042A.D	79.97	80-120	TB03-WQ-032018	SL2439-1	Detects: J Non-detects: UJ

Notes:

- SDG = Sample delivery group
- ICV = Initial calibration verification
- ID = Identification
- %R = Percent recovery
- J = Estimated value; calibration was outside control limits.
- UJ = Undetected and estimated; calibration was outside control limits.

Table A-2 Surrogate Spike Recovery Non-Conformance							
SDG	Sample ID	Laboratory ID	Batch	Surrogate	%R	%R Control Limit	Qualifier
SL2078	RE103D1-GW-031418	SL2078-7DL	WG225016	1,2-Dichloroethane-d4	123	70-120	Trichloroethene: J
SL2078	RE103D2-GW-031418	SL2078-8DL	WG225016	1,2-Dichloroethane-d4	123	70-120	Trichloroethene: J
SL2078	RE103D3-GW-031418	SL2078-9DL	WG225016	1,2-Dichloroethane-d4	124	70-120	Trichloroethene: J

Notes:

SDG = Sample delivery group
 ID = Identification
 %R = Percent recovery
 J = Positive result qualified estimated and may be biased high.

Table A-3 Trip Blank Non-Conformance					
SDG	Blank	Lab Sample ID	Analyte	Blank Results (UG_L)	Detected Associated Sample Qualified U
SL2078	TB01-WQ-031218	SL2078-1	Carbon disulfide	0.37	RE104D1-GW-031418
SL2078	TB01-WQ-031218	SL2078-1	Carbon disulfide	0.37	RE104D2-GW-031418
SL2078	TB01-WQ-031218	SL2078-1	Carbon disulfide	0.37	RE104D3-GW-031418
SL2078	TB01-WQ-031218	SL2078-1	Carbon disulfide	0.37	RE108D1-GW-031218
SL2078	TB01-WQ-031218	SL2078-1	Carbon disulfide	0.37	RE122D3-GW-031218

Notes:

SDG = Sample delivery group
 ID = Identification
 UG_L = Micrograms per liter
 U = Associated samples qualified undetected "U" due to blank detections.

Attachment B
Qualified Results Summary after Data Review

Table B-1
Qualified Summary Results after Data Review

SDG	Sample ID	Lab ID	Sample Date	DF	Analyte	Result	Units	Lab Qualifier	Validator Qualifier	Final Qualifier	RC
SL2078	RE103D1-GW-031418	SL2078-7DL	3/14/2018	10	TRICHLOROETHENE	660	UG_L		J+	J+	s
SL2078	RE103D2-GW-031418	SL2078-8DL	3/14/2018	10	TRICHLOROETHENE	550	UG_L		J+	J+	s
SL2078	RE103D3-GW-031418	SL2078-9DL	3/14/2018	5	TRICHLOROETHENE	380	UG_L		J+	J+	s
SL2078	RE104D1-GW-031418	SL2078-10	3/14/2018	1	CARBON DISULFIDE	0.5	UG_L	J	U	U	bt
SL2078	RE104D2-GW-031418	SL2078-11	3/14/2018	1	CARBON DISULFIDE	0.5	UG_L	J	U	U	bt
SL2078	RE104D3-GW-031418	SL2078-12	3/14/2018	1	CARBON DISULFIDE	0.5	UG_L	J	U	U	bt
SL2439	RE105D1-GW-032018	SL2439-6	3/20/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE105D1-GW-032018	SL2439-6	3/20/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE105D2-GW-032018	SL2439-5DL2	3/20/2018	4	TRICHLOROFLUOROMETHANE	4	UG_L	U	J-	UJ	c
SL2439	RE105D2-GW-032018	SL2439-5DL2	3/20/2018	4	DICHLORODIFLUOROMETHANE	4	UG_L	U	J-	UJ	c
SL2078	RE108D1-GW-031218	SL2078-5	3/12/2018	1	CARBON DISULFIDE	0.5	UG_L	J	U	U	bt
SL2439	RE117D1-GW-032218	SL2439-7	3/22/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE117D1-GW-032218	SL2439-7	3/22/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE117D2-GW-032218	SL2439-8	3/22/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE117D2-GW-032218	SL2439-8	3/22/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D1-GW-032018	SL2439-2	3/20/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D1-GW-032018	SL2439-2	3/20/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D2-GW-032018	SL2439-3	3/20/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D2-GW-032018	SL2439-3	3/20/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D3-GW-032018	SL2439-4	3/20/2018	1	TRICHLOROFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2439	RE120D3-GW-032018	SL2439-4	3/20/2018	1	DICHLORODIFLUOROMETHANE	1	UG_L	U	J-	UJ	c
SL2078	RE122D3-GW-031218	SL2078-4	3/12/2018	1	CARBON DISULFIDE	0.5	UG_L	J	U	U	bt

Notes:

SDG = Sample delivery group

ID = Identification

DF = Dilution factor

RC = Reason code

UG_L = Micrograms per liter

U = **Undetected** — The analyte was analyzed but undetected at the listed limit of quantitation or was qualified as undetected during data review due to blank artifacts.

J = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.

J+ = **Estimated Value** — One or more quality control parameters were outside control limits and biased high.

J- = **Estimated Value** — One or more quality control parameters were outside control limits and biased low.

UJ = **Undetected and estimated** — The analyte was analyzed but undetected at the listed limit of quantitation; one or more quality control parameters were outside control limits.

Qualification Reason Code:

- s = Surrogate spike percent recovery outlier
- bt = Trip blank contamination
- c = Initial calibration verification outside control limits

Attachment C
Analytical Data Results

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE103D1-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	9.4		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	1.7		
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.66	J	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	6.7		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2.6		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.25	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2.6		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	7.3		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	660	J+	S1
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	15		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE103D2-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	3.4		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	1		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.2	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.25	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.76	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.2		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.77	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	550	J+	S1
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	1.8		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE103D3-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	2		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.4	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	0.86	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	3.4		
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.53	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.86	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.48	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	380	J+	S1
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.73		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE104D1-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	2		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.47	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	0.71	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B6
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.71	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.8		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	72		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	7.8		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE104D2-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.52	J	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	9.3		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B6
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	1.2		
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	9.3		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	33		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.65		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE104D3-GW-031418 3/14/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B6
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROETHENE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.18	U	

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE108D1-GW-031218 3/12/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.69	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	0.34	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B6
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.34	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	1.3		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	75		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	7.9		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE108D2-GW-031218 3/12/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	6.3		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	6.6		
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	4.4		
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	8.4		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	9.3		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	2	U	
8260C	2-BUTANONE	78-93-3	UG L	10	U	
8260C	2-HEXANONE	591-78-6	UG L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	10	U	
8260C	ACETONE	67-64-1	UG L	10	U	
8260C	BENZENE	71-43-2	UG L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	2	U	
8260C	BROMOFORM	75-25-2	UG L	2	U	
8260C	BROMOMETHANE	74-83-9	UG L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	1.3	J	
8260C	CHLOROBENZENE	108-90-7	UG L	2	U	
8260C	CHLOROETHANE	75-00-3	UG L	4	U	
8260C	CHLOROFORM	67-66-3	UG L	3.6	J	
8260C	CHLOROMETHANE	74-87-3	UG L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	9.3		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	4	U	
8260C	ETHYLBENZENE	100-41-4	UG L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	4	U	
8260C	METHYL ACETATE	79-20-9	UG L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	10	U	
8260C	O-XYLENE	95-47-6	UG L	2	U	
8260C	STYRENE	100-42-5	UG L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.6	J	
8260C	TOLUENE	108-88-3	UG L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	3800		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	4	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	6	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	8.4		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE122D1-GW-031218 3/12/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	5.5		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	1.3		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2.6		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.68	J	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.63	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2.2		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.1		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.34	J	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	550		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	8.2		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE122D2-GW-031218 3/12/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	16		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	6.8		
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	2	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	6.8		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	5.1	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	2	U	
8260C	2-BUTANONE	78-93-3	UG L	10	U	
8260C	2-HEXANONE	591-78-6	UG L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	10	U	
8260C	ACETONE	67-64-1	UG L	10	U	
8260C	BENZENE	71-43-2	UG L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	2	U	
8260C	BROMOFORM	75-25-2	UG L	2	U	
8260C	BROMOMETHANE	74-83-9	UG L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	2	J	
8260C	CHLOROBENZENE	108-90-7	UG L	2	U	
8260C	CHLOROETHANE	75-00-3	UG L	4	U	
8260C	CHLOROFORM	67-66-3	UG L	2	U	
8260C	CHLOROMETHANE	74-87-3	UG L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	5.1		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	4	U	
8260C	ETHYLBENZENE	100-41-4	UG L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	4	U	
8260C	METHYL ACETATE	79-20-9	UG L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	10	U	
8260C	O-XYLENE	95-47-6	UG L	2	U	
8260C	STYRENE	100-42-5	UG L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	4.5		
8260C	TOLUENE	108-88-3	UG L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	4700		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	4	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	6	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	12		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 RE122D3-GW-031218 3/12/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B6
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROETHENE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	2.6		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2078 TB01-WQ-031218 3/12/2018 Trip Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	B4
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROETHENE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	NA		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 DUP01-GW-031518 3/15/2018 Field Duplicate		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	1		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	24		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	5.8		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 DUP02-GW-031918 3/19/2018 Field Duplicate		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.43	J	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	24		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	8		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	3.9		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.42	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.55	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	3.9		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	0.62	J	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.4		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	200		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	21		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 FB01-WQ-031918 3/19/2018 Field Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	3.3	J	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE109D1-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.93	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.48	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	24		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	6.4		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE109D2-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	1.2		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	26		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	5.9		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE109D3-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.4	J	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	3.8		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.4	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.2	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.62	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.2		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.47	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	65		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	8.4		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE123D1-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	6.9		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	4.3		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE123D2-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	1.6		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	1.6		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.84		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE123D3-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE125D1-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	14		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	2		
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	3.1		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	3.8		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.79	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	3.8		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	7.3		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	160		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	12		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE125D2-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	21		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	7.1		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	3.4		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.47	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.48	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	3.4		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	0.61	J	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.8		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	200		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	20		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE125D3-GW-031918 3/19/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	49		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	1.3		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.9	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.38	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.41	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.9		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	140		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	4		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE126D1-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROETHANE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	1.2		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	50		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	4.8		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE126D2-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.64	J	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	1		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	1.6		
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	1.6		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.68	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.49	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.81	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	500		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	6.7		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE126D3-GW-031518 3/15/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.7	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	3.1		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	3.5		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	1.7		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE131D1-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	5.1		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	1.1		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	4.6		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	2.4		
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	4.6		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	12		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	140		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	13		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE131D2-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	220		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	3.1		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	3.5		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.36	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.33	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	3.5		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	11		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	64		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	13		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 RE131D3-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	180		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	2.3		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	3.1		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	9.9		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	2.4		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 TB02-WQ-031518 3/15/2018 Trip Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	NA		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 TT101D1-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	J	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	20		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	1		
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	8		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.9	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	1.6		
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.87	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.9		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1.2	J	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	180		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	9.6		

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 TT101D2-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	27		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	5.2		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.9	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	1.3		
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.87	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.9		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	1.3		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	650		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	2.7		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2296 TT101D-GW-031618 3/16/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	15		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	3.3		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2.5		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2.5		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1.8	J	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	69		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	10		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 FB02-WQ-032218 3/22/2018 Field Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE105D1-GW-032018 3/20/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	4.7		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.79	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	0.91	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROETHANE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROETHANE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.91	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.45	J	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	120		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	8.9		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE105D2-GW-032018 3/20/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	16		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	2	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	2	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	7.8		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1.7	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	2	U	
8260C	2-BUTANONE	78-93-3	UG L	10	U	
8260C	2-HEXANONE	591-78-6	UG L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	10	U	
8260C	ACETONE	67-64-1	UG L	10	U	
8260C	BENZENE	71-43-2	UG L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	2	U	
8260C	BROMOFORM	75-25-2	UG L	2	U	
8260C	BROMOMETHANE	74-83-9	UG L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	1.3	J	
8260C	CHLOROBENZENE	108-90-7	UG L	2	U	
8260C	CHLOROETHANE	75-00-3	UG L	4	U	
8260C	CHLOROFORM	67-66-3	UG L	2	U	
8260C	CHLOROMETHANE	74-87-3	UG L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	1.7	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	4	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	4	U	
8260C	METHYL ACETATE	79-20-9	UG L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	10	U	
8260C	O-XYLENE	95-47-6	UG L	2	U	
8260C	STYRENE	100-42-5	UG L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2	U	
8260C	TOLUENE	108-88-3	UG L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	1600		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	4	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	6	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	11		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE117D1-GW-032218 3/22/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	9.6		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE117D2-GW-032218 3/22/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

- UG_L = Micrograms per liter
- NA = Not applicable
- Qual = Final qualifiers (See Attachment A)
- RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE120D1-GW-032018 3/20/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.72	J	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	24		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.74	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	1.8		
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	15		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2.5		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.47	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.62	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2.5		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	2.6		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	830		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	21		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE120D2-GW-032018 3/20/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	25		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.41	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	5.3		
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	2.7		
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.65	J	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.66	J	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	2.7		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	4.3		
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	620		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	14		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 RE120D3-GW-032018 3/20/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.81	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	27		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.3		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Sample Delivery Group Sample Identification Sample Date Sample Type				SL2439 TB03-WQ-032018 3/20/2018 Trip Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	UJ	C4
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	UJ	C4
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	NA		

Notes:

UG_L = Micrograms per liter
NA = Not applicable
Qual = Final qualifiers (See Attachment)
RC = Reason codes (See Attachment)

Attachment
Final Qualifier and Definition

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.

Attachment	Reason Code
Example Qualification Code Reference Table Explanation of Infraction	
ICV/CCV Infraction with Low Bias	C4
Method Blank Infraction (Qualified Detect)	B4
Surrogate percent recovery Infraction with High Bias	S1
Trip Blank Infraction (Qualified Detect)	B6

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Groups:	SL1069 and TK1898	
Analyses/Method:	Volatile Organic Compounds by United States Environmental Protection Agency (U.S. EPA) SW-846 Method 8260C, Total Organic Carbon (TOC) by U.S. EPA SW-846 Method 9060A, and 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring	
Validation Level:	Stage 3 Validation Electronic and Manual	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 03/07/2018

SUMMARY

This report summarizes data review findings for the RE116 soil and groundwater sampling event (samples listed below) collected by Resolution Consultants from the Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Site on 12 December 2017 and 8 February 2018 in accordance with the following Uniform Federal Policy (UFP) Sampling and Analysis Plans:

- *Sampling and Analysis Plan, Bethpage, New York.* (Resolution Consultants April 2013).
- *UFP SAP Addendum, Installation of Vertical Profile Borings and Monitoring Wells, Operable Unit 2, NWIRP Bethpage, New York.* (Resolution Consultants November 2013).
- *UFP SAP Addendum, Inclusion of Additional Target Analytes for Volatile Organics Analyses, NWIRP Bethpage OU2, Bethpage, New York.* (Resolution Consultants August 2014).

Sample Identification	Matrix/Sample Type	Analysis
RE116D1-GW-020818	Groundwater	8260C/8270D_SIM
DUP01-GW-020818	Field Duplicate	8260C/8270D_SIM
EB01-WQ-020818	Equipment Blank	8260C/8270D_SIM
TB01-WQ-020818	Trip Blank	8260C
RE116D1-SOIL-121517-583-585	Soil	9060A
RE116D1-EB-121517	Equipment Blank	9060A

Note:

SIM = Selective Ion Monitoring

Data validation activities were conducted using the following guidance documents: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (U.S. EPA 2006), *SW-846 Method 8270D, Semi volatile Organic Compounds by Gas Chromatograph/Mass Spectrometry* (U.S. EPA 2014), *National Functional Guidelines for Superfund Organic Methods Data Review* (U.S. EPA January 2017), *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (U.S. EPA January 2009), *Department of Defense (DoD) General Data Validation Guidelines (DoD February 2018)*, and *DoD Quality Systems Manual for Environmental Laboratories, Version 4.2* (DoD October 2010). In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements, and/or professional judgment were used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

- ✓ Data completeness (chain-of-custody)/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas chromatography/Mass spectrometer performance checks
- ✓ Initial calibration /initial calibration verification /continuing calibration verification
- ✓ Laboratory blanks/field blanks/trip blanks
- ✓ Surrogate spike recovery
- ✗ Matrix spike and/or matrix spike duplicate result
- ✓ Laboratory control sample /laboratory control sample duplicate result
- ✗ Field duplicate
- ✓ Internal standard
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. Acceptable data parameters for which all criteria were met, no qualification was performed, and/or non-conformance or other issues that were noted during validation, but did not result in qualification of data are not discussed further. The symbol (X) indicates that a QC non-conformance resulted in the qualification of data. Any QC non-conformance that resulted in the qualification of data is discussed below.

RESULTS

Matrix Spike/Matrix Spike Duplicate Results

MS/MSDs are generated to provide information about the effect of each sample matrix on the sample preparation and the measurement methodology. MS/MSD percent %Rs assess the effect of the sample matrix on the accuracy of the analytical results and %Rs above the laboratory control limit could indicate a potential high result bias while %Rs below QC limits could indicate a potential low result bias. The relative percent differences (RPDs) between the MS and MSD results are evaluated to assess sample precision. The MS/MSD %Rs and RPDs were reviewed for conformance with the QC acceptance criteria. Data qualification to the analytes associated with the specific MS/MSD non-conformances were as follows:

Matrix Spike/Matrix Spike Duplicate Non-Conformances Chart:

Criteria	Action	
	Detected Compounds	Non-Detected Compounds
%R or RPD > Upper Limit	J	No qualification
20% ≤ %R < Lower Limit	J	UJ
%R < 20%	J	Rejected

Notes:

%R	=	Percent recovery
RPD	=	Relative percent difference
J	=	Estimated
UJ	=	Undetected and estimated

MS/MSD non-conformances are summarized in Attachment A in Table A-1.

Field Duplicate

One field duplicate pair were collected to assess precision: RE116D1-GW-020818/ DUP01-GW-020818. Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤30% for aqueous matrices. These criteria apply if both results were greater than twice the limit of quantitation (LOQ). Data qualification to the analytes associated with the specific field duplicate RPDs was as follows:

Field Duplicate Non-conformances Chart:

Criteria	RPD	Action	
		Detected	Non-
Sample and duplicate are not detected	NC	No qualification	No
Sample and duplicate results ≥2x LOQ	>30 (aqueous)	J	Not Applicable
If sample or duplicate result is >2x LOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <2x LOQ and the other is not detected	NC	No qualification	No qualification

Notes:

NC	=	Not calculable	J	=	Estimated value
LOQ	=	Limit of quantitation	UJ	=	Undetected and estimated

The field duplicate non-conformance is summarized in Attachment A in Table A-2.

Qualification Actions

The data were reviewed independently from the laboratory to assess data quality. All compounds detected at concentrations less than the limit of quantitation but greater than the method detection limit were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation. Any sample that was analyzed at a dilution because of high concentrations of target or non-target analytes was checked to confirm that the results and/or sample-specific limit of quantitation and limit of detections were adjusted accordingly by the laboratory.

No results were rejected; therefore, analytical completeness was calculated to be 100 percent. Data not qualified during data review are considered usable by the project. The remaining results qualified as estimated may be high or low, but the data are usable for their intended purpose, according to U.S. EPA and Department of Defense guidelines. Attachment B provides a summary of all qualified results during this data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Table

Attachment B: Qualified Results Summary after Data Review and Analytical Data

Attachment A
Non-Conformance Summary Table

Table A-1 Matrix Spike/Matrix Spike Duplicate Percent Recovery Non-Conformance								
SDG	Method	Spiked Sample ID	Analyte	Sample Result (UG_L)	MS %R	MSD %R	%R Limit	Qualifier
SJ1069	8270D_SIM	RE116D1-GW-020818	1,4-Dioxane	4.9	79.3	93.3	10-90	J

Notes:

- SDG = Sample delivery group
- ID = Identification
- UG_L = Micrograms per liter
- MS = Matrix spike
- MSD = Matrix spike duplicate
- %R = Percent recovery
- SIM = Selective ion monitoring
- Bold** = %R outside the 10-90% control limits
- J = Analyte in associated sample qualified estimated "J" because %R is lower than the control limit and may be biased low.

Table A-2 Field Duplicate Non-Conformance										
Analyte	Sample ID	Lab ID	Duplicate ID	Lab ID	Sample Result (UG_L)	Sample LOQ	Duplicate Result (UG_L)	Duplicate LOQ	RPD	Qualifier
1,4-Dioxane	RE116D1-GW-020818	SJ1069-1	DUP01-GW-020818	SJ1069-2	4.9	0.38	3.4	0.25	36.1	J-both

Notes:

- ID = Identification
- UG_L = Micrograms per liter
- LOQ = Limit of quantitation
- RPD = Relative percent difference (limit ≤ 30)
- J = Analyte in associated samples qualified estimated "J" due to potential poor duplicate precision.

Attachment B
Qualified Results Summary after Data Review and Analytical Data

Table B-1 Qualified Summary Results after Data Review											
SDG	Sample ID	Lab ID	Sample Date	DF	Analyte	Result	Units	Lab Qualifier	Validator Qualifier	Final Qualifier	RC
SL1069	DUP01-GW-020818	SL1069-2	2/8/2018	1	1,4-Dioxane	3.4	UG_L		J	J	fd
SL1069	RE116D1-GW-020818	SL1069-1	2/8/2018	1	1,4-Dioxane	4.9	UG_L	M	J	J	m,fd

Notes:

SDG = Sample delivery group

ID = Identification

DF = Dilution factor

RC = Reason code

UG_L = Micrograms per liter

J = **Estimated Value**— One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.

M = Indicates that the analyte was detected outside of the control limits in the matrix spike/matrix spike duplicate prepared and/or analyzed concurrently with the native sample (laboratory qualifier).

Qualification Reason Code:

fd = Field duplicate relative percent difference

m = Matrix spike/matrix spike duplicate percent recovery

**Table B-2
Analytical Data**

Sample Delivery Group Lab Identification Sample Identification Sample Date Sample Type				SL1069 SL1069-1 RE116D1-GW-020818 2/8/2018 Groundwater		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	4.9	J	m,fd

Notes:

- RC = Reason code
- UG_L = Micrograms per liter
- U = Nondetected for analyte
- = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.
- J =

Qualification Reason Code:

- fd = Field duplicate relative percent difference
- m = Matrix spike/matrix spike duplicate percent recovery

**Table B-2
Analytical Data**

Sample Delivery Group Lab Identification Sample Identification Sample Date Sample Type				SL1069 SL1069-2 DUP01-GW-020818 2/8/2018 Field Duplicate		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	3.4	J	fd

Notes:

- RC = Reason code
- UG_L = Micrograms per liter
- U = Nondetected for analyte
- = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.
- J =

Qualification Reason Code:

- fd = Field duplicate relative percent difference
- m = Matrix spike/matrix spike duplicate percent recovery

**Table B-2
Analytical Data**

Sample Delivery Group Lab Identification Sample Identification Sample Date Sample Type				SL1069 SL1069-3 EB01-WQ-020818 2/8/2018 Equipment Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L	0.17	U	

Notes:

- RC = Reason code
- UG_L = Micrograms per liter
- U = Nondetected for analyte
- = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.
- J =

Qualification Reason Code:

- fd = Field duplicate relative percent difference
- m = Matrix spike/matrix spike duplicate percent recovery

**Table B-2
Analytical Data**

Sample Delivery Group Lab Identification Sample Identification Sample Date Sample Type				SL1069 SL1069-4 TB01-WQ-020818 2/8/2018 Trip Blank		
Method	Analyte	CAS No	Units	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG L	2.5	U	
8260C	ACETONE	67-64-1	UG L	2.5	U	
8260C	BENZENE	71-43-2	UG L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG L	0.5	U	
8260C	BROMOFORM	75-25-2	UG L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG L	1	U	
8260C	CHLOROFORM	67-66-3	UG L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG L	1	U	
8260C	METHYL ACETATE	79-20-9	UG L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG L	2.5	U	
8260C	O-XYLENE	95-47-6	UG L	0.5	U	
8260C	STYRENE	100-42-5	UG L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG L	0.5	U	
8260C	TOLUENE	108-88-3	UG L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG L	1.5	U	
8270D SIM	1,4-DIOXANE	123-91-1	UG L			

Notes:

- RC = Reason code
- UG_L = Micrograms per liter
- U = Nondetected for analyte
- = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.
- J =

Qualification Reason Code:

- fd = Field duplicate relative percent difference
- m = Matrix spike/matrix spike duplicate percent recovery

**Table B-2
Analytical Data**

Sample Delivery Group				TK1898		TK1898	
Lab Identification				TK1898-1		TK1898-2	
Sample Identification				RE116D1-SOIL-121517-583-585		RE116D1-EB-121517	
Sample Date				12/15/2017		12/15/2017	
Sample Type				Soil		Equipment Blank	
Method	Analyte	CAS No	Units	Result	Qual	Result	Qual
2540G	TOTAL SOLIDS	-29	PCT	84		NA	
9060A	TOTAL ORGANIC CARBON	-28	UG_G	14000		NA	
9060A	TOTAL SOLIDS	-29	MG_L	NA		0.94	

Notes:

NA = Not analyzed
PCT = Percent
UG_G = Micrograms per gram
MG_L = Micrograms per liter

Appendix C
Analytical Data Validation – ARCADIS

Navy Wells-

Operable Unit 2

Data Review

Bethpage, New York

Volatile and Semi-Volatile Analyses

SDGs #JC61173 and JC61239

Analyses Performed By:
Accutest-SGS Laboratories
Dayton, New Jersey

Report #29649R
Review Level: Tier II
Project: NY001496.23TM.NAVI4



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #JC61173 and JC61239 samples collected in association with the Navy Wells at the Bethpage, NY site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
JC61173	BPOW 5-5	JC61173-1	Water	2/20/2018		X	X			
	BPOW 5-6	JC61173-2	Water	2/20/2018		X	X			
	TB022018PP1	JC61173-3	Water	2/20/2018		X				
JC61239	BPOW 5-1	JC61239-1	Water	2/21/2018		X	X			
	BPOW 5-3	JC61239-2	Water	2/21/2018		X	X			
	BPOW 5-2	JC61239-3	Water	2/21/2018		X	X			
	REP022118CK1	JC61239-4	Water	2/21/2018	BPOW 5-3	X	X			
	TB022018CK1	JC61239-5	Water	2/21/2018		X				

Note:

1. EPA Method 522 Semi-volatile analysis for 1,4-Dioxane was performed by GEL Laboratories, LLC, located in Charleston, South Carolina (subcontracted via SGS-Accutest Laboratory). The associated SDG is: JC61173X/444585 and JC61239X/444624.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) methods 524.2 and 522-Selected Ion Monitoring (SIM). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and

provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUNDS (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 524.2	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

Note: In the tentatively identified compound (TIC) section of the samples and/or the method blank result pages, an "Internal standard added for V8260 method" was reported. The internal standard compound is not considered a compound of concern and therefore was not evaluated.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established

arcadis.com

acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with either SDG.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited acceptable recoveries and RPD in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SDG JC61239: BPOW 5-3/ REP022118CK1	All compounds	U	U	AC

Notes:

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

A field duplicate was not collected with a sample location associated with SDG JC61173.

7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A laboratory duplicate was not performed on a sample location associated with either SDGs.

8. System Performance and Overall Assessment

Tentatively identified compounds (TICs) were not detected in any of the sample locations.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: EPA 524.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

RPD Relative percent difference

%R Percent recovery

SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 522-SIM	Water	28 days from collection to extraction and 28 days from extraction to analysis	Cool to <6 °C; preserved with Sodium Bisulfate (NaHSO ₄) to a pH of less than 4 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with either SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
<u>SDG JC61239:</u> BPOW 5-3/ REP022118CK1	1,4-Dioxane	2.69	2.64	1.9%

Notes:

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

A field duplicate was not collected with a sample location associated with SDG JC61173.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: EPA 522	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Lisa Horton

SIGNATURE:



DATE: April 25, 2018

PEER REVIEW: Todd Church

DATE: May 2, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS



GW
WJB

CHAIN OF CUSTODY
 Accutest New Jersey/SPL Environmental
 2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.acctest.com

FED-EX Tracking # **#4** Bottle Order Control #
 Accutest Quote # **JC61173** Accutest Job #

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes																			
Company Name Arcadis		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells Navy Wells OU2 -Bethpage, New York				V5242NG36OW-40 SB522SIM14DIOX (GEL Lab)										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank																			
Street Address 2 Huntington Quad, Suite 1S10		Street Bethpage NY																																	
City State Zip Melville NY 11747		Billing Information (If different from Report to) Company Name Arcadis, U.S., Inc. Attn: Accts Payable																																	
Project Contact Soma Das, soma.das@arcadis-us.com		Street Address 630 Plaza Drive, Suite 600																																	
Phone # 631-249-7600		Client Purchase Order # NY001496.23TM.NAVI3				City State Zip Highlands Ranch, CO 80129																													
Fax # 631-249-7610		Work Authorization #: NY001496_2015.10.30				Attention:																													
Sampler(s) Name(s) Pat Prozorki 516-247-6277		Project Manager Carlo San Giovanni																																	
Accutest Sample #		Collection		Number of preserved Bottles								LAB USE ONLY																							
Field ID / Point of Collection		MEQH/DI Val #		Date		Time		Sampled by		Matrix		# of bottles		ICI		NACH		NACD		NACB		NACD		NONE		DI WASH		MEOH		ENCORE		NAREDA			
1 BPOW 5-5				2-20-18		1455		PP		GW		5		3																				SUB	
2 BPOW 5-6				2-20-18		1500		CK		GW		5		3																		V940			
3 TB022018PR2				2-20-18		1200		-		TB		2		2																					

Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions			
<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY		Approved By (Accutest PM) / Date:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other CUMM/C+										INITIAL ASSESSMENT <i>1A/00</i> LABEL VERIFICATION	
Emergency & Rush TIA data available VIA Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data													

Relinquished by Sampler:		Date Time:		Received #:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:	
1 <i>[Signature]</i>		2/20/18 1800		1		<i>[Signature]</i>		2/21/18 9:55		2		<i>[Signature]</i>		2/21/18/1645		2		<i>[Signature]</i>															
3				3				3		4				4				5															
5				5				5		Custody Seal #		<input checked="" type="checkbox"/> Intact		Preserved where applicable		<input type="checkbox"/>		Cooler Temp.		1.4°C													

5.1
5



Report of Analysis

Client Sample ID: BPOW 5-5	Date Sampled: 02/20/18
Lab Sample ID: JC61173-1	Date Received: 02/21/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136079.D	1	03/05/18 13:47	CSF	n/a	n/a	V3D5769
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BPOW 5-5	Date Sampled: 02/20/18
Lab Sample ID: JC61173-1	Date Received: 02/21/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	85%		70-130%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Internal standard added for V8260 method	17.59	.7	ug/l	J	
	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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BPOW 5-6	Date Sampled:	02/20/18
Lab Sample ID:	JC61173-2	Date Received:	02/21/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136080.D	1	03/05/18 14:18	CSF	n/a	n/a	V3D5769
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

4.2
4

Report of Analysis

Client Sample ID: BPOW 5-6 Lab Sample ID: JC61173-2 Matrix: AQ - Ground Water Method: EPA 524.2 REV 4.1 Project: Navy Wells OU2, Bethpage, NY	Date Sampled: 02/20/18 Date Received: 02/21/18 Percent Solids: n/a
--	---

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	83%		70-130%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Internal standard added for V8260 method	17.59	.61	ug/l	J	
	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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: TB022018PP1		Date Sampled: 02/20/18
Lab Sample ID: JC61173-3		Date Received: 02/21/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
Project: Navy Wells OU2, Bethpage, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136081.D	1	03/05/18 14:50	CSF	n/a	n/a	V3D5769
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

4.3
4

Report of Analysis

Client Sample ID: TB022018PP1 Lab Sample ID: JC61173-3 Matrix: AQ - Ground Water Method: EPA 524.2 REV 4.1 Project: Navy Wells OU2, Bethpage, NY	Date Sampled: 02/20/18 Date Received: 02/21/18 Percent Solids: n/a
---	---

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	83%		70-130%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Internal standard added for V8260 method	17.59	.57	ug/l	J	
	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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61173X GEL Work Order: 444585


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit or indicates that the analyte recovery in the MS or MSD is outside of specified acceptance criteria.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 14 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61173X
 Lab Sample ID: 444585001
 Client Sample: 1X
 Client ID: BPOW 5-5
 Batch ID: 1742444
 Run Date: 03/08/2018 16:21
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0816.D

Date Collected: 02/20/2018 14:55
 Date Received: 02/23/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		1.48	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61173X
 Lab Sample ID: 444585002
 Client Sample: 2X
 Client ID: BPOW 5-6
 Batch ID: 1742444
 Run Date: 03/08/2018 17:03
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0817.D

Date Collected: 02/20/2018 15:00
 Date Received: 02/23/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

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

2

66
WB

FED-EX Tracking #	732	Bole Order Control #	
Accutest Quote #		Accutest Job #	JC61239

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes																																																																																		
Company Name Arcadis Street Address 2 Huntington Quad, Suite 1S10 City State Zip Melville NY 11747 Project Contact Soma Das, soma.das@arcadis-us.com Phone # 631-249-7800 Fax # 631-249-7810 Sampler(s) Name(s) Pat Vercesi: 516 267-6147		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells Street Navy Wells OU2 -Bethpage, New York Billing Information (if different from Report to) City State Bethpage NY Company Name Arcadis, U.S., Inc. Attn: Accts Payable Street Address 630 Plaza Drive, Suite 600 City State Zip Highlands Ranch, CO 80129 Client Purchase Order # NY001496.23TM.NAVI3 Work Authorization #: NY001496_2015.10.30 Project Manager: Carlo San Giovanni Attention:				Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank LAB USE ONLY																																																																																														
Field ID / Point of Collection BPOW 5-1 BPOW 5-3 BPOW 5-2 REPO22118CK1 TB022118CK1		Collection <table border="1"> <thead> <tr> <th>MECH/DI Vial #</th> <th>Date</th> <th>Time</th> <th>Sampled by</th> <th>Matrix</th> <th># of bottles</th> <th>ICI</th> <th>MCH</th> <th>HWSD</th> <th>H2SO4</th> <th>NONE</th> <th>DI Water</th> <th>MEDH</th> <th>ENCORE</th> <th>WATER</th> </tr> </thead> <tbody> <tr> <td></td> <td>2/21/18</td> <td>1320</td> <td>CP</td> <td>GW</td> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 3 2</td> </tr> <tr> <td></td> <td>2/21/18</td> <td>1355</td> <td>CK</td> <td>GW</td> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 3 2</td> </tr> <tr> <td></td> <td>2/21/18</td> <td>1600</td> <td>CP/CK</td> <td>GW</td> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 3 2</td> </tr> <tr> <td></td> <td>2/21/18</td> <td>---</td> <td>---</td> <td>GW</td> <td>5</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 3 2</td> </tr> <tr> <td></td> <td>2/21/18</td> <td>1300</td> <td>---</td> <td>TB</td> <td>2</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> </tr> </tbody> </table>																MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	ICI	MCH	HWSD	H2SO4	NONE	DI Water	MEDH	ENCORE	WATER		2/21/18	1320	CP	GW	5	3									2 3 2		2/21/18	1355	CK	GW	5	3									2 3 2		2/21/18	1600	CP/CK	GW	5	3									2 3 2		2/21/18	---	---	GW	5	3									2 3 2		2/21/18	1300	---
MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	ICI	MCH	HWSD	H2SO4	NONE	DI Water	MEDH	ENCORE	WATER																																																																																						
	2/21/18	1320	CP	GW	5	3									2 3 2																																																																																					
	2/21/18	1355	CK	GW	5	3									2 3 2																																																																																					
	2/21/18	1600	CP/CK	GW	5	3									2 3 2																																																																																					
	2/21/18	---	---	GW	5	3									2 3 2																																																																																					
	2/21/18	1300	---	TB	2	2									2																																																																																					

Turnaround Time (Business days) <input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <small>Emergency & Rush T/A data available VIA Lablink</small>		Approved By (Accutest PM) / Date: _____ _____		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data</small>				<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other CUMMUC+				Comments / Special Instructions INITIAL ASSESSMENT ZB LABEL VERIFICATION			
---	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--

Sample Custody must be documented below each time samples change possession, including courier delivery.													
Relinquished by Sampler: 1 [Signature]		Date Time: 2/21/18 1830		Received By: 1 [Signature]		Date Time: 2/21/18 9:35		Relinquished By: 2 [Signature]		Date Time: 2/21/18 1655		Received By: 2 [Signature]	
Relinquished by Sampler: 3		Date Time: 		Received By: 3		Date Time: 		Relinquished By: 4		Date Time: 		Received By: 4	
Relinquished by: 5		Date Time: 		Received By: 5		Date Time: 		Relinquished By: 		Date Time: 		Received By: 	

Intact Not Intact Preserved where applicable On Ice Cooler Temp: 1.8°, 2.1° C

5.1
5

Report of Analysis

Client Sample ID: BPOW 5-1		Date Sampled: 02/21/18
Lab Sample ID: JC61239-1		Date Received: 02/22/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
Project: Navy Wells OU2, Bethpage, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136089.D	1	03/05/18 19:04	CSF	n/a	n/a	V3D5769
Run #2							

Run	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

Report of Analysis

Client Sample ID: BPOW 5-1		Date Sampled: 02/21/18
Lab Sample ID: JC61239-1		Date Received: 02/22/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.1
4

Report of Analysis

Client Sample ID: BPOW 5-3		Date Sampled: 02/21/18
Lab Sample ID: JC61239-2		Date Received: 02/22/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.2
4

Report of Analysis

Client Sample ID: BPOW 5-2	Date Sampled: 02/21/18
Lab Sample ID: JC61239-3	Date Received: 02/22/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136091.D	1	03/05/18 20:07	CSF	n/a	n/a	V3D5769
Run #2							

Run	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

4.3
 4

Report of Analysis

Client Sample ID: BPOW 5-2		Date Sampled: 02/21/18
Lab Sample ID: JC61239-3		Date Received: 02/22/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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.

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

4.3
4

Report of Analysis

Client Sample ID: REP022118CK1	Date Sampled: 02/21/18
Lab Sample ID: JC61239-4	Date Received: 02/22/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136092.D	1	03/05/18 20:39	CSF	n/a	n/a	V3D5769
Run #2							

Run	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

Report of Analysis

Client Sample ID: REP022118CK1		Date Sampled: 02/21/18
Lab Sample ID: JC61239-4		Date Received: 02/22/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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.

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

4.4
4

Report of Analysis

Client Sample ID:	TB022118CK1	Date Sampled:	02/21/18
Lab Sample ID:	JC61239-5	Date Received:	02/22/18
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D136093.D	1	03/05/18 21:10	CSF	n/a	n/a	V3D5769
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB022118CK1		Date Sampled: 02/21/18
Lab Sample ID: JC61239-5		Date Received: 02/22/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	99%		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.

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

4.5
4



CHAIN OF CUSTODY

444624

2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480

Client / Reporting Information
 Company Name: **SGS North America Inc.**
 Street Address: **2235 Route 130**
 City: **Dayton** State: **NJ** Zip: **08810**
 Project Contact: **Michelle Jenkins** E-mail: **michelle.jenkins@sgs.com**
 Phone #: **732-329-0200** Fax #:
 Sampler(s) Name(s): **PP/CK**

Project Information
 Project Name: **Northrup Grumman, Navy Wells O2, Bethpage, NY**
 Billing Information (if different from Report to):
 Company Name: _____
 Street Address: _____
 City: _____ State: _____ Zip: _____
 Attention: _____

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MCH/ID/Vol #	Date	Time	Collected by	Matrix	# of bottles	Number of preserved Bottles	Matrix Codes
1X	BPOW5-1		2/21/18	1:20:00 PM	PP/CK	AQ		ENCORE	DW - Drinking Water
2X	BPOW5-3		2/21/18	1:55:00 PM	PP/CK	AQ		MEOH	GW - Ground Water
3X	BPOW5-2		2/21/18	4:00:00 PM	PP/CK	AQ		DI Water	WW - Water
4X	REP022118CK1		2/21/18	12:00:00 AM	PP/CK	AQ		H2SO4	SW - Surface Water
								HNO3	SO - Soil
								NONE	SL - Sludge
								LIQ	LIQ - Other Liquid
								SOL	SOL - Other Solid
								WIP	WIP - Wipe
								FB	FB-Field Blank
								EB	EB-Equipment Blank
								RB	RB - Rinse Blank
								TB	TB-Trip Blank

LAB USE ONLY

Data Deliverable Information
 Approved By (SGS PM): / Date: _____
 Std. 10 Business Days
 5 Day RUSH
 3 Day EMERGENCY
 2 Day EMERGENCY
 1 Day EMERGENCY
 other Z1
 Emergency & Rush PM data available via Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Retinquished by Sampler	Date Time	Received By	Date Time	Retinquished by	Date Time	Received By	Date Time
1		2-23-18		TEDEX	2		
3		2/21/18		2/21/18	4		
5				2/21			

Preserved where applicable Intact Not Intact

On Ice Cooler Temp.



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61239X GEL Work Order: 444624


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit or indicates that the analyte recovery in the MS or MSD is outside of specified acceptance criteria.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 14 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61239X
 Lab Sample ID: 444624001
 Client Sample: 1X
 Client ID: BPOW5-1
 Batch ID: 1742444
 Run Date: 03/08/2018 17:45
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0818.D

Date Collected: 02/21/2018 13:20
 Date Received: 02/24/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	J	0.144	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61239X
 Lab Sample ID: 444624002
 Client Sample: 2X
 Client ID: BPOW5-3
 Batch ID: 1742444
 Run Date: 03/08/2018 18:27
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0819.D

Date Collected: 02/21/2018 13:55
 Date Received: 02/24/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		2.69	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61239X
 Lab Sample ID: 444624003
 Client Sample: 3X
 Client ID: BPOW5-2
 Batch ID: 1742444
 Run Date: 03/08/2018 19:09
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0820.D

Date Collected: 02/21/2018 16:00
 Date Received: 02/24/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	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: JC61239X
 Lab Sample ID: 444624004
 Client Sample: 4X
 Client ID: REP022118CK1
 Batch ID: 1742444
 Run Date: 03/08/2018 19:51
 Prep Date: 03/07/2018 10:00
 Data File: s030818.B\s6c0821.D

Date Collected: 02/21/2018 12:00
 Date Received: 02/24/2018 09:25
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		2.64	ug/L	0.100	0.100	0.200

2

Navy Wells-

Operable Unit 2

Data Review

Bethpage, New York

Volatile and Semi-Volatile Analyses

SDGs #JC61329 and JC61374

Analyses Performed By:
Accutest-SGS Laboratories
Dayton, New Jersey

Report #29650R
Review Level: Tier II
Project: NY001496.23TM.NAVI4



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #JC61329 and JC61374 samples collected in association with the Navy Wells at the Bethpage, NY site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
JC61329	BPOW 5-4	JC61329-1	Water	2/22/2018		X	X			
	TB022218CK1	JC61329-2	Water	2/22/2018		X				
JC61374	BPOW 5-7	JC61374-1	Water	2/23/2018		X	X			
	TB022318CK1	JC61374-2	Water	2/23/2018		X				

Note:

1. EPA Method 522 Semi-volatile analysis for 1,4-Dioxane was performed by GEL Laboratories, LLC, located in Charleston, South Carolina (subcontracted via SGS-Accutest Laboratory). The associated SDG is: JC61329X/444816 and JC61374X/444815.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) methods 524.2 and 522-Selected Ion Monitoring (SIM). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

UB Compound considered non-detect at the listed value due to associated blank contamination.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and

provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUNDS (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 524.2	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with either SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited acceptable recoveries in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A laboratory duplicate was not performed on a sample location associated with either SDG.

8. System Performance and Overall Assessment

Tentatively identified compounds (TICs) were not detected in any of the sample locations.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: EPA 524.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

RPD Relative percent difference

%R Percent recovery

SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 522-SIM	Water	28 days from collection to extraction and 28 days from extraction to analysis	Cool to <6 °C; preserved with Sodium Bisulfate (NaHSO ₄) to a pH of less than 4 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with either SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: EPA 522	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Lisa Horton

SIGNATURE:



DATE: April 27, 2018

PEER REVIEW: Todd Church

DATE: May 2, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

Report of Analysis

Client Sample ID: BPOW 5-4		Date Sampled: 02/22/18
Lab Sample ID: JC61329-1		Date Received: 02/23/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
Project: Navy Wells OU2, Bethpage, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114058.D	1	03/05/18 16:04	CSF	n/a	n/a	V1B5456
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

4.1
4

Report of Analysis

Client Sample ID: BPOW 5-4		Date Sampled: 02/22/18
Lab Sample ID: JC61329-1		Date Received: 02/23/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	97%		70-130%
460-00-4	4-Bromofluorobenzene	91%		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

4.1
4

Report of Analysis

Client Sample ID:	TB022218CK1	Date Sampled:	02/22/18
Lab Sample ID:	JC61329-2	Date Received:	02/23/18
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114059.D	1	03/05/18 16:36	CSF	n/a	n/a	V1B5456
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

Report of Analysis

Client Sample ID: TB022218CK1		Date Sampled: 02/22/18
Lab Sample ID: JC61329-2		Date Received: 02/23/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	99%		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

4.2
4

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61329X GEL Work Order: 444816


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 16 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61329X
 Lab Sample ID: 444816001
 Client Sample: 1X
 Client ID: BPOW 5-4
 Batch ID: 1744009
 Run Date: 03/12/2018 16:22
 Prep Date: 03/12/2018 11:30
 Data File: s031218.B\s6c1208.D

Date Collected: 02/22/2018 14:00
 Date Received: 02/28/2018 09:35
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		1.32	ug/L	0.100	0.100	0.200

2

GW
WB

Tracking # *104* Bottle Order Control #
 Accutest Quote # *JC61374*

Client / Reporting Information		Project Information			Requested Analysis (see TEST CODE sheet)										Matrix Codes		
Company Name Acradis Street Address 2 Huntington Quad, Suite 1S10 City State Zip Melville NY 11747 Project Contact Soma Das, soma.das@arcadis-us.com Phone # Fax # 631-249-7600 631-249-7810 Support(s) Name(s) Phone # <i>Patrizia 516-247-6242</i>		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells Navy Wells OU2 -Bethpage, New York Street Billing Information (If different from Report to) City State Company Name Bethpage NY Arcadis, U.S., Inc. Attn: Accts Payable Project # NY001496.23TM.NAVI3 Client Purchase Order # 630 Plaza Drive, Suite 600 Work Authorization #: NY001496_2015.10.30 Project Manager Highlands Ranch, CO 80129 Carlo San Giovanni			V5242NG36OW+40 SB522SIM14DIOX (GEL Lab)										Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank		
Account Sample #	Field ID / Point of Collection	MEHQ/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	IC1	NIOSH	INISO	INISO4	NIHNE	DI Water	MEHQ	EMC90E	INISO4	LAB USE ONLY
1	BPow 5-7		2/23/18	1225	CK	GW	5	3									
2	TB022318CF1		2/23/18	1100	-	TB	2	2									SUB V970

Turnaround Time (Business days) <input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		Approved By (Accutest PM) / Date: _____		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other CUMMUC+ Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data						Comments / Special Instructions INITIAL ASSESSMENT 3A/JP LABEL VERIFICATION _____	
---	--	--	--	--	--	--	--	--	--	---	--

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sample # <i>1</i>	Date Time: 02-23-18 12:06 PM	Received By: M. Al # 36	Relinquished By: 2 X M. Al # 36	Date Time: 02-23-18	Received By: <i>[Signature]</i>
Relinquished by Sample # 3	Date Time: 12-06 PM	Received By: 4	Relinquished By: 5	Date Time: 6-45 PM	Received By: 4
Relinquished by: 5		Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp.	

5.1
5

Report of Analysis

Client Sample ID: BPOW 5-7	Date Sampled: 02/23/18
Lab Sample ID: JC61374-1	Date Received: 02/23/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114060.D	1	03/05/18 17:10	CSF	n/a	n/a	V1B5456
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

4.1
4

Report of Analysis

Client Sample ID: BPOW 5-7		Date Sampled: 02/23/18
Lab Sample ID: JC61374-1		Date Received: 02/23/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	99%		70-130%
460-00-4	4-Bromofluorobenzene	96%		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

4.1
4

Report of Analysis

Client Sample ID: TB022318CK1	Date Sampled: 02/23/18
Lab Sample ID: JC61374-2	Date Received: 02/23/18
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114061.D	1	03/05/18 17:43	CSF	n/a	n/a	V1B5456
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

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

Report of Analysis

Client Sample ID: TB022318CK1		Date Sampled: 02/23/18
Lab Sample ID: JC61374-2		Date Received: 02/23/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.2
4

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61374X GEL Work Order: 444815


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 16 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61374X
 Lab Sample ID: 444815001
 Client Sample: 1X
 Client ID: BPOW 5-7
 Batch ID: 1744009
 Run Date: 03/12/2018 15:57
 Prep Date: 03/12/2018 11:30
 Data File: s031218.B\s6c1207.D

Date Collected: 02/23/2018 12:25
 Date Received: 02/28/2018 09:35
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

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

2

Navy Wells-

Operable Unit 2

Data Review

Bethpage, New York

Volatile and Semi-volatile Analyses

SDGs #JC61490 and JC61843

Analyses Performed By:
Accutest-SGS Laboratories
Dayton, New Jersey

Report #29651R
Review Level: Tier II
Project: NY001496.23TM.NAVI4



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #JC61490 and JC61843 for samples collected in association with the Navy Wells located at the Bethpage Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
JC61490	BPOW 2-3	JC61490-1	Water	2/26/2018		X	X			
	TB022618PP1	JC61490-2	Water	2/26/2018		X				
	BPOW 2-1	JC61490-3	Water	2/26/2018		X	X			
	BPOW 2-2	JC61490-4	Water	2/26/2018		X	X			
	DISCHARGE_022618	JC61490-5	Water	2/26/2018		X*	X			
JC61843	BPOW 6-1	JC61843-1	Water	3/5/2018		X	X			
	BPOW 6-2	JC61843-2	Water	3/5/2018		X	X			
	TB030518PP1	JC61843-3	Water	3/5/2018		X				

Notes:

1. Sample (*) analyzed by Method 624. Remaining samples were analyzed by 524.2 for VOC analysis.
2. EPA Method 522 Semi-volatile analysis for 1,4-Dioxane was performed by GEL Laboratories, LLC, located in Charleston, South Carolina (subcontracted via SGS-Accutest Laboratory). The associated Accutest/GEL SDG is: JC61490X/444872 and JC61843X/ 445926.
3. SDG JC61490: Matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location BPOW 2-3 for VOC and SVOC analyses.
4. SDG JC61843: MS analysis was performed on sample location BPOW 6-1 for VOC analysis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Methods 524.2, 624 and 522-Selected Ion Monitoring (SIM). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUNDS (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 524.2	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
EPA 624	Discharge water		

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established

acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD in SDG JC61490; and, the MS exhibited acceptable recoveries in SDG JC61843.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A laboratory duplicate was not performed on a sample location associated with SDG JC61490.

All compounds associated with the laboratory duplicate performed on sample BPOW 6-2 (SDG JC61843) exhibited recoveries within the control limits.

8. System Performance and Overall Assessment

Tentatively identified compounds (TICs) were not identified in any of the sample locations.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: EPA 524.2 and 624	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

RPD Relative percent difference

%R Percent recovery

SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 522-SIM	Water	28 days from collection to extraction and 28 days from extraction to analysis	Cool to <6 °C; preserved with Sodium Bisulfate (NaHSO ₄) to a pH of less than 4 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD in SDG JC61490.

A MS/MSD was not performed on a sample location associated with SDG JC61843.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: EPA 522-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	

GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)

Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Lisa Horton

SIGNATURE:

Lisa Horton

DATE: April 27, 2018

PEER REVIEW: Todd Church

DATE: May 2, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS



GW
WCB

CHAIN OF CUSTODY
 Accutest New Jersey/SPL Environmental
 2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.accutest.com

FED-EX Tracking # **#4** Bottle Order Control #
 Accutest Quote # **JC61490**

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes	
Company Name Arcadis		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells				V5242NG360W+40 SB522SIM14DIOX (GEL Lab) <i>VOCs G24</i>										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address 2 Huntington Quad, Suite 1S10		Street Bethpage NY															
City State Zip Melville NY 11747		Billing Information (if different from Report to) Company Name Arcadis, U.S., Inc. Attn: Accts Payable															
Project Contact Soma Das, soma.das@arcadis-us.com		Project # NY001496.23TM.NAVI3															
Phone # 631-249-7600		Client Purchase Order # 631-249-7610															
Sampler(s) Name(s) Carlo San Giovanni		Work Authorization # NY001496_2015.10.30				City State Zip Highlands Ranch, CO 80129											
Field ID / Point of Collection		MEQ/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	MCH	MUCB	H2SO4	NONE	DI Water	MESH	ENCORE	NAPSOA	LAB USE ONLY
1	BPOW 2-3		2-26-18	1515	GW	15	9										SUB
2	TB022618PP		2-26-18	1300	TB	2	2										
3	BPOW 2-1		2-26-18	1652	GW	5	3										V989
4	BPOW 2-2		2-26-18	1645	GW	5	3										
5	Discharge-022618		2-26-18	1755	GW	3	3										

INITIAL ASSESSMENT **3A/AP**
 LABEL VERIFICATION

Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliverable Information				Comments / Special Instructions	
<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY		Approved By: _____ Date: _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other CUMMUC+				Please use BPOW 2-3 as a QA/QC MS/MSD sample	
Emergency & Rush TIA data available VIA Lablink Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data									
Sample Custody must be documented below each time samples change possession, including courier delivery.									
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:
1	2/26/18 1945	Chris Law	2/27/18 10:00	Chris Law	2/27/18 1750	Chris Law	2/27/18 1750		
3									
5									

5.1
5

Report of Analysis

Client Sample ID:	BPOW 2-3	Date Sampled:	02/26/18
Lab Sample ID:	JC61490-1	Date Received:	02/27/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114052.D	1	03/05/18 12:48	CSF	n/a	n/a	V1B5456
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BPOW 2-3		Date Sampled: 02/26/18
Lab Sample ID: JC61490-1		Date Received: 02/27/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

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

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

4.1
4

Report of Analysis

Client Sample ID: TB022618PP1		Date Sampled: 02/26/18
Lab Sample ID: JC61490-2		Date Received: 02/27/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	96%		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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID:	BPOW 2-1	Date Sampled:	02/26/18
Lab Sample ID:	JC61490-3	Date Received:	02/27/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114054.D	1	03/05/18 13:53	CSF	n/a	n/a	V1B5456
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	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: BPOW 2-1		Date Sampled: 02/26/18
Lab Sample ID: JC61490-3		Date Received: 02/27/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

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

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

4.3
4

Report of Analysis

Client Sample ID:	BPOW 2-2	Date Sampled:	02/26/18
Lab Sample ID:	JC61490-4	Date Received:	02/27/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114055.D	1	03/05/18 14:26	CSF	n/a	n/a	V1B5456
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BPOW 2-2		Date Sampled: 02/26/18
Lab Sample ID: JC61490-4		Date Received: 02/27/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.4
4

Report of Analysis

Client Sample ID:	DISCHARGE_022618	Date Sampled:	02/26/18
Lab Sample ID:	JC61490-5	Date Received:	02/27/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 624		
Project:	Navy Wells OU2, Bethpage, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T229861.D	1	02/28/18 20:32	CSF	n/a	n/a	VT9449
Run #2							

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

VOA OU2 Discharge List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.9	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.59	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.9	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
100-42-5	Styrene	ND	2.0	0.45	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	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: DISCHARGE_022618	Date Sampled: 02/26/18
Lab Sample ID: JC61490-5	Date Received: 02/27/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 624	
Project: Navy Wells OU2, Bethpage, NY	

VOA OU2 Discharge List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	
79-01-6	Trichloroethene	1.4	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	92%		76-122%
2037-26-5	Toluene-D8 (SUR)	100%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	94%		80-120%
1868-53-7	Dibromofluoromethane (S)	97%		80-120%

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

4.5
4



444872

2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480

Client / Reporting Information
 Company Name: SGS North America Inc.
 Street Address: 2235 Route 130
 City: Dayton State: NJ Zip: 08810
 Project Contact: michelle.jenkins@sgs.com
 Phone #: 732-329-0200
 Project Name: Northrup Grumman, Navy Wells OU2, Bethpage, NY

Project Information
 Billing Information (if different from Report to):
 Company Name: _____
 Street Address: _____
 City: _____ State: _____ Zip: _____
 Attention: _____

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MECH/ID Vial #	Date	Time	Matrix	# of bottles	ENCORE	MECH	DI Water	NONE	H2SO4	HNO3	NOH	HI	LAB USE ONLY
1X	BPOW 2-3		2/26/18	3:15:00 PM	PP	AQ									X
1SX	BPOW 2-3		2/26/18	3:15:00 PM	PP	AQ									X
1DX	BPOW 2-3		2/26/18	3:15:00 PM	PP	AQ									X
3X	BPOW 2-1		2/26/18	4:52:00 PM	PP	AQ									X
4X	BPOW 2-2		2/26/18	4:45:00 PM	PP	AQ									X

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, SED - Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB - Equipment Blank, RB - Rice Blank, TB - Trip Blank

Additional volume for MS/MSD on -1

Data Deliverable Information
 Commercial "A" (Level 1) NYASP Category A
 Commercial "B" (Level 2) NYASP Category B
 FULLT1 (Level 3+4) State Forms
 NJ Reduced EDD Format
 Commercial "C" Other COMM+
 Commercial "A" = Results Only
 Commercial "B" = Results + OC Summary
 Commercial "C" = Results + OC Summary + Partial Raw data
 NJ Reduced = Results + OC Summary + Partial Raw data

Approved By (SGS PM): / Date: _____

Turnaround Time (Business days): _____

Emergency & Rush/TIA data available V/A Lablink
 Std. 10 Business Days
 5 Day RUSH
 3 Day EMERGENCY
 2 Day EMERGENCY
 1 Day EMERGENCY
 other 21

Relinquished by Sampler: _____ Date Time: 2/26/18 11:00
 Relinquished by Sampler: _____ Date Time: _____
 Relinquished by: _____ Date Time: _____

Sample Custody must be documented below each time samples change possession, including courier delivery.
 Relinquished By: _____ Date Time: 3/1/18 9:15
 Relinquished By: _____ Date Time: _____

Received By: _____ Date Time: _____
 Received By: _____ Date Time: _____

On Ice Cooler Temp. _____
 Preserved where applicable Intact Not intact



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61490X GEL Work Order: 444872


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 16 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61490X
 Lab Sample ID: 444872001
 Client Sample: 1X
 Client ID: BPOW 2-3
 Batch ID: 1744009
 Run Date: 03/12/2018 17:13
 Prep Date: 03/12/2018 11:30
 Data File: s031218.B\s6c1210.D

Date Collected: 02/26/2018 15:15
 Date Received: 03/01/2018 09:15
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		4.88	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61490X
 Lab Sample ID: 444872002
 Client Sample: 3X
 Client ID: BPOW 2-1
 Batch ID: 1744009
 Run Date: 03/12/2018 18:51
 Prep Date: 03/12/2018 11:30
 Data File: s031218.B\s6c1214.D

Date Collected: 02/26/2018 16:52
 Date Received: 03/01/2018 09:15
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		2.60	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61490X
 Lab Sample ID: 444872003
 Client Sample: 4X
 Client ID: BPOW 2-2
 Batch ID: 1744009
 Run Date: 03/12/2018 19:42
 Prep Date: 03/12/2018 11:30
 Data File: s031218.B\s6c1216.D

Date Collected: 02/26/2018 16:45
 Date Received: 03/01/2018 09:15
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane		0.510	ug/L	0.100	0.100	0.200

2

*GW
WTB*

CHAIN OF CUSTODY
Accutest New Jersey/SPL Environmental
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	#4	Bottle Order Control #	
Accutest Quote #		Accutest Job #	JC61843

Client / Reporting Information			Project Information						Requested Analysis (see TEST CODE sheet)											Matrix Codes
Company Name Arcadis			Project Name: AGMNYM72080 // OU2 Navy Outpost Wells						V5242NG360W-40 SB522S1M14D10X (GEL Lab)											DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank
Street Address 2 Huntington Quad, Suite 1S10			Street Bethpage NY																	
City State Zip Melville NY 11747			Billing Information (If different from Report to) Company Name Arcadis, U.S., Inc. Attn: Accts Payable																	
Project Contact Soma Das, soma.das@arcadis-us.com			Project # NY001496.23TM.NAVI3																	
Phone # Fax # 631-249-7600 631-249-7610			Client Purchase Order # NY001496_2015.10.30																	
Sample(s) Name(s) KAT Porusti 516-287-6247			Work Authorization # NY001496_2015.10.30																	
			Project Manager Carlo San Giovanni																	
			City State Zip Highlands Ranch, CO 80129																	
			Attention:																	
Account Sample #	Field ID / Point of Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NO3	NO2	HSO4	DI Water	MECH	ENCODE	NonSO4	LAB USE ONLY				
1	BPOLW G-1		3-5-18	1535	BP	GW	5	3												
2	BPOLW G-2		3-5-18	1530	BP	GW	5	3												
3	TB030518 PPA		3-5-18	1400	-	TB	2	2								<u>V1037</u> <u>SUB</u>				
Turnaround Time (Business days)			Data Deliverable Information						Comments / Special Instructions											
<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush TIA data available VIA Lablink			Approved By (Accutest PM) / Date: _____ _____ _____ _____ _____						<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other CUMMC+											
<input type="checkbox"/> Initial Assessment <input type="checkbox"/> LABEL VERIFICATION			Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																	
Relinquished By Sampler: <i>[Signature]</i>			Sample Custody must be documented below each time samples change possession, including courier delivery.						Date Time: 3-5-18 1930											
Relinquished By: 1 <i>[Signature]</i>			Received By: 1 <i>[Signature]</i>						Date Time: 3/6/18 11:15											
Relinquished By: 2 <i>[Signature]</i>			Received By: 2 <i>[Signature]</i>						Date Time: 3/6/18 18:10											
Relinquished By: 3 _____			Received By: 3 _____						Date Time: _____											
Relinquished By: 4 _____			Received By: 4 _____						Date Time: _____											
Relinquished By: 5 _____			Received By: 5 _____						Date Time: _____											
			Custody Seal # <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact						Preserved where applicable <input type="checkbox"/> On Job <input checked="" type="checkbox"/> Cooler Temp. <u>4.0°C</u>											

5.1
5

Report of Analysis

Client Sample ID: BPOW 6-1	Date Sampled: 03/05/18
Lab Sample ID: JC61843-1	Date Received: 03/06/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114131.D	1	03/09/18 11:37	CSF	n/a	n/a	V1B5461
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BPOW 6-1		Date Sampled: 03/05/18
Lab Sample ID: JC61843-1		Date Received: 03/06/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	104%		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

4.1
4

Report of Analysis

Client Sample ID: BPOW 6-2 Lab Sample ID: JC61843-2 Matrix: AQ - Ground Water Method: EPA 524.2 REV 4.1 Project: Navy Wells OU2, Bethpage, NY	Date Sampled: 03/05/18 Date Received: 03/06/18 Percent Solids: n/a
--	---

VOA OU2 Outpost List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	0.50	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: TB030518PP1	Date Sampled: 03/05/18
Lab Sample ID: JC61843-3	Date Received: 03/06/18
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114133.D	1	03/09/18 12:52	CSF	n/a	n/a	V1B5461
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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB030518PP1		Date Sampled: 03/05/18
Lab Sample ID: JC61843-3		Date Received: 03/06/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	104%		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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4



CHAIN OF CUSTODY

445926

Client / Reporting Information Company Name: SGS North America Inc. Street Address: 2235 Route 130 City: Dayton State: NJ Zip: 08810 Project Contact: Kristin Degraw E-mail: Kristin.Degraw@sgs.com Phone #: 732-329-0200 Fax #: _____ Sampler(s) Name(s): PP		Project Information Project Name: Northrup Grumman, Navy Wells OJ2, Bethpage, NY Billing Information (if different from Report to): Company Name: _____ Street Address: _____ City: _____ State: _____ Zip: _____ Attention: _____		Project ID: _____ Project # _____ Client Purchase Order # _____ Project Manager: _____ Phone: _____		Collection MECH/ID Val # _____ Date: 3/5/18 Time: 3:35:00 PM Date: 3/5/18 Time: 3:30:00 PM		Matrix: AQ 2 Matrix: AQ 2		Number of preserved bottles: Na Br/Slr: 2 ENCORE: _____ MECH: _____ DI Water: _____ NONE: _____ H2SO4: _____ HNO3: _____ HNOH: _____ I: _____		Requested Analysis (see TEST CODE sheet) Matrix Codes: DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid W/P - Wipe EB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank LAB USE ONLY		Bottle Order Control # JC61843X SGS Quote # _____ FED-EX Tracking # _____	
Turnaround Time (Business days) <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other Z1 Emergency & Rush Turnaround Available V/A Lablink		Approved By (SGS PM): / Date: _____ _____		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input checked="" type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____ Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data		Comments / Special Instructions									
Relinquished by Sampler: Date Tm: 3/5/18 11:00 Date Time: _____ Date Time: _____		Received By: 1 3 5		Relinquished By: 2 4		Received By: 4		Sample Custody must be documented below each time samples change possession, including courier delivery. Date Tm: 3/5/18 9:15 Date Time: _____ Date Time: _____		Relinquished by: _____ Received By: _____ Relinquished by: _____ Received By: _____					
Relinquished by: Date Time: _____ Date Time: _____		Relinquished By: 3 5		Relinquished By: 4		Relinquished By: 4		Relinquished by: _____ Received By: _____ Relinquished by: _____ Received By: _____		Relinquished by: _____ Received By: _____ Relinquished by: _____ Received By: _____					



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61843X GEL Work Order: 445926


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit or indicates that the analyte recovery in the MS or MSD is outside of specified acceptance criteria.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 29 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61843X
 Lab Sample ID: 445926001

 Client ID: BPOW 6-1
 Batch ID: 1749758
 Run Date: 03/29/2018 03:02
 Prep Date: 03/28/2018 11:30
 Data File: s032818a.B\s6c2828.D

Date Collected: 03/05/2018 15:35
 Date Received: 03/15/2018 09:15
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER

 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	J	0.119	ug/L	0.100	0.100	0.200

2

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61843X
 Lab Sample ID: 445926002

 Client ID: BPOW 6-2
 Batch ID: 1749758
 Run Date: 03/29/2018 04:22
 Prep Date: 03/28/2018 11:30
 Data File: s032818a.B\s6c2830.D

Date Collected: 03/05/2018 15:30
 Date Received: 03/15/2018 09:15
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER

 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

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

2

Navy Wells-

Operable Unit 2

Data Review

Bethpage, New York

Volatile and Semi-Volatile Analyses

SDGs #JC61937 and JC62063

Analyses Performed By:
Accutest-SGS Laboratories
Dayton, New Jersey

Report #29652R
Review Level: Tier II
Project: NY001496.23TM.NAVI4



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #JC61937 and JC62063 samples collected in association with the Navy Wells at the Bethpage, NY site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
JC61937	BPOW 6-3	JC61937-1	Water	3/6/2018		X	X			
	TB030618PP1	JC61937-2	Water	3/6/2018		X				
	BPOW 6-4	JC61937-3	Water	3/6/2018		X	X			
JC62063	BPOW 6-6	JC62063-1	Water	3/8/2018		X	X			
	BPOW 6-5	JC62063-2	Water	3/8/2018		X	X			
	TB030818DC1	JC62063-3	Water	3/8/2018		X				

Notes:

1. EPA Method 522 Semi-volatile analysis for 1,4-Dioxane was performed by GEL Laboratories, LLC, located in Charleston, South Carolina (subcontracted via SGS-Accutest Laboratory). The associated SDG is: JC61937X/445662 and JC6063X/445705.
2. SDG JC62063: Matrix Spike (MS) analysis was performed on sample location BPOW 6-6 for VOC analysis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) methods 524.2 and 522-Selected Ion Monitoring (SIM). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and

provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUNDS (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 524.2	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with SDG JC61937.

The MS exhibited acceptable recoveries in SDG JC62063.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited acceptable recoveries in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A laboratory duplicate was not performed on a sample location associated with SDG JC61937.

All compounds associated with the laboratory duplicate performed on sample BPOW 6-5 (SDG JC62063) exhibited recoveries within the control limits.

8. System Performance and Overall Assessment

Tentatively identified compounds (TICs) were not detected in any of the sample locations.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: EPA 524.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

RPD Relative percent difference

%R Percent recovery

SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
EPA 522-SIM	Water	28 days from collection to extraction and 28 days from extraction to analysis	Cool to <6 °C; preserved with Sodium Bisulfate (NaHSO ₄) to a pH of less than 4 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location associated with either SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits in both SDGs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected with a sample location associated with either SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: EPA 522	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Lisa Horton

SIGNATURE:



DATE: April 27, 2018

PEER REVIEW: Todd Church

DATE: May 2, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

GW
WTP

CHAIN OF CUSTODY

Accutest New Jersey/SPL Environmental
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # **94** Bottle Order Control #
Accutest Quote # **JC61937** Accutest Job #

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes
Company Name Arcadis		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells Navy Wells OU2 -Bethpage, New York				V5242NG36OW-40 SB522SIM14DIOX (GEL Lab)												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB-Rinse Blank TB-Trip Blank
Street Address 2 Huntington Quad, Suite 1S10		Billing Information (if different from Report to)																
City State Zip Melville NY 11747		Company Name Arcadis, U.S., Inc. Attn: Accts Payable																
Project Contact Soma Das, soma.das@arcadis-us.com		Street Address 630 Plaza Drive, Suite 600																
Phone # Fax # 631-249-7600 631-249-7610		Project # NY001496.23TM.NAVI3		Client Purchase Order #		Matrix # of bottles HCl HNO3 H2SO4 H2O2 H2O2+HNO3 H2O2+HNO3+H2SO4 H2O2+HNO3+H2SO4+HCl H2O2+HNO3+H2SO4+HCl+H2O2												
Sample(s) Name(s) PT #2020th 516 287-6247		Work Authorization #: NY001496_2015.10.30		City State Zip Highlands Ranch, CO 80129		Matrix: GW 5 3 TB 2 2 GW 5 3												LAB USE ONLY
Sampler(s) Name(s) Carlo San Giovanni		Project Manager		Attention:														

5.1
5

V1049
SUB

Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions											
<input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush TIA data available VIA Lablink		Approved By (Accutest PM): / Date: _____ <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other UOMMG+				INITIAL ASSESSMENT 3 A (R)											
Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data						LABEL VERIFICATION											

Sample Custody must be documented below each time samples change possession, including courier delivery.													
Retrieved By: [Signature]		Date Time: 3-6-18 1930		Received By: [Signature]		Date Time: 3/6/18 10:30		Retrieved By: [Signature]		Date Time: 3/5/18/10.50		Received By: [Signature]	
Retrieved By: _____		Date Time: _____		Received By: _____		Date Time: _____		Retrieved By: _____		Date Time: _____		Received By: _____	
Retrieved By: _____		Date Time: _____		Received By: _____		Date Time: _____		Retrieved By: _____		Date Time: _____		Received By: _____	
Custody Seal #		<input checked="" type="checkbox"/> Intact		Preserved where applicable		<input type="checkbox"/>		On Ice		<input checked="" type="checkbox"/>		Cooler Temp. 2.6°C	

JC61937: Chain of Custody

Page 1 of 2

Report of Analysis

Client Sample ID: BPOW 6-3		Date Sampled: 03/06/18
Lab Sample ID: JC61937-1		Date Received: 03/08/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	84%		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

4.1
4

Report of Analysis

Client Sample ID: TB030618PP1		Date Sampled: 03/06/18
Lab Sample ID: JC61937-2		Date Received: 03/08/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	104%		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

4.2
4

Report of Analysis

Client Sample ID: BPOW 6-4		Date Sampled: 03/06/18
Lab Sample ID: JC61937-3		Date Received: 03/08/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	104%		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.

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

4.3
4

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC61937X GEL Work Order: 445662


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit or indicates that the analyte recovery in the MS or MSD is outside of specified acceptance criteria.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 27 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC61937X
 Lab Sample ID: 445662001
 Client Sample: 1X
 Client ID: BPOW 6-3
 Batch ID: 1744012
 Run Date: 03/22/2018 15:17
 Prep Date: 03/21/2018 12:30
 Data File: s032218.B\s6c2214.D

Date Collected: 03/06/2018 14:30
 Date Received: 03/10/2018 09:05
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	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: JC61937X
 Lab Sample ID: 445662002
 Client Sample: 3X
 Client ID: BPOW 6-4
 Batch ID: 1744012
 Run Date: 03/22/2018 15:42
 Prep Date: 03/21/2018 12:30
 Data File: s032218.B\s6c2215.D

Date Collected: 03/06/2018 16:21
 Date Received: 03/10/2018 09:05
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER
 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	Qualifier	Result	Units	MDL	LOD	LOQ
123-91-1	1,4-Dioxane	J	0.139	ug/L	0.100	0.100	0.200

2

GW
WB

CHAIN OF CUSTODY

Accutest New Jersey/SPL Environmental
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # **#4** Bottle Order Control #
Accutest Quote # **JC62063** Accutest Job #

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes			
Company Name Arcadis Street Address 2 Huntington Quad, Suite 1S10 City State Zip Melville NY 11747 Project Contact Soma Das, soma.das@arcadis-us.com Phone # Fax # 631-249-7600 631-249-7610 Sampler(s) Name(s) Pat Pzowski 516 287-6247		Project Name: AGMNYM72080 // OU2 Navy Outpost Wells Navy Wells OU2 -Bethpage, New York Street Billing Information (If different from Report to) Company Name Bethpage NY Street Address Arcadis, U.S., Inc. Attn: Accts Payable 630 Plaza Drive, Suite 600 City State Zip Highlands Ranch, CO 80129 Client Purchase Order # NY001496.23TM.NAVI3 Work Authorization #: NY001496_2015.10.30 Project Manager Carlo San Giovanni Attention: Soma Das		V5242NG36OW+40 SB522SIM14DIOX (GEL Lab)												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank			
Turnaround Time (Business days) <input type="checkbox"/> Std. 15 Business Days <input checked="" type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		Approved By (Accutest PM): / Date: <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data															Data Deliverable Information <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other CUMMU+		
Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	SW	RUSH	HHO3	HSO4	HSO4	NONE	DI Water	MEOH	ENCORE	HHO3	LAB USE ONLY	
1	BPW 6-6		3-8-18	1315	OC	GW	5	3											
2	BPW 6-5		3-8-18	1335	PP	GW	5	3										SUB	
3	TB030818 OC 1		3-8-18	1300	-	TB	2	2										V1071	
Relinquished by Sampler: 3-8-18 1600 Received By: [Signature]		Relinquished by Sampler: 3 Received By: [Signature]		Relinquished by Sampler: 5 Received By: [Signature]		Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not intact		<input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp. 3.6											

5.1
5

JC62063: Chain of Custody

Page 1 of 2

Report of Analysis

Client Sample ID: BPOW 6-6		Date Sampled: 03/08/18
Lab Sample ID: JC62063-1		Date Received: 03/09/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	97%		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.

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

4.1
4

Report of Analysis

Client Sample ID:	BPOW 6-5	Date Sampled:	03/08/18
Lab Sample ID:	JC62063-2	Date Received:	03/09/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Navy Wells OU2, Bethpage, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114161.D	1	03/12/18 12:32	CSF	n/a	n/a	V1B5463
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BPOW 6-5		Date Sampled: 03/08/18
Lab Sample ID: JC62063-2		Date Received: 03/09/18
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.2
4

Report of Analysis

Client Sample ID: TB030818DC1	Date Sampled: 03/08/18
Lab Sample ID: JC62063-3	Date Received: 03/09/18
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: EPA 524.2 REV 4.1	
Project: Navy Wells OU2, Bethpage, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B114165.D	1	03/12/18 16:10	CSF	n/a	n/a	V1B5463
Run #2							

Run #	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	3.8	ug/l	
78-93-3	2-Butanone	ND	5.0	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.26	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.36	ug/l	
75-25-2	Bromoform	ND	0.50	0.40	ug/l	
74-83-9	Bromomethane	ND	0.50	0.081	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.39	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.27	ug/l	
75-00-3	Chloroethane	ND	0.50	0.071	ug/l	
67-66-3	Chloroform	ND	0.50	0.33	ug/l	
74-87-3	Chloromethane	ND	0.50	0.39	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.13	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.28	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.094	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.098	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.25	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.26	ug/l	
76-13-1	Freon 113	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	2.0	1.3	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	1.5	ug/l	
100-42-5	Styrene	ND	0.50	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.099	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.12	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.12	ug/l	
108-88-3	Toluene	ND	0.50	0.13	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB030818DC1		Date Sampled: 03/08/18
Lab Sample ID: JC62063-3		Date Received: 03/09/18
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: EPA 524.2 REV 4.1		
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	0.11	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.056	ug/l	
	m,p-Xylene	ND	0.50	0.26	ug/l	
95-47-6	o-Xylene	ND	0.50	0.24	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	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.

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

4.3
4



CHAIN OF CUSTODY

445705

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480

Client / Reporting Information Company Name: SGS North America Inc. Street Address: 2235 Route 130 City: Dayton State: NJ Zip: 08810 Project Contact: Kristin Degraw E-mail: Kristin.Degraw@sgs.com Phone #: 732-329-0200 Fax #: _____ Sampler(s) Name(s): DC		Project Information Project Name: Northrup Grumman, Navy Wells OUL2, Bethpage, NY Street: _____ City: _____ State: _____ Zip: _____ Billing Information (if different from Report to): Company Name: _____ Street Address: _____ City: _____ State: _____ Zip: _____ Attention: _____		Requested Analysis (see TEST CODE sheet) Matrix Codes: DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RP - Rinse Blank TB - Trip Blank LAB USE ONLY		Batch Order Control # JC62063X SGS Quote # _____	
Approved By (SGS PM): / Date: <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other 21 Emergency & Rush T/A data available V/A Lablink		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input checked="" type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + CC Summary NJ Reduced = Results + CC Summary + Partial Raw data		Turnaround Time (Business days) Approved By (SGS PM): / Date: _____ Date Time: _____		Comments / Special Instructions _____ _____ _____	
Relinquished by Sampler: Date Time: _____ Date Time: _____ Date Time: _____		Relinquished By: Date Time: _____ Date Time: _____ Date Time: _____		Relinquished By: Date Time: _____ Date Time: _____ Date Time: _____		Relinquished By: Date Time: _____ Date Time: _____ Date Time: _____	



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

ACTL003 SGS Accutest

Client SDG: JC62063X GEL Work Order: 445705


The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Barbara Bailey

Date: 29 MAR 2018

Title: Data Validator

**Semi-Volatile
Certificate of Analysis
Sample Summary**

SDG Number: JC62063X
 Lab Sample ID: 445705001

 Client ID: BPOW 6-6
 Batch ID: 1749758
 Run Date: 03/28/2018 20:22
 Prep Date: 03/28/2018 11:30
 Data File: s032818a.B\s6c2818.D

Date Collected: 03/08/2018 13:15
 Date Received: 03/13/2018 09:05
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER

 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

CAS No.	Parname	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: JC62063X
 Lab Sample ID: 445705002

 Client ID: BPOW 6-5
 Batch ID: 1749758
 Run Date: 03/28/2018 21:42
 Prep Date: 03/28/2018 11:30
 Data File: s032818a.B\s6c2820.D

Date Collected: 03/08/2018 13:35
 Date Received: 03/13/2018 09:05
 Client: ACTL003
 Method: EPA 522
 Inst: MSD6.I
 Analyst: JMB3
 Aliquot: 100 mL
 Rtx-624

Matrix: WATER

 Project: ACTL00316
 SOP Ref: GL-OA-E-073
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 2 mL

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

2

Appendix D

ARCADIS Separate and Ongoing OU2 Monitoring of Navy Wells

Appendix D. Schedule of ARCADIS Separate and Ongoing OU2 Monitoring of Navy wells

Well	Well owner	1st Q	2nd Q	3rd Q	4th Q	VOC Analysis Method
------	------------	-------	-------	-------	-------	---------------------

Outpost wells

BPOW1-1	Navy		X		X	524.2
BPOW1-2	Navy		X		X	524.2
BPOW1-3	Navy		X		X	524.2
BPOW1-4	Navy		X		X	524.2
BPOW1-5	Navy		X		X	524.2
BPOW1-6	Navy		X		X	524.2
BPOW2-1	Navy		X		X	524.2
BPOW2-2	Navy		X		X	524.2
BPOW2-3	Navy		X		X	524.2
BPOW3-1	Navy		X		X	524.2
BPOW3-2	Navy		X		X	524.2
BPOW3-3	Navy		X		X	524.2
BPOW3-4	Navy		X		X	524.2
BPOW4-1R	Navy		X		X	524.2
BPOW4-2R	Navy		X		X	524.2

Semi-annual and annual

FW-03	Navy		X			8260C
GM-15D	Navy		X		X	8260C
GM-15D2	Navy		X		X	8260C
GM-17D	Navy		X		X	8260C
GM-17I	Navy		X		X	8260C
GM-18D	Navy		X		X	8260C
GM-21D	Navy		X			8260C
GM-39DA	Navy		X		X	8260C
GM-39DB	Navy		X		X	8260C
GM-73D	Navy		X		X	8260C
GM-73D2	Navy		X		X	8260C
GM-74D	Navy		X		X	8260C
GM-74D2	Navy		X		X	8260C
GM-74I	Navy		X		X	8260C
GM-75D2	Navy		X		X	8260C
GM-78I	Navy		X			8260C
GM-78S	Navy		X			8260C
GM-79D	Navy		X		X	8260C
GM-79I	Navy		X		X	8260C
HN-24I	Navy		X			8260C
HN-40I	Navy		X			8260C
HN-40S	Navy		X			8260C
HN-42I	Navy		X			8260C
HN-42S	Navy		X			8260C

Above Navy owned wells sampled by ARCADIS and reported by ARCADIS under separate cover.

Q: Quarter

VOC: volatile organic compound

Appendix E
Synoptic Water Levels Measured March 29, 2018

SYNOPTIC WATER LEVELS 3/29/18
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Interval (S = <300'; I = 300-500'; D = >500')	Measuring Point (ft amsl)	Depth to water 3/29/2018 (ft bmp)	Water elevation 3/29/2018 (ft amsl)
BPOW 1-1	S	72	29.13	42.87
BPOW 1-2	I	71.82	32.19	39.63
BPOW 1-3	I	71.92	32.71	39.21
BPOW 1-4	I	56.68	13.16	43.52
BPOW 1-5	D	56.75	14.03	42.72
BPOW 1-6	D	57.06	14.27	42.79
BPOW 2-1	I	58.64	19.61	39.03
BPOW 2-2	I	58.5	22.43	36.07
BPOW 2-3	D	57.98	22.08	35.9
BPOW 3-1	I	61.43	23.3	38.13
BPOW 3-2	D	61.82	22.46	39.36
BPOW 3-3	D	60.64	20.84	39.8
BPOW 3-4	D	62.44	22.59	39.85
BPOW 4-1R	D	63.67	21.5	42.17
BPOW 4-2R	D	66.13	23.29	42.84
BPOW 5-1	D	56.12	20.03	36.09
BPOW 5-2	D	56.32	20.4	35.92
BPOW 5-3	D	56.04	20.01	36.03
BPOW5-4	D	53.88	21.68	32.2
BPOW5-5	D	57.58	21.37	36.21
BPOW5-6	D	57.72	21.55	36.17
BPOW5-7	D	55.92	20.22	35.7
BPOW6-1	D	42.93	14.55	28.38
BPOW6-2	D	43.08	14.8	28.28
BPOW6-3	D	39.96	10.64	29.32
BPOW6-4	D	40.02	10.32	29.7
BPOW6-5	D	42.58	13.2	29.38
BPOW6-6	D	42.34	13.31	29.03
FW-01	S	126.1	59.32	66.78
FW-02	S	126.85	59.98	66.87
FW-03	S	125.46	58.43	67.03
GM-15D	I	109.84	49.56	60.28
GM-15D2	D	109.59	51.28	58.31
GM-15S	S	109.44	47.85	61.59
GM-17D	S	115.68	49.66	66.02
GM-17I	S	115.83	43	72.83
GM-18D	I	108.88	46.87	62.01
GM-21D	S	105.66	45.75	59.91
GM-21D2	D	104.62	49.85	54.77
GM-21I	S	105.72	43.05	62.67
GM-39D (A)	S	102.23	40.96	61.27
GM-39D2 (B)	I	102.08	43.24	58.84
GM-73D	I	104.87	45.83	59.04
GM-73D2	D	104.62	47.43	57.19
GM-74D	I	107.43	47.74	59.69
GM-74D2	D	107.36	53.46	53.9
GM-74I	S	107.42	45.24	62.18
GM-75D2	D	93.63	36.71	56.92
GM-78I	S	105.06	43.1	61.96

SYNOPTIC WATER LEVELS 3/29/18
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Interval (S = <300'; I = 300-500'; D = >500')	Measuring Point (ft amsl)	Depth to water 3/29/2018 (ft bmp)	Water elevation 3/29/2018 (ft amsl)
GM-78S	S	104.94	42.81	62.13
GM-79D	S	101.25	43.55	57.7
GM-79I	S	101.09	42.61	58.48
HN-24I	S	125.8	54.33	71.47
HN-24S	S	122.73	53.46	69.27
HN-27I	S	126.51	59.32	67.19
HN-27S	S	125.50	55.2	70.3
HN-29D	S	115.50	49.33	66.17
HN-29I	S	116.42	49.09	67.33
HN-40I	S	115.91	51.57	64.34
HN-40S	S	116.35	51.78	64.57
HN-42I	S	119.61	53.69	65.92
HN-42S	S	120.32	54.32	66
MW-01	S	123.17	NA	NA
MW-02	S	122.89	NA	NA
MW-03	S	122.26	54.93	67.33
MW-04	S	122.77	55.51	67.26
MW-05	S	NA	NA	NA
MW-06	S	118.26	51.12	67.14
MW-07	S	118	50.87	67.13
MW-08	S	118.89	51.58	67.31
MW-09	S	119.55	52.18	67.37
MW-10	S	116.6	49.54	67.06
MW-11	S	120.75	NA	NA
MW-118-5	D	84.17	35.00	49.17
MW-75D2	S	120.55	50.84	69.71
RE103D1	D	93.00	40.08	52.92
RE103D2	D	92.73	39.86	52.87
RE103D3	D	92.76	39.98	52.78
RE104D1	I	89.80	36.47	53.33
RE104D2	D	90.12	38.77	51.35
RE104D3	D	90.20	39.12	51.08
RE105D1	D	87.23	37.36	49.87
RE105D2	D	87.18	37.94	49.24
RE106D1	I	101.19	42.77	58.42
RE106D2	I	101.37	43.5	57.87
RE106D3	D	101.34	43.44	57.9
RE107D1	D	98.92	42.61	56.31
RE107D2	D	98.99	42.9	56.09
RE107D3	D	99.96	44.07	55.89
RE108D1	D	95.38	41.09	54.29
RE108D2	D	95.43	41.5	53.93
RE109D1	D	99.64	45.21	54.43
RE109D2	D	99.80	45.44	54.36
RE109D3	D	99.73	45.43	54.3
RE114D1	D	74.04	29.68	44.36
RE114D2	D	73.96	29.61	44.35
RE114D3	D	74.17	29.94	44.23
RE115D1	D	69.01	26.71	42.3

SYNOPTIC WATER LEVELS 3/29/18
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Interval (S = <300'; I = 300-500'; D = >500')	Measuring Point (ft amsl)	Depth to water 3/29/2018 (ft bmp)	Water elevation 3/29/2018 (ft amsl)
RE115D2	D	69.01	26.64	42.37
RE117D1	D	53.81	19.22	34.59
RE117D2	D	53.59	18.87	34.72
RE118D1	D	57.61	18.64	38.97
RE119D1	D	55.61	20.8	34.81
RE120D1	D	85.58	36.07	49.51
RE120D2	D	85.54	36	49.54
RE120D3	D	85.70	36.21	49.49
RE121D1	D	79.03	33	46.03
RE121D2	D	79.24	33.51	45.73
RE122D1	D	97.42	42.84	54.58
RE122D2	D	97.35	43.03	54.32
RE122D3	D	97.27	43.37	53.9
RE123D1	D	105.49	48.68	56.81
RE123D2	D	106.11	49.82	56.29
RE123D3	D	105.92	49.33	56.59
RE124D1	D	78.26	31.99	46.27
RE124D2	D	77.79	31.81	45.98
RE125D1	I	85.66	39.55	46.11
RE125D2	D	85.76	36.13	49.63
RE125D3	D	85.98	36.3	49.68
RE126D1	D	101.03	46.15	54.88
RE126D2	D	101.39	46.69	54.7
RE126D3	D	101.1	46.36	54.74
RE127D1	D	61.13	24.04	37.09
RE127D2	D	60.96	24.15	36.81
RE128D1	D	68.79	28.73	40.06
RE128D2	D	68.53	28.39	40.14
RE129D1	D	53.63	18.49	35.14
RE129D2	D	53.52	18.28	35.24
RE130D1	D	57.59	19.66	37.93
RE130D2	D	57.72	19.7	38.02
RE131D1	I	85.94	35.95	49.99
RE131D2	D	85.72	36.41	49.31
RE131D3	D	85.9	36.8	49.1
RE133D1	D	48.38	18.65	29.73
RE133D2	D	48.72	19.21	29.51
RE137	D	85.15	35.97	49.18
RW1-MW1	I	85.87	35.1	50.77
RW1-MW2	I	87.35	40.25	47.1
RW1-MW3	I	80.34	30.52	49.82
RW2-MW1	D	90.75	39.6	51.15
RW3-MW1	I	92.22	39.96	52.26
RW3-MW2	I	91.98	39.07	52.91
RW3-MW3	I	92.98	40.41	52.57
RW3-MW4	I	92.92	40.82	52.1
TT-101D	I	80.89	32.58	48.31
TT-101D1	D	80.92	33.6	47.32
TT-101D2	D	80.89	33.97	46.92

SYNOPTIC WATER LEVELS 3/29/18
 2018 OU2 GROUNDWATER INVESTIGATION
 NWIRP BETHPAGE, NY

Well	Interval (S = <300'; I = 300-500'; D = >500')	Measuring Point (ft amsl)	Depth to water 3/29/2018 (ft bmp)	Water elevation 3/29/2018 (ft amsl)
TT-102D	D	49.96	18.48	31.48
TT-102D2	D	44.12	10.52	33.6
TT-301D	S	128.90	NA	NA
TT-301I	S	128.48	58.37	70.11
TT-301S	S	128.88	58.34	70.54
TT-302D	S	116.08	49.76	66.32
TT-302I1	S	115.91	49.22	66.69
TT-302I2	S	115.91	49.48	66.43
TT-302S	S	116.01	49.18	66.83
TT-303D	S	115.94	49.88	66.06
TT-303I1	S	115.83	49.37	66.46
TT-303I2	S	115.89	49.72	66.17
TT-303S	S	115.65	49.02	66.63
TT-304D	S	116.21	51.09	65.12
TT-304I1	S	116.18	50.65	65.53
TT-304I2	S	116.07	50.79	65.28
TT-304S	S	116	50.39	65.61
TT-305D	I	115.94	50.3	65.64
TT-305I	S	116.16	49.99	66.17
TT-305S	S	116.04	48.87	67.17
TT-306D	S	118.06	52.71	65.35
TT-306I	S	117.76	51.98	65.78
TT-306S	S	117.82	51.41	66.41
TT-307D	S	114.42	49.5	64.92
TT-307I	S	114.16	49.09	65.07
TT-307S	S	114.39	48.62	65.77
TT-308D	S	130.98	63.72	67.26
TT-308I	S	130.73	63.14	67.59
TT-308S	S	131.05	62.63	68.42
TT-309D	S	131.52	63.93	67.59
TT-309I	S	131.83	63.95	67.88
TT-309S	S	131.77	62.83	68.94
TT-310S	S	129.50	61.05	68.45
TT-311I	S	130.34	62.37	67.97
TT-311S	S	130.23	62.13	68.1
TT-312I	S	129.95	62.15	67.8
TT-312S	S	129.81	61.28	68.53
TT-313S	S	129.76	60.94	68.82
TT-314I	S	128.69	62.13	66.56
TT-314S	S	128.60	61.89	66.71
RE116D1		NM	29.1	NM

NOTES

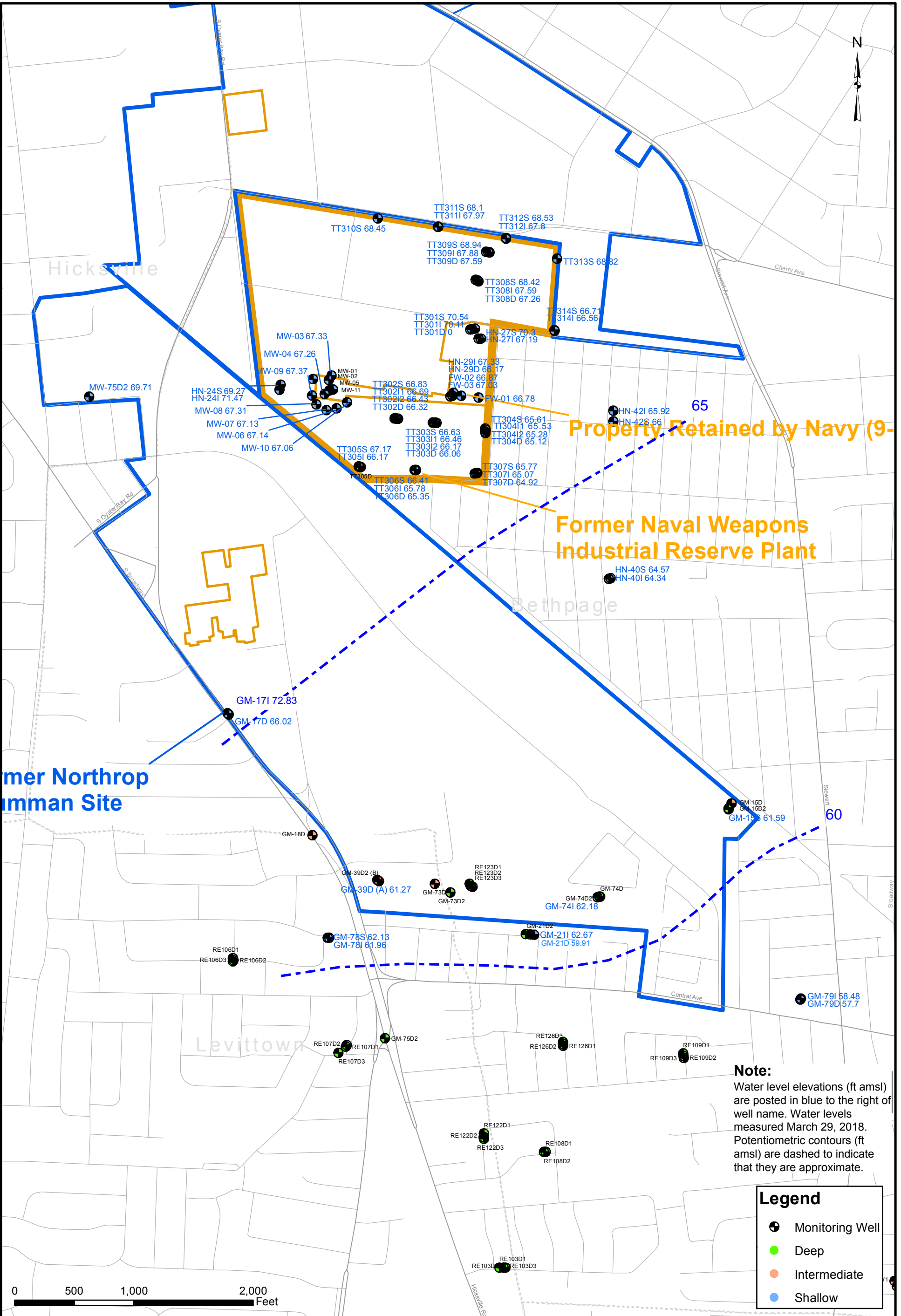
ft: feet

bgs: below ground surface

amsl: above mean sea level

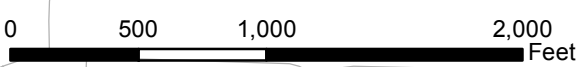
bmp: below measuring point

NM: not measured



Note:
 Water level elevations (ft amsl) are posted in blue to the right of well name. Water levels measured March 29, 2018. Potentiometric contours (ft amsl) are dashed to indicate that they are approximate.

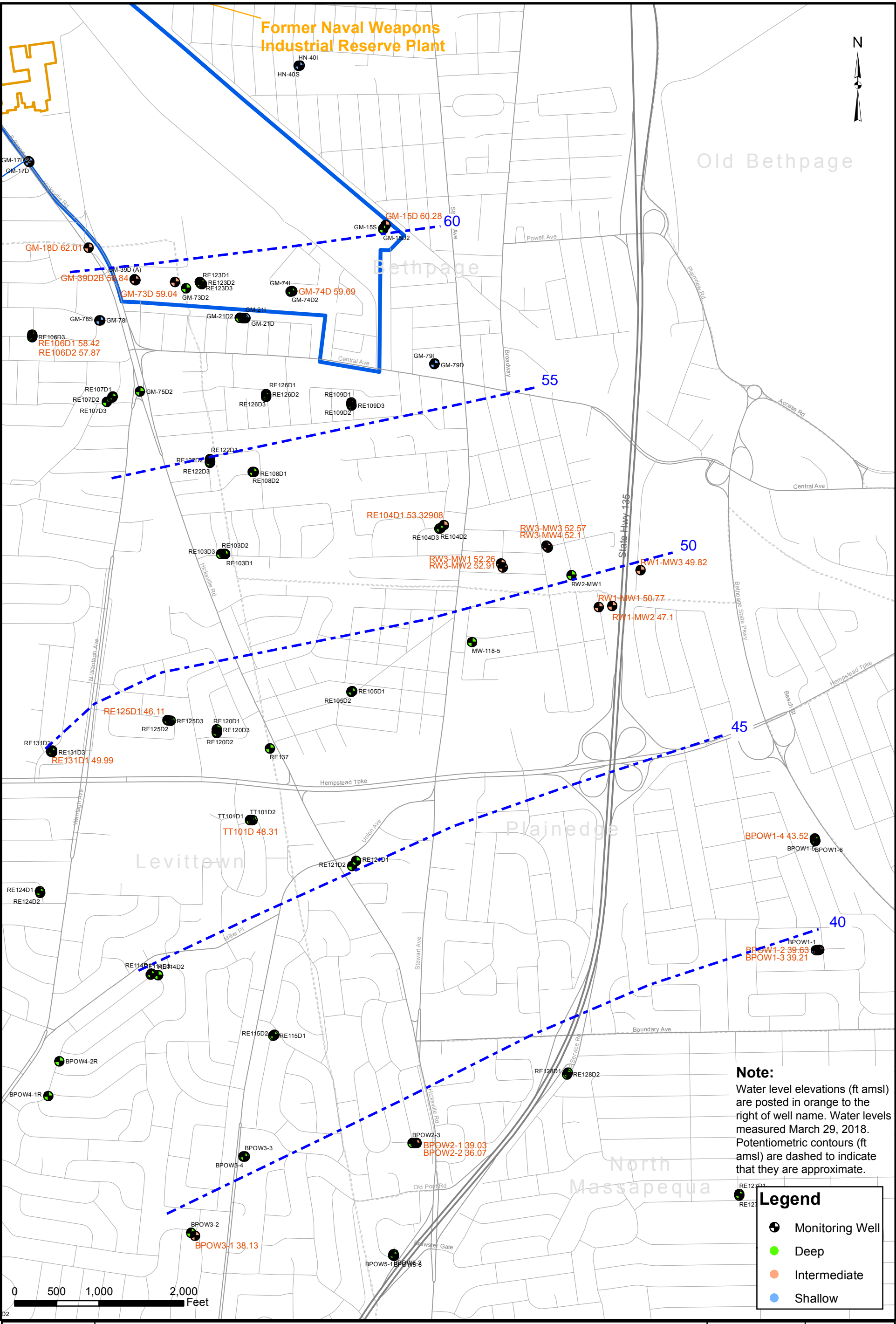
Legend	
	Monitoring Well
	Deep
	Intermediate
	Shallow



**Synoptic Water Levels March 29, 2018 in Shallow Wells
 (screened <300 ft bgs)
 NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
 BETHPAGE, NEW YORK**

CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE 15
APPROVED BY PS	DATE 5/2/2018
APPROVED BY	DATE
FIGURE NO. 1	REV 0

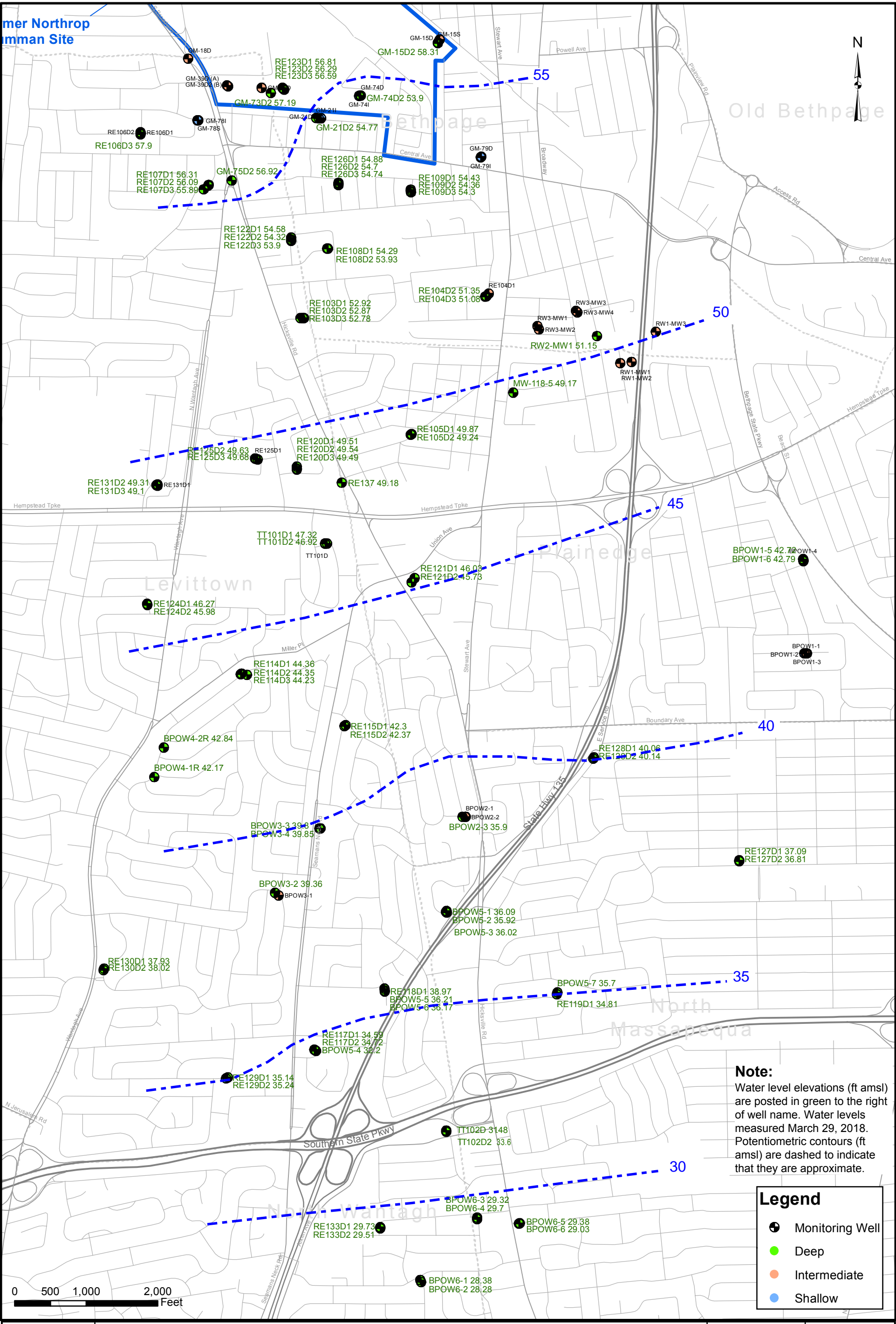
F:\Projects\Navy\Bethpage\WXE0817.0_Deliverables\7.2_CADD\GIS_files\Bethpage\MAP_DOCS\IMXD\MISC\Wells Inventory\GW_Contours\2018_05\Contours_BaseMap_2018_05_01_1.mxd



**Synoptic Water Levels March 29, 2018 in Intermediate Wells
(screened 300-500 ft bgs)
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK**

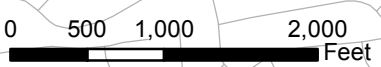
CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE 15
APPROVED BY PS	DATE 5/1/2018
APPROVED BY	DATE
FIGURE NO. 2	REV 0

F:\Projects\Navy\Bethpage\WXC0817.0_Deliverables\7.2_CADD\GIS_files\Bethpage\MAP_DOCS\MXD\MISC\Wells Inventory\GW_Contours\2018_05\Contours_Basemap_2018_05_01_D.mxd



Note:
 Water level elevations (ft amsl) are posted in green to the right of well name. Water levels measured March 29, 2018. Potentiometric contours (ft amsl) are dashed to indicate that they are approximate.

Legend	
	Monitoring Well
	Deep
	Intermediate
	Shallow



**Synoptic Water Levels March 29, 2018 in Deep Wells
 (screened >500 ft bgs)
 NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
 BETHPAGE, NEW YORK**

CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE 15
APPROVED BY PS	DATE 5/1/2018
APPROVED BY	DATE
FIGURE NO. 3	REV 0

NEW YORK PROFESSIONAL GEOLOGIST SEAL

As a New York-licensed Professional Geologist, I have reviewed and approve this March 2018 Quarterly Groundwater Sampling Report at Naval Industrial Reserve Plant Bethpage Operable Unit 2, Site 1, and seal it in accordance with Article 145 Section 7209 of the New York State Education Laws. In sealing this document, I certify it was prepared under my direction, the geological information contained in it is true to the best of my knowledge and the geological methods and procedures included herein are consistent with currently accepted geological practices.

It is a violation of this law for any person to alter the contained drawings or the report in any way, unless he or she is acting under the direction of a NY-licensed Professional Geologist.

Name: Brian E. Caldwell
NY PG License Number: 000511
State: New York

