MARCH 2015 GROUNDWATER SAMPLING DATA SUMMARY REPORT BETHPAGE, NY

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Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9742 Maryland Ave.
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CTO WE15

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List of Acronyms and Abbreviations

DOT	Department of Transportation
IDW	Investigation Derived Waste
Katahdin	Katahdin Analytical Services, Inc.
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 Data Summary Report for the Naval Facilities Engineering Command, Mid-Atlantic under contract task order WE15 Contract N62470-11-D-8013. The report describes monitoring well sampling activities in March 2015 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 sampling 23 monitoring wells. 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. The locations of monitoring wells sampled as part of this effort are shown in Figure 2.

Documentation of these activities is included in the appendices of this report. Appendix A contains the groundwater sampling forms, Appendix B contains documentation of data validation.

2.0 FIELD PROGRAM

Field tasks were conducted in March of 2015 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 the 23 monitoring wells.

2.1 Sampling

Wells were purged with 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 8270C by Katahdin Analytical Services (Katahdin). All purge water was managed as investigation derived waste (IDW). Samples were placed in a cooler containing ice and held for sample pick up by the laboratory courier. All samples were submitted to the laboratory for analyses of VOCs for the analytes listed in, and in accordance with, GC method SW846-8260C. Quality assurance (QA) and quality control (QC) samples were collected during the sampling effort.

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

2.2 Investigation Derived Waste

Purge water was transported from point of generation to the designated staging area at NWIRP in Department of Transportation (DOT) approved 55-gallon drums. 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. A representative water sample will be collected from each of the frac tanks and submitted to Katahdin for analysis. No solid waste was generated during sampling.

3.0 SUMMARY

Well construction information is summarized in Table 1; analytical data is summarized in Table 2; stabilized field water quality parameters are summarized in Table 3. Groundwater sample forms and data validation packages are included in Appendix A and B, respectively.

4.0 REFERENCES

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

Tables

Table 1.
Monitoring Well
Construction Summary

Well	Total Depth (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Mid-screen (ft bgs)	Sump Length (ft)	VPB affiliation
RE103D1	645	625	640	630	5	VPB137
RE103D2	673	653	673	663	0	
RE103D3	735	715	730	720	5	
RE104D1	375	350	370	360	5	VPB138
RE104D2	735	710	730	720	5	
RE104D3	785	760	780	770	5	
RE105D1	555	530	550	540	5	VPB139
RE105D2	755	730	750	740	5	
RE108D1	545	530	550	540	5	VPB142
RE108D2	655	630	650	640	5	
RE120D1	655	630	650	640	5	VPB 154
RE120D2	713	690	710	700	5	
RE120D3	765	740	760	750	5	
TT101D	350	325	345	335	5	VPB129
TT101D1	595	570	590	580	5	
TT101D2	765	740	760	750	5	
RE122D1	545	520	540	530	5	VPB156
RE122D2	615	590	610	600	5	
RE122D3	740	715	735	725	5	
BPOW6-1	580	550	575	562.5	5	VPB145
BPOW6-2	785	755	780	767.5	5	
BPOW6-3	780	750	775	762.5	5	VPB146
BPOW6-4	575	545	570	557.5	5	

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	BPOW6-1	BPOW6-2	BPOW6-3	BPOW6-4
Sample Date		3/26/2015	3/26/2015	3/26/2015	3/26/2015
Sample ID		BPOW6-1-GW-032615	BPOW6-2-GW-032615	BPOW6-3-GW-032615	BPOW6-4-GW-032615
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLOROETHANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	< 0.17 U	< 0.19 U	< 0.17 U	< 0.17 U
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CHLOROFORM	7	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TETRACHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TOLUENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
TRICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE103D1	RE103D2	RE103D3	RE104D1
Sample Date		3/23/2015	3/23/2015	3/23/2015	3/23/2015
Sample ID		RE103D1-GW-032315	RE103D2-GW-032315	RE103D3-GW-032315	RE104D1-GW-032315
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.53 J**	< 0.50 U	< 0.50 U	**0.27 J**
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**16**	**8.1**	**3.5**	**6.2**
1,1,2-TRICHLOROETHANE	1	**0.77 J**	**0.54 J**	< 0.50 U	< 0.50 U
1,1-DICHLOROETHANE	5	**1.1**	**0.92 J**	**0.50 J**	< 0.50 U
1,1-DICHLOROETHENE	5	**6.8**	**1.6**	**0.69 J**	**0.80 J**
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**3.9**	**1.9 J**	**1.2 J**	**1.5 J**
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**19**	**3.0**	**1.3**	**9.7**
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	**0.56 J**	**0.47 J**	**0.31 J**	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CHLOROFORM	7	**0.76 J**	**1.2**	**0.90 J**	< 0.50 U
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**3.9**	**1.9**	**1.2**	**1.5**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TETRACHLOROETHENE	5	**4.6 J**	**1.1 J**	**0.47 J**	**2.4 J**
TOLUENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
TRICHLOROETHENE	5	**900 J**	**940 J**	**570 J**	**110**
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE104D2	RE104D2	RE104D3	RE105D1
Sample Date		3/23/2015	3/23/2015	3/23/2015	3/25/2015
Sample ID		RE104D2-GW-032315	DUPLICATE-GW-032315	RE104D3-GW-032315	RE105D1-GW-032515
Sample type code		N	FD	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	**0.43 J**
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	**12**
1,1,2-TRICHLOROETHANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	**1.2**
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**1.2 J**	**1.3 J**	< 1.0 U	**2.2**
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**0.12 J**	**0.096 J**	< 0.19 U	**14**
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U
CHLOROFORM	7	< 0.50 U	< 0.50 U	< 0.50 U	**0.35 J**
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**1.2**	**1.3**	< 0.50 U	**2.2**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	**0.58 J**
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TETRACHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TOLUENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
TRICHLOROETHENE	5	**3.0**	**3.1**	**0.46 J**	**120**
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE105D2	RE108D1	RE108D2	RE120D1
Sample Date		3/25/2015	3/27/2015	3/27/2015	3/25/2015
Sample ID		RE105D2-GW-032515	RE108D1-GW-032715	RE108D2-GW-032715	RE120D1-GW-032515
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.63 J**	< 0.50 U	**1.0 J**	**2.0**
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**34**	**1.2**	**3.1 J**	**60**
1,1,2-TRICHLOROETHANE	1	**1.2**	< 0.50 U	**1.1 J**	**1.8**
1,1-DICHLOROETHANE	5	**1.5**	< 0.50 U	**4.4 J**	**3.5**
1,1-DICHLOROETHENE	5	**5.6**	< 0.50 U	**5.3 J**	**23**
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 1.5 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**3.7**	**0.46 J**	**8.4 J**	**4.4**
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**2.7**	**9.7**	**9.2**	**19**
2-BUTANONE	50	< 2.5 UJ	< 2.5 U	< 5.0 U	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 U	< 5.0 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 UJ	< 5.0 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 5.0 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 U	< 2.0 U	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 U	< 1.0 U	< 0.50 UJ
CARBON TETRACHLORIDE	5	**3.1**	< 0.50 U	**1.1 J**	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
CHLOROETHANE	5	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 U
CHLOROFORM	7	**2.2**	< 0.50 U	**3.1 J**	**1.0**
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 U	< 2.0 U	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**3.7**	**0.46 J**	**8.4 J**	**4.4**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 1.0 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 U	< 1.0 U	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	**0.33 J**	< 1.0 U	< 2.0 U	**0.52 J**
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 1.5 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 U	< 1.0 U	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 5.0 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
TETRACHLOROETHENE	5	**1.1 J**	**1.1**	**2.2 J**	**1.8 J**
TOLUENE	5	< 0.50 U	< 0.50 U	< 1.0 U	**0.46 J**
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 1.0 U***	***< 0.50 U***
TRICHLOROETHENE	5	**1600 J**	**140**	**3300 J**	**1300 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 2.0 U	**0.41 J**
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 3.0 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE120D2	RE120D3	RE120D3	RE122D1
Sample Date		3/25/2015	3/25/2015	3/25/2015	3/24/2015
Sample ID		RE120D2-GW-032515	RE120D3-GW-032515	DUPLICATE-GW-032515	RE122D1-GW-032415
Sample type code		N	N	FD	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.41 J**	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**33**	< 0.50 U	< 0.50 U	**7.2**
1,1,2-TRICHLOROETHANE	1	**0.56 J**	< 0.50 U	< 0.50 U	**0.40 J**
1,1-DICHLOROETHANE	5	**1.1**	< 0.50 U	< 0.50 U	< 0.50 U
1,1-DICHLOROETHENE	5	**4.9**	< 0.50 U	< 0.50 U	< 0.50 U
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**3.7**	< 1.0 U	< 1.0 U	**2.0**
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**5.8**	< 0.18 U	< 0.18 U	**8.1**
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROETHANE	5	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CHLOROFORM	7	**0.76 J**	< 0.50 U	< 0.50 U	**0.62 J**
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**3.7**	< 0.50 U	< 0.50 U	**2.0**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	**0.36 J**	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TETRACHLOROETHENE	5	**1.6 J**	< 0.50 UJ	< 0.50 UJ	**1.3 J**
TOLUENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
TRICHLOROETHENE	5	**830 J**	**0.74 J**	**0.83 J**	**570 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	RE122D2	RE122D3	TT101D	TT101D1
Sample Date		3/24/2015	3/24/2015	3/24/2015	3/24/2015
Sample ID		RE122D2-GW-032415	RE122D3-GW-032415	TT101D-GW-032415	TT101D1-GW-032415
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.71 J**	< 0.50 U	**0.36 J**	**0.68 J**
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**31**	< 0.50 U	**22**	**21**
1,1,2-TRICHLOROETHANE	1	**2.8**	< 0.50 U	< 0.50 U	**0.49 J**
1,1-DICHLOROETHANE	5	**1.7**	< 0.50 U	**0.78 J**	**0.71 J**
1,1-DICHLOROETHENE	5	**8.7**	< 0.50 U	**3.5**	**4.9**
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**6.0**	< 1.0 U	**3.0**	**1.8 J**
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**14**	< 0.19 U	**9.7**	**8.7**
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	**1.5**	< 0.50 U	< 0.50 U	**0.89 J**
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	7	**2.4**	< 0.50 U	**0.50 J**	**0.92 J**
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**6.0**	< 0.50 U	**3.0**	**1.8**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	**2.1 J**	**2.1 J**
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 U	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TETRACHLOROETHENE	5	**2.7 J**	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TOLUENE	5	**0.63 J**	**0.37 J**	< 0.50 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***
TRICHLOROETHENE	5	**4600 J**	**6.8**	**61**	**170**
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	TT101D2
Sample Date		3/24/2015
Sample ID		TT101D2-GW-032415
Sample type code		N
VOC 8260C (ug/L)		
1,1,1-TRICHLOROETHANE	5	**0.44 J**
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**25**
1,1,2-TRICHLOROETHANE	1	**0.62 J**
1,1-DICHLOROETHANE	5	**0.75 J**
1,1-DICHLOROETHENE	5	**4.0**
1,2,4-TRICHLOROBENZENE	5	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	**2.0**
1,2-DICHLOROPROPANE	1	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U
1,4-DIOXANE (Method 8270D_SIM)	NL	**2.4**
2-BUTANONE	50	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U
ACETONE	50	< 2.5 UJ
BENZENE	1	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U
BROMOFORM	50	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ
CARBON TETRACHLORIDE	5	**0.36 J**
CHLOROBENZENE	5	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ
CHLOROFORM	7	**0.82 J**
CHLOROMETHANE	5	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	**2.0**
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ
ETHYLBENZENE	5	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U
METHYL ACETATE	NL	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 U
METHYL TERT-BUTYL ETHER	10	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U
O-XYLENE	NL	< 0.50 U
STYRENE	5	< 0.50 U
TETRACHLOROETHENE	5	**0.47 J**
TOLUENE	5	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***
TRICHLOROETHENE	5	**480 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 U
VINYL CHLORIDE	2	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U

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 = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

M = the matrix spike or matrix spike duplicate did not meet recovery or precision requirements.

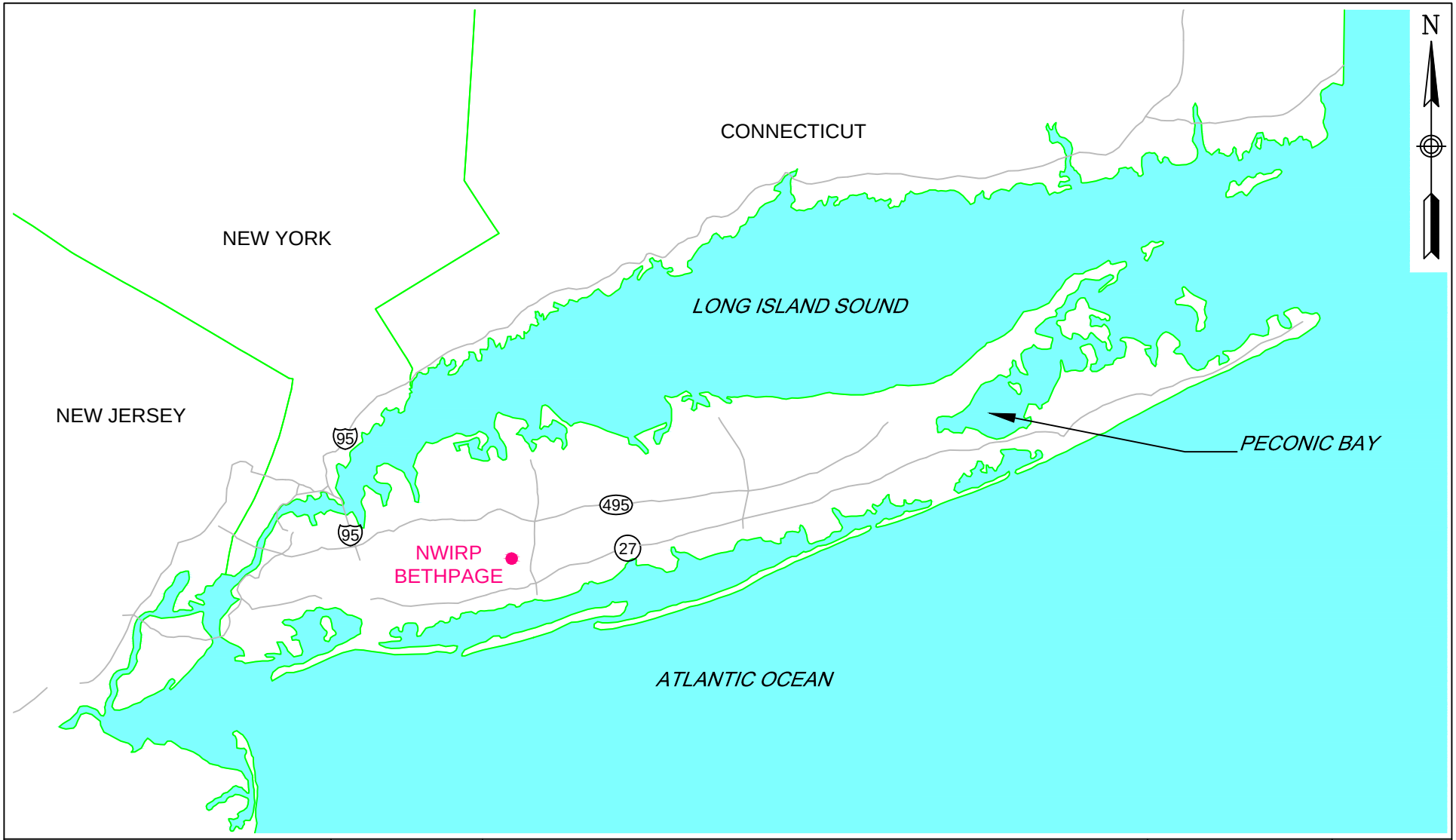
Table 3.
Stabilized Field Parameters

Well	Date	Temperature (°C)	pH	Specific Conductance (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Depth to water (ft bgs)	Flow rate (ml/min)
RE103D1	3/23/2015	12.68	5.54	0.155	4.78	42	0.12	37.10	300
RE103D2	3/23/2015	13.01	5.67	0.083	6.9	235.1	0.41	36.82	450
RE103D3	3/23/2015	14.23	5.03	0.043	5.26	241.1	0.46	37.1	550
RE104D1	3/23/2015	13.4	5.23	0.11	4.82	0.419	0.63	33.48	500
RE104D2	3/23/2015	13.49	5.92	0.047	6.79	237.1	1.60	38.22	500
RE104D3	3/23/2015	12.24	5.17	0.027	5.84	302.5	3.5	36.68	450
RE105D1	3/25/2015	14.18	5.20	0.118	2.36	254.8	0.64	34.66	600
RE105D2	3/25/2015	13.9	5.11	0.065	5.91	16.5	0.21	35.34	500
RE108D1	3/27/2015	13.87	5.02	0.094	6.21	6.21	2.5	37.20	575
RE108D2	3/27/2015	13.75	5.18	0.075	6.04	36.6	0.21	37.71	550
RE120D1	3/25/2015	14.15	5.49	131	1.48	219.7	1.4	33.52	500
RE120D2	3/25/2015	14.06	5.25	0.077	5.86	1.5	1.95	32.46	450
RE120D3	3/25/2015	14.52	6.69	0.024	3.87	318.1	5.3	33.85	500
TT101D	3/24/2015	14.98	4.77	0.111	0.1	249.6	0.18	30.34	600
TT101D1	3/24/2015	14.75	5.2	0.117	1.71	253.1	3.71	31.71	450
TT101D2	3/24/2015	14.87	5.33	0.05	7.87	2.3	2.51	32.24	750
RE122D1	3/24/2015	12.9	6.5	0.153	6.35	144.7	25.8	39.27	500
RE122D2	3/24/2015	12.81	5.65	0.121	5.09	15.3	3.86	39.58	500
RE122D3	3/24/2015	12.52	5.55	0.051	2.82	200.7	95.4	40.7	500
BPOW6-1	3/26/2015	12.94	5.1	0.088	1.18	60.8	163	13.6	500
BPOW6-2	3/26/2015	12.98	5.33	0.032	1.18	22.5	30	13.97	600
BPOW6-3	3/26/2015	12.88	4.94	0.027	0.88	218.4	4.47	10.78	550
BPOW6-4	3/26/2015	12.91	4.59	0.093	0.91	34.1	3.99	10.11	750

* Initial water level not equilibrated due to pump installation; drawdown during sampling not determined.

Figures

112G00622\0510\112G00622CM01.DWG 08/02/10 MKB



0 15 30

SCALE IN MILES

NAVFAC

GENERAL LOCATION MAP
NWIRP BETHPAGE
BETHPAGE, NEW YORK

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

F:\Projects\NavyBethpage WXE0817.0 Deliverables\7.2 CADD\GIS_files\Bethpage\MAP DOCS\MXD\MISC\2014 03 Wells Sampled\F2 GW Samples 2015 03 04.mxd

Former Northrop Grumman Site

N

Bethpage

Plainedge

Levittown

North Massapequa

North Wantagh

Hicksville Rd

Hempstead Tpke

State Hwy 135

Southern State Pkwy

WELL 17 WELL 18 WELL 19

GM-33D2 GM-39D GM-39D2 VPB73 MW-3R N-10631 GM-78S GM-78I N-10600 VPB140 GM-20I GM-20D GM-21S GM-21I GM-21D GM-74I GM-74D GM-74D2 GM-74D3 N-10633 N-9924 GM-75D2 N-10624 N-10627 N-10634 GM-70D2 GM-71D2 GM-79I GM-79D N-10628 VPB104 GM-37D GM-37D2

VPB156 RE122D1 RE122D2 RE122D3

VPB121 RE108D1 RE108D2 VPB142 GM-35D2

VPB137 RE103D1 RE103D2 RE103D3

VPB117 MW-117-5 GM-36D VPB138 RE104D1 RE104D2 RE104D3 MW-116-5 VPB116 BWD-6915 BWD-6916 VPB51 RW3-MW3 RW3-MW4 RW3-MW1 RW3-MW2 RW1-MW3 RW2-MW1 RW-3 GM-38D GM-38D2 RW1-MW1 RW1-MW2 RW-1 VPB47 VPB38 VPB48 VPB118 MW-118-5

VPB123 GM-34D GM-34D2 BWD-8941 BWD-3876

VPB139 RE105D1 RE105D2 VPB40 BWD-8004 VPB119 VPB77

VPB122

VPB154 RE120D1 RE120D2 RE120D3

VPB76 VPB129 TT-101D TT-101D1 TT-101D2

VPB127 BPOW 1-4 BPOW 1-5 BPOW 1-6 VPB43

VPB158 LWD VPB148 VPB46 BPOW 4-2R BPOW 4-1R LWD-5303 VPB149 VPB150 BPOW 1-1 BPOW 1-2 BPOW 1-3 VPB45 VPB44 VPB131 VPB128 VPB50 BPOW 3-3 BPOW 3-4 VPB126 VPB130 BPOW 2-1 BPOW 2-2 BPOW 2-3 SFWD-6150 BPOW 3-1 BPOW 3-2 VPB125 VPB132 BPOW 5-1 BPOW 5-2 BPOW 5-3 ANY-8480 ANY-9338 VPB152 VPB124 VPB153 VPB151 SFWD-8664 SFWD-8665 VPB133 TT-102D TT-102D2

VPB146 BPOW 6-3 BPOW 6-4 VPB147

BPOW 6-1 BPOW 6-2 VPB145

0 750 1,500 3,000 Feet

Legend

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

NAVFAC

LOCATION MAP
MARCH 2015 GROUNDWATER SAMPLING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

CONTRACT NUMBER	CTO NUMBER
N62470-11-D8013	WE15
APPROVED BY: EV	DATE: 3/4/2015
APPROVED BY: —	DATE: —
FIGURE NO.: 2	REV: 0

Appendices

Appendix A

Groundwater Sampling Forms

RESOLUTION CONSULTANTS

Well ID: RE103D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 23 / 15 | Time: Start 815 am/pm | Finish 1215 am/pm
Project No: 60266526
Site Location: Avoca & Martin
Weather Conds: Sunny, Windy, 30° | Collector(s): Paul Kaeth

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

a. Total Well Length 64.5' c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 36.82 d. Calculated System Volume (see back) 15 ft 10 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556	471124X
	Hanna	HI98703	HG9117X

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
940	ON									
955		13.01	6.72	0.146	3.82	-66.9	0.49	500	38.45	
1050		13.03	6.31	0.146	4.25	-65.7				
1005		10.85	6.18	0.139	8.03	-63.3				
1010		10.55	6.07	0.139	5.62	-65.4		300	37.0	
1015		10.54		0.141	5.21	-64.4				

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

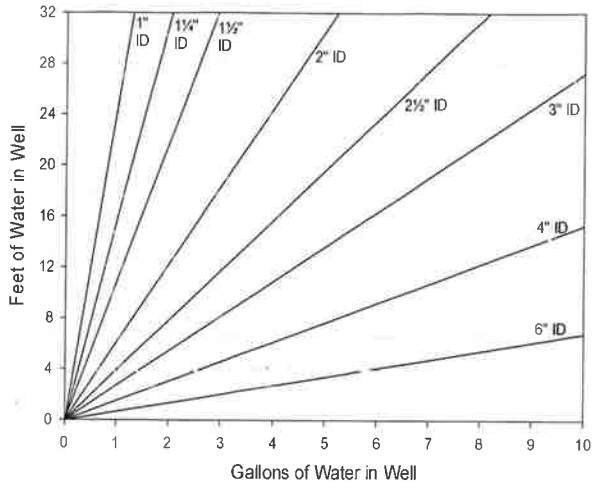
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE103D1-GW-032315	40-mL vial	3	HCl	VOCs	1700
RE103D1-GW-032315	1-L amber	2	none	1,4-Dioxane	1200

Comments

Signature Paul Kaeth Date 3/23/15

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

1 screen volume

37

15 ft = ~~56.8 L~~ / 9.8 G

20 ft = ~~75.7 L~~ / 13.1 G

25 ft = ~~94.6 L~~ / 16.3 G

Well ID: RE103 01 @ 9:55

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
			±.1	±3%	10%	±10mV				
1020		11.54	5.92	0.145	4.01	-63.4				
1025		11.16	5.84	0.143	3.94	-62.9	0.18	300	37.04	
1030		11.78	5.79	0.145	4.23	-62.8				
1035		11.76	5.78	0.145	4.21	-61.7				
1040	18 L	11.64	5.75	0.145	4.47	-60.5				
1045		11.51	5.73	0.145	4.52	-59.6				
1050		11.68	5.70	0.146	4.42	-57.8				
1055		11.64	5.69	0.146	4.26	-55.7				
1100		11.59	5.67	0.148	4.63	-54.2		300	37.05	
1105		12.30	5.61	0.152	4.76	-50.7				
1110		12.18	5.61	0.152	4.97	-49.5				
1115		12.38	5.58	0.154	4.97	-47.6				
1120		12.53	5.56	0.155	4.95	-45.5				
1125		1247	5.56	0.154	4.93	-45.2	0.12	300		
1130		12.33	5.56	0.154	4.91	-44.8				
1135		12.06	5.55	0.153	4.70	-44.6			37.10	
1140		12.56	5.54	0.155	4.72	-43.5				unit shutdown
1145		12.52	5.54	0.155	4.76	-42.6				
1150	10gal	12.68	5.54		4.78	-42.0				
1200										Sample

Well ID: RE 103 D2

RESOLUTION CONSULTANTS

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage	Date: 3/ 23 / 15	Time: Start 815 am/pm	
Project No: 60266526		Finish 1110 am/pm	
Site Location: Avoca of Martin			
Weather Conds: sunny windy 23-36°	Collector(s): Saby Chatterjee		

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

a. Total Well Length 673 c. Length of Water Column ________ (a-b) Casing Diameter/Material 4-inch PVC

b. Water Table Depth 36.62 d. Calculated System Volume (see back) 20ft 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

Make	Model	Serial Number
~~556 MPS~~	~~05589X~~	~~600336 44~~
Hanna	98730	~~43 21~~ 69117
YSI	556	471977

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0925		10.78	8.39	0.125	7.12	105.8	2.5	380	36.58	clear
0930		11.33	7.26	0.117	6.31	116.7	0.37	380		clear
0935		11.68	6.18	0.103	5.31	148	0.31	420	36.62	|
0940		12.13	5.90	0.085	6.07	176	0.35	450	36.78	|
0945		12.06	5.84	0.077	7.01	182.6	0.42	450	36.75	
0950		12.03	5.76	0.075	7.25	185		450	36.81	
1000	5 G	11.98	5.75	0.074	7.87	196	0.40	450		

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

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

If no or N/A - Explain below.

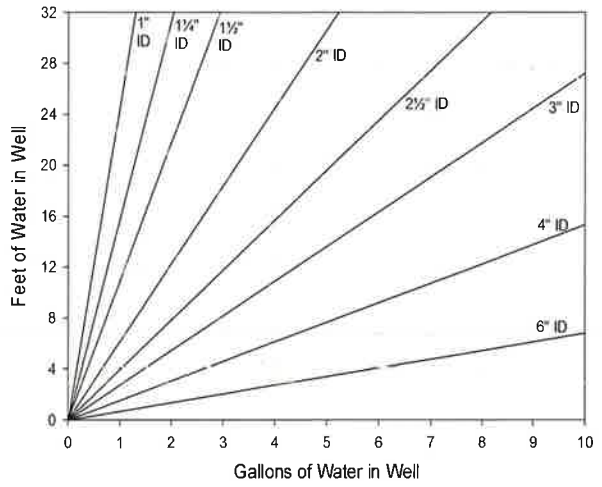
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
	40-mL vial	3	HCl	VOCs	1110
RE103D2-GW-032315	1-L amber	2	none	1,4-Dioxane	1110

Comments ____________________

Signature [signature] Date 03/23/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1005		11.76	5.75	0.074	7.80	202.2	0.27	450	36.82	~~36.82~~ clear
1010		12.04	5.72	0.076	7.29	211.2	0.35	450	36.82	
1015		12.36	5.71	0.077	8.53	218.1	0.37	450	36.82	
1020		12.35	5.71	0.078	8.37	219.1	0.45	450	36.82	
1025		12.58	5.69	0.081	7.22	224.1	0.41	450	36.82	
1030	1067	12.56	5.68	0.082	7.18	224.9	0.35	450	36.82	
1035		12.75	5.68	0.083	7.08	230	0.38	450	36.82	
1040		13.18	5.68	0.081	6.98	233.4	0.45	450	36.82	
1045		13.13	5.67	0.082	6.92	234.1	0.41	450	36.82	
1050		13.05	5.68	0.082	6.91	235.1	0.42	450	36.82	
1055		12.98	5.68	0.082	6.87	237.1	0.41	450	36.82	
1100	1467	13.01	5.67	0.083	6.90	235.1	0.41	450	1	Stop pump collect sample at 1110.
1110										

RESOLUTION CONSULTANTS

Well ID: RE103 D3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 23 / 15 | Time: Start 815 am/pm
Project No: 60266526 | Finish 1045 am/pm
Site Location: Avocet + Martin
Weather Conds: 30s F, W wind @ 10mph | Collector(s): JC

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

a. Total Well Length 35 | c. Length of Water Column _____ (a-b) | Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 36.95 | d. Calculated System Volume (see back) 15 ft 40.0

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	55474
	Hanna	HI 98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
925		12.54	6.23	0.041	9.16	121	5.20	450	38.71	clear
0930		1362	5.64	0.041	6.38	129	1.78	450	38.75	"
0935		1393	5.41	0.040	5.47	176.8	1.50	475	32.31	"
0945		14.03	5.13	0.042	5.27	211.4	1.06	475	37.07	"
0950		14.12	5.07	0.042	5.23	223.3	1.01	475	37.09	"
1000		14.17	5.04	0.043	5.21	233.7	1.01	550	37.10	"
1010		14.23	5.03	0.043	5.26	241.1	0.96	550	37.10	"

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

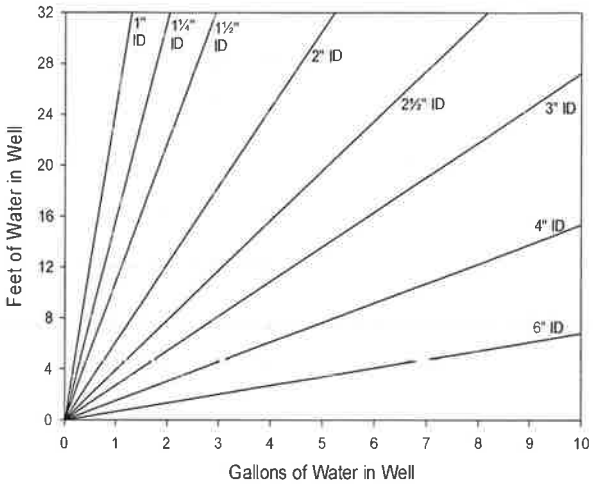
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE103D3-GW-032315	40-mL vial	3	HCl	VOCs	1030
RE103D3-GW-032315	1-L amber	2	none	1,4-Dioxane	1030

Comments: Purging began @ 925

Signature _____ Date 3/23/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID: _____

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor

RESOLUTION CONSULTANTS

Well ID: RE104D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 23 / 15 | Time: Start 1330 am/pm | Finish 1600 am/pm
Project No: 60266526
Site Location: Hilltop
Weather Conds: sunny windy 25-35° | Collector(s): Paul Kaneth

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

a. Total Well Length 375 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 33.92 d. Calculated System Volume (see back) 20ft screen 13 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	21124
Hanna	98730	69117

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1350										ON
1400		12.56	5.43	0.111	8.36	-58.9				
1420		12.49	5.32	0.110	5.21	-58.2		500	33.74	
1425		12.44	5.28	0.108	5.05	-55.5				
1430										pump alt problems back on
1435		10.23	5.27	0.103	5.23	-55.0	0.80	500		
1440		13.21	5.26	0.109	4.87	-53.8				

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

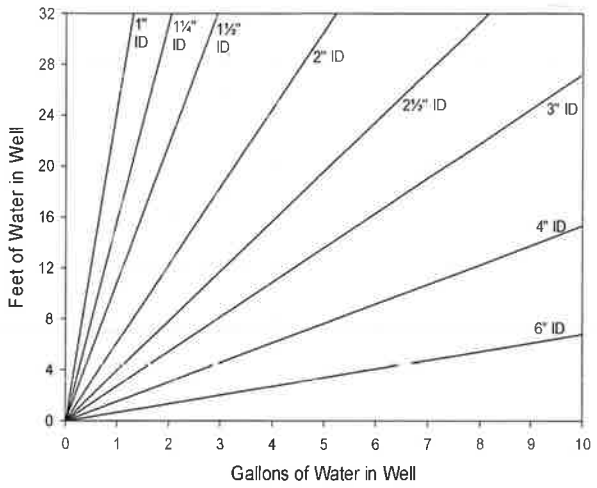
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE-104D1-032315	40-mL vial	3	HCl	VOCs	1550
RE104D1-032315	1-L amber	2	none	1,4-Dioxane	1550

Comments _____

Signature Paul Kaneth Date 3/23/15

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

1 screen volume

15 ft = ~~56.8 L~~ / 9.8 G
20 ft = ~~75.7 L~~ / 13.1 G
25 ft = ~~94.6 L~~ / 16.3 G

Well ID: MW-10401 @ 1350

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1445	5gal	13.06	5.26	0.109	4.85	-52.9	0.73		33.60	
1450		12.71	5.26	0.107	4.81	-53.1		500		
1455		13.15	5.26	0.109	4.75	-52.7				
1500		13.26	5.25	0.110	4.85	-50.7				
1505		13.36	5.25	0.109	4.73	-50.4			33.52	
1510		13.48	5.25	0.110	4.78	-49.9	1.09			
1515		13.35	5.25	0.110	4.73	-49.1		500		
1520		13.10	5.24	0.109	4.77	-48.7				
1525		13.27	5.25	0.109	4.78	-47.1	0.63		33.48	
1530		13.42	5.24	0.110	4.77	-45.7				
1535		13.27	5.23	0.110	4.85	-45.0				
1540		13.38	5.24	0.109	4.82	-43.7				
1545	13.3	13.40	5.23	0.110	4.82	-41.9				
										sample
1550										

1523

RESOLUTION CONSULTANTS

Well ID: RE104D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 23 / 15 | Time: Start 1400 am/pm
Project No: 60266526 | Finish 1600 am/pm
Site Location: Hilltop
Weather Conds: sunny, windy, cold | Collector(s): SC

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

a. Total Well Length 735 | c. Length of Water Column 698.71 (a-b) | Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 36.29 | d. Calculated System Volume (see back)

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	~~14F21~~ 71977
	~~#~~	154589	
	Hanna	~~98703~~	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1410		12.71	6.08	0.057	9.44	185.6	2.07	500	36.35	clear
1415		13.27	5.95	0.057	7.08	201.1	1.85	500	37.23	clear
1420		13.26	5.90	0.055	6.09	211.3	2.13	500	37.85	"
1425		13.32	5.88	0.054	6.09	214.5	2.17	500	37.92	"
1430		13.30	5.88	0.055	6.12	215.1	1.85	500	38.21	"
1435		13.29	5.87	0.053	6.28	220.8	1.52	500	38.22	
1440	5 G	13.33	5.90	0.050	6.59	221	1.57	500	38.22	

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

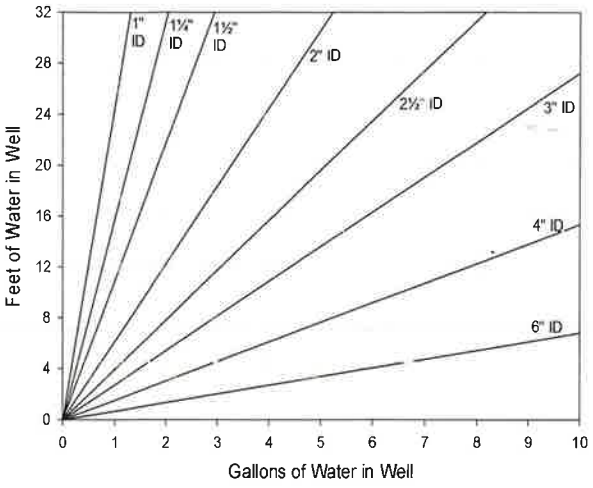
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE104D2-GW032315	40-mL vial	3	HCl	VOCs	1540
	1-L amber	2	none	1,4-Dioxane	1540
Duplicate-GW-032315	VOC	3			1600
	Dioxane	2			1600

Comments

Signature [signature] Date 03/23/15

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

1 screen volume

15 ft = [redacted] / 9.8 G
20 ft = [redacted] / 13.1 G
25 ft = [redacted] / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1445		13.48	5.90	0.049	6.70	223.7	1.6	500	38.22	None
1450		13.39	5.90	0.048	6.79	225.2	1.7	500	38.22	clear
1455		13.45	5.92	0.046	6.79	230.1		500	38.22	clear
1500		13.43	5.90	0.047	6.81	227.5		500	38.22	"
1505	10G	13.42	5.91	0.046	6.83	230.8	1.5	500	38.22	"
1510		13.52	5.93	0.047	6.79	231.7		500	38.22	"
1515		13.47	5.92	0.046	6.75	232.1		500	38.22	"
1520		13.51	5.92	0.047	6.78	237.3	1.5	500	38.22	"
1525		13.52	5.93	0.047	6.81	237.1		500	"	"
1530		13.49	5.92	0.045	6.82	238.1		"	"	"
1535	14G	13.49	5.92	0.047	6.79	237.1	1.6	"	38.22	clear
1540	Sample	fine								

RESOLUTION CONSULTANTS

Well ID: RE0403

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage
Project No: 60266526
Site Location: Hilltop
Weather Conds: 40 F, windy
Date: 3 / 23 / 15
Time: Start 1425 am/pm
Finish 1625 am/pm
Collector(s): SC

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

a. Total Well Length 185
c. Length of Water Column 148.28 (a-b)
Casing Diameter/Material: 4-inch PVC
b. Water Table Depth 36.72
d. Calculated System Volume (see back) 20' → 13 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	55474
	Hanna	HI 98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1430		11.24	5.59	0.031	7.96	266.5		450	36.71	clear
1435		12.14	5.42	0.031	6.38	268.4	3.16	450	36.70	clear
1440		12.30	5.35	0.030	6.00	275.4		450	36.70	clear
1445		12.31	5.35	0.029	5.98	276.1	1.21	450	36.70	clear
1450		12.34	5.34	0.029	5.95	279.5		450	36.70	clear
1455		12.31	5.31	0.028	6.07	286.4	5.17	450	36.70	clear
1500	5 G	12.21	5.20	0.036	6.16	292.1	4.28	450	36.70	clear

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

Method: Geotech bladder pump with drop tube assembly

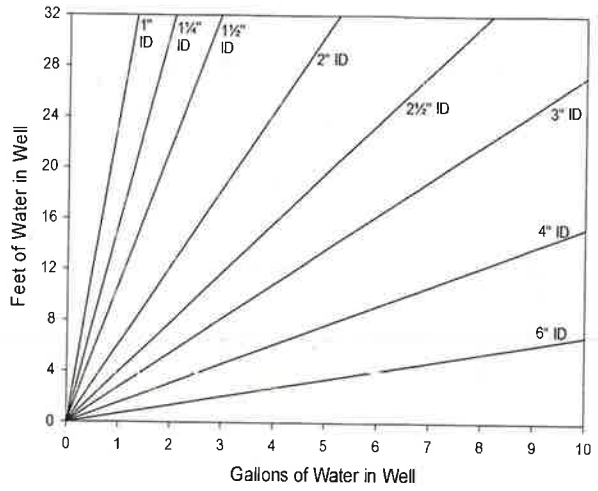
Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE1403-GW-032315	40-mL vial	3	HCl	VOCs	1610
RE1403-GW-032315	1-L amber	2	none	1,4-Dioxane	1610

Comments

Signature

Date 3/23/15

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

1 screen volume

15 ft = ~~56.8 L~~ / 9.8 G
20 ft = ~~75.7 L~~ / 13.1 G
25 ft = ~~94.6 L~~ / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1505		11.98	5.23	0.036	6.13	293.5		450	36.70	clear, odor
1515		12.10	5.22	0.027	5.97	297.3	4.61	450	36.69	clear
1520		12.08	5.20	0.027	5.95	299.4		450	36.69	"
1525		12.03	5.16	0.027	5.95	300.8	3.84	450	36.69	"
1530		12.02	5.21	0.027	5.94	297.1		450	36.68	"
1535		12.04	5.17	0.027	5.93	302.5	3.61	450	36.68	"
1540		12.03	5.16	0.027	5.89	301.4		450	36.68	"
1550		12.09	5.14	0.027	5.86	304.1	3.59	450	36.68	"
1600		12.24	5.17	0.027	5.84	302.5		450	36.68	"

RESOLUTION CONSULTANTS

Well ID: RE122P1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3/24/15 | Time: Start 8:15 am/pm | Finish 12:15 am/pm
Project No: 60266526
Site Location: Curtis & Hayden
Weather Conds: sunny 25° | Collector(s): JC

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

a. Total Well Length 545 | c. Length of Water Column _____ (a-b) | Casing Diameter/Material 4-inch PVC

b. Water Table Depth 39.26 | d. Calculated System Volume (see back) 20ft screen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	55474
	Hanna	HI 98703	89177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0900		10.33	7.76	0.158	11.10	190.4	2.00	400	39.35	clear
0910		11.42	6.08	0.153	10.54	172.1		400	39.45	
0915		12.20	5.79	0.153	9.78	168.2	9.83	500	39.45	cloudy
0920		12.26	5.79	0.153	9.80	168.1		500	39.45	"
0925		12.16	6.13	0.235	9.16	165.8	>50	500	39.25	"
0930		12.34	6.76	0.242	8.69	168.3		500	39.25	"
0935		12.37	6.75	0.241	8.76	167.2	>50	500	39.25	"

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

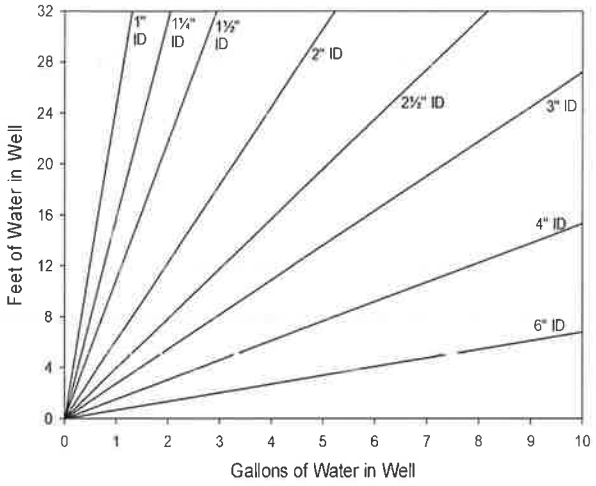
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE122D1-GW-032415	40-mL vial	3	HCl	VOCs	1105
RE122D1-GW-032415	1-L amber	2	none	1,4-Dioxane	1105

Comments: hit bottom ~15ft too long ~535 of tubing

Signature _____ Date 3/24/15

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

1 screen volume

15 ft = [redacted] / 9.8 G
20 ft = [redacted] / 13.1 G
25 ft = [redacted] / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0940	5G	12.14	6.74	0.239	8.73	163.2		500	39.25	cloudy
1000		12.29	6.61	0.157	7.84	170.4		500	39.27	
1010		12.74	6.53	0.157	6.91	173.7		500	39.27	cloudy - clearing
1015		12.73	6.51	0.155	6.54	172.5	234	500	39.27	"
1020		12.71	6.51	0.153	6.57	161.4	225	500	39.27	"
1025		12.69	6.51	0.155	6.49	152.8	228	500	39.27	"
1030	10 G	12.89	6.49	0.154	6.54	148.1	94.4	500	39.27	"
1035		12.78	6.50	0.154	6.47	145.8	63.0	500	39.27	"
1040		12.92	6.50	0.154	6.43	145.2	64.6	500	39.27	"
1045		12.66	6.49	0.153	6.36	145.6	32.5	500	39.27	"
1050		12.84	6.50	0.154	6.39	145.1	29.0	500	39.27	"
1055		12.90	6.50	0.153	6.35	144.7	25.8	500	39.27	"

RESOLUTION CONSULTANTS

Well ID: RE122D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 24 / 15 Time: Start 815 am/pm
Project No: 60266526 Finish 1200 am/pm
Site Location: Curtis & Hayden
Weather Conds: Sunny 45° Collector(s): Paul Kareth

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

a. Total Well Length 615 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 39.53 d. Calculated System Volume (see back) 20ft screen, 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556MPS	71124
	Hanna	HI 98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
925	ON									
0935		9.37	7.07	0.158	1582	-54.6	3.86	480	39.78	clear
0940		11.64	6.17	0.153	10.47	-43	2.75		39.45	"
0945		10.38	5.59	0.150	7.01	-32.3		350		
0950		10.41	5.60	0.150	7.20	-31.4			39.44	
1000								450		air in tube adjust hose fitting
1010		11.12	5.85	0.120	5.70	-36.9				

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

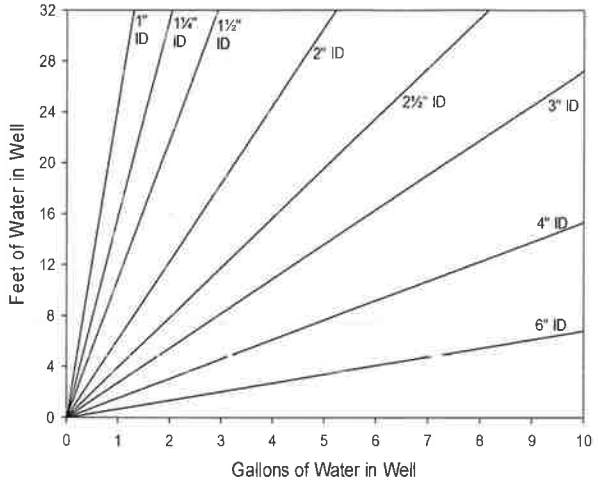
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE122D2-GW-032415	40-mL vial	9	HCl	VOCs	1130 MS, MSD
RE122D2-GW-032415 MS,MSD	1-L amber	6	none	1,4-Dioxane	1130 MS, MSD

Comments: hit bottom, tubing was not cut

Signature: Paul Kareth Date: 3/24/15

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

1 screen volume

15 ft = [redacted] / 9.8 G
20 ft = [redacted] / 13.1 G
25 ft = [redacted] / 16.3 G

Well ID: RE-122020 925

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1015		11.31	5.74	0.117	5.59	-33.3	15.1		39.51	
1020	5gal	12.01	5.71	0.119	5.32	-30.9		500		
1020		11.99	5.68	0.119	5.57	-29.0	14.6			
1025		12.59	5.68	0.121	5.41	-28.4				
1030		12.70	5.67	0.121	5.32	-27.6				
1035		12.51	5.67	0.121	5.31	-25.2			39.52	
1040		12.77	5.66	0.121	5.27	-23.5	5.62			
1045		12.41	5.65	0.120	5.25	-21.9		500		
1050		12.70	5.65	0.120	5.22	-20.9				
1055	10gal	12.79	5.65	0.120	5.19	-19.2				
1100		12.83	5.65	0.121	5.17	-18.4	3.86			
1105		12.62	5.65	0.121	5.10	-16.6				
1110		12.81	5.65	0.121	5.09	-15.3		500	39.58	
1115										
1130										Sample MS, MSD

RESOLUTION CONSULTANTS

Well ID: RE122-03

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 24 / 15 | Time: Start 915 am/pm | Finish 1215 am/pm
Project No: 60266526
Site Location: Curtis & Hayden
Weather Conds: Sunny ~5°C | Collector(s): SC

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

a. Total Well Length 240 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 40.19 d. Calculated System Volume (see back) 20ft screen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI 556	~~6820-10~~ X	~~60233644~~ 71977
	Hann ~~MPS~~	HI 54589 X	~~14521~~ 69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
9570										
1000		11.63	5.99	0.055	8.55	149.1	>50	500	40.26	cloudy
1005		11.43	5.82	0.054	8.72	155.6	305			
1010		11.72	5.47	0.050	5.86	185.3	291	500	40.70	cloudy
1020		11.42	5.56	0.051	5.62	187.8	299	500	40.70	"
1025		11.91	6.13	0.087	5.32	167.9			40.70	"
1030	5G	12.22	5.89	0.063	4.92	177.2	141	500	40.70	

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

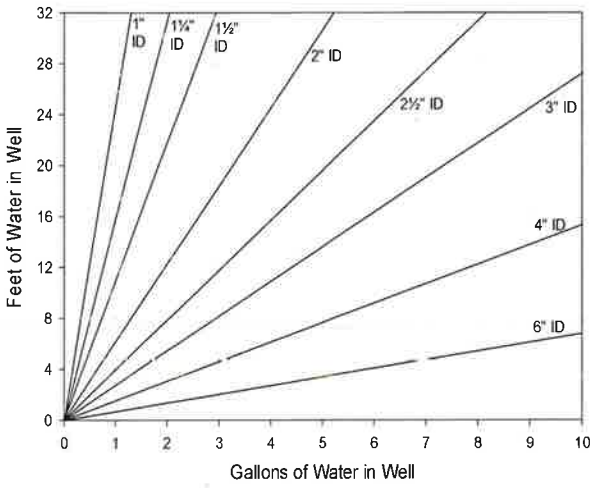
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE122D3-GW-032415	40-mL vial	3	HCl	VOCs	1150
RE122D3-GW-032415	1-L amber	2	none	1,4-Dioxane	1150

Comments: tubing kit bottom ~3-4ft too long

Signature _____ Date 03/24/15

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

1 screen volume

15 ft = [redacted] / 9.8 G
20 ft = [redacted] / 13.1 G
25 ft = [redacted] / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1035		11.72	5.62	0.054	4.91	185.6		500	40.70	
1040		12.19	5.55	0.053	4.57	191.2	93.8	500	40.70	
1045		12.15	5.57	0.053	4.29	196.3				
1050		12.16	5.59	0.053	4.35	195.2		1	40.70	
1055		12.13	5.56	0.053	4.23	195.1	112	500	40.70	
1100		12.14	5.56	0.052	3.97	196		500	40.70	
1105	106	12.33	5.56	0.051	3.82	197.2	101	500	40.70	
1110		12.31	5.58	0.051	2.89	196.3		500	40.70	
1115		12.36	5.55	0.051	2.85	199.7	97.1	500	40.70	
1120		12.48	5.56	0.051	2.82	199.0				
1125		12.51	5.55	0.051	2.83	199.2	90.4	500	40.70	
1130		12.49	5.55	0.050	2.80	200.3	92.3	500	40.70	
1135		12.52	5.55	0.050	2.80	201.0		500	40.70	
1140	146	12.52	5.55	0.051	2.82	200.7	95.4	500	40.70	
										Sample at
										1150

RESOLUTION CONSULTANTS

Well ID: TT-101D

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 24 / 15 | Time: Start 1315 am/pm | Finish 1500 am/pm
Project No: 60266526
Site Location: Wadsworth
Weather Conds: mostly sunny 40° | Collector(s): JC

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

a. Total Well Length 350 c. Length of Water Column 30.32 (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 319.68 d. Calculated System Volume (see back) 20ftscreen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	55474
	Hanna	HI 98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1335	~~1.25~~	11.57	5.58	0.102	4.96	146.0	0.11	525	30.37	clear
1340		14.82	4.76	0.110	0.35	220.4		600	30.39	"
1345		14.82	4.82	0.110	0.22	202.0	0.94	600	30.39	"
1350		14.86	4.84	0.110	0.23	201.8		600	30.39	"
1355	5gal	14.83	4.84	0.110	0.20	181.9	0.44	600	30.39	"
1400		14.78	4.84	0.110	0.17	210.0		600	30.39	"
1405		14.90	4.84	0.110	0.24	215.0	0.15	600	30.39	"

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

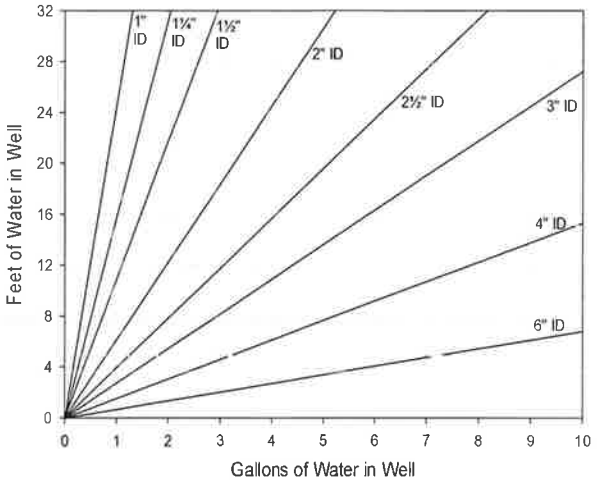
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
TT101D-GW-032415	40-mL vial	3	HCl	VOCs	1440
TT101D-GW-032415	1-L amber	2	none	1,4-Dioxane	1440

Comments

Signature Date 3/24/2015

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1410		14.97	4.83	0.111	0.14	232.0		600	30.39	clear
1415		14.88	4.81	0.111	0.13	237.7	0.12	600	30.39	clear
1420	10 gal	14.85	4.81	0.110	0.12	241.7		600	30.39	"
1425		14.91	4.79	0.111	0.12	245.7	0.14	600	30.39	"
1430		14.91	4.79	0.111	0.10	247.8		600	30.39	"
1435	13.1 gal	14.98	4.77	0.111	0.10	249.6	0.18	600	30.39	"

RESOLUTION CONSULTANTS

Well ID: TT-10101

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 24 / 15 | Time: Start 1315 am/pm | Finish 1560 am/pm
Project No: 60266526
Site Location: Wadsworth
Weather Conds: mostly sunny 40° | Collector(s): SC

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

a. Total Well Length 595 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 31.43 d. Calculated System Volume (see back) 20ft screen, 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
YSI	556	U54589X	14J21 71977
Hanna	HI98130	98730	67177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1340		14.49	5.33	114	2.97	195	0.72	550	31.65	
1345		14.52	5.31	114	2.82	200.2			31.74	
1350		14.56	5.30	114	2.64	208.1	0.46	550	31.75	
1355		14.60	5.26	115	2.47	214.3		550	31.74	
1400	5G	14.58	5.24	115	2.24	222.6	0.58	550	31.74	
1405		14.41	5.22	116	2.22	226.2		400	31.74	
1410		14.51	5.20	118	2.17	230.6		400	31.74	

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

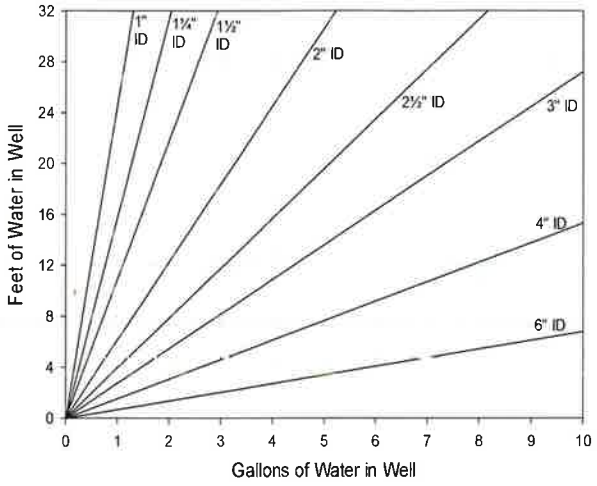
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
TT101DI-GW032415	40-mL vial	3	HCl	VOCs	1500
TT101DI-GW-032415	1-L amber	2	none	1,4-Dioxane	1500

Comments _____

Signature Sally Clotfelter Date 03/24/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1415		14.54	5.21	118	1.90	242	6.64	450	31.74	
1420		14.61	5.20	117	1.87	244.1		450	31.74	
1425		14.71	5.21	118	1.82	247	5.51	450	31.74	
1430	10G	14.71	5.21	117	1.73	250.3		450	31.74	
1435		14.74	5.21	117	1.72	252.7		450	31.74	
1440		14.73	5.21	116	1.68	254.1	2.38	450	31.74	
1445	13.5	14.75	5.20	117	1.71	253.1	3.71	450	31.74	
			stop							Sample at 1500

RESOLUTION CONSULTANTS

Well ID: TT1010L

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/24/15 Time: Start 1315 am/pm
Project No: 60266526 Finish 1560 am/pm
Site Location: Wadsworth
Weather Conds: mostly sunny 40° Collector(s): Paul Kaveth

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

a. Total Well Length 76.5 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 32.17 d. Calculated System Volume (see back) 20ft screen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556	71124
	Hanna	98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1330	ON									
1340		14.68	5.36	0.049	2.94	-46.1	0.29	750	32.25	
1345		14.84	5.35	0.049	4.25	-38.6				
1350	59.1	14.89	5.34	0.049	4.60	-33.8		750	32.27	
1355		14.93	5.34	0.049	5.26	-28.2	2.57			
1400		14.86	5.35	0.049	6.37	-22.2				
1405		14.95	5.35	0.050	7.41	-15.7			32.23	

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

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

If no or N/A - Explain below.

_____

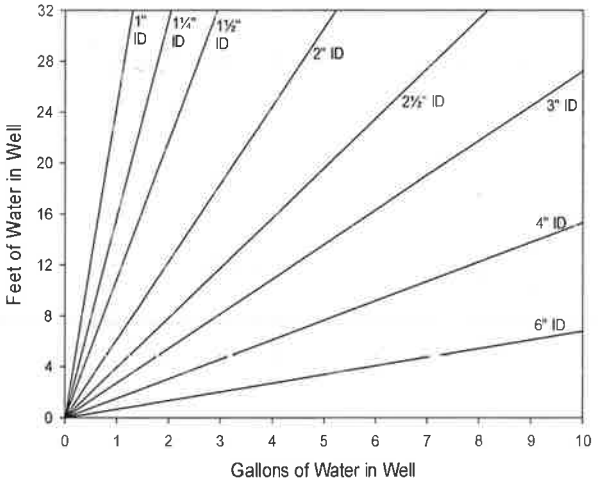
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
TT1012-GW-032415	40-mL vial	3	HCl	VOCs	1435
TT1012-GW-032415	1-L amber	2	none	1,4-Dioxane	

Comments _____

Signature Paul Kaveth Date 3/24/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID: TT101D2 @1330

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C) ±3	pH ±.1	Spec. Cond. (mS/cm) ±3%	DO (mg/L) ±10%	ORP (mV) ±10mV	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1410		14.98	5.33	0.050	7.67	-9.6				
1415	10gal	14.95	5.33	0.051	7.72	-7.9	2.62		32.24	
1420		14.94	5.33	0.050	7.79	-4.5				
1425		14.94	5.33	0.050	7.86	-2.8				
1430		14.87	5.33	0.050	7.87	-2.3	2.51			
1435										sample

Well ID: RE120D1

RESOLUTION CONSULTANTS

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 25 / 15 | Time: Start 800 am/pm

Project No: 60266526 | Finish 1200 am/pm

Site Location: Shelley Dr

Weather Conds: 25-40°, sunny | Collector(s): SC

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

a. Total Well Length 655 c. Length of Water Column ______ (a-b) Casing Diameter/Material 4-inch PVC

b. Water Table Depth 3349 d. Calculated System Volume (see back) 20 ft screen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI 556 MPS	05458 9 X	~~600336 4M~~ 79177
		~~14J21~~
Hanna	98730	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0855	ON									
0900		12.08	7.59	135	10.79	144.3	2.18	400	33.51	clear
0905		12.88	6.48	136	5.18	155.0		400	33.52	|
0910		13.42	6.02	131	4.38	164.4	0.79	500	33.52	|
0915		13.48	5.75	130	2.28	184.9		500	33.52	
0920		13.54	5.56	131	1.91	198.2		500	33.52	
0925	5 G7	13.58	5.52	132	1.83	206.3	1.74	500	33.52	

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

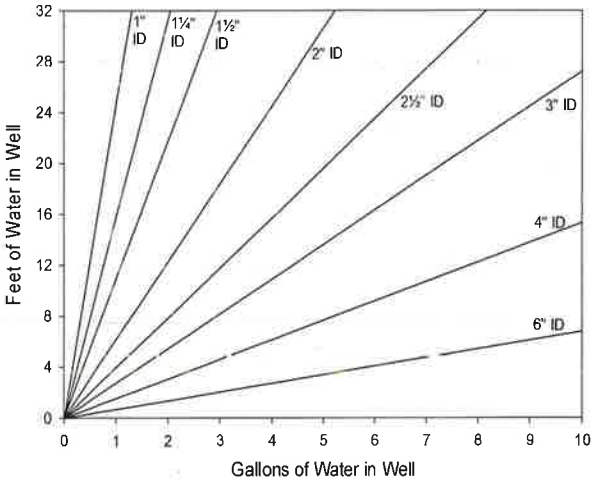
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE120D1-GW-032515	40-mL vial	3	HCl	VOCs	1050
RE120D1-GW-032515	1-L amber	2	none	1,4-Dioxane	1050

Comments

Signature [signature] Date 03/25/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0930		13.56	5.51	133	1.94	210.3		500	33.52	clear
0935 ~~1430~~		13.56	5.52	132	2.26	215	1.95	500	33.52	"
0940		13.62	5.52	132	2.30	216.9		500	33.52	
0945		13.72	5.52	132	2.20	218.4		500	33.52	
0950		13.83	5.53	133	2.08	218.9	1.75	500	33.52	
0955		13.77	5.53	133	1.87	218.2		500	33.52	
1000	10G	13.95	5.52	133	1.64	218.6		500	33.52	
1005		13.96	5.52	133	1.60	218.7	1.34	500	33.52	
1010		14.06	5.52	133	1.58	218.2		500	33.52	
1015		14.17	5.51	133	1.49	218.8		500	33.52	
1020		14.16	5.51	133	1.51	219.2	1.41	500	33.52	
1025		14.10	5.50	133	1.51	219.1		500	33.52	
1030		14.14	5.50	133	1.49	220.1		~~550~~	33.52	
1035		14.12	5.49	132	1.50	220.1		4500	33.52	
1040	4G	14.15	5.49	131	1.48	219.7	1.35	500	33.52	
	STOP									
										Sample time
										1050

RESOLUTION CONSULTANTS

Well ID: RE120D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 25 / 15 Time: Start 800 am/pm
Project No: 60266526 Finish 1200 am/pm
Site Location: Skelley Dr
Weather Conds: sunny 25-40° Collector(s): Paul Kaveth

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

a. Total Well Length 715 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 33.23 d. Calculated System Volume (see back) 20ft screen 13.1gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556	7174
	Hanna	98703	69117

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
830	ON									
0835		13.52	7.54	0.075	7.43	-54.1	11.94	450	33.39	clear none
0840		13.83	6.38	0.074	5.54	-48.8	6.90	500	33.39	
0845		13.86	6.05	0.074	5.36	-45.3		500	33.39	
0850		13.88	5.70	0.075	5.72	-39.3	1.94	500	33.39	
0855		13.88	5.46	0.076	6.02	-33.1				
900	5gal	13.91		0.077	6.06	-29.5				

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

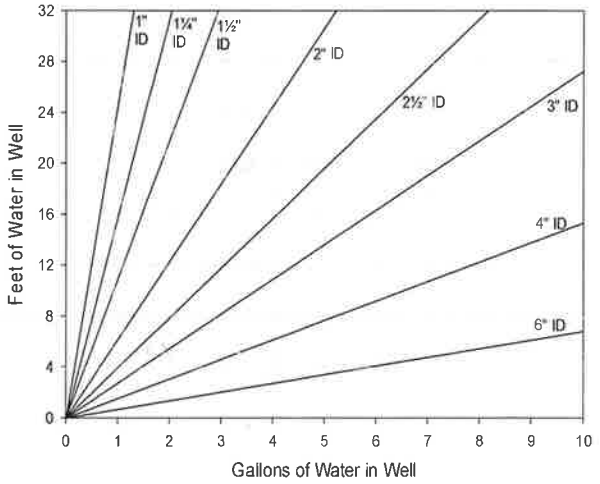
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE120D2-GW-032515	40-mL vial	3	HCl	VOCs	1010
RE120D2-GW-032515	1-L amber	2	none	1,4-Dioxane	1010

Comments MS, MSD

Signature Paul Kaveth Date 3/25/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID: RE126DL @ 830

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L) ±10%	ORP (mV) ±10mV	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
905		13.95	5.34	0.077	6.04	-46.0				
910		13.93	5.32	0.077	6.02	-22.6		450	33.38	
915		13.93	5.30	0.076	6.06	-18.7				
920		13.93	5.29	0.076	6.08	-15.5	1.89			
925		13.95	5.26	0.076	6.27	-13.3				
930		13.99	5.27	0.076	6.39	-10.8			33.42	
935	10gal	13.94	5.26	0.076	6.11	-7.9		450		
940		14.01	5.26	0.077	6.04	-5.0				
945		14.00	5.26	0.077	5.97	-3.8	1.95		32.44	
950		14.09	5.25	0.078	5.91	-2.3				
955		14.02	5.25	0.077	5.85	-0.4				
1000		14.06	5.25	0.077	5.86	1.5		450	32.46	
1010										Sample

RESOLUTION CONSULTANTS

Well ID: RE-120 03

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage | Date: 3 / 25 / 15 | Time: Start 810 am/pm | Finish 1100 am/pm
Project No: 60266526
Site Location: Heather Dr
Weather Conds: sunny 25-40° | Collector(s):

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

a. Total Well Length 765' c. Length of Water Column 731.15 (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 33.85 d. Calculated System Volume (see back) 20 ft screen 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	554744
	Hanna	HI 98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0845	ON									
0850		12.25	7.86	0.027	9.70	195	21	500	33.90	clear, o
0855		13.81	6.68	0.025	4.70	198.6		500	33.90	"
0900		14.08	11.11	0.024	4.63	201.9	13.3	500	33.80	"
0905		14.24	7.80	0.024	4.16	225.5		500	33.85	"
0910		14.35	8.19	0.024	4.06	234.8	8.13	500	33.85	"
0915		14.43	7.73	0.024	4.10	249.9		500	33.85	"

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

3. SAMPLE COLLECTION:

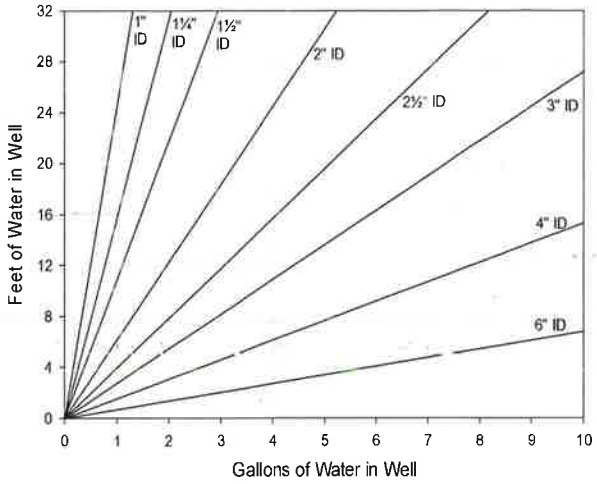
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE120D3-GW-032515	40-mL vial	3	HCl	VOCs	1025
RE120D3-GW-032515	1-L amber	2	none	1,4-Dioxane	1025
DUPLICATE-GW-032515	40mL VOA	3	HCl	VOCs	1030
DUPLICATE-GW-032515	1L AG	2	none	1,4-Dioxane	1030

Comments

Signature [signature] Date 3/25/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
920		14.38	7.89	0.024	4.26	262.8	9.74	500	37.85	clear
925		14.42	7.84	0.024	4.18	270.1		500	37.85	"
930		14.34	7.44	0.024	4.08	277.5	9.74	500	37.85	"
935		14.42	7.37	0.024	4.02	282.2		500	37.85	"
940		14.52	7.14	0.024	4.00	286.5	9.86	500	37.85	"
945		14.48	7.05	0.024	3.96	290.16		500	37.85	"
950		14.65	6.94	0.024	3.93	294.3	8.19	500	37.85	"
955		14.62	6.85	0.024	3.92	296.8		500	37.85	"
1000		14.70	6.84	0.024	3.87	302.0	6.14	500	37.85	"
1005		14.60	6.78	0.024	3.86	304.6		500	37.85	"
1010		14.54	6.72	0.024	3.88	310.4	5.54	500	37.85	"
1015		14.57	6.67	0.024	3.85	314.5		500	37.85	"
1020		14.52	6.64	0.024	3.87	318.1	5.26	500	37.85	"

RESOLUTION CONSULTANTS

Well ID: RE105D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 25 / 15 Time: Start 1310 am/pm
Project No: 60266526 Finish 1530 am/pm
Site Location: Lincoln
Weather Conds: sunny 40° Collector(s): JC

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

a. Total Well Length 555 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 35.23 d. Calculated System Volume (see back) 20ft screen 13l gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	55474
	Hanna	HI 98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1325		13.63	5.60	0.122	5.02	155.5	0.42	550	34.75	clear
1330		14.28	4.92	0.120	3.14	197.4		550	34.74	clear
1335		14.29	5.05	0.120	3.00	198.8	0.31	600	34.74	clear
1340		14.31	5.13	0.118	2.82	199.2		600	34.74	clear
1345		14.35	5.32	0.120	2.66	202.2	0.28	600	34.74	clear
1350		14.38	5.43	0.120	2.49	207.7		600	34.74	clear
1355		14.40	5.48	0.120	2.51	213.3	0.21	600	34.74	"

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

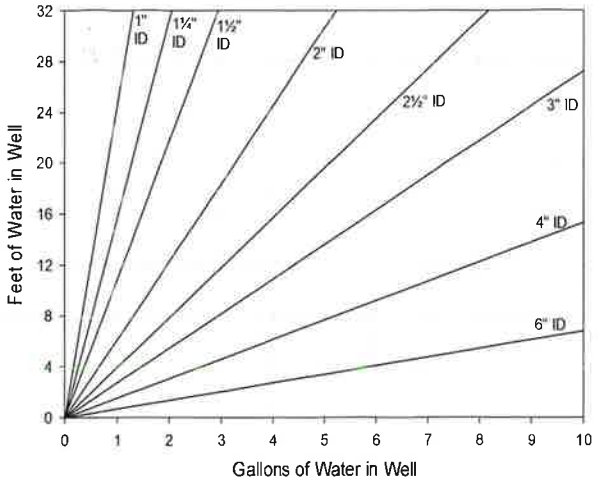
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE105D1-GW-032515	40-mL vial	3	HCl	VOCs	1450
RE105D1-GW-032515	1-L amber	2	none	1,4-Dioxane	1450

Comments _____

Signature _____ Date _____

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

1 screen volume

15 ft = ~~56.8 L~~ / 9.8 G
20 ft = ~~75.7 L~~ / 13.1 G
25 ft = ~~94.6 L~~ / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1400		14.28	5.37	0.119	2.44	219.2	1.59	600	34.74	clear
1405		14.23	5.36	0.119	2.40	226.1		600	34.71	"
1410		14.22	5.34	0.118	2.41	231.1	1.23	600	34.71	"
1415		14.25	5.23	0.118	2.40	240.2		600	34.70	"
1420		14.26	5.25	0.118	2.40	241.9	0.98	600	34.64	"
1425		14.23	5.26	0.118	2.37	245.9		600	34.69	"
1430		14.28	5.26	0.118	2.34	249.4	0.87	600	34.70	"
1435		14.16	5.25	0.118	2.36	254.9		600	34.64	"
1440		14.18	5.20	0.118	2.36	259.8	0.64	600	34.66	"
~~1445~~										

RESOLUTION CONSULTANTS

Well ID: RE 105DL

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 25 / 15 Time: Start 1250 am/pm
Project No: 60266526 Finish 1530 am/pm
Site Location: Lincoln
Weather Conds: Sunny 40° Collector(s): Paul Kaneth

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

a. Total Well Length 755 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 35.23 d. Calculated System Volume (see back) 20ft screen, 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556	711 24
	Hanna	HI 98703	1164117X

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1315		13.96	5.43	0.063	10.22	-0.4	2.39	500	35.55	
1320		14.10	5.34	0.063	6.50	-4.6				
1325		14.11	5.31	0.062	5.12	-4.7			35.37	
1330		14.11	5.28	0.063	3.84	-6.0		500		
1335		14.08	5.20	0.063	4.06	-5.9	0.64			
1340		14.14	5.13	0.065	5.20	-4.1			35.37	
1345		14.15	5.11	0.066	5.93	-1.6				

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

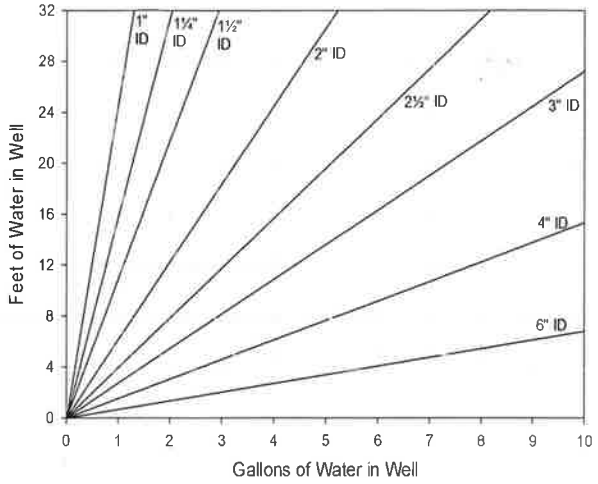
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE105D2-GW-032515	40-mL vial	3	HCl	VOCs	1500
RE105D2-GW-032515	1-L amber	2	none	1,4-Dioxane	1500

Comments _____

Signature Paul Kaneth Date 3/25/15

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

1 screen volume

15 ft = [redacted] L / 9.8 G
20 ft = [redacted] L / 13.1 G
25 ft = [redacted] L / 16.3 G

Well ID: KEMS02 @ 1310

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
				± 3%	±10%	±10mV				
1350	5gal	14.15	5.10	0.067	6.11	2.3	0.40		35.36	
1355		14.17	5.10	0.067	6.11	5.1				
1400		14.19	5.11	0.066	6.12	6.2				
1405		14.08	5.11	0.065	6.05	8.0	0.34	500	35.34	
1410		14.08	5.10	0.065	6.07	8.9				
1415		14.08	5.10	0.065	6.07	9.7				
1420		14.05	5.10	0.065	6.09	11.7	0.58		35.33	
1425	10gal	14.10	5.11	0.066	5.97	13.6				
1430		14.05	5.11	0.065	5.98	14.1				
1435		14.01	5.11	0.065	5.93	14.7	0.21		35.34	
1440		13.95	5.11	0.065	5.94	15.9				
1445		13.96	5.11	0.065	5.93	16.4				
1450	13.5gal	13.90	5.11	0.065	5.91	16.5			35.34	
1500										sample

Well ID: BPOW6-1

RESOLUTION CONSULTANTS

Low Flow Ground Water Sample Collection Record R2111 01

Client: Navy NWIRP Bethpage Date: 3/26/15 Time: Start 900 am/pm
Project No: 60266526 Finish 1130 am/pm
Site Location: Sylvia
Weather Conds: cloudy, 40° overnight rain Collector(s): Paul Kaneth

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

a. Total Well Length 580 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 13.53 d. Calculated System Volume (see back) 20ft screen, 13.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556	55474
Horiba	98730	69117

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
850	ON									
900		12.42	5.06	0.073	6.61	196.9	13.62	500	13.62	
910		12.41	4.79	0.075	4.16	220.2	19.5			
915		12.68	5.62	0.105	2.60	137.6				
920		12.72	5.74	0.113	1.82	103.4			13.58	
925		12.70	5.65	0.106	1.87	86.0				gray, cloudy visible silt
930	5gal	12.68	5.65	0.105	2.19	87.1	71000			

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☑	☐	☐
Has required turbidity been reached	☐	☒	☐
Have parameters stabilized	☑	☐	☐

(continued on back)

If no or N/A - Explain below

ended after 2 hr purge (hit bottom turned gravel)

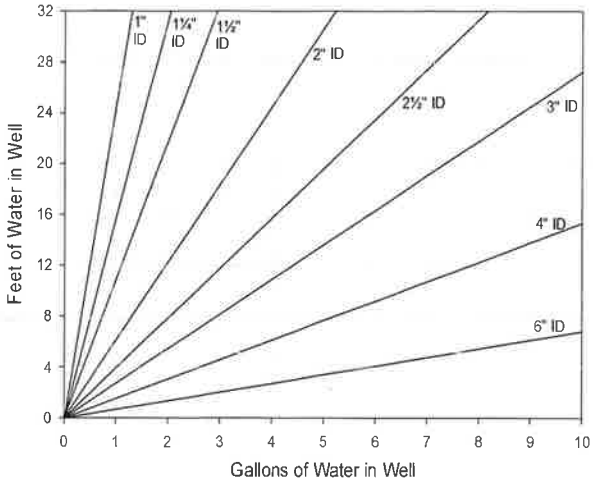
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
	40-mL vial	3	HCl	VOCs	1100
	1-L amber	2	none	1,4-Dioxane	

Comments hit bottom, tubing too long

Signature Paul Kaneth Date 3/26/15

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID: SPOW6-1 @ 850 = 2hrs

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L) ±10%	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
935		12.61	5.60	0.102	2.41	69.6	>1000	500		
940		12.71	5.81	0.100	2.28	62.7	>1000			
945		12.75	5.53	0.098	2.00	58.1	>1000		13.60	
950		12.72	5.50	0.097	1.41	57.5	>1000			clear flowcell
955		12.68	5.45	0.094	1.58	54.8	>1000	500		
1000		12.62	5.38	0.092	1.50	53.0	905		13.58	clear flowcell
1005	1gal	12.72	5.36	0.090	1.20	57.0	850			
1010		12.74	5.31	0.091	1.16	54.8	786			
1015		12.69	5.27	0.089	1.29	55.0	576			
1020		12.74	5.24	0.089	1.31	53.5	511		13.61	
1025		12.76	5.24	0.088	1.34	53.6	443			
1030		12.81	5.19	0.089	1.08	58.8	327			
1035	15gal	12.90	5.16	0.088	1.16	59.7	265			
1040		12.88	5.14	0.088	1.15	60.0	243		13.60	
1045		12.97	5.12	0.088	1.14	60.6	162			
1050	17.5gal	12.94	5.10	0.088	1.18	60.8	163		13.60	
1100										Sample

RESOLUTION CONSULTANTS

Well ID: BPOW6-2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 26 / 15 Time: Start 825 am/pm
Project No: 60266526 Finish 1100 am/pm
Site Location: Sylvia
Weather Conds: 50s F, cloudy Collector(s): JC

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

a. Total Well Length 78.5' c. Length of Water Column 13.96 (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth _____ d. Calculated System Volume (see back) 25 ft screen, 16.3 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	71124
	Hanna	HI 98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
825		10.80	7.85	0.054	7.70	-42.3		500	13.99	cloudy
855		12.71	5.56	0.044	2.30	-22.3	26.4	600	13.99	cloudy
900		12.84	5.51	0.041	2.07	-26.2		600	13.99	cloudy
905	5 gal	12.87	5.69	0.045	1.75	-27.5	1000	600	13.99	cloudy
910		12.82	5.66	0.042	1.62	-33.0		600	13.99	cloudy
915		12.71	5.54	0.037	1.51	-38.4	370	600	13.99	cloudy
920		12.87	5.50	0.036	1.45	-38.6		600	13.98	cloudy

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

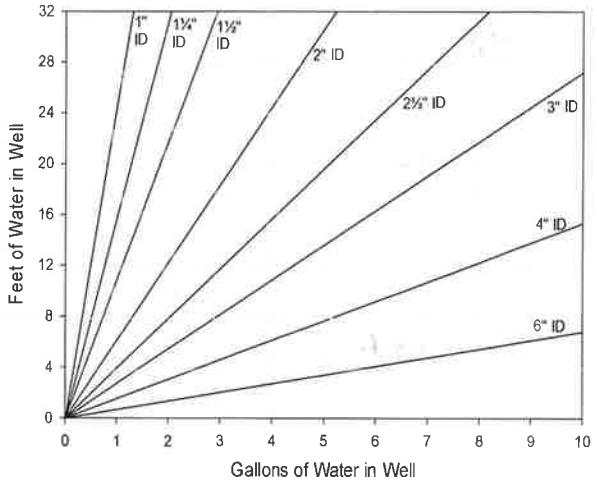
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
BPOW 6-2-GW-032615	40-mL vial	3	HCl	VOCs	1025
BPOW 6-2-GW-032615	1-L amber	2	none	1,4-Dioxane	1025

Comments Hit bottom

Signature _____ Date 3/26/2015

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
925		12.86	5.44	0.036	1.41	-39.1	265	600	13.99	Cloudy
930		12.52	5.44	0.035	1.69	-32.6	244	600	13.99	Cloudy
935		12.92	5.44	0.034	1.37	-35.0		600	13.99	Cloudy
940	10 gal	12.90	5.41	0.034	1.34	-35.1	134	600	13.97	Cloudy
945		12.91	5.39	0.033	1.32	-37.8	82.1	600	13.97	Cloudy clearing
950		12.89	5.38	0.033	1.30	-32.5	69.0	600	13.97	"
955		12.88	5.37	0.033	1.27	-30.7	56.4	600	13.97	"
1000		12.85	5.36	0.032	1.24	-28.5	52.8	600	13.97	"
1005		12.88	5.36	0.032	1.23	-27.5	38.7	600	13.97	"
1010	15 gal	12.89	5.35	0.032	1.23	-26.2	33.1	600	13.97	"
1015		12.93	5.34	0.032	1.20	-24.3	29.9	600	13.97	"
1020		12.98	5.33	0.032	1.18	-22.5	30.4	600	13.97	"

RESOLUTION CONSULTANTS

Well ID: BPOW6-3

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 26 / 15 Time: Start 1230 am/pm
Project No: 60266526 Finish 1345 am/pm
Site Location: Wicker and Jerome
Weather Conds: 40°, drizzle Collector(s): Paul Kaveth

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

a. Total Well Length 780 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 10.28 d. Calculated System Volume (see back) 25ft screen 16.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556	21977
	Hanna	9828	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1300	6N									
1325		12.58	5.24	0.032	2.01	177.8		550	10.65	Cloudy
1330		12.43	5.02	0.028	1.78	192.0				
1335	5gal	12.13	5.00	0.028	1.61	195.2	23			
1340		12.13	4.96	0.027	1.42	199.6	18.1		10.62	
1345		12.35	4.96	0.027	1.20	202.9	16.5			
1350		12.35	4.95	0.027	1.15	204.5	17.5			

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

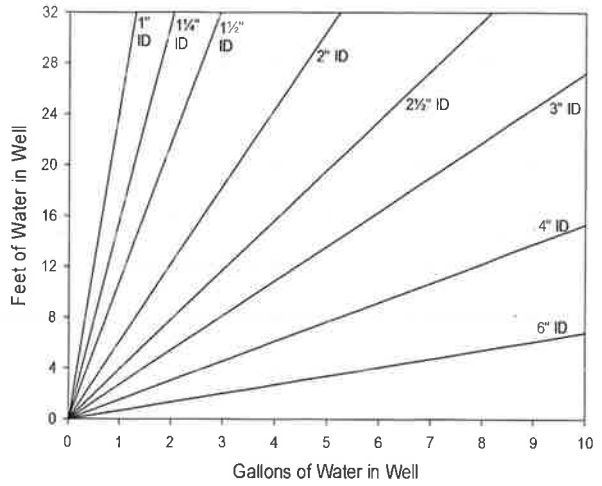
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
BPOW6-3-GW-032615	40-mL vial	3	HCl	VOCs	1350
	1-L amber	2	none	1,4-Dioxane	

Comments Hit bottom stirred up silt, pre cut tubing is too long

Signature Paul Kaveth Date 3/26/15

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

1 screen volume

15 ft = ~~56.8~~ L / 9.8 G
20 ft = ~~75.71~~ L / 13.1 G
25 ft = ~~94.6~~ L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1355		12.78	4.95	0.027	1.10	207.4	30.6	550	10.68	
1400		12.33	4.95	0.027	1.07	208.5	17.0			
1405	1 gal	12.50	4.94	0.027	1.07	210.2	14.0			
1410		12.47	4.94	0.027	1.04	211.3	11.1			
1415		12.44	4.94	0.027	1.01	212.4	6.58			
1420		12.31	4.94	0.027	0.98	213.5	5.86			
1425		12.32	4.94	0.027	0.98	214.4	5.85			
1430	1 gal	12.25	4.94	0.027	0.95	215.3	6.02	550	10.78	
1435		12.60	4.94	0.027	0.92	217.3	4.57			
1440		12.58	4.94	0.027	0.92	217.9	4.28			
1445	1 gal	12.86	4.94	0.027	0.88	218.4	4.47			
1450										

RESOLUTION CONSULTANTS

Well ID: BPOW6-4

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3 / 26 / 15 Time: Start 1320 am/pm
Project No: 60266526 Finish _____ am/pm
Site Location: Wicks Tgerome
Weather Conds: 40° drizzle Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing) 565.08

a. Total Well Length 575 c. Length of Water Column ~~4.58~~ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 9.92 d. Calculated System Volume (see back) 25ft screen 16.1 gal

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556MPS	71124
	Horiba	U-22 98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1330		12.88	4.12	0.105	4.31	15.9		750	9.98	clear
1335		12.81	4.14	0.102	4.14	20.5		750	10.03	clear
1340		12.70	4.19	0.101	2.01	20.0		750	10.03	clear
1345		12.71	4.57	0.093	1.36	<5.1	76.2	750	10.09	clear
1350		12.64	4.57	0.093	1.27	-9.9		750	10.09	clear
1355		12.59	4.57	0.093	1.14	-15.8	6.31	750	10.09	clear
1400		12.62	4.57	0.092	1.10	-18.2		750	10.09	clear

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

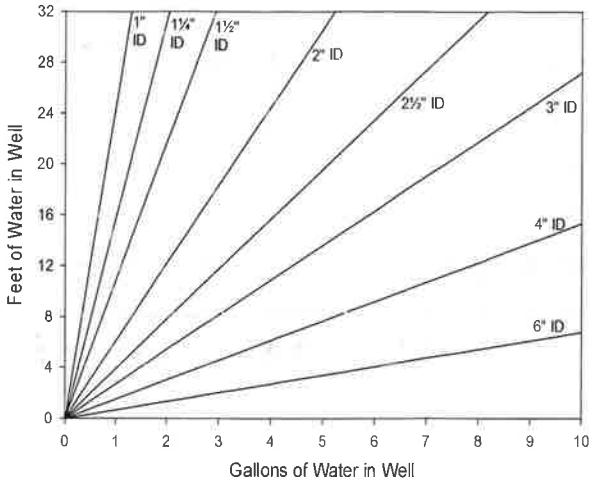
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
BPOW6-4-GW-032615	40-mL vial	3	HCl	VOCs	1500
BPOW6-4-GW-032615	1-L amber	2	none	1,4-Dioxane	1500

Comments

Signature _____ Date 3/26/2015

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

1 screen volume

15 ft = ~~56.8 L~~ / 9.8 G
20 ft = ~~75.7 L~~ / 13.1 G
25 ft = ~~94.6 L~~ / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
1405		12.80	4.57	0.093	1.03	-21.0	3.15	750	10.11	clear
1410		12.77	4.57	0.091	1.04	-24.1		750	10.11	clear
1415		12.83	4.57	0.092	1.01	-25.8	2.54	750	10.11	clear
1420		12.77	4.57	0.092	1.01	-26.9		750	10.11	clear
1425		12.71	4.57	0.091	1.00	-28.3	3.24	750	10.11	clear
1430		12.61	4.57	0.092	1.00	-29.8		750	10.11	clear
1435		12.64	4.58	0.092	0.98	-30.7	2.68	750	10.11	clear
1440		12.45	4.59	0.092	0.95	-32.1		750	10.11	clear
1445		12.90	4.59	0.093	0.91	-32.9	3.99	750	10.11	clear
1450		12.91	4.57	0.093	0.91	-34.1		750	10.11	clear

RESOLUTION CONSULTANTS

Well ID: RE108D2

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage
Project No: 60266526
Site Location: Corona & Ceil
Weather Conds: 30s F, calm, cloudy

Date: 3 / 27 /15

Time: Start 910 am/pm
Finish 1100 am/pm

Collector(s): JC

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

a. Total Well Length: 65.5 ft
b. Water Table Depth: 37.22 ft
c. Length of Water Column: _____ ft
d. Calculated System Volume (see back) 20ft screen - 13.1 G

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	71174
	Hanna	HI98703	69177

Time (24hr)	Volume Removed (liters)	Temp (°C)	pH	Sp. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color / Odor
920		13.00	7.76	0.078	10.66	16.4		550	37.75	clear
925		13.48	6.54	0.078	6.56	13.3	1.33	550	37.75	clear
930		13.54	5.89	0.078	5.07	10.7		550	37.69	clear
935		13.63	5.54	0.077	4.82	9.6	0.92	550	37.69	"
940		13.58	5.41	0.076	5.31	10.1		550	37.67	"
945		13.63	5.25	0.075	5.48	16.0	0.36	550	37.67	"
950	5gal	13.69	5.22	0.075	6.03	17.7		550	37.67	"

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

(continued on back)

3. SAMPLE COLLECTION:

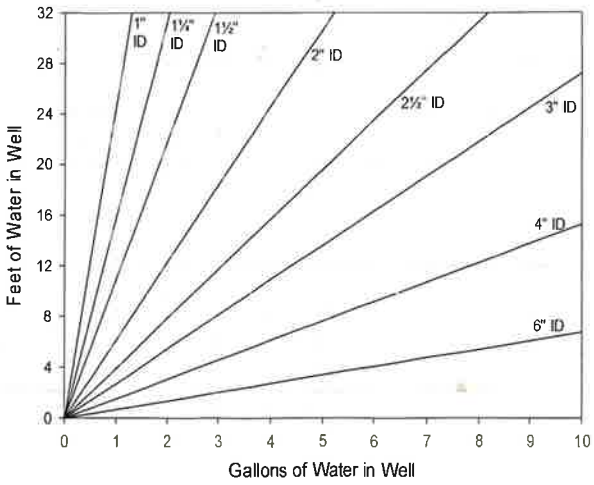
Method: Geotech bladder pump with drop tube assembly

Sample ID	Container type	No. of containers	Preservation	Analysis Req.	Time
RE108D2-GW-032715	40-mL vials	3	HCl	VOCs	1045
RE108D2-GW-032715	1-L amber	2	none	1,4-Dioxane	1045

Comments

Signature

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

1 screen volume

15 ft = 56.8 L / 9.8 G
20 ft = 75.7 L / 13.1 G
25 ft = 94.6 L / 16.3 G

Well ID:

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0955		13.72	5.22	0.074	6.07	22.0		550	37.67	clear
1000		13.86	5.20	0.075	6.08	23.7	0.42	550	37.67	"
1005		13.87	5.19	0.075	6.12	26.1		550	37.67	"
1010		13.77	5.19	0.075	6.11	27.3	0.38	550	37.67	"
1015	10 gal	13.83	5.18	0.075	6.09	30.2	0.42	550	37.67	"
1020		13.78	5.18	0.074	6.04	32.2		550	37.68	"
1025		13.74	5.17	0.074	6.00	33.6	0.28	550	37.70	"
1030		13.74	5.18	0.075	5.98	35.4		550	37.70	"
1035		13.75	5.18	0.075	6.04	36.6	0.21	550	37.71	"
~~1040~~										

RESOLUTION CONSULTANTS

Well ID: RE108D1

Low Flow Ground Water Sample Collection Record

Client: Navy NWIRP Bethpage Date: 3/27/15 Time: Start 835 am/pm
Project No: 60266526 Finish 1100 am/pm
Site Location: Corona, Ceil
Weather Conds: Collector(s): JC + PK

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

a. Total Well Length 555 c. Length of Water Column _____ (a-b)

Casing Diameter/Material: 4-inch PVC

b. Water Table Depth 36.75 d. Calculated System Volume (see back) 20 ft screen - 13.1 G

2. WELL PURGE DATA

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

b. Acceptance Criteria defined (see workplan)

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

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	17197X
	Hanna	HI98703	69177

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
840		11.52	8.21	0.094	12.30	84.1	7.51	575	36.91	clear
845		13.51	6.79	0.099	7.12	135.4		575	36.92	clear
850		13.68	5.65	0.097	6.31	162.0	5.00	575	36.94	clear
855		13.76	5.20	0.095	6.54	195.4		575	36.97	clear
		insert UG-1030R during								
910	5 gal	13.79	5.08	0.095	6.56	220.3	1.19			
915		13.81	5.07	0.094	6.45	227.8				

(continued on back)

d. Acceptance criteria pass/fail

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

If no or N/A - Explain below.

_____

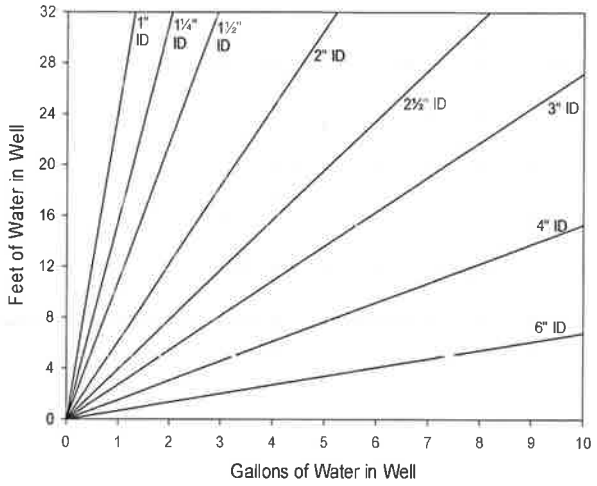
3. SAMPLE COLLECTION: Method: Geotech bladder pump with drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
RE108D1-GW-032715	40-mL vial	3	HCl	VOCs	1800
RE108D1-GW-032715	1-L amber	2	none	1,4-Dioxane	1800

Comments _____

Signature Paul Knuth Date 3/27/15

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

1 screen volume

15 ft = ~~56.8~~ L / 9.8 G
20 ft = ~~75.7~~ L / 13.1 G
25 ft = ~~94.6~~ L / 16.3 G

Well ID: RE108D1 @840

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (mS/cm)	DO (mg/L) ±10%	ORP (mV) 10mV	Turbidity (NTU)	Flow Rate (ml/min)	Depth to water (ft)	Color/Odor
0920		13.79	5.06	0.095	6.46	231.2			37.12	
0925		13.82	5.05	0.095	6.41	235.2		575		
0930		13.78	5.03	0.094	6.40	240.4	1.09		37.14	
0935		13.79	5.03	0.094	6.34	242.4				
0940	10gal	13.84	5.02	0.094	6.29	245.6	1.21			
0945		13.81	5.02	0.094	6.22	248.5				
0950		13.86	5.02	0.094	6.21	250.2	2.45	575	37.20	
0955	13gal	13.87	5.02	0.094	6.21	252.2				
1000										Sample

Appendix B

Data Validation

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI1876	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring (SIM)	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 06/08/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI1876_8260C_8270D

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 25 March 2015 in accordance with the following 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 ID	Matrix/Sample Type	Analysis
RE120D1-GW-032515	Groundwater	8260C / 8270D_SIM
RE120D2-GW-032515	Groundwater	8260C / 8270D_SIM
RE120D3-GW-032515	Groundwater	8260C / 8270D_SIM
DUPLICATE-GW-032515	Field Duplicate	8260C / 8270D_SIM
RE105D1-GW-032515	Groundwater	8260C / 8270D_SIM
RE105D2-GW-032515	Groundwater	8260C / 8270D_SIM
TRIPBLANK041615	Trip Blank	8260C

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, Semivolatile Organic Compounds by Gas Chromatograph/Mass Spectrometry (U.S. EPA, 2007), *U.S. Environmental Protection Agency* (U.S. EPA) *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008), and Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 (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/continuing calibration verification
✓	Laboratory blanks/trip blanks
✗	Surrogate spike recoveries
✓	Matrix spike and/or matrix spike duplicate results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. Acceptable data parameters for which all criteria were met and no qualification was performed and 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/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration percent relative standard deviation, correlation coefficient/coefficient of determination, and/or response factor method acceptance criteria were met;

- the initial calibration verification (ICV) standard percent recovery acceptance criteria were met;

- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and response factor acceptance criteria were met; and

- the retention time method acceptance criteria were met.

Data qualification to the analytes associated with the specific calibration verification was as follows:

ICV Recovery Non-conformance:

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

Notes:
J = Estimated
UJ = Undetected and estimated

CCV Linearity Non-conformance:

Criteria	Actions	
	Detected Results	Non-detected Results
%Difference or %Drift > 20%	J	UJ

Notes:
J = Estimated
UJ = Undetected and estimated

ICV and CCV non-conformances are summarized in Attachment A in Table's A-1 and A-2.

Surrogate Spike Recoveries

Surrogates provide information needed to assess the accuracy of analyses. Known amounts of surrogate compounds, or 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 Recovery Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
% R > UL	J	No qualification
20%≤ %R < LL	J	UJ
%R < 20%	J	Rejected

Notes:

%R	=	Percent recovery
UL	=	Upper limit
LL	=	Lower limit
J	=	Estimated
UJ	=	Undetected and estimated

Surrogate recovery non-conformance is summarized in Attachment A in Table A-3.

Laboratory Control Samples / Laboratory Control Sample Duplicate

LCS %Rs is used to monitor the overall accuracy and performance of each step during analysis, including sample preparation. The laboratory analyzed LCSs in duplicate when matrix spike/matrix spike duplicates were not reported. In these instances, the laboratory determined precision between the duplicated values. Non-conformance is summarized in Attachment A in Table A-4. Data qualification to the analytes associated with the specific LCS/LCS duplicate was as follows:

Laboratory Control Sample / Laboratory Control Sample Duplicate Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
% R or RPD > UL	J	No qualification
%R < LL	J	UJ
%R < 20%	J	Rejected

Notes:

%R	=	Percent recovery
RPD	=	Relative percent difference
UL	=	Upper limit
LL	=	Lower limit
J	=	Estimated
UJ	=	Undetected and estimated

Qualifications Actions

The data was 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. Environmental Protection Agency and Department of Defense guidelines. Final data review qualifiers used to describe results and how they should be interpreted by the end data user are provided in Attachment B and Attachment C. Attachment D provides final results after data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Tables
Attachment B: Qualifier Codes and Explanations
Attachment C: Reason Codes and Explanations
Attachment D: Final Results after Data Review

Attachment A
Non-Conformance Summary Table

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE120D1-GW-032515	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE120D2-GW-032515	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE120D3-GW-032515	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	DUPLICATE-GW-032515	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE105D1-GW-032515	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE105D2-GW-032515	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TRIPBLANK041615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE120D1-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE120D2-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE120D3-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	DUPLICATE-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE105D1-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE105D2-GW-032515	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TRIPBLANK041615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE120D1-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE120D2-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE120D3-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	DUPLICATE-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE105D1-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE105D2-GW-032515	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TRIPBLANK041615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE120D1-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE120D2-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE120D3-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	DUPLICATE-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE105D1-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE105D2-GW-032515	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TRIPBLANK041615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE120D1-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE120D2-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE120D3-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	DUPLICATE-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE105D1-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE105D2-GW-032515	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TRIPBLANK041615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE120D1-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE120D2-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE120D3-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	DUPLICATE-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE105D1-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE105D2-GW-032515	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TRIPBLANK041615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE120D1-GW-032515	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE120D2-GW-032515	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE120D3-GW-032515	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	DUPLICATE-GW-032515	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE105D1-GW-032515	UJ

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE105D2-GW-032515	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TRIPBLANK041615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE120D1-GW-032515	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE120D2-GW-032515	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE120D3-GW-032515	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	DUPLICATE-GW-032515	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE105D1-GW-032515	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE105D2-GW-032515	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TRIPBLANK041615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE120D1-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE120D2-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE120D3-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	DUPLICATE-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE105D1-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE105D2-GW-032515	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TRIPBLANK041615	UJ

Notes:
ICV = Initial calibration verification
%R = Percent recovery
J = Detected analyte in associate sample qualified estimated "J" due to potential bias.
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-2
Continuing Calibration Verification Non-Conformance

Method	Analyte	CCV ID	%D	Limit	Associated Samples	Qualifier
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE105D1-GW-032515	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE105D2-GW-032515	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE120D1-GW-032515	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE120D2-GW-032515	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	TRIPBLANK041615	UJ
8260C	Chloroethane	C0241.D	21.59	20	RE120D3-GW-032515	UJ
8260C	Chloroethane	C0241.D	21.59	20	DUPLICATE-GW-032515	UJ

Notes:
CCV = Continuing calibration verification
%D = Percent difference
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-3
Surrogate Non-Conformance

Method	Analyte	%R	Limits	Associated Sample	Qualifier
8260C	1,2-Dichloroethane-d4	125	70-120	DUPLICATE-GW-032515	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	130	70-120	RE105D2-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	126	70-120	RE120D1-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	125	70-120	RE120D2-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	123	70-120	RE120D3-GW-032515	Trichloroethene qualified J
8260C	Dibromofluoromethane	118	85-115	RE105D2-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	118	85-115	RE120D1-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	118	85-115	RE120D2-GW-032515 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	116	85-115	RE120D3-GW-032515	Trichloroethene qualified J

Notes:
%R = Percent recovery
J = Detected analyte qualified estimated "J" because %R is greater than the upper control limit in associated sample.

Table A-4
Laboratory Control Sample Non-Conformance

LCS	Batch	Analyte	%R	Limits	Associated Sample	Qualifier
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE105D1-GW-032515	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE105D2-GW-032515	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE120D1-GW-032515	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE120D2-GW-032515	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	TRIPBLANK041615	UJ

Notes:
LCS = Laboratory control sample
%R = Percent recovery
UJ = Non-detected analyte in associated sample qualified estimated "UJ" because %R is lower than lower control limit.

Attachment B
Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Attachment C
Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate relative percent difference
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration
l	Laboratory control sample
lc	Labeled compound recovery
ld	Laboratory duplicate relative percent difference
lp	Laboratory control sample/laboratory control sample duplicate relative percent difference
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate relative percent difference
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column relative percent difference
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	Interference check sample results (metals)

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-1		
		Sample ID		RE120D1-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2		
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	60		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1.8		
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	3.5		
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	23		
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	4.4		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	1		
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4.4		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.52	J	c
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	UJ	l,c
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	1.8	J	c
8260C	TOLUENE	108-88-3	UG_L	0.46	J	
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	1300	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	0.41	J	
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	19		

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-2		
		Sample ID		RE120D2-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.41	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	33		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.56	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1.1		
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	4.9		
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	3.7		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	0.76	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	3.7		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.36	J	c
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	UJ	l,c
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	J	c
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	J	s
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		

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-3		
		Sample ID		RE120D3-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	0.74	J	s
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	

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-4		
		Sample ID		DUPLICATE-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	0.83	J	s
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	

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-5		
		Sample ID		RE105D1-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		Groundwater		
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	12		
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	1.2		
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	2.2		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	0.35	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.58	J	c
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	UJ	l,c
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	UJ	c
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	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	14		

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-6		
		Sample ID		RE105D2-GW-032515		
		Sample Date		3/25/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.63	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	34		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1.2		
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1.5		
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	5.6		
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	3.7		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	3.1		
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	2.2		
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	3.7		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.33	J	c
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	UJ	l,c
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	1.1	J	c
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	1600	J	s
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		

		Sample Delivery Group		SI1876		
		Lab ID		SI1876-7		
		Sample ID		TRIPBLANK041615		
		Sample Date		3/25/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	l,c
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	UJ	c
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
Qual = Final qualifier (Refer to Attachment B)
RC = Reason code (Refer to Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI1908	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring (SIM)	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 06/08/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI1908_8260C_8270D

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 26 March 2015 in accordance with the following 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 ID	Matrix/Sample Type	Analysis
BPOW6-1-GW-032615	Groundwater	8260C / 8270D_SIM
BPOW6-2-GW-032615	Groundwater	8260C / 8270D_SIM
BPOW6-3-GW-032615	Groundwater	8260C / 8270D_SIM
BPOW6-4-GW-032615	Field Duplicate	8260C / 8270D_SIM
TRIPBLANK032615	Groundwater	8260C

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, Semivolatile Organic Compounds by Gas Chromatograph/Mass Spectrometry*

(U.S. EPA, 2007), *U.S. Environmental Protection Agency* (U.S. EPA) *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008), and Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 (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/continuing calibration verification
✓	Laboratory blanks/trip blanks
✓	Surrogate spike recoveries
NA	Matrix spike and/or matrix spike duplicate results
✓	Laboratory control sample /laboratory control sample duplicate results
NA	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. Acceptable data parameters for which all criteria were met and no qualification was performed and 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/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration percent relative standard deviation, correlation coefficient/coefficient of determination, and/or response factor method acceptance criteria were met;

- the initial calibration verification (ICV) standard percent recovery acceptance criteria were met;

- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and response factor acceptance criteria were met; and

- the retention time method acceptance criteria were met.

Data qualification to the analytes associated with the specific calibration verification was as follows:

ICV Recovery Non-conformance:

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

Notes:
J = Estimated
UJ = Undetected and estimated

CCV Linearity Non-conformance:

Criteria	Actions	
	Detected Results	Non-detected Results
%Difference or %Drift > 20%	J	UJ

Notes:
J = Estimated
UJ = Undetected and estimated

ICV and CCV non-conformances are summarized in Attachment A in Tables A-1 and A-2.

Qualification Actions

The data was reviewed independently from the laboratory to assess data quality. 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. Environmental Protection Agency and Department of Defense guidelines. Final

data review qualifiers used to describe results and how they should be interpreted by the end data user are provided in Attachment B and Attachment C. Attachment D provides final results after data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Tables
Attachment B: Qualifier Codes and Explanations
Attachment C: Reason Codes and Explanations
Attachment D: Final Results after Data Review

Attachment A
Non-Conformance Summary Table

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	BPOW6-1-GW-032615	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	BPOW6-2-GW-032615	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	BPOW6-3-GW-032615	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	BPOW6-4-GW-032615	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TRIPBLANK032615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	BPOW6-1-GW-032615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	BPOW6-2-GW-032615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	BPOW6-3-GW-032615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	BPOW6-4-GW-032615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TRIPBLANK032615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	BPOW6-1-GW-032615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	BPOW6-2-GW-032615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	BPOW6-3-GW-032615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	BPOW6-4-GW-032615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TRIPBLANK032615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	BPOW6-1-GW-032615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	BPOW6-2-GW-032615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	BPOW6-3-GW-032615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	BPOW6-4-GW-032615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TRIPBLANK032615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	BPOW6-1-GW-032615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	BPOW6-2-GW-032615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	BPOW6-3-GW-032615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	BPOW6-4-GW-032615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TRIPBLANK032615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	BPOW6-1-GW-032615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	BPOW6-2-GW-032615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	BPOW6-3-GW-032615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	BPOW6-4-GW-032615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TRIPBLANK032615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	BPOW6-1-GW-032615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	BPOW6-2-GW-032615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	BPOW6-3-GW-032615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	BPOW6-4-GW-032615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TRIPBLANK032615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	BPOW6-1-GW-032615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	BPOW6-2-GW-032615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	BPOW6-3-GW-032615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	BPOW6-4-GW-032615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TRIPBLANK032615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	BPOW6-1-GW-032615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	BPOW6-2-GW-032615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	BPOW6-3-GW-032615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	BPOW6-4-GW-032615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TRIPBLANK032615	UJ

Notes:
ICV = Initial calibration verification
%R = Percent recovery
UJ = Non-detected analyte in associated sample qualified estimated “UJ” due to potential bias.

Table A-2
Continuing Calibration Verification Non-Conformance

Method	Analyte	CCV ID	%D	Limit	Associated Samples	Qualifier
8260C	Chloroethane	C2041.D	21.59	20	BPOW6-1-GW-032615	UJ
8260C	Chloroethane	C2041.D	21.59	20	BPOW6-2-GW-032615	UJ
8260C	Chloroethane	C2041.D	21.59	20	BPOW6-3-GW-032615	UJ
8260C	Chloroethane	C0241.D	21.59	20	BPOW6-4-GW-032615	UJ
8260C	Chloroethane	C0241.D	21.59	20	TRIPBLANK032615	UJ

Notes:

CCV = Continuing calibration verification
%D = Percent difference
UJ = Non-detected analyte in associated sample qualified estimated “UJ” due to potential bias.

Attachment B
Qualifier Codes and Explanations

Qualifier	Explanation
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Attachment C
Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate relative percent difference
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration
l	Laboratory control sample
lc	Labeled compound recovery
ld	Laboratory duplicate relative percent difference
lp	Laboratory control sample/laboratory control sample duplicate relative percent difference
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate relative percent difference
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column relative percent difference
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	Interference check sample results (metals)

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI1908		
		Lab ID		SI1908-1		
		Sample ID		BPOW6-1-GW-032615		
		Sample Date		3/26/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	

		Sample Delivery Group		SI1908		
		Lab ID		SI1908-2		
		Sample ID		BPOW6-2-GW-032615		
		Sample Date		3/26/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	0.19	U	

		Sample Delivery Group		SI1908		
		Lab ID		SI1908-3		
		Sample ID		BPOW6-3-GW-032615		
		Sample Date		3/26/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	

		Sample Delivery Group		SI1908		
		Lab ID		SI1908-4		
		Sample ID		BPOW6-4-GW-032615		
		Sample Date		3/26/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	

		Sample Delivery Group		SI1908		
		Lab ID		SI1908-5		
		Sample ID		TRIPBLANK032615		
		Sample Date		3/26/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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
Qual = Final qualifier (Refer to Attachment B)
RC = Reason code (Refer to Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI2990	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring (SIM)	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 06/09/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI2990_8260C_8270D

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 27 March 2015 in accordance with the following 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 ID	Matrix/Sample Type	Analysis
RE108D1-GW-032715	Groundwater	8260C / 8270D_SIM
RE108D2-GW-032715	Groundwater	8260C / 8270D_SIM
TRIPBLANK033115	Trip Blank	8260C

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, Semivolatile Organic Compounds by Gas Chromatograph/Mass Spectrometry* (U.S. EPA, 2007), *U.S. Environmental Protection Agency* (U.S. EPA) *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008), and Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 (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/continuing calibration verification
- ✓ Laboratory blanks/trip blanks
- ✗ Surrogate spike recoveries
- ✓ Matrix spike and/or matrix spike duplicate results
- ✗ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicates
- ✓ Internal standards
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. Acceptable data parameters for which all criteria were met and no qualification was performed and 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/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration percent relative standard deviation, correlation coefficient/coefficient of determination, and/or response factor method acceptance criteria were met;
- the initial calibration verification (ICV) standard percent recovery acceptance criteria were met;

- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and response factor acceptance criteria were met; and

- the retention time method acceptance criteria were met.

Data qualification to the analytes associated with the specific calibration verification was as follows:

ICAL Linearity Non-conformance:

Criteria	Actions	
	Detected Results	Non-detected Results
%RSD >15% and quantitation based on mean response factor	J	UJ

Notes:
%RSD = Relative standard deviation
J = Estimated
UJ = Undetected and estimated

ICV Recovery Non-conformance:

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

Notes:
J = Estimated
UJ = Undetected and estimated

CCV Linearity Non-conformance:

Criteria	Actions	
	Detected Results	Non-detected Results
%Difference or %Drift > 20%	J	UJ

Notes:
J = Estimated
UJ = Undetected and estimated

ICAL, ICV and CCV non-conformances are summarized in Attachment A in Table's A-1, A-2 and A-3.

Surrogate Spike Recoveries

Surrogates provide information needed to assess the accuracy of analyses. Known amounts of surrogate compounds, or 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 Recovery Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
% R > UL	J	No qualification
20%< %R < LL	J	UJ
%R < 20%	J	Rejected

Notes:
%R = Percent recovery
UL = Upper limit
LL = Lower limit
J = Estimated
UJ = Undetected and estimated

Surrogate recovery non-conformance is summarized in Attachment A in Table A-4.

Laboratory Control Samples / Laboratory Control Sample Duplicate

LCS %Rs is used to monitor the overall accuracy and performance of each step during analysis, including sample preparation. The laboratory analyzed LCSs in duplicate when matrix spike/matrix spike duplicates were not reported. In these instances, the laboratory determined precision between the duplicated values. Non-conformance is summarized in Attachment A in Table A-5. Data qualification to the analytes associated with the specific LCS/LCS duplicate was as follows:

Laboratory Control Sample / Laboratory Control Sample Duplicate Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
% R or RPD > UL	J	No qualification
%R < LL	J	UJ
%R < 20%	J	Rejected

Notes:
%R = Percent recovery
RPD = Relative percent difference
UL = Upper limit
LL = Lower limit
J = Estimated
UJ = Undetected and estimated

Qualifications Actions

The data was 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. Environmental Protection Agency and Department of Defense guidelines. Final data review qualifiers used to describe results and how they should be interpreted by the end data user are provided in Attachment B and Attachment C. Attachment D provides final results after data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Tables
Attachment B: Qualifier Codes and Explanations
Attachment C: Reason Codes and Explanations
Attachment D: Final Results after Data Review

Attachment A
Non-Conformance Summary Table

Table A-1
Initial Calibration Linearity Non-Conformance

Method	Analyte	Instrument ID / Date	%RSD	Limit	Associated Samples	Qualifier
8260C	Acetone	GCMS/04/06/2015	26.18615	≤15%	RE108D2-GW-032715	J
8260C	2-Hexanone	GCMS/04/06/2015	15.19400	≤15%	RE108D2-GW-032715	J

Notes:
GCMS-C = Gas chromatography/Mass spectrometer
%RSD = Relative standard deviation
J = Detected analyte in associate sample qualified estimated "J" due to potential bias.

Table A-2
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TRIPBLANK033115	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TRIPBLANK033115	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TRIPBLANK033115	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TRIPBLANK033115	UJ
8260C	Acetone	WG160458-7	173.34	80-120	TRIPBLANK033115	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TRIPBLANK033115	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TRIPBLANK033115	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TRIPBLANK033115	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TRIPBLANK033115	UJ
8260C	Acetone	WG160815-7	130.29	80-120	RE108D2-GW-032715	UJ
8260C	Acetone	WG160924-7	129.17	80-120	RE108D1-GW-032715	UJ
8260C	4-Methyl-2-Pentanone	WG160924-7	121.87	80-120	RE108D1-GW-032715	UJ

Notes:
ICV = Initial calibration verification
%R = Percent recovery
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-3
Continuing Calibration Verification Non-Conformance

Method	Analyte	CCV ID	%D	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	C2067.D	30.44208	20	TRIPBLANK033115	UJ
8260C	Bromomethane	C2067.D	21.12669	20	TRIPBLANK033115	UJ
8260C	Chloroethane	C2067.D	67.48028	20	TRIPBLANK033115	UJ
8260C	Trichlorofluoromethane	C2067.D	34.41041	20	TRIPBLANK033115	UJ
8260C	Methyl acetate	C2067.D	23.87121	20	TRIPBLANK033115	UJ
8260C	Methylcyclohexane	C2067.D	47.67171	20	TRIPBLANK033115	UJ

Notes:
CCV = Continuing calibration verification
%D = Percent difference
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-4
Surrogate Non-Conformance

Method	Analyte	%R	Limits	Associated Sample	Qualifier
8260C	1,2-Dichloroethane-d4	130	70-120	RE108D2-GW-032715	Trichloroethene qualified J
8260C	Dibromofluoromethane	116	85-115	RE108D2-GW-032715	Trichloroethene qualified J
8260C	Toluene-D8	127	85-115	RE108D2-GW-032715	Qualify "J" detected analytes: 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1-dichloroethane, cis-1,2-dichloroethene, chloroform, 1,1,1-trichloroethane, carbon tetrachloride, 1,1,2-trichloroethane, tetrachloroethene, and 1,2-dichloroethylene

Notes:
%R = Percent recovery
J = Detected analyte qualified estimated "J", indicating potential high bias.

Table A-5
Laboratory Control Sample Non-Conformance

LCS	Batch	Analyte	%R	Limits	Associated Sample	Qualifier
WG160723-1	WG160723	Methyl cyclohexane	46.4	73-125	RE108D2-GW-032715	UJ

Notes:
LCS = Laboratory control sample
%R = Percent recovery
UJ = Non-detected analyte in associated sample qualified estimated "UJ", and may be biased low.

Attachment B
Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Attachment C
Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate relative percent difference
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration
l	Laboratory control sample
lc	Labeled compound recovery
ld	Laboratory duplicate relative percent difference
lp	Laboratory control sample/laboratory control sample duplicate relative percent difference
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate relative percent difference
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column relative percent difference
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	Interference check sample results (metals)

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI2990		
		Lab ID		SI2008-5RA / SI2990-1		
		Sample ID		RE108D1-GW-032715		
		Sample Date		3/27/2015		
		Sample Type		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	0.46	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	UJ	c
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	0.46	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	1.1		
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	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	9.7		

		Sample Delivery Group		SI2990		
		Lab ID		SI2008-6DL2 / SI2990-2		
		Sample ID		RE108D2-GW-032715		
		Sample Date		3/27/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	J	s
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	3.1	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1.1	J	s
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	4.4	J	s
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	5.3	J	s
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	8.4	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	U	
8260C	2-BUTANONE	78-93-3	UG_L	5	U	
8260C	2-HEXANONE	591-78-6	UG_L	5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	U	
8260C	ACETONE	67-64-1	UG_L	5	UJ	c
8260C	BENZENE	71-43-2	UG_L	1	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	U	
8260C	BROMOFORM	75-25-2	UG_L	1	U	
8260C	BROMOMETHANE	74-83-9	UG_L	2	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1.1	J	s
8260C	CHLOROBENZENE	108-90-7	UG_L	1	U	
8260C	CHLOROETHANE	75-00-3	UG_L	2	U	
8260C	CHLOROFORM	67-66-3	UG_L	3.1	J	s
8260C	CHLOROMETHANE	74-87-3	UG_L	2	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	8.4	J	s
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	1	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	1	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	U	
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	U	
8260C	O-XYLENE	95-47-6	UG_L	1	U	
8260C	STYRENE	100-42-5	UG_L	1	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2.2	J	s
8260C	TOLUENE	108-88-3	UG_L	1	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	3300	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	U	
8270D_SIM	1,4-DIOXANE	123-91-1	UG_L	9.2		

		Sample Delivery Group		SI2990		
		Lab ID		SI2008-8 / SI2990-3		
		Sample ID		TRIPBLANK033115		
		Sample Date		3/31/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	l,c
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	UJ	c
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	c
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
Qual = Final qualifier (Refer to Attachment B)
RC = Reason code (Refer to Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI1843	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C 1,4-Dioxane by U.S. EPA SW-846 Method 8270D via Selective Ion Monitoring (SIM)	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 06/08/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI1843_8260C_8270D

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 24 March 2015 in accordance with the following 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 ID	Matrix/Sample Type	Analysis
DUPLICATE-GW-032315	Field Duplicate	8260C / 8270D_SIM
RE103D1-GW-032315	Groundwater	8260C / 8270D_SIM
RE103D2-GW-032315	Groundwater	8260C / 8270D_SIM
RE103D3-GW-032315	Groundwater	8260C / 8270D_SIM
RE104D1-GW-032315	Groundwater	8260C / 8270D_SIM
RE104D2-GW-032315	Groundwater	8260C / 8270D_SIM
RE104D3-GW-032315	Groundwater	8260C / 8270D_SIM
RE122D1-GW-032415	Groundwater	8260C / 8270D_SIM
RE122D2-GW-032415	Groundwater	8260C / 8270D_SIM
RE122D3-GW-032415	Groundwater	8260C / 8270D_SIM
TT101D1-GW-032415	Groundwater	8260C / 8270D_SIM

Sample ID	Matrix/Sample Type	Analysis
TT101D2-GW-032415	Groundwater	8260C / 8270D_SIM
TT101D-GW-032415	Groundwater	8260C / 8270D_SIM
TRIPBLANK031615	Trip Blank	8260C

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, Semivolatile Organic Compounds by Gas Chromatograph/Mass Spectrometry* (U.S. EPA, 2007), *U.S. Environmental Protection Agency* (U.S. EPA) *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008), and Department of Defense Quality Systems Manual for Environmental Laboratories, Version 4.2 (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/continuing calibration verification
- ✓ Laboratory blanks/trip blanks
- ✗ Surrogate spike recoveries
- ✓ Matrix spike and/or matrix spike duplicate results
- ✗ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicates
- ✓ Internal standards
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. Acceptable data parameters for which all criteria were met and no qualification was performed and 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/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration percent relative standard deviation, correlation coefficient/coefficient of determination, and/or response factor method acceptance criteria were met;
- the initial calibration verification (ICV) standard percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and response factor acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Data qualification to the analytes associated with the specific calibration verification was as follows:

ICV Recovery Non-conformance:

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

Notes:
J = Estimated
UJ = Undetected and estimated

CCV Linearity Non-conformance:

Criteria	Actions	
	Detected Results	Non-detected Results
%Difference or %Drift > 20%	J	UJ

Notes:
J = Estimated
UJ = Undetected and estimated

ICV and CCV non-conformances are summarized in Attachment A in Table's A-1 and A-2.

Surrogate Spike Recoveries

Surrogates provide information needed to assess the accuracy of analyses. Known amounts of surrogate compounds, or 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 Recovery Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
% R > UL	J	No qualification
20%< %R < LL	J	UJ
%R < 20%	J	Rejected

Notes:

%R	=	Percent recovery
UL	=	Upper limit
LL	=	Lower limit
J	=	Estimated
UJ	=	Undetected and estimated

Surrogate recovery non-conformance is summarized in Attachment A in Table A-3.

Laboratory Control Samples / Laboratory Control Sample Duplicate

LCS %Rs is used to monitor the overall accuracy and performance of each step during analysis, including sample preparation. The laboratory analyzed LCSs in duplicate when matrix spike/matrix spike duplicates were not reported. In these instances, the laboratory determined precision between the duplicated values. Non-conformance is summarized in Attachment A in Table A-4. Data qualification to the analytes associated with the specific LCS / LCS duplicate was as follows:

Laboratory Control Sample / Laboratory Control Sample Duplicate Non-conformance Chart:

Criteria	Action	
	Detected	Non-detected
%R or RPD > UL	J	No qualification
%R < LL	J	UJ
%R < 20%	J	Rejected

Notes:

%R	=	Percent recovery
RPD	=	Relative percent difference
UL	=	Upper limit
LL	=	Lower limit
J	=	Estimated
UJ	=	Undetected and estimated

Qualifications Actions

The data was 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. Environmental Protection Agency and Department of Defense guidelines. Final data review qualifiers used to describe results and how they should be interpreted by the end data user are provided in Attachment B and Attachment C. Attachment D provides final results after data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Tables
Attachment B: Qualifier Codes and Explanations
Attachment C: Reason Codes and Explanations
Attachment D: Final Results after Data Review

Attachment A
Non-Conformance Summary Table

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	DUPLICATE-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE103D1-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE103D2-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE103D3-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE104D1-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE104D2-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE104D3-GW-032315	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE122D1-GW-032415	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE122D2-GW-032415	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	RE122D3-GW-032415	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TT101D1-GW-032415	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TT101D2-GW-032415	J
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TT101D-GW-032415	UJ
8260C	Dichlorodifluoromethane	WG160458-7	132.53	80-120	TRIPBLANK031615	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	DUPLICATE-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE103D1-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE103D2-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE103D3-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE104D1-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE104D2-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE104D3-GW-032315	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE122D1-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE122D2-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	RE122D3-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TT101D1-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TT101D2-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TT101D-GW-032415	UJ
8260C	Chloromethane	WG160458-7	121.77	80-120	TRIPBLANK031615	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	DUPLICATE-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE103D1-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE103D2-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE103D3-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE104D1-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE104D2-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE104D3-GW-032315	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE122D1-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE122D2-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	RE122D3-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TT101D1-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TT101D2-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TT101D-GW-032415	UJ
8260C	Bromomethane	WG160458-7	130.01	80-120	TRIPBLANK031615	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	DUPLICATE-GW-032315	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE103D1-GW-032315	J
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE103D2-GW-032315	J
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE103D3-GW-032315	J
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE104D1-GW-032315	UJ

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE104D2-GW-032315	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE104D3-GW-032315	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE122D1-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE122D2-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	RE122D3-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TT101D1-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TT101D2-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TT101D-GW-032415	UJ
8260C	Carbon Disulfide	WG160458-7	544.89	80-120	TRIPBLANK031615	UJ
8260C	Acetone	WG160458-7	137.34	80-120	DUPLICATE-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE103D1-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE103D2-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE103D3-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE104D1-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE104D2-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE104D3-GW-032315	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE122D1-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE122D2-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	RE122D3-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TT101D1-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TT101D2-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TT101D-GW-032415	UJ
8260C	Acetone	WG160458-7	137.34	80-120	TRIPBLANK031615	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	DUPLICATE-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE103D1-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE103D2-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE103D3-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE104D1-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE104D2-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE104D3-GW-032315	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE122D1-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE122D2-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	RE122D3-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TT101D1-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TT101D2-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TT101D-GW-032415	UJ
8260C	2-Butanone	WG160458-7	134.65	80-120	TRIPBLANK031615	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	DUPLICATE-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE103D1-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE103D2-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE103D3-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE104D1-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE104D2-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE104D3-GW-032315	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE122D1-GW-032415	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE122D2-GW-032415	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	RE122D3-GW-032415	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TT101D1-GW-032415	UJ

Table A-1
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Cyclohexane	WG160458-7	193.37	80-120	TT101D2-GW-032415	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TT101D-GW-032415	UJ
8260C	Cyclohexane	WG160458-7	193.37	80-120	TRIPBLANK031615	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	DUPLICATE-GW-032315	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE103D1-GW-032315	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE103D2-GW-032315	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE103D3-GW-032315	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE104D1-GW-032315	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE104D2-GW-032315	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE104D3-GW-032315	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE122D1-GW-032415	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE122D2-GW-032415	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	RE122D3-GW-032415	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TT101D1-GW-032415	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TT101D2-GW-032415	UJ
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TT101D-GW-032415	J
8260C	Tetrachloroethene	WG160458-7	124.99	80-120	TRIPBLANK031615	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	DUPLICATE-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE103D1-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE103D2-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE103D3-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE104D1-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE104D2-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE104D3-GW-032315	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE122D1-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE122D2-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	RE122D3-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TT101D1-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TT101D2-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TT101D-GW-032415	UJ
8260C	2-Hexanone	WG160458-7	130.94	80-120	TRIPBLANK031615	UJ

Notes:

ICV = Initial calibration verification
%R = Percent recovery
J = Detected analyte in associate sample qualified estimated "J" due to potential bias.
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-2
Continuing Calibration Verification Non-Conformance

Method	Analyte	CCV ID	%D	Limit	Associated Samples	Qualifier
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE104D2-GW-032315	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	RE122D3-GW-032415	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	TRIPBLANK031615	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	TT101D1-GW-032415	UJ
8260C	Methyl cyclohexane	C2012.D	49.68	20	TT101D2-GW-032415	UJ
8260C	Chloroethane	C1970.D	40.73	20	RE103D1-GW-032315	UJ
8260C	Chloroethane	C1970.D	40.73	20	RE103D2-GW-032315	UJ
8260C	Chloroethane	C1970.D	4.073	20	RE103D3-GW-032315	UJ
8260C	Chloroethane	C1986.D	36.53	20	DUPLICATE-GW-032315	UJ

Table A-2
Continuing Calibration Verification Non-Conformance

Method	Analyte	CCV ID	%D	Limit	Associated Samples	Qualifier
8260C	Chloroethane	C1986.D	36.53	20	RE104D1-GW-032315	UJ
8260C	Chloroethane	C1986.D	36.53	20	RE104D3-GW-032315	UJ
8260C	Chloroethane	C1986.D	36.53	20	RE122D1-GW-032415	UJ
8260C	Chloroethane	C1986.D	36.53	20	RE122D2-GW-032415	UJ
8260C	Chloroethane	C1986.D	36.53	20	TT101D-GW-032415	UJ

Notes:
CCV = Continuing calibration verification
%D = Percent difference
UJ = Non-detected analyte in associated sample qualified estimated "UJ" due to potential bias.

Table A-3
Surrogate Non-Conformance

Method	Analyte	%R	Limits	Associated Sample	Qualifier
8260C	1,2-Dichloroethane-d4	123	70-120	RE103D1-GW-032315 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	126	70-120	RE103D2-GW-032315 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	127	70-120	RE103D3-GW-032315 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	124	70-120	RE122D1-GW-032415 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	122	70-120	RE122D2-GW-032415 (diluted run)	Trichloroethene qualified J
8260C	1,2-Dichloroethane-d4	129	70-120	TT101D1-GW-032415 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	117	85-115	RE103D2-GW-032315 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	116	85-115	RE122D1-GW-032415 (diluted run)	Trichloroethene qualified J
8260C	Dibromofluoromethane	118	85-115	TT101D1-GW-032415 (diluted run)	Trichloroethene qualified J

Notes:
%R = Percent recovery
J = Detected analyte qualified estimated "J" because %R is greater than the upper control limit in associated sample.

Table A-4
Laboratory Control Sample Non-Conformance

LCS	Batch	Analyte	%R	Limits	Associated Sample	Qualifier
WG160459-1	WG160459	Carbon Disulfide	534	35-160	RE103D1-GW-032315	J
WG160459-1	WG160459	Carbon Disulfide	534	35-160	RE103D2-GW-032315	J
WG160459-1	WG160459	Carbon Disulfide	534	35-160	RE103D3-GW-032315	J
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE104D2-GW-032315	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	RE122D3-GW-032415	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	TT101D1-GW-032415	UJ
WG160576-1	WG160576	Methyl cyclohexane	50.2	73-125	TT101D2-GW-032415	UJ

Notes:
LCS = Laboratory control sample
%R = Percent recovery
J = Detected analyte qualified estimated "J" because %R is greater than the upper control limit in associated sample.
UJ = Non-detected analyte in associated sample qualified estimated "UJ" because %R is lower than lower control limit.

Attachment B
Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Attachment C
Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate relative percent difference
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration
l	Laboratory control sample
lc	Labeled compound recovery
ld	Laboratory duplicate relative percent difference
lp	Laboratory control sample/laboratory control sample duplicate relative percent difference
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate relative percent difference
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column relative percent difference
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	Interference check sample results (metals)

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-1		
		Sample ID		RE103D3-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		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	3.5		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	J	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.69	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-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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.31	J	l,c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.9	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	c
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	570	J	s
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	1.3		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-2		
		Sample ID		RE103D2-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		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	8.1		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.54	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.92	J	
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	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.47	J	l,c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	1.2		
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	1.1	J	c
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	940	J	s
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		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-3		
		Sample ID		RE103D1-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.53	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	16		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.77	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1.1		
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	6.8		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.56	J	l,c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.76	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	4.6	J	c
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	900	J	s
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	19		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-5		
		Sample ID		RE104D1-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.27	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	6.2		
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	0.8	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-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	1.5	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.5		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	J	c
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	110		
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	9.7		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-6		
		Sample ID		RE104D2-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		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	1.2	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	l,c
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	UJ	c
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		
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	0.12	J	

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-7		
		Sample ID		RE104D3-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	0.46	J	
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	0.19	U	

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-8		
		Sample ID		DUPLICATE-GW-032315		
		Sample Date		3/23/2015		
		Sample Type		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	1.3	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.3		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	c
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	3.1		
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	0.096	J	

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-9		
		Sample ID		RE122D1-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		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	7.2		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.4	J	
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	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.62	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	J	c
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	570	J	s
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	8.1		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-10		
		Sample ID		RE122D2-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.71	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	31		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2.8		
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1.7		
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	8.7		
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	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1.5		
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	2.4		
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	6		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	2.7	J	c
8260C	TOLUENE	108-88-3	UG_L	0.63	J	
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	4600	J	s
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	14		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-11		
		Sample ID		RE122D3-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	l,c
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	UJ	c
8260C	TOLUENE	108-88-3	UG_L	0.37	J	
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	6.8		
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	0.19	U	

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-14		
		Sample ID		TT101D1-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.68	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	21		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.49	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.71	J	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	4.9		
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	1.8	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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.89	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	0.92	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.8		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2.1	J	c
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	UJ	l,c
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	UJ	c
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	170		
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	8.7		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-12		
		Sample ID		TT101D2-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.44	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	25		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.62	J	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.75	J	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	4		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.82	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	c
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	480	J	s
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		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-13		
		Sample ID		TT101D-GW-032415		
		Sample Date		3/24/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.36	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	22		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.78	J	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	3.5		
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		
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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	3		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2.1	J	c
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	UJ	l,c
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	UJ	c
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	61		
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	9.7		

		Sample Delivery Group		SI1843		
		Lab ID		SI1843-15		
		Sample ID		TRIPBLANK031615		
		Sample Date		3/24/2015		
		Sample Type		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	UJ	c
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
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	UJ	c
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c
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	UJ	c
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	UJ	c
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
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	UJ	l,c
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	UJ	c
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:
UG_L = Micrograms per liter
Qual = Final qualifier (Refer to Attachment B)
RC = Reason code (Refer to Attachment C)