2015 OU2 GROUNDWATER INVESTIGATION DATA SUMMARY REPORT VPB160

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP)
SITE 1 OU2
BETHPAGE, NY

Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Atlantic
9324 Virginia Avenue
Building Z-144
Norfolk, Virginia 23511

June 2016

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9324 Virginia Avenue
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Contract Number: N62470-11-D-8013
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List of Acronyms and Abbreviations

AOC	Area of Concern
bgs	below ground surface
BWD	Bethpage Water District
COR	Continuously Operating Reference
DoD	Department of Defense
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency, United States
ft	feet
GOCO	Government-Owned Contractor-Operated
GPS	Global Positioning System
IDW	Investigation Derived Waste
IR	Installation Restoration
Katahdin	Katahdin Analytical Services
NAD	North American Datum
NAVD	North American Vertical Datum
NAVFAC	Naval Facilities Engineering Command
NG	Northrop Grumman
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
ONCT	On-site Containment Treatment System
OU	Operable Unit
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PID	Photoionization Detector
POTW	Publicly Owned Treatment Works
PPE	Personal Protective Equipment
SAP	Sampling and Analysis Plan
SVOC	Semivolatile Organic Compounds
TCE	Trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Total Organic Carbon
UFP	United Federal Programs
VOC	Volatile Organic Compounds
VPB	Vertical Profile Boring

1.0 PROJECT BACKGROUND

Resolution Consultants has prepared this Data Summary Report for the Naval Facilities Engineering Command (NAVFAC), Mid-Atlantic under contract task order WE15 Contract N62470-11-D-8013. This report describes vertical profile boring (VPB) installation activities (specifically at the VPB160 location) in 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).

1.1 Scope and Objectives

This data summary report provides information on the installation of VPB160. The purpose of the VPB160 investigation was to ascertain subsurface conditions and contaminant levels south of the On-site Containment Treatment System (ONCT) and north of Hempstead Turnpike. VPB locations within the general vicinity of VPB160 are shown in Figure 2. VPB160 was completed to 890 feet (ft) below ground surface (bgs). The data from VPB160 provides information on the extent and magnitude of Volatile Organic Compounds (VOCs) near Bethpage Water District Plant (BWD) #6, and to a certain extent helps ascertain the effectiveness of the ONCT.

Field tasks were conducted in 2015 in accordance with the *United Federal Programs Sampling and Analysis Plan (UFP SAP)*, Bethpage, New York (Resolution Consultants, 2013a) and the *UFP SAP Addendum Installation of Vertical Profile Borings and Monitoring Wells* (Resolution Consultants, 2013b). The field investigation included completing one vertical profile boring, groundwater grab samples, geophysical logging, and surveying.

Documentation of these activities is included in Appendix A of this report.

1.2 Site History

NWIRP Bethpage is in the Hamlet of Bethpage, Town of Oyster Bay, New York. Since its inception in 1941, the plant's primary mission was the research, prototyping, testing, design, engineering, fabrication, and primary assembly of military aircraft. The facilities at NWIRP included four plants used for assembly and prototype testing, a group of quality control laboratories, two warehouse complexes (north and south), a salvage storage area, water recharge basins, the Industrial Wastewater Treatment Plant, and several smaller support buildings.

The Navy’s property originally totaled 109.5 acres and was formerly a Government-Owned Contractor-Operated (GOCO) facility that was operated by Northrop Grumman (NG) until

September 1998. Prior to 2002, the NWIRP property was bordered on the north, west, and south by current or former NG facilities, and on the east by a residential neighborhood. By March 2008, approximately 100 acres of NWIRP property were transferred to Nassau County in three separate actions. The remaining 9 acres and access easements were retained by the Navy to continue remedial efforts at Installation Restoration (IR) Site 1 – Former Drum Marshalling Area and Site 4 – Former Underground Storage Tanks (Area of Concern [AOC] 22). A parcel of land connecting the two sites was also retained. Currently, the 9-acre parcel of NWIRP is bordered on the east by a residential neighborhood and on the north, south, and west by Steel Equities; however, a small portion near Sites 2 and 3 is still owned by Nassau County. Access to the NWIRP is from South Oyster Bay Road.

1.3 Geology and Hydrogeology

Overburden at the site consists of well over 1,000 ft of unconsolidated deposits overlying crystalline bedrock of the Hartland Formation. Overburden is divided into four geologic units: the upper Pleistocene deposits, the Magothy Formation, the clay member of the Raritan Formation ("Raritan Clay") and the Lloyd Sand member of the Raritan Formation ("Lloyd Sand") (Geraghty and Miller, 1994).

The upper Pleistocene ranges in thickness from approximately 50 to 100 ft and consists of till and outwash deposits of medium to coarse sand and gravel with lenses of fine sand, silt and clay (Smolensky and Feldman, 1990); these deposits form the Upper Glacial Aquifer. Directly underlying this unit is the Magothy Formation with a thickness of 650 to 900 ft and lower extent of 700 to 1,000 ft bgs, as observed at the former NWIRP and extending southeast to areas south of Southern State Parkway. Locally at VPB160, the bottom of the Magothy (top of the Raritan Clay) is encountered at approximately 869 feet bgs. The Magothy is characterized by fine to medium sands and silts interbedded with zones of clays, silty sands and sandy clays. Sand and gravel lenses are found in some areas between depths of 600 and 880 ft bgs; these deposits form the main producing zones of the Magothy Aquifer.

Investigations performed by the Navy since 2012 indicate that the bottom of the Magothy (top of the Raritan Clay) can extend to depths of 700 to greater than 1,000 ft bgs. The top of the Raritan Clay deepens to the south-southeast, as evidenced by clay depths of 1,000 ft bgs (or more) in borings installed offsite. The Raritan Clay Unit is of continental origin and consists of clay, silty clay, clayey silt, and fine silty sand. This member acts as a confining layer over the Lloyd Sand Unit. The Lloyd Sand Unit is also of continental origin, having been deposited in a large fresh water lacustrine

environment. The material consists of fine to coarse-grained sands, gravel, inter-bedded clay, and silty sand. These deposits form the Lloyd Aquifer.

The Upper Glacial Aquifer and the Magothy Aquifer comprise the aquifers of interest at the NWIRP. Regionally, these formations are generally considered to form a common, interconnected aquifer as the coarse nature of each unit near their contact and the lack of any regionally confining clay unit allows for the unrestricted flow of groundwater between the formations.

The Magothy Aquifer is the major source of public water in Nassau County. The most productive water bearing zones are the discontinuous lenses of sand and gravel that occur within the siltier matrix. The major water-bearing zones are coarse sand and gravel lenses located in the lower portion of the Magothy. The Magothy Aquifer is commonly regarded to function overall as an unconfined aquifer at shallow depths and a confined aquifer at deeper depths. The drilling program at the NWIRP has revealed that clay zones beneath the facility are common but laterally discontinuous. No confining clay units of facility-wide extent have been encountered. This is also the case for borings installed offsite.

Groundwater is encountered at a depth of approximately 50 ft bgs at the facility. Historically, because of pumping and recharge at the facility, groundwater depths have been measured to range from 40 to 60 ft bgs. The groundwater flow in the area is to the south-southeast.

2.0 FIELD PROGRAM

Field investigation activities at VPB160 consisted of drilling, sampling, soil/groundwater analysis, geophysical logging, and surveying. Drilling during this investigation was performed by Delta Well and Pump Company of Ronkonkoma, New York. A description of these tasks is provided below.

2.1 Vertical Profile Borings

One vertical profile boring (VPB160) was completed during this field effort between 15 September 2015 and 25 November 2015. The total depth of VPB160 was 890 ft. The location is shown in Figure 2 and details are summarized in Table 1.

2.1.1 Drilling

VPB160 was installed by setting a 10-inch diameter surface casing to 52 feet bgs and then setting an 8-inch diameter casing inside the 10-inch casing to 121 feet bgs. Finally an 8-inch diameter hole was drilled using mud rotary drilling techniques. Drilling mud consisted of potable water and polymer-free sodium bentonite or similar material. Drilling mud was contained and re-circulated in baffled, high capacity mud tubs. A sand separator was used intermittently to remove fines from circulation.

2.1.2 Sampling

A total of 12 split spoon samples were collected from ground surface to the bottom of the boring. A change in geology was observed by the field geologist at 869 ft bgs and three split spoon samples were subsequently collected to confirm the presence of the Raritan Clay. Samples were logged by the field geologist and screened for VOCs utilizing a photoionization detector (PID). A detailed boring log for VPB160 is included in Appendix A.

Groundwater grab samples were collected every 50 ft for the first 200 ft of borehole depth. After the first 200 ft, groundwater grab samples were collected approximately every 20 ft until the boring terminated in the Raritan. Groundwater grab samples were collected with a hydropunch sampler and analyzed for VOCs using Environmental Protection Agency (EPA) Method 8260C. The groundwater grab samples were analyzed by Katahdin Analytical Services (Katahdin), a Department of Defense (DoD), Environmental Laboratory Accreditation Program (ELAP), and New York State Department of Environmental Conservation (NYSDEC)-certified laboratory. During the collection of groundwater grab samples, field parameters were measured (pH, temperature, specific conductivity, oxidation reduction potential, dissolved oxygen, and turbidity). Data validation was

performed by Resolution Consultants. Groundwater grab sample logs, data validation packages, and analytical data tables are included in Appendix A.

One soil sample was collected for laboratory analysis for total organic carbon (TOC) by EPA series SW-846 method 9060A. During drilling, air sampling was conducted under a Community Air Monitoring Plan. One air sample was collected using a Summa canister and submitted for laboratory analysis by EPA Method TO-15. All analyses were performed or sub-contracted by Katahdin. Data validation of both TOC and air data was performed by Resolution Consultants. Data validation packages and analytical data tables are included in Appendix A.

2.1.3 Geophysics

Borehole geophysical logs (gamma) were recorded after the borehole was drilled but prior to the removal of drill rods. A Mount Sopris Instrument model 2PGA-100 poly gamma was used. Starting at the top of the hole, the probe was advanced at a maximum rate of 12 ft per minute. A copy of the log was printed in the field for review once the probe reached the bottom of the borehole. The instrument was then raised to the top of the boring and a second log was generated and printed in the field. The down hole gamma log sheets and plots comparing the gamma log with trichloroethene (TCE) and tetrachloroethene (PCE) concentrations from hydropunch samples are included in Appendix A.

2.2 Decontamination and Investigation Derived Waste (IDW)

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

As part of the IDW management practices and in accordance with the SAP, the investigation waste (consisting of soil cuttings, drilling muds, IDW fluids, and personal protective equipment [PPE]) generated during the boring installation was containerized and staged at NWIRP Bethpage. IDW solids were characterized and disposed of properly. Representative samples from each roll off were submitted to Katahdin for analysis of:

- Target Compound List (TCL) VOCs
- TCL Semi-volatile Organic Compounds (SVOCs)

- Toxicity Characteristic Leaching Procedure (TCLP) Metals
- Polychlorinated Biphenyls (PCBs)
- Total petroleum hydrocarbons
- Corrosivity
- Ignitability
- Reactive Cyanide
- Reactive Sulfide
- Paint Filter

IDW water was containerized in frac tanks and stored at NWIRP Bethpage for characterization and ultimate disposal to the Publicly Owned Treatment Works (POTW), in accordance with the facilities existing discharge permit. A representative water sample was collected from each frac tank and submitted to Katahdin for analysis of VOCs via Method SW 624, pH via Method SW 9040B, PCBs via Method 8082 and Total Metals via Method SW 846. To the extent feasible, soil and water were not mixed. All analytical criteria were met for disposal of soil and water.

2.3 Surveying

A survey of the boring location was conducted at the end of fieldwork by C. T. Male, Inc., of Latham, NY, under the direct supervision of Resolution Consultants. The location was tied into the existing base map developed for this investigation. The survey elevation is referenced to the North American Vertical Datum (NAVD) 1988 and has a vertical accuracy of 0.01 foot. Vertical control is based on observations of the Continuously Operating Reference (COR) Stations Queens and Central Islip. The horizontal location is referenced to the North American Datum (NAD) 1983 (2011) N.Y. Long Island Zone 3104 and has an accuracy of 0.1 foot. Local horizontal and vertical control is based on Global Positioning System (GPS) observations using the NYSNet Real Time Network.

A table of survey data (ground, latitude/longitude and northing/easting) and a survey map is included in Appendix A.

3.0 REFERENCES

Geraghty and Miller, Inc., 1994. *Remedial Investigation Report, Grumman Aerospace Corporation, Bethpage, New York*. Revised September 1994.

Naval Facilities Engineering Command (NAVFAC), 2003. *Record of Decision Naval Weapons Industrial Reserve Plant Bethpage, New York, Operable Unit 2 – Groundwater*, NYS Registry: 1-30-003B. April.

Resolution Consultants, 2013a. *United Federal Programs Sampling and Analysis Plan*, *Site OU-2 Offsite TCE Groundwater Plume Investigation,* NWIRP, Bethpage, New York. April.

Resolution Consultants, 2013b. *UFP SAP Addendum, Installation of Vertical Profile Borings and Monitoring Wells.* NWIRP, Bethpage, New York. December.

Smolensky, D., and Feldman, S., 1990. *Geohydrology of the Bethpage-Hicksville-Levittown Area, Long Island, New York, U.S*. Geological Survey Water-Resourced Investigations Report 88-4135, 25 pp.

Tables

TABLE 1
VERTICAL PROFILE BORING SUMMARY
2015 OU2 GROUNDWATER INVESTIGATION
NWIRP BETHPAGE, NY

BORING	BORING START DATE	BORING COMPLETION DATE	GROUND ELEVATION (MSL)	TOTAL DEPTH (ft bgs)	*SURFACE CASING SET AT (ft bgs)	NO. OF SPOON SAMPLES	GAMMA LOG (ft bgs)	NO. GW SAMPLES COLLECTED / DUPLICATES / ATTEMPTED	TOC SAMPLE DEPTH (ft bgs)	DATE OF AIR SAMPLE	MONITORING WELLS INSTALLED AT LOCATION
VPB160	9/15/2015	11/25/2015	101.68	890	52	13	890	35/2/12	603-605	10/22/2015	RE126D1, RE126D2, RE126D3

MSL - mean sea level
ft bgs - feet below ground surface
GW - Groundwater
TOC - Total Organic Carbon
*8-inch casing installed to 121 feet inside 10-inch casing

Figures

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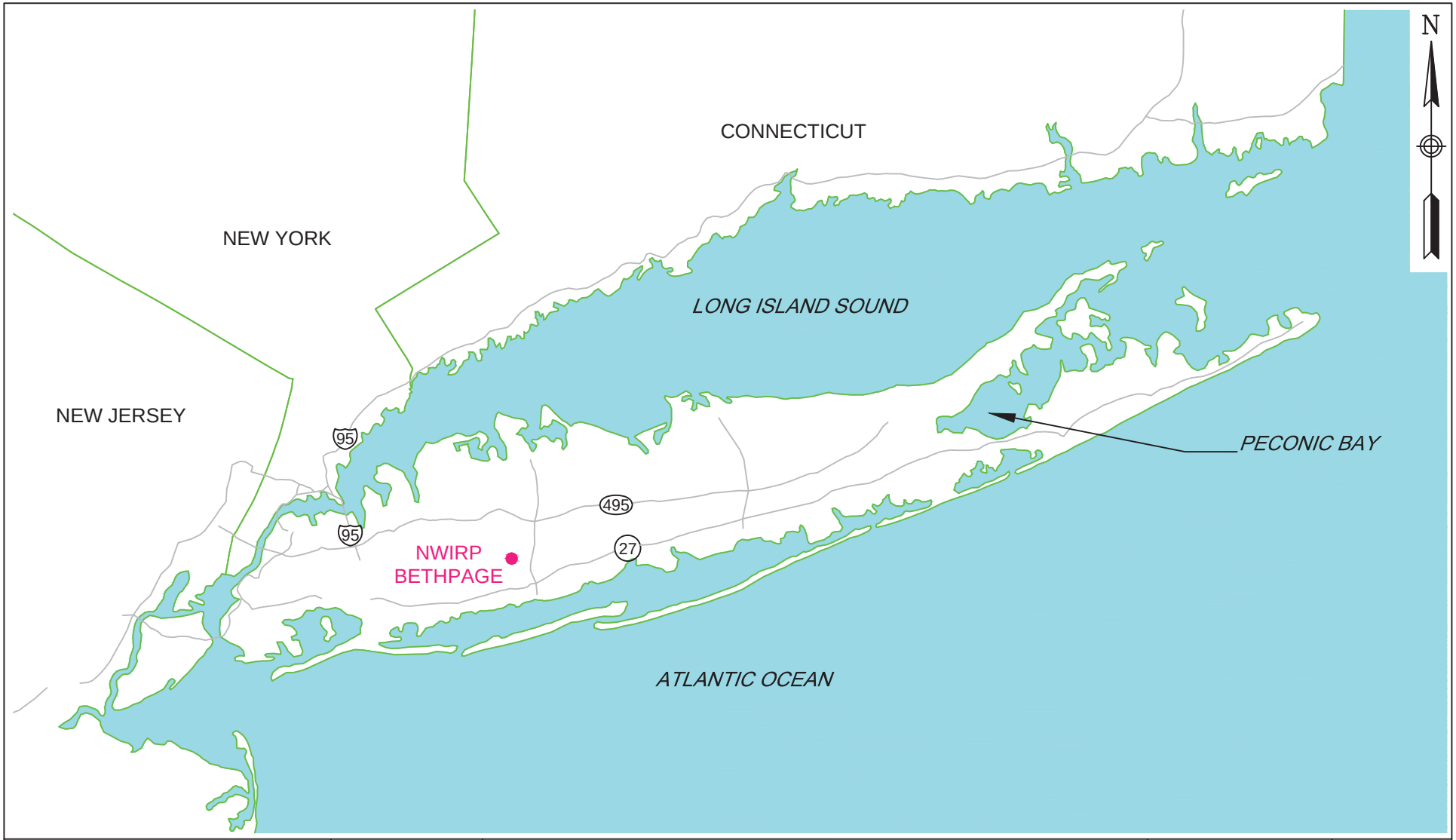


0 15 30

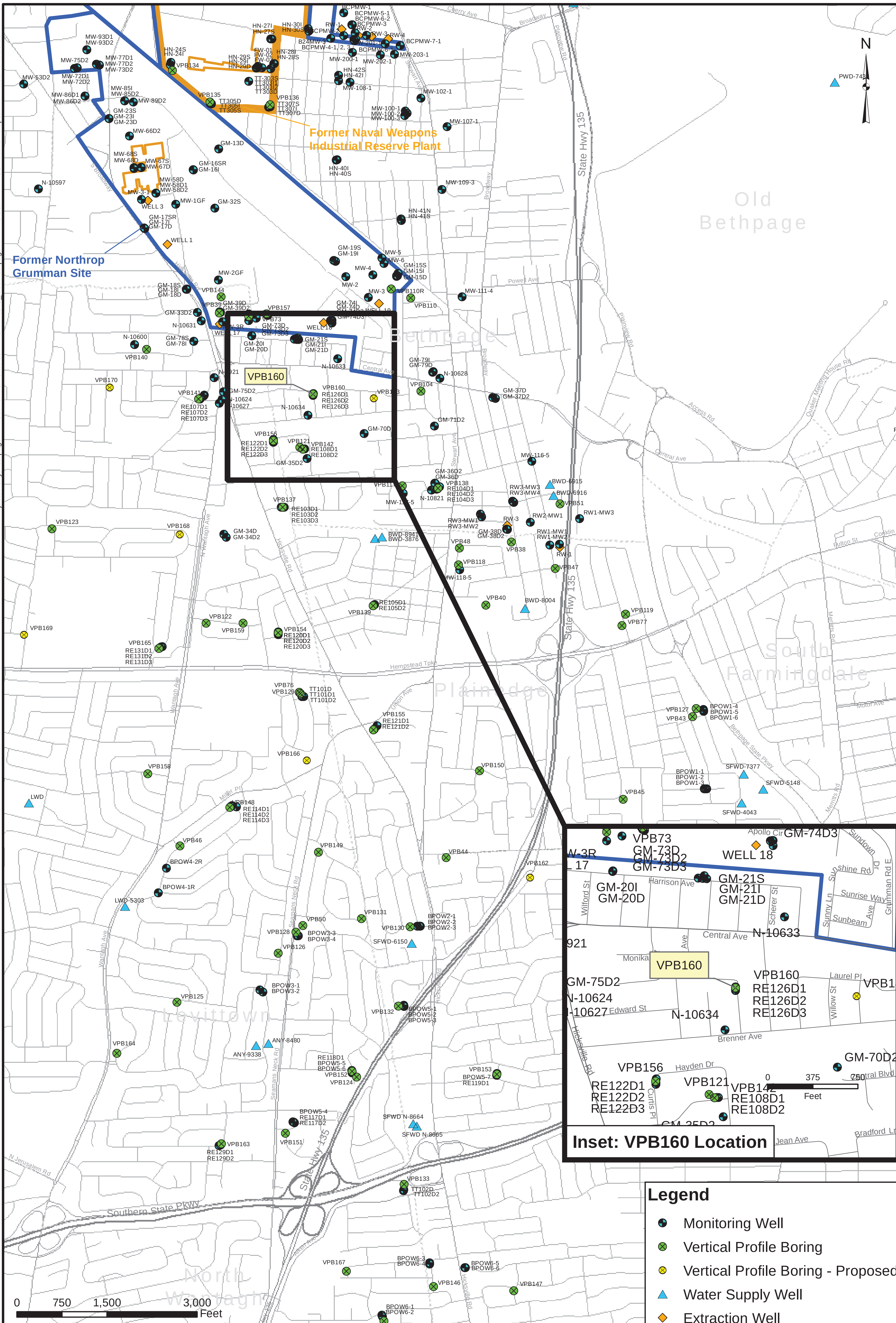
SCALE IN MILES

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\Navy\Bethpage WXE0817.0 Deliverables\7.2 CADD\GIS_files\Bethpage\MAP DOCS\MXD\MISC\Location Maps\F2 VPB160 2016 05 03 R1.mxd



VPB160 LOCATION MAP NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE15	
	APPROVED BY PS	DATE 5/3/2016	
	APPROVED BY __	DATE __	
	FIGURE NO. 2	REV 0	

NAVFAC

Appendix A

VPB160

Section 1

VPB160 Boring and Gamma Logs

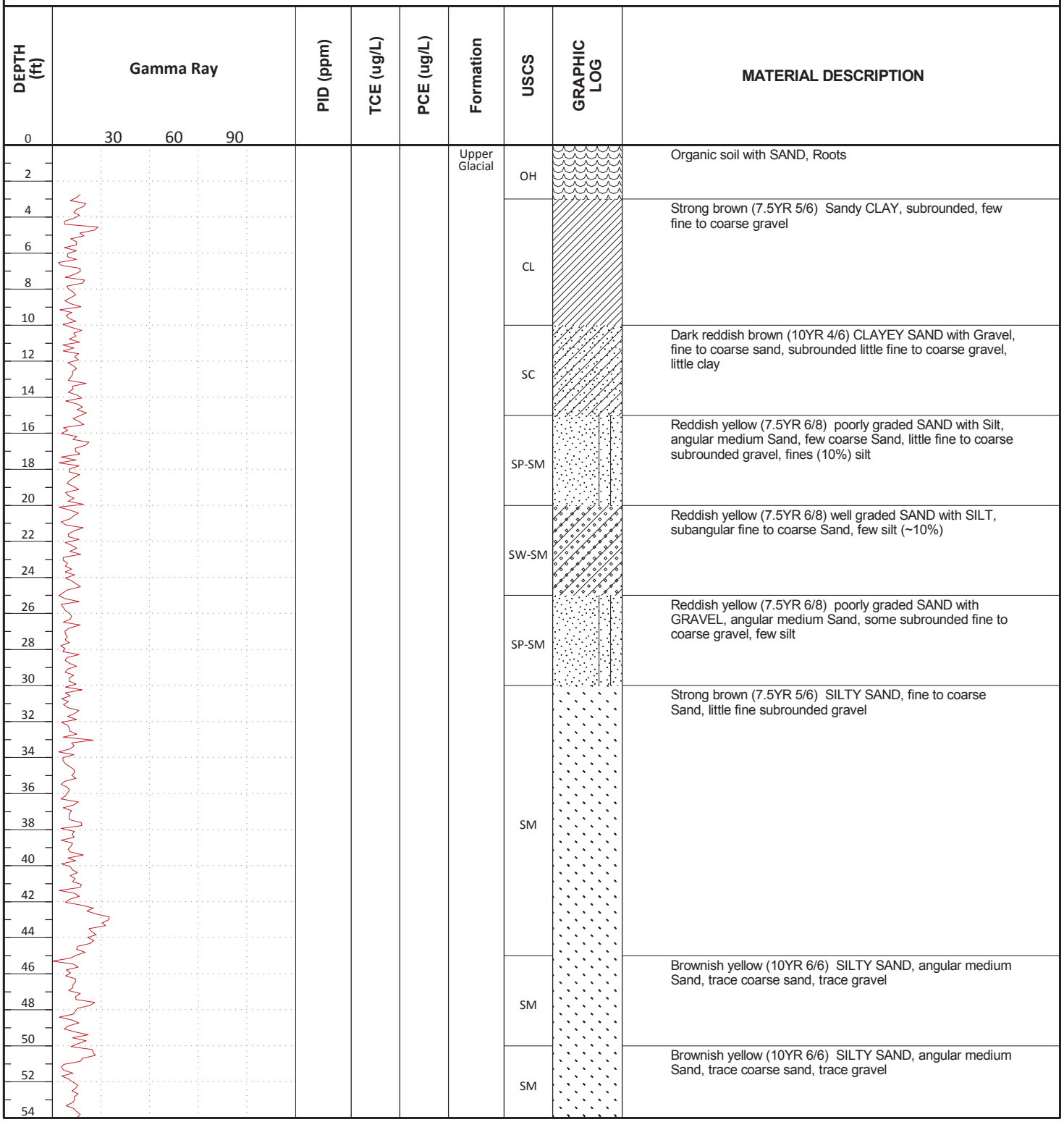
Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 1 of 15

Client: Department of the Navy, Naval Facilities Engineering Command, Mid-Atlantic		**Logged By:** V. Thayer
Location: S. Nassau St. and Lynn Pl., Bethpage, NY	**Northing:** 208577.64 **Easting:** 1125641.89	**Drilling Company:** Delta Well & Pump
Project #: 60266526	**Ground Elevation (ft amsl):** 101.68	**Well Screen Interval (ft):** NA
Start Date: 9/15/2015	**Drilling Method:** Auger (0-50' bgs) Mud Rotary (>50' bgs)	**Water Level (ft):** NA
Finish Date: 11/25/2015		**Total Depth (ft):** 890.0

Mud Rotary Drilling Note: Unless denoted by a splitspoon sample (indicated by the presence of a PID reading), boundaries between strata are approximate and may be transitional because they are based on screened wash samples collected during mud rotary drilling at 5 ft. intervals.



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Boring Log

BORING #: VPB160
Sheet 2 of 15

DEPTH (ft)	Gamma Ray (30 60 90)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
54					Upper Glacial	SM		Brownish yellow (10YR 6/6) SILTY SAND, angular medium Sand, trace coarse sand, trace gravel *(continued)*
56								
58								
60			< 0.50	< 0.50		GP-GC		Very pale brown (7/4) poorly graded GRAVEL with Sand and clay, subrounded fine gravel, coarse sand, clay (10-15%)
62						SW		Very pale brown (10YR 7/3) well graded SAND, subangular medium to coarse Sand, little fine sand, iron concretions (15%)
64								
66						GP		Very pale brown (10YR 7/3) poorly graded GRAVEL with Sand, subrounded to subangular, pea size fine gravel, little medium to coarse sand, iron concretions (15%)
68								
70						CL		Brownish yellow CLAY
72								
74						SP-SC		Brownish yellow (10YR 6/6) poorly graded SAND with Clay, angular medium sand, few clay
76								
78								
80						GW-GC		Brownish yellow (10YR 6/6) widely graded GRAVEL with Clay, angular medium to coarse sand, subrounded, fine to coarse gravel, few clay
82								
84						SP		Brownish yellow (10YR 6/6) poorly graded SAND, medium Sand, little gravel
86								
88								
90								
92								
94						SP/SC		Brownish yellow (10YR 6/6) poorly graded SAND, medium Sand, trace coarse sand, several clumps of clay (interbedded clay layers) several iron concretions
96								
98								
100			0.42	< 0.50		SW		Brownish yellow (10YR 6/6) well graded SAND with gravel
102					Magothy			
104						SP-SC		Brownish yellow (10YR 6/6) poorly graded SAND with Clay and gravel
106								
108								
110						SW/SC		Brownish yellow (10YR 6/6) well graded SAND with Clay and gravel, fine to coarse sand, little subrounded fine gravel, interbedded clay layers, 10% iron concretions
112								
114								

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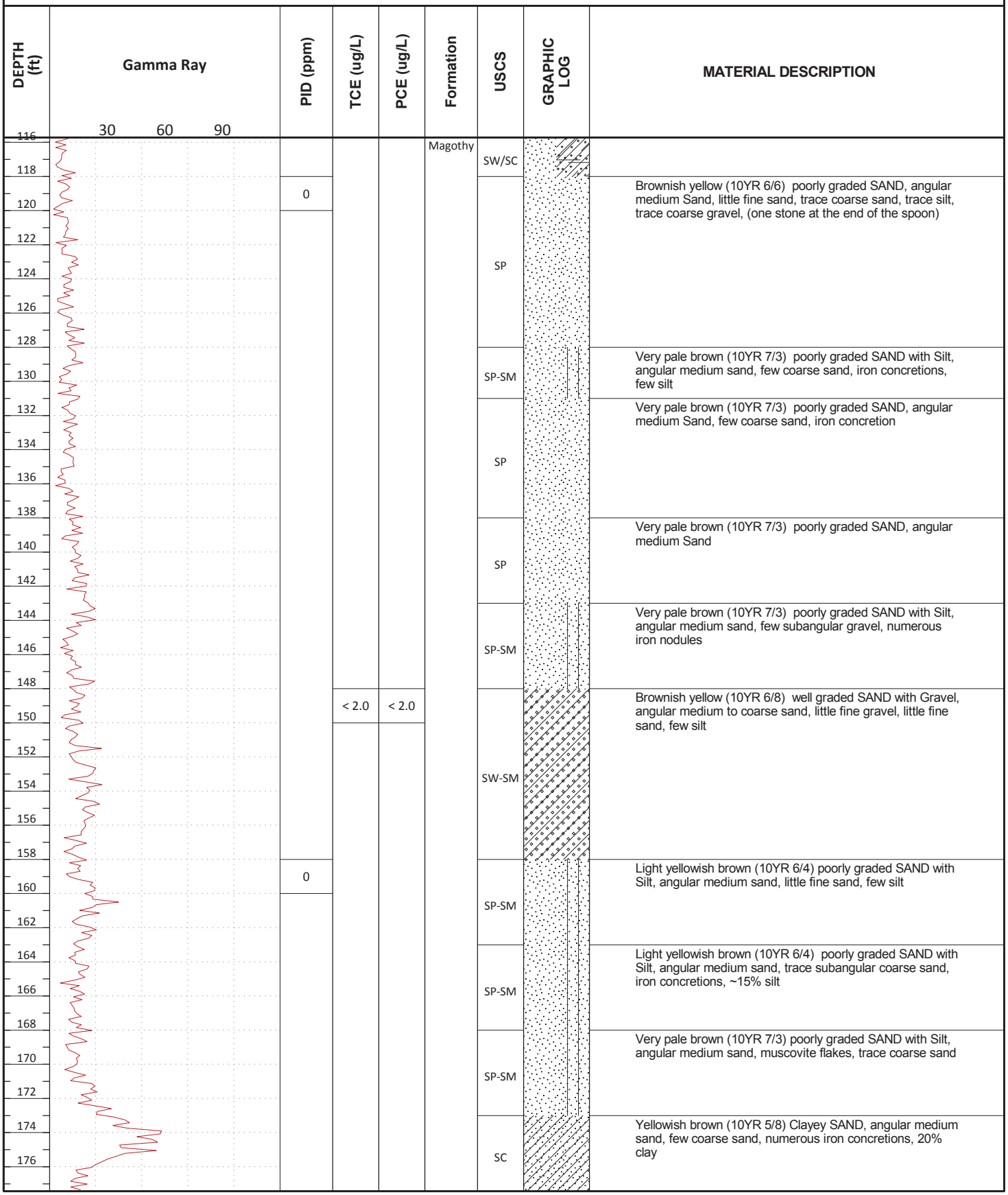
Boring Log

BORING #: VPB160
Sheet 3 of 15



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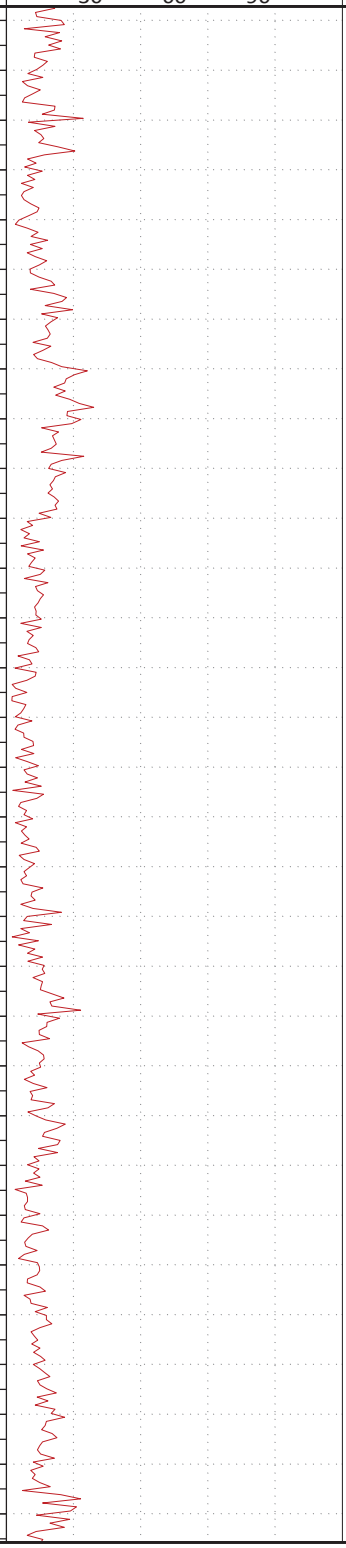
Boring Log

BORING #: VPB160
Sheet 4 of 15



DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
178				Magothy			
180					SC		Reddish yellow (7.5YR 6/8) Clayey SAND, angular medium sand, trace coarse sand, some iron concretions
182							
184		0.41	< 0.50		CL		Reddish yellow (7.5YR 6/8) Sandy CLAY, angular medium Sand, trace coarse sand, iron concretions, trace subrounded coarse gravel, 55% clay
186					SC		Reddish yellow (7.5YR 6/6) Clayey SAND, angular medium Sand, 10% iron concretions, trace coarse sand, muscovite flakes, 20% clay
188							
190							
192							
194					SC		Brownish yellow (10YR 6/6) Clayey SAND, angular medium Sand, little fine sand, 25% fines
196							
198							
200		0.35	< 0.50		SC		Yellow (10YR 7/6) Clayey SAND
202							
204					SC		Very Pale Brown (10YR 7/3) Clayey SAND, angular fine to medium Sand, trace coarse sand, clay (30% fines)
206							
208							
210					SW/SC		Yellowish red (5YR 5/6) poorly graded SAND interbedded with thin Clay layers, angular medium sand, little fine sand, iron concretions
212							
214					SP-SM		Yellow (10YR 7/6) poorly graded SAND with Silt, angular medium sand, trace subrounded fine gravel, trace iron nodules
216							
218					SC		Brownish yellow (10YR 6/8) Clayey SAND, angular medium Sand, few fine sand, numerous iron concretions, fines (25%) clay
220		0.82	< 0.50				
222							
224					SC		Brownish yellow (10YR 6/8) Clayey SAND, angular medium Sand, little fine sand, iron concretions, trace angular sand, clay (40%)
226					SW/SC		Brownish yellow (10YR 6/8) poorly graded SAND, angular medium Sand, trace subrounded fine gravel, muscovite flakes, numerous iron concretions, interbedded thin clay lenses
228							
230							
232							
234					SW/SC		Brownish yellow (10YR 6/6) poorly graded SAND with thin interbedded gray Clay layers
236							
238							
					SC		

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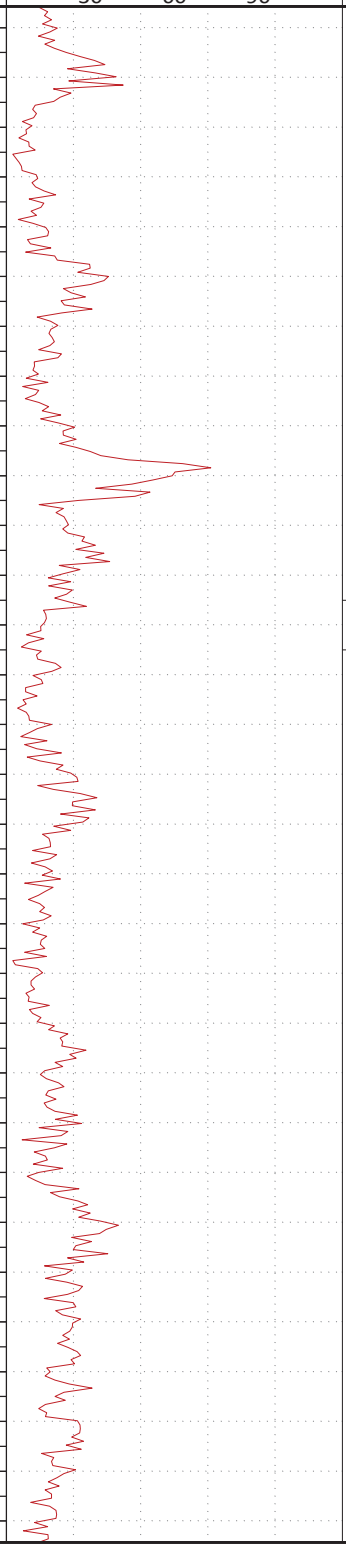
Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 5 of 15



DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
240				Magothy	SC		Brownish yellow (10YR 6/6) Clayey SAND, angular medium Sand, little fine sand, muscovite flakes, gray clay (40%) several iron concretions *(continued)*
242							
244							
246							
248					SP-SM		Brownish yellow (10YR 6/8) poorly graded SAND with Silt, angular medium Sand, trace iron nodules, silt (~10%)
250		0.41	< 0.50				
252							
254					SW/SC		Brownish yellow (10YR 6/6) Poorly graded SAND, interbedded with very thin gray clay lens, medium sand, little fine sand, iron concretions, muscovite flakes
256					SC		Brownish yellow (10YR 6/6) Clayey SAND, angular medium Sand, little fine sand, numerous iron concretions, muscovite flakes, (30% fines) clay
258							
260		< 2.0	< 2.0				
262							
264	0				SM		Light gray (10YR 7/2) with brownish yellow banding (10YR 6/6) angular medium SAND, 20% Silt, thin lignite lenses
266					SP-SM		Yellowish brown (10YR 5/6) poorly graded SAND with Silt, angular medium sand, little fine sand, several iron concretions
268							
270					SP/SC		Poorly graded SAND interbedded with thin Clay layers
272					CL		Light yellowish brown (10YR 6/4) Sandy CLAY
274							
276							
278							
280							
282							
284		< 0.50	< 0.50				
286							
288							
290					CL		Light yellowish brown Sandy CLAY,
292							
294							
296							
298							
300		< 0.50	< 0.50		SP/CL		Poorly graded SAND interbedded with thin gray Clay lenses

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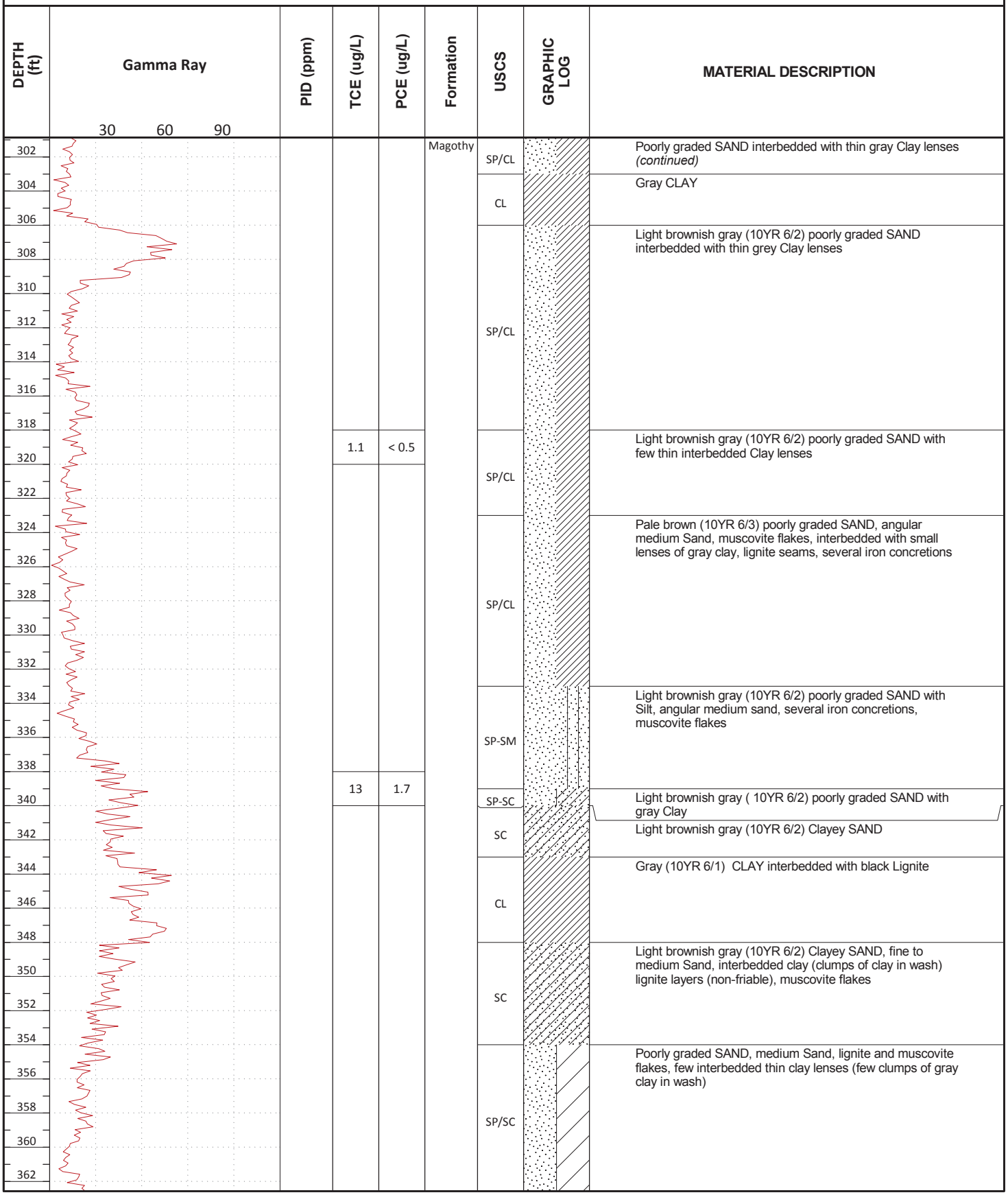
Boring Log

BORING #: VPB160
Sheet 6 of 15



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Boring Log

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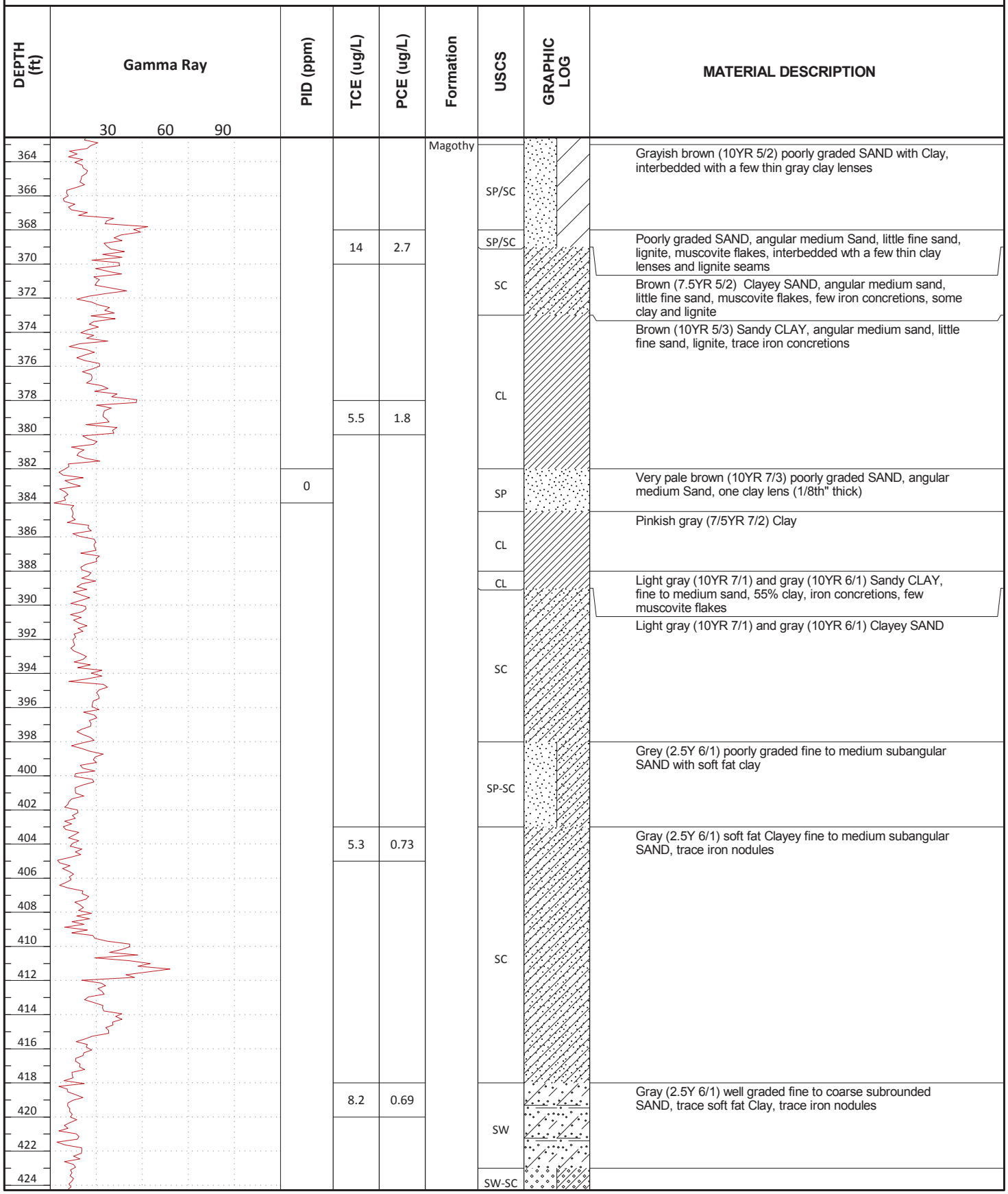

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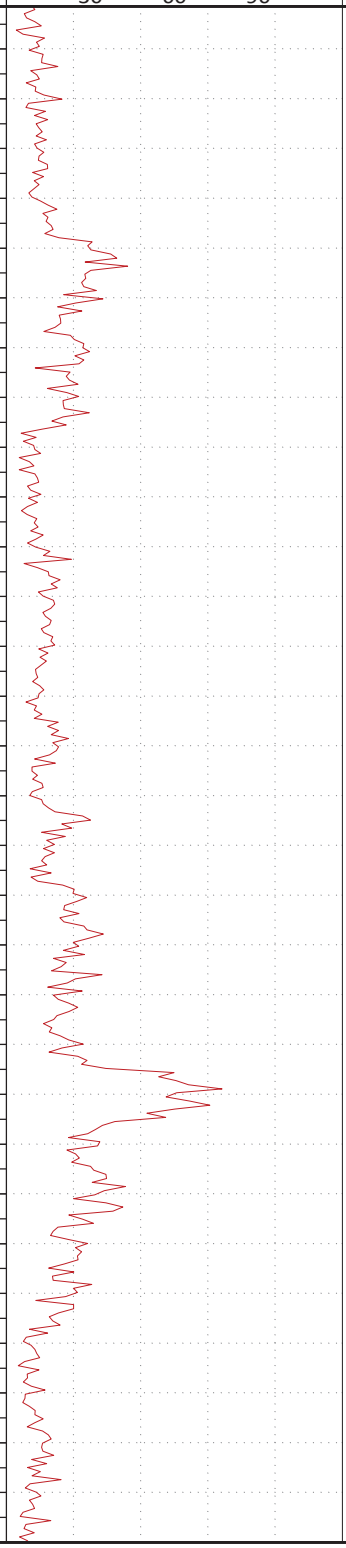
Boring Log

BORING #: VPB160
Sheet 8 of 15



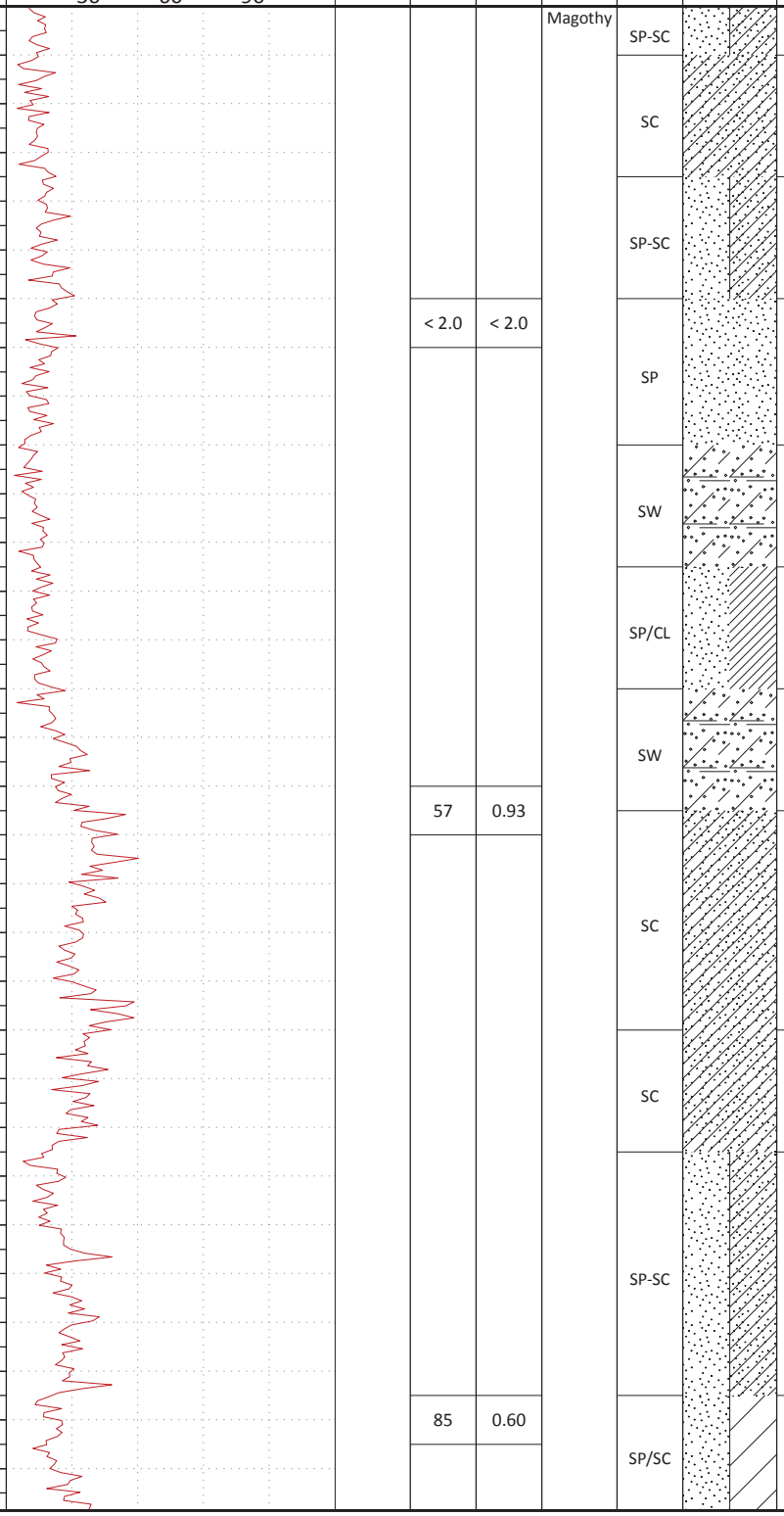
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
426				Magothy	SW-SC		Gray (2.5Y 5/1) well graded fine to coarse subrounded SAND with soft fat Clay, trace iron nodules *(continued)*
428							
430							
432							
434					SW-SC		Gray (2.5Y 5/1) well graded fine to coarse subrounded SAND with soft fat Clay, trace iron nodules, trace silt
436							
438							
440		2.9	1.2		SW		Gray (2.5Y 6/1) well graded fine to coarse subrounded SAND, trace Slit, trace soft fat clay, trace iron nodules
442							
444					SC		Gray (Gley 1 5/1) soft fat Clayey fine to coarse subrounded SAND, trace silt, trace iron nodules
446							
448							
450					SM		Gray (Gley 1 6/1) Silty fine to medium subrounded SAND, trace soft fat clay, trace iron nodules
452							
454					SC		Gray (2.5Y 5/1) soft fat Clayey fine to coarse subrounded SAND, trace iron nodules
456							
458							
460		< 4.0	< 4.0		CH		Gray (Gley 1 5/1) soft fat CLAY with fine Sand, trace medium to coarse subrounded sand
462							
464					CH		Gray (Gley 1 5/1) soft fat CLAY with fine Sand, trace medium to coarse subrounded sand, trace iron nodules
466							
468							
470					CH		Gray (Gley 1 5/1) fine Sandy soft fat CLAY, trace medium to coarse subrounded sand, trace iron nodules
472							
474					SP-SC		Gray (2.5Y 5/1) poorly graded fine to medium SAND with soft fat Clay, trace coarse sand, trace iron nodules
476							
478							
480					SP-SC		Gray (2.5Y 5/1) poorly graded fine to medium SAND with soft fat Clay, trace silt
482							
484		< 2.5	< 2.5				
486							

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 9 of 15

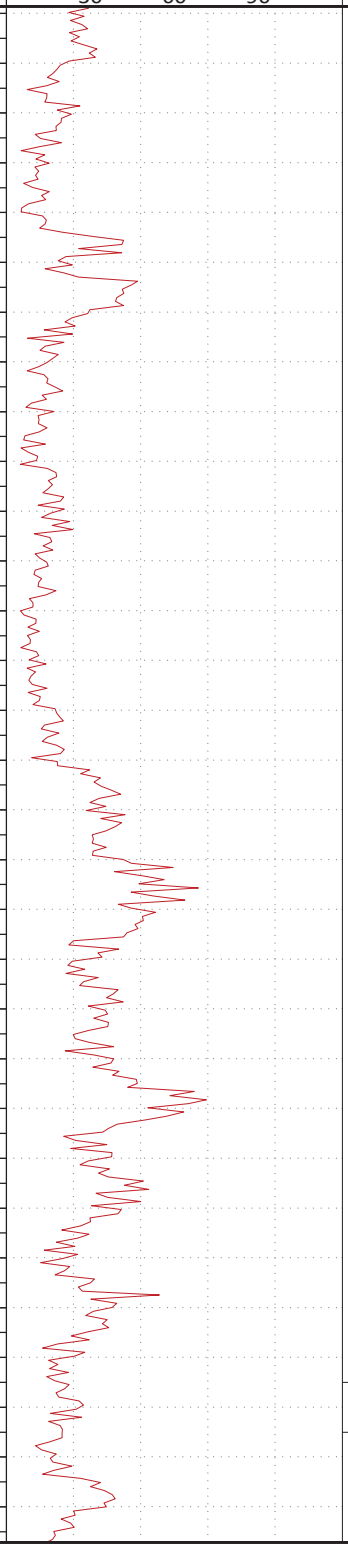


(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 10 of 15



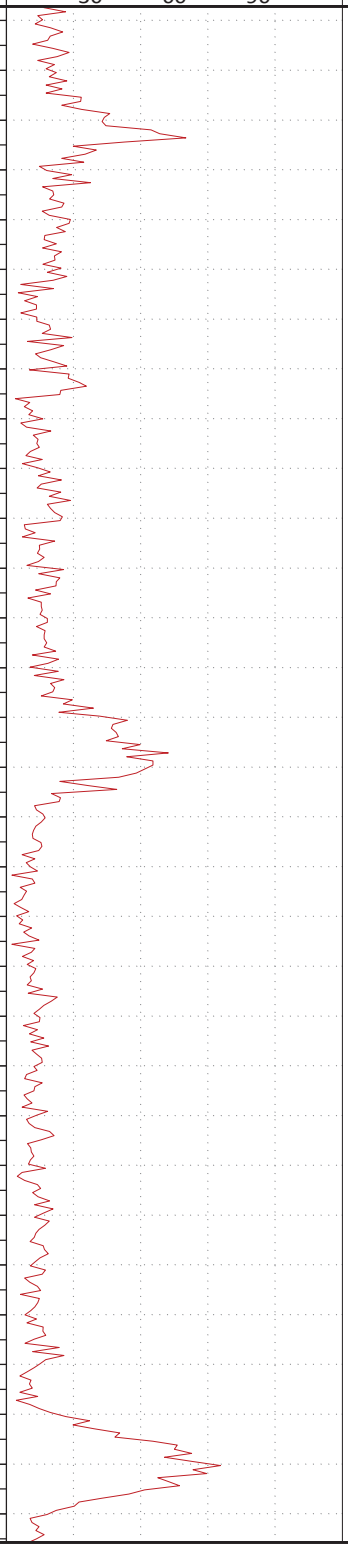
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
548				Magothy			
550					SW/SC		Gray (7.5YR 6/1) well graded SAND with Clay, subrounded medium to coarse sand, little fine sand, interbedded with trace gray clay lenses
552							
554					SC		Light gray (10YR 7/1) Clayey SAND, angular medium sand, few subangular coarse sand, trace fine gravel, 25% fines
556							
558							
560		520	< 0.50		SP		Light brownish grey (10YR 6/2) poorly graded SAND, angular medium Sand, few subrounded to subangular fine gravel, iron concretions
562							
564					SP-SC		Light brownish gray (10YR 6/2) poorly graded SAND with Clay, angular medium sand, little coarse sand, trace fine subrounded gravel, iron concretion, few clay
566							
568							
570							
572					SP		Light brownish grey (10YR 6/2) poorly graded SAND, angular medium Sand, little coarse sand, trace fines
574							
576							
578							
580					SP		Light brownish gray (10YR 6/2) angular medium SAND, some coarse Sand, few angular gravel
582					SW/SC		Gray (7.5YR 5/1) well graded SAND, subrounded to subangular medium to coarse Sand, little fine sand, fines (10%), possible interbedded clay lenses, one iron concretion
584		< 8.0	< 8.0				
586					CL		Gray (10YR 6/1) CLAY noted by driller, hard drilling
588							
590					SC		Light brownish gray (10YR 6/2) Clayey SAND, angular medium SAND, trace subrounded fine gravel, 30% clay
592							
594					SM		Light Gray Silty SAND
596							
598							
600		< 2.5	< 2.5		SM		Light gray (10YR 7/1) Silty SAND, fine sand, silt
602							
604	0				SM		Light gray (10YR 7/1) Silty SAND, find sand, 25% silt
606							
608							
		1.2	< 0.95		SM		Gray (10YR 6/1) Silty SAND

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 11 of 15



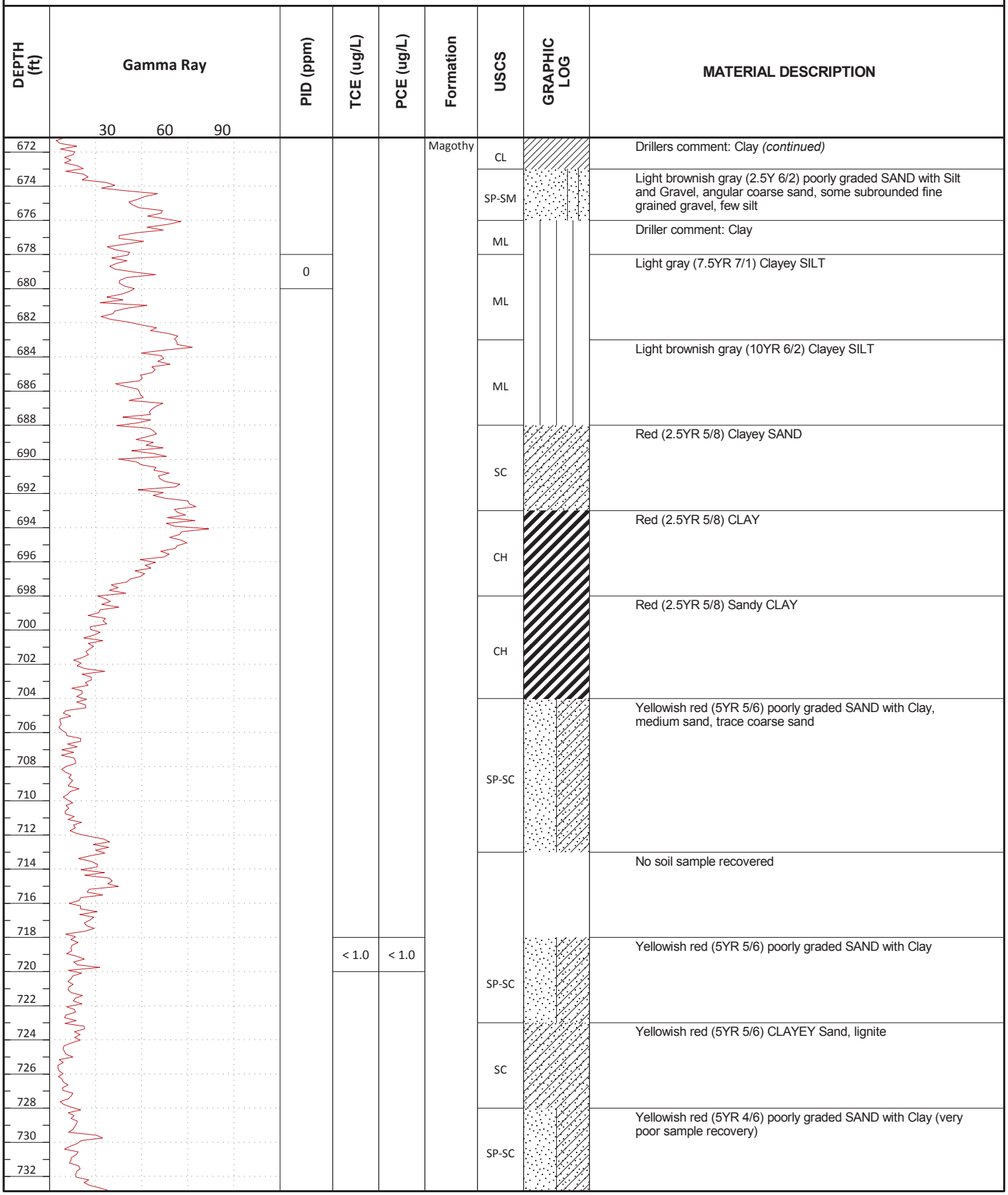
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
610				Magothy			
612					SM		Gray (10YR 6/1) Silty SAND *(continued)*
614					SM		Gray (10YR 6/1) Silty SAND
616							
618							
620		1.3	< 0.50		SM		Gray (10YR 6/1) Silty SAND, fine to medium Sand, silt (20%)
622							
624					SM		Light brownish gray Silty SAND (10YR 6/2) angular medium Sand, little fine sand, trace coarse sand, silt (25%)
626					GP		Light gray (10YR 7/2) poorly graded GRAVEL with Sand, subrounded fine gravel, some coarse sand, few medium sand
628							
630					GP		Light gray (10YR 7.2) poorly graded GRAVEL with Sand, subrounded fine gravel, subrounded coarse sand, few medium sand
632							
634					GP		Light gray (10YR 7/2) poorly graded GRAVEL with Sand, subangular fine gravel, few subrounded coarse gravel, some medium to coarse sand, few clay lenses interbedded
636							
638							
640		0.54	< 0.50				
642					CL		Drillers comment: Clay lens
644		0.45	< 0.50		GP		Pale brown (10YR 6/3) poorly graded GRAVEL with Sand, fine subrounded gravel, some medium to coarse sand
646							
648							
650					GP		Poorly graded GRAVEL with Sand, subrounded fine gravel, some coarse sand, little medium sand
652					GW		Light gray (10YR 7/2) Well graded GRAVEL, subangular to subrounded fine Gravel, little subrounded coarse gravel
654							
656					GW		Well graded GRAVEL, subangular fine gravel, little subrounded coarse gravel, few interbedded silt lenses
658							
660		< 4.0	< 4.0				
662					GW		Very pale brown (10YR 7/3) well graded GRAVEL, subrounded fine gravel, Little coarse subrounded gravel, little medium to coarse sand
664							
666							
668					GW-GM		Dark gray (10YR 4/1) GRAVEL with Silt, subrounded fine to coarse gravel, silt
670					CL		Drillers comment: Clay

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 12 of 15

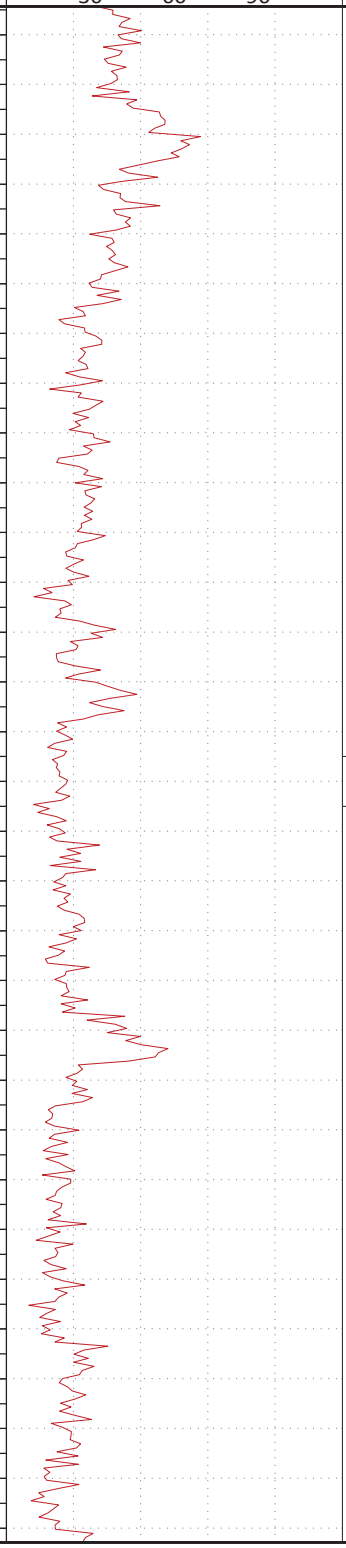


(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 13 of 15



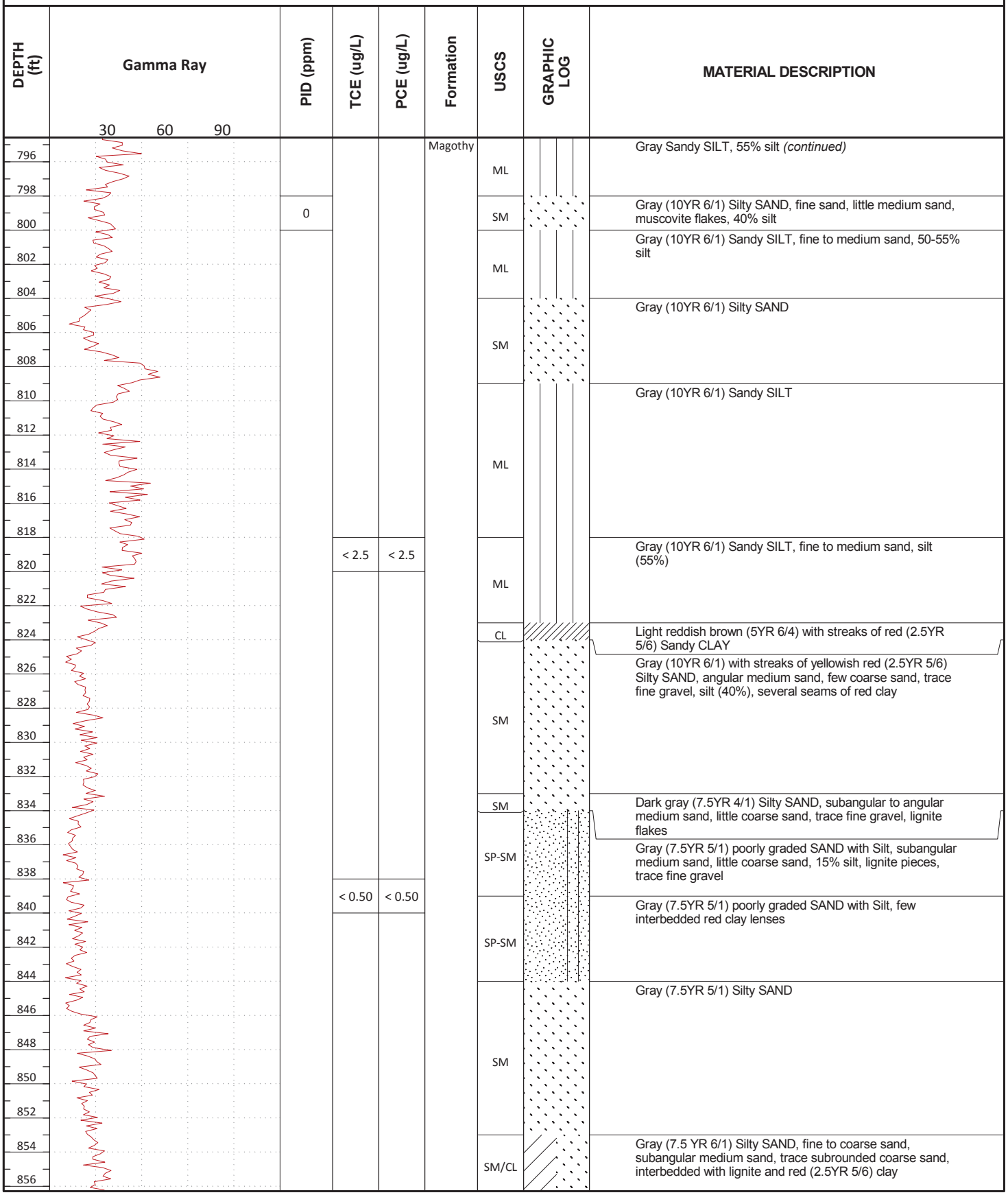
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
734				Magothy	CL		Gray (10YR 6/1) Sandy CLAY
736							
738							
740					CL		Gray (10YR 6/1) Sandy CLAY
742							
744							
746							
748							
750							
752							
754					SM		Gray (10YR 6/1) Silty SAND, fine to medium sand, silt
756							
758							
760		< 1.2	< 1.2		SM		Gray (10YR 6/1) Silty SAND, lignite
762							
764	0				SM		Grey (10YR 6/1) Silty SAND, medium sand, little fine sand, one faint lignite (1/4in) seam, 20% silt
766							
768							
770		< 0.50	< 0.50		SM		Gray (10YR 6/1) Silty SAND, medium sand, little fine sand, little silt
772							
774							
776							
778							
780							
782							
784							
786							
788							
790							
792							
794					ML		Gray Sandy SILT, 55% silt

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 14 of 15



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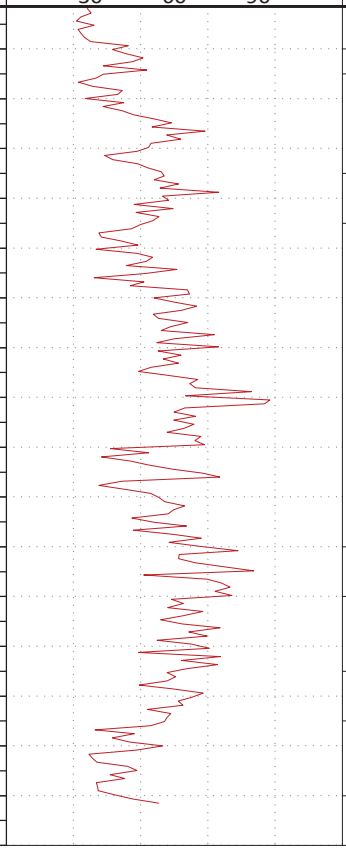
Resolution Consultants

Boring Log

BORING #: VPB160
Sheet 15 of 15



DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
858				Magothy	SM/CL		
	0				OH		Black LIGNITE
860					ML		Gray (7.5YR 5/1) Clayey SILT, micaceous
862							
864	0				ML		Gray (7.5YR 5/1) Clayey SILT, micaceous
866							
868							
870				Raritan	ML		Dark gray (7.5YR 4/1) Clayey SILT
					CH		Dark gray (7.5YR 4/1) fat CLAY
872							
874							
876							
878							
880	0				CH		Gray (10YR 6/1) fat CLAY
882							
884	0				CH		Yellowish red (5YR 5/6) and gray (5YR 6/1) fat CLAY, color mottled
886							
888							
890	0				CH		White (10YR 8/1) fat CLAY

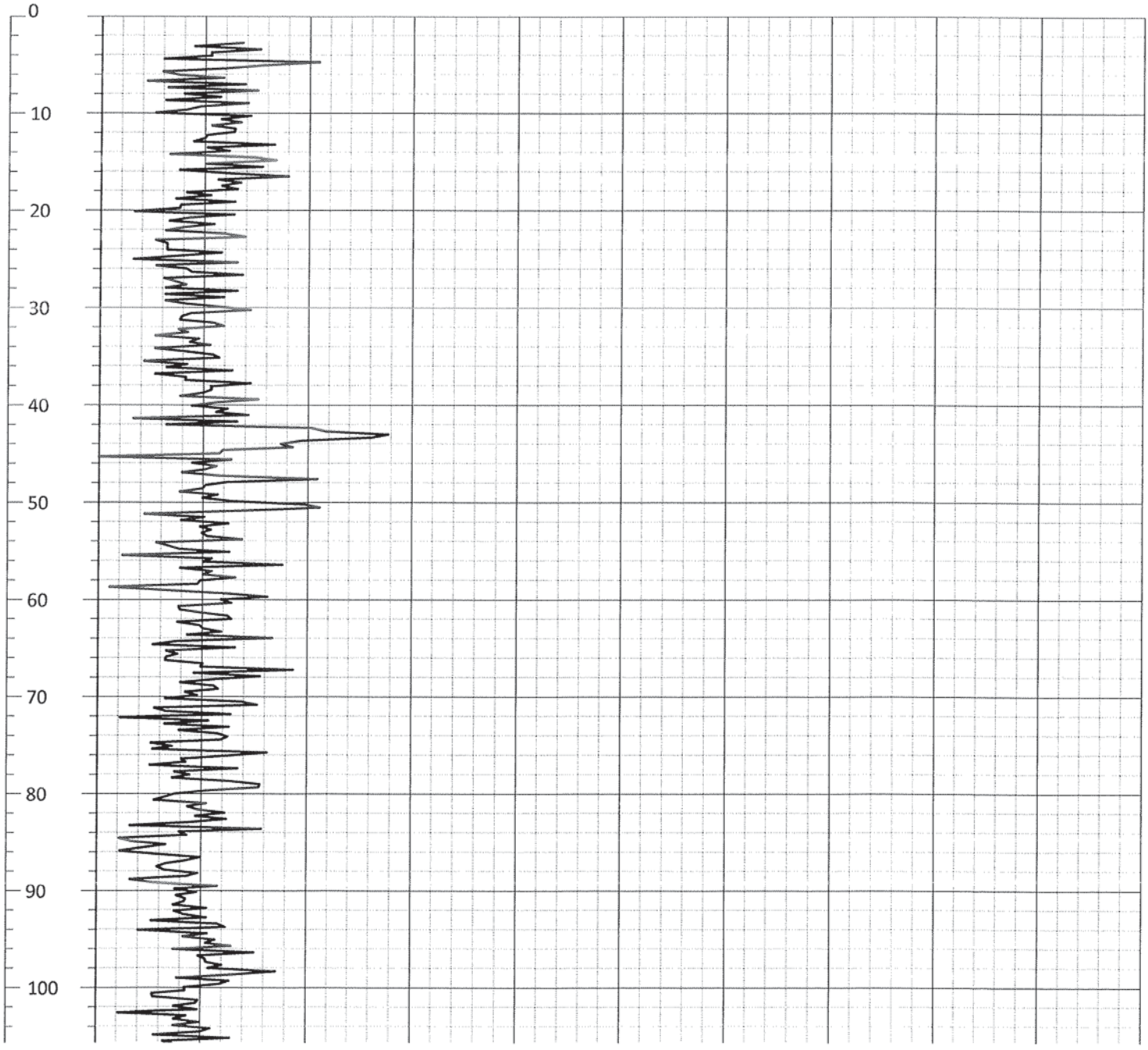
End of boring at 890.0 ft. bgs.

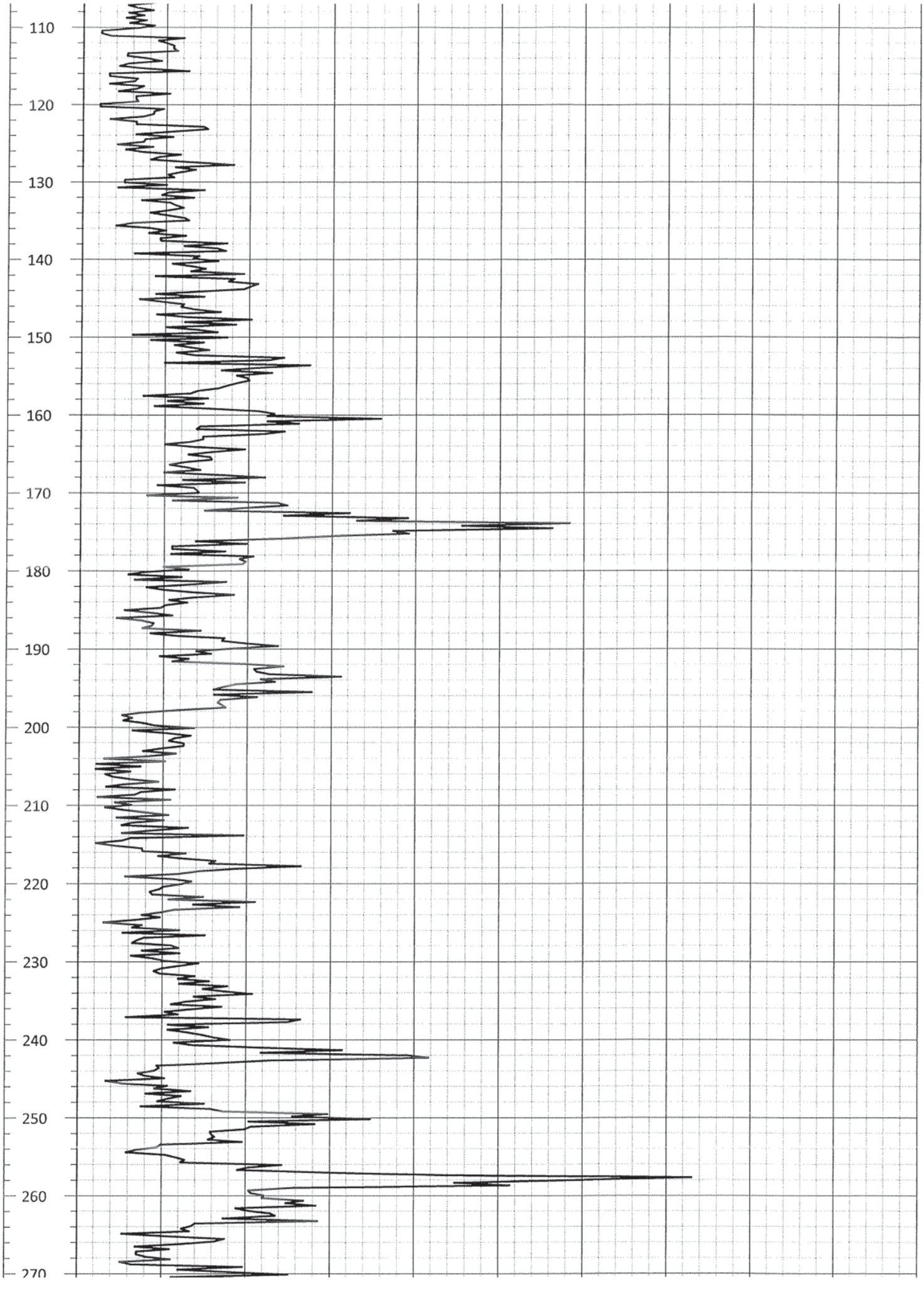
DOWN

COMPANY:	DELTA WELL & PUMP CO., INC.
LOCATION:	SO NASSAU ST

Well: VPB-160		Depth Driller:
		Depth Logger:
Date: 11/20/2015	Time:	Logged by: CMO
File Name: 739		Witness: VAL

Depth (ft.)	GAMMA (cps)	
0.0		100.0

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160
170
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230
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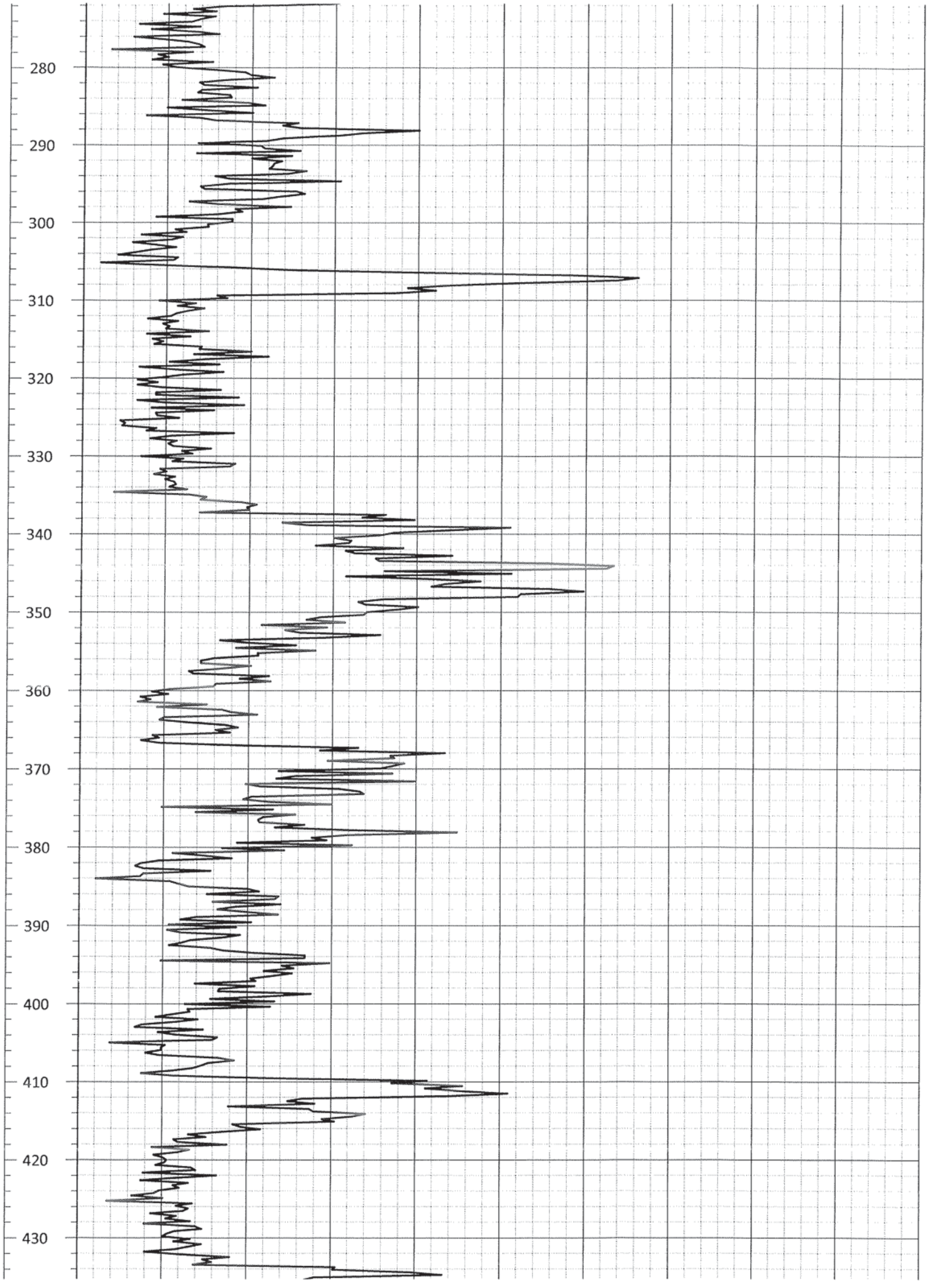
250
260
270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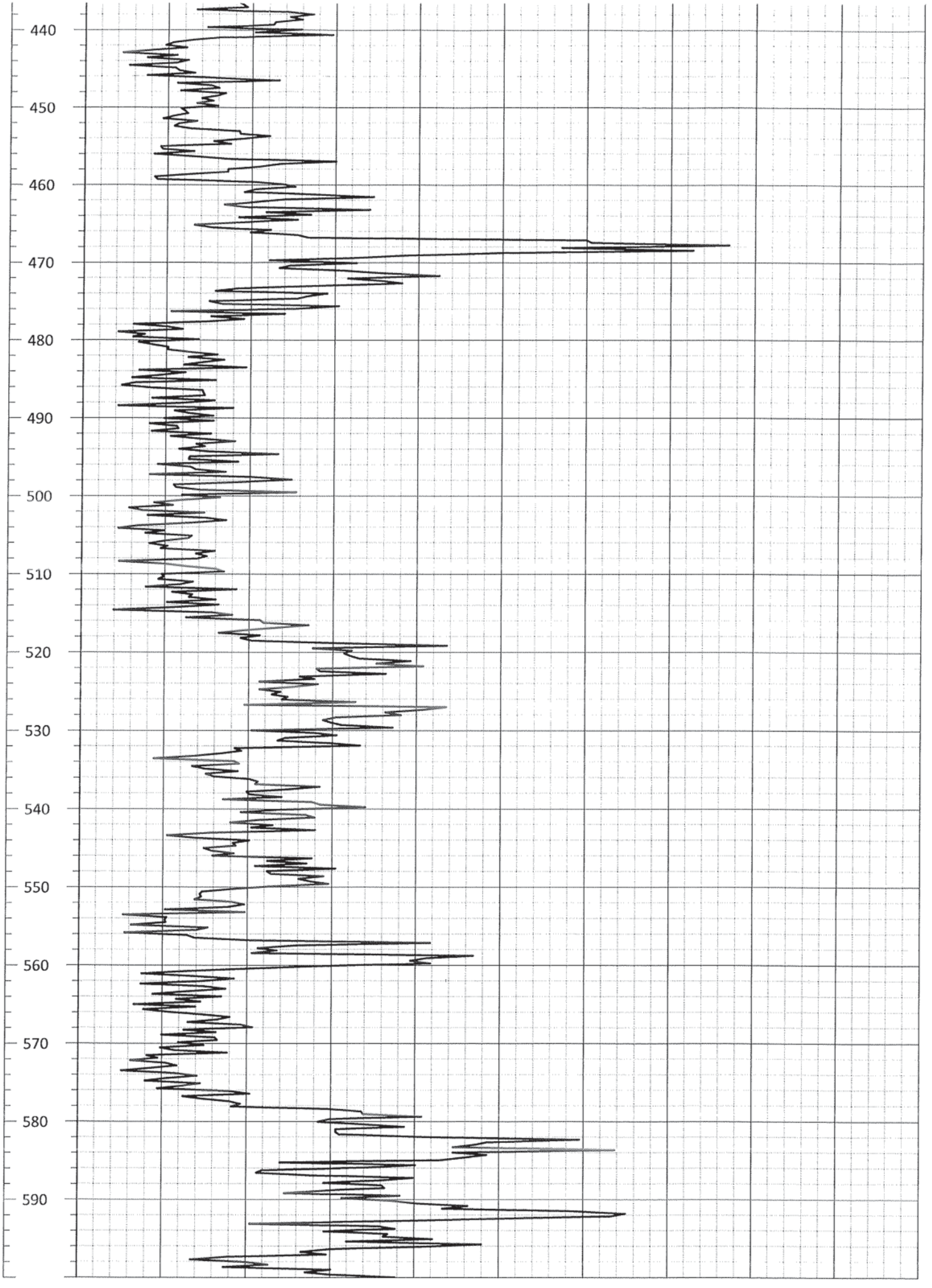
380
390
400
410
420
430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460
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500
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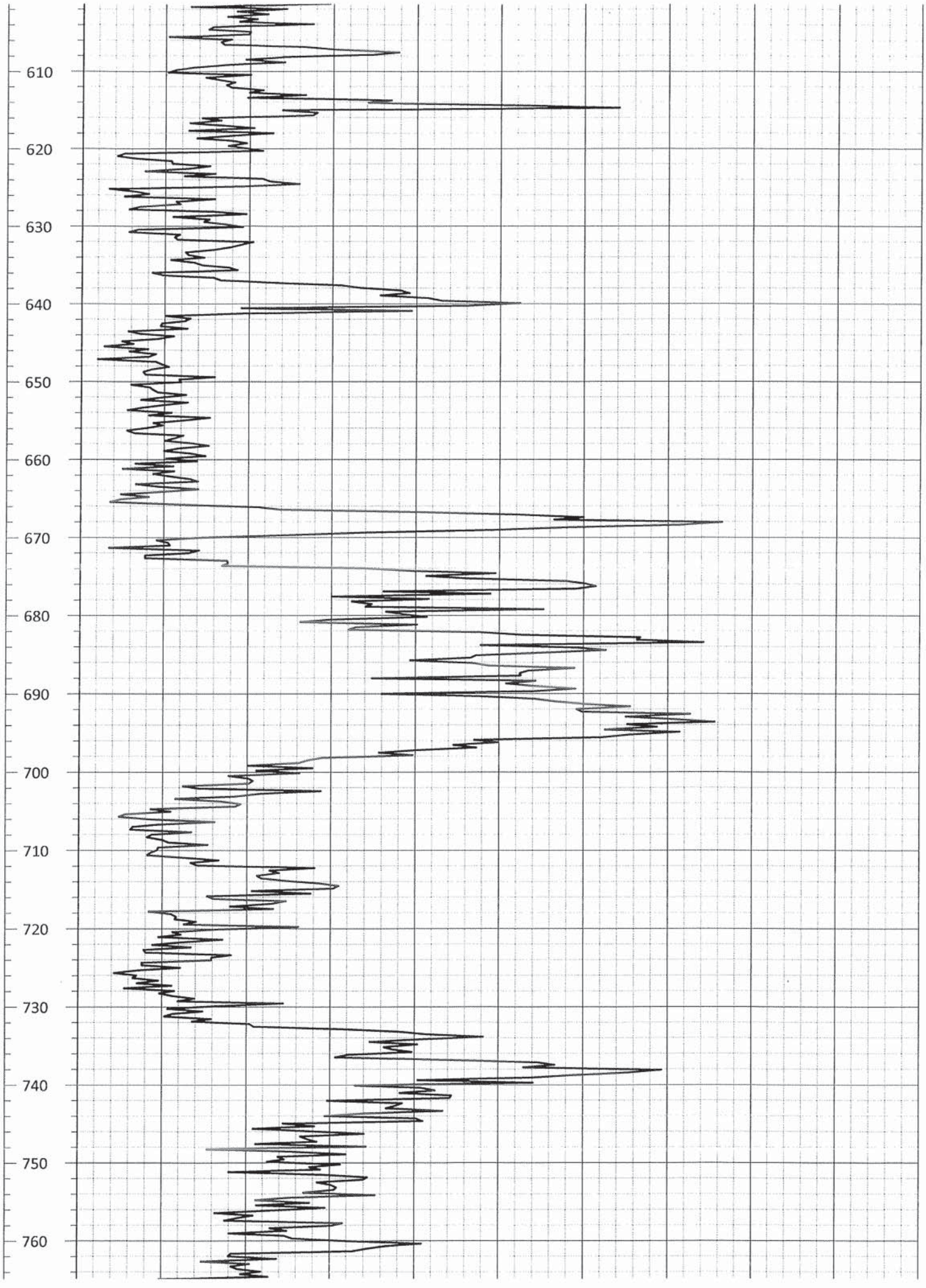
550
560
570
580
590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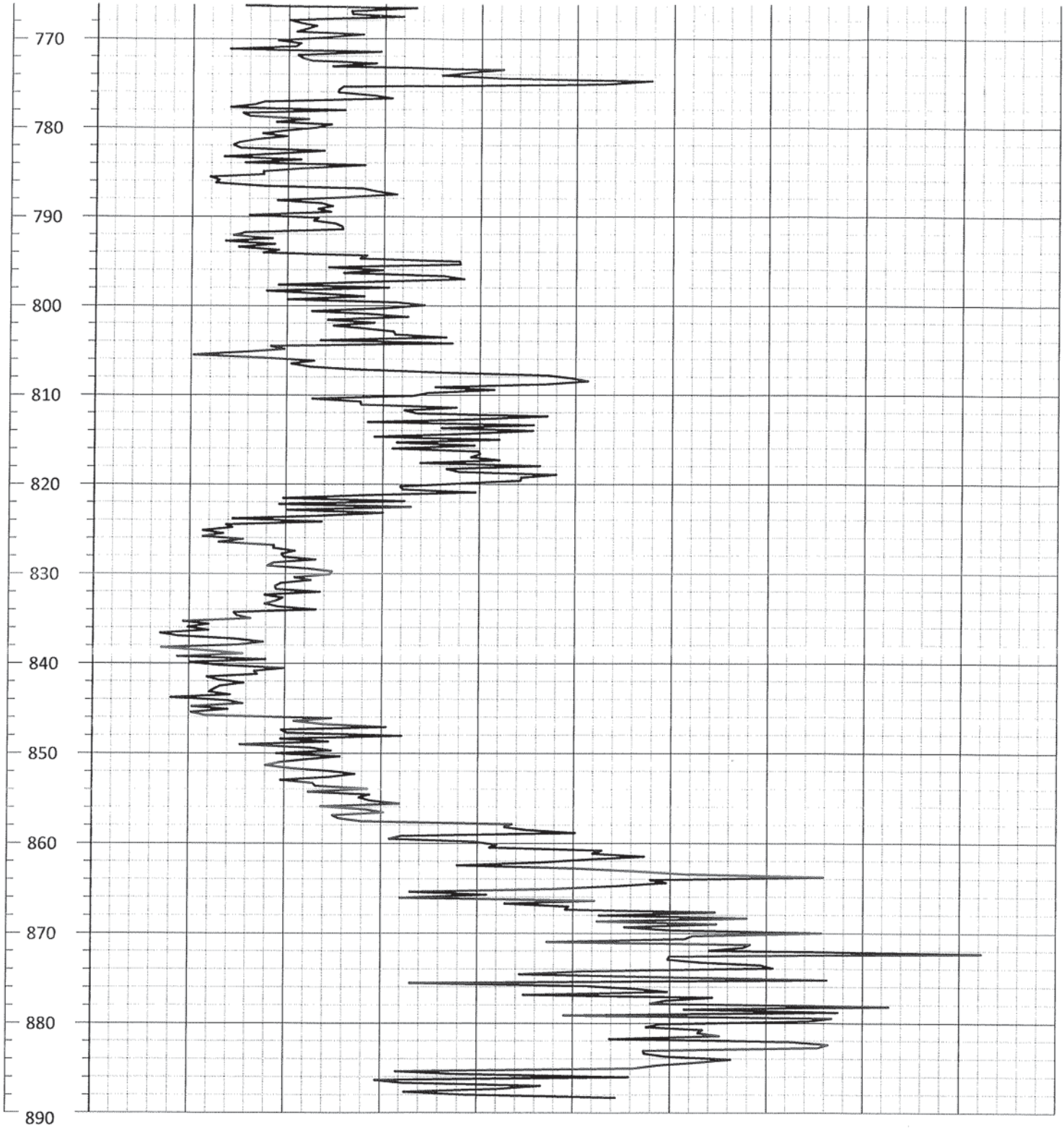
670
680
690
700
710
720
730
740
750
760

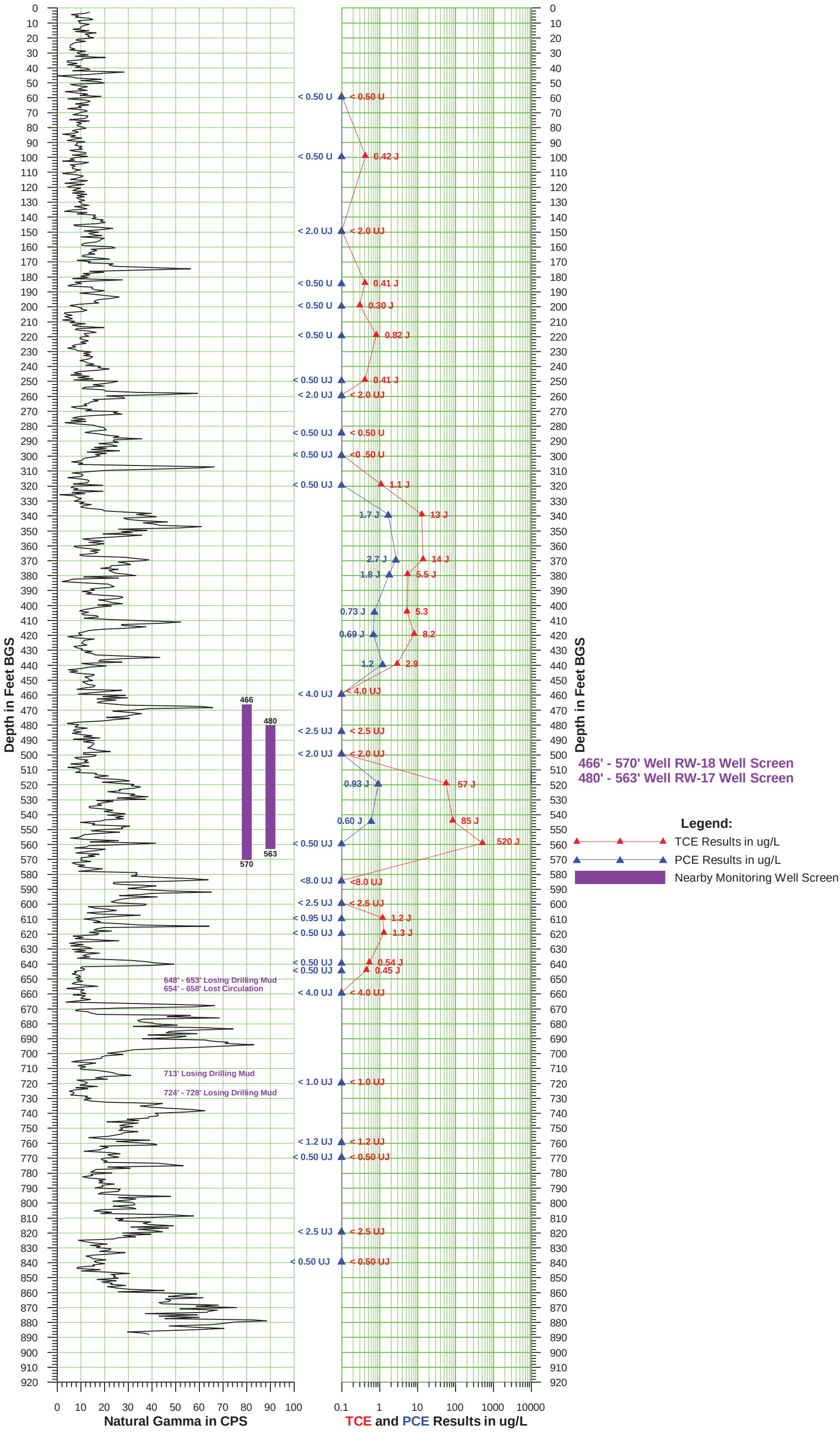


Depth (ft.)	0.0	GAMMA (cps)	100.0

Section 2

VPB160 Gamma and PCE/TCE Plot

Vertical Profile Boring VPB-160
Downward Run - November 20, 2015
Validated Analytical Data



Section 3

VPB160 Groundwater Sample Log Sheets

RESOLUTION CONSULTANTS

Hydropunch Sample

Client: NWIRP - Bethpage
Project No: 60266526
Site Location: Bethpage
Weather Conds: Mild

Date: 9/23/15 - 11/12/15
VPB: VPB 160
Collector(s): V Thayer
M Zobel 10/9 - 10/12/15

Sample Date	Time	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Starting depth(ft)	Ending depth(ft)	Color
9/23/15	14:45	22.8	7.27	405.3	4.10	15.7	off scale	58'	60'	Brown
9/24/15	12:15	25.5	7.67	218.8	6.29	31.9	739.3	98'	100'	Light Brown
9/28/15	11:45	19.9	8.75	680	3.78	8.0	off scale	148'	150'	Bulline mud
9/29/15	10:00	22.1	3.67	567	4.83	317.9	246.6	183	185	Light Brown
9/29/15	12:30	22.4	6.16	267.3	0.80	-131.8	off scale	198	200	Light Brown
9/29/15	14:30	22.6	6.78	149.8	5.61	27.3	406.7	218	220	
9/30/15	10:45	←		no recovery			→	238	240	
9/30/15	12:45	21.4	7.19	227	5.74	-10.0	116.3	248	250	dulling mud
9/30/15	14:30	- not enough sample for YSI					—	258	260	
10/1/15	10:50	←		no recovery			→	278	280	
10/1/15	11:30	16.6	8.66	195.7	5.83	-20.5	453.4	283	285	Light brown
10/1/15	14:45	16.5	6.58	135.7	4.14	23.1	off scale	298	300	yellowish brown, mud
10/2/15	10:45	15.3	6.6	180.7	10.45	4.5	430	318	320	Light brown
10/2/15	12:45	15.1	6.83	160	9.19	40	565.4	338	340	
10/5/15	11:00	←		no recovery			→	358	360	
10/5/15	13:45	20.2	6.21	150	2.32	21.5	off scale	368	370	half black and half clear
10/8/15	12:30	19.5	7.45	229	4.11	-12.6	817.2	378	380	pale gray
10/9/15	10:15			no recovery				398	400	
10/9/15	12:00	16.8	6.90	218.9	1.91	-33.2	457.4	403	405	Gray/Brown
10/9/15	14:45	18.7	6.89	468.5	0.29	-156.1	617.7	418	420	brown
10/12/15	11:00	18.3	6.61	292.3	0.87	-68.2	369.8	438	440	cloudy
10/12/15	13:30	— not enough sample for readings						458	460	Brown

RESOLUTION CONSULTANTS

Hydropunch Sample

Client: NWIRP - Bethpage
Project No: 60266526
Site Location: ~~BE~~ VPB 160 (S. Nassau & Lynn)
Weather Conds: mild

Date: Oct & Nov 2015
VPB: 160
Collector(s): V Thayer 10/16/15 - 11/11/15
Mike Zobel 10/13/15 - 10/15/15

Sample Date	Time	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Starting depth(ft)	Ending depth(ft)	Color
10/13/15	12:05			Not enough sample for reading				483	485	Brown
10/13/15	14:45	17.8	6.91	583.2	1.3	-148.2	>1,100	498	500	Brown
10/14/15	11:15	18.6	7.28	173.2	3.47	-45.6	891.3	518	520	Pale Brown
10/14/15	12:45			no recovery				538	540	
10/15/15	10:15	17	8.69	242.9	20	-111.8	off scale	543	545	
10/15/15	12:45	18	7.69	150.3	6.47	71.4	1100	558	560	Pale Brown
10/15/15	14:00			no recovery				578	580	Brown
10/16/15	12:45	16.2	7.61	612	0.15	-601.4	off scale	583	585	Brown, drilling mud
10/16/15	15:00			no recovery				588	590	
10/21/15	11:35	18.3	8.43	679	0.46	-379	off scale	598	600	Brown drilling mud
10/22/15	11:00	←	not enough sample for reading					608	610	"
10/22/15	13:30	←	not enough sample for reading					618	620	Brown drilling mud
10/23/15	10:45	15.2	8.27	679	0.79	334.3	off scale	638	640	
10/23/15	13:00	16.4	7.55	74	0.16	-251.4	"	643	645	
10/26/15	10:45	not enough sample for YSI						658	660	
10/26/15	15:00	←	no recovery				→	663	665	
10/28/15	14:00	←	no recovery				→	648	700	
~~10/29/15~~ (HT)	~~12:30~~									
11/10/15	12:30	15	9.56	920	2.30	-101.2	off scale	718	720	Very Brown Mud
11/11/15	11:30	←	no recovery				→	738	740	

RESOLUTION CONSULTANTS

Hydropunch Sample

Client: NWIRP - Bethpage
Project No: 60266526
Site Location: VPB 160 S. Nassau & Lynn
Weather Conds: Mild

Date: Nov 2015
VPB: 160
Collector(s): V. Thayer

Sample Date	Time	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Starting depth(ft)	Ending depth(ft)	Color
11/11/15	13:45	not enough sample for YSI						758	760	brown mud
11/12/15	12:00	← not enough sample for YSI →						768	770	
11/12/15	14:00	← no recovery →						778	780	
11/16/15	10:45	← not enough sample for reading →						818	820	brown mud
11/16/15	14:00	← not enough sample for YSI →						838	840	clear

Section 4

VPB160 Analytical Data Validation

- Analytical Data Sheets
- Chain of Custody Records
- Validation Letter and Table

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI7501	
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 10/03/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI7501_8260C

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 23 and 24 September 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
VPB160-TB-092315	Trip Blank	8260C
VPB160-GW-092315-58-60	Groundwater	8260C
VPB160-GW-092415-98-100	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), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), and Department of Defense (DoD) Quality Systems Manual (QSM) 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 verification /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 initial calibration (ICAL) 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

Data qualification to the analytes associated with the specific ICV 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

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

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 (LOQ) 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-targets was checked to confirm that the results and/or sample-specific LOQs 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 Table
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 Non-Conformance

Method	Analyte	%RSD	Limit	Associated Samples	Qualifier
8260C	Chloromethane	15.21596	<15%	All samples in SDG	Detects: J Non-detects: UJ
8260C	Bromomethane	15.30744	<15%	All samples in SDG	Detects: J Non-detects: UJ
8260C	Chloroethane	22.54916	<15%	All samples in SDG	Detects: J Non-detects: UJ
8260C	Acetone	16.25899	<15%	All samples in SDG	Detects: J Non-detects: UJ
8260C	Methylcyclohexane	15.36496	<15%	All samples in SDG	Detects: J Non-detects: UJ

Notes:
%RSD = Relative standard deviation
SDG = Sample delivery group
J = Detected estimated value
UJ = Non-detect estimated value

Table A-2
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Dichlorodifluoromethane	C4859A.D	67.47	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	Trichlorofluoromethane	C4859A.D	79.95	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	Carbon Disulfide	C4859A.D	79.65	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	Acetone	C4859A.D	138.88	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	2-Butanone	C4859A.D	159.36	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	4-methyl-2-pentanone	C4859A.D	146.19	80-120	All samples in SDG	Detects: J Non-detects: UJ
8260C	2-Hexanone	C4859A.D	153.44	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

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
bm	Missing Blank Information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument Tune
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI7501		
		Lab ID		SI7501-1		
		Sample ID		VPB160-TB-092315		
		Sample Date		9/23/2015		
		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	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	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	0.45	J	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	U	
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	c
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2	J	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	c
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7501		
		Lab ID		SI7501-2		
		Sample ID		VPB160-GW-092315-58-60		
		Sample Date		9/23/2015		
		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	UJ	c
8260C	ACETONE	67-64-1	UG_L	11	J	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	0.25	J	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	U	
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	0.27	J	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.4	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	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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7501		
		Lab ID		SI7501-3		
		Sample ID		VPB160-GW-092415-98-100		
		Sample Date		9/24/2015		
		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	UJ	c
8260C	ACETONE	67-64-1	UG_L	6.9	J	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.42	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI7640 and SI7682	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 10/28/2015
Reviewed by:	Tina Clemmey/Resolution Consultants	File Name: SI7640_SI7682_8260C

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 28 to 30 September 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
VPB160-GW-093015-248-250	Groundwater	8260C
VPB160-GW-093015-258-260	Groundwater	8260C
VPB160-TB-093015	Trip Blank	8260C
VPB160-FD-092915	Duplicate of VPB160-GW-092915-198-200	8260C
VPB160-GW-092815-148-150	Groundwater	8260C
VPB160-GW-092915-183-185	Groundwater	8260C
VPB160-GW-092915-198-200	Groundwater	8260C
VPB160-GW-092915-218-220	Groundwater	8260C
VPB160-TB-092815	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* (United States

Environmental Protection Agency [U.S. EPA] 2006), *U.S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (U.S. EPA, 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 verification (ICV)/continuing calibration verification (CCV)
✗	Laboratory blanks/trip blanks
✓	Surrogate spike recoveries
✓	Matrix spike and/or matrix spike duplicate results
✓	Laboratory control sample/laboratory control sample duplicate results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. Acceptable data parameters for which all criteria were met 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

Data Completeness/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- the COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody;

- the laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory;

- completeness of analyses was verified by comparing the reported results to the COC request.

Below shows a list of samples that were mostly comprised of soil in all vials and not very much liquid:

- Samples SI7640-2 and SI7682-2 contained soil at the bottom of all three vials. Each vial was decanted, compounded into 1 vial for each sample and analyzed at a dilution of 1:4.
- Sample SI7682-3 contained soil at the bottom of all three vials. Each vial was decanted and analyzed.

Positive and non-detected results for all decanted samples were qualified as estimated (J and UJ) respectively due to possible loss of sample integrity during the decanting process. Non-conformances are summarized in Attachment A in Table A-1.

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 ICV standard percent recovery acceptance criteria were met
- The CCV method percent difference or percent drift and response factor acceptance criteria were met
- The retention time method acceptance criteria were met

Data qualification to the analytes associated with the specific initial calibration (ICAL) 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

Data qualification to the analytes associated with the specific ICV 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

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

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 Tables A-2, A-3, and A-4.

Laboratory Blanks/ Trip Blanks

Laboratory blanks and trip blanks were analyzed with samples to assess contamination imparted by sample preparation and/or analysis. All results associated with a particular blank were evaluated to determine whether there was an inherent variability in the data, or if a problem was an isolated occurrence that did not affect the data. Samples were flagged in accordance with *Functional Guidelines* (shown below) where detections were not believed to be site-related. Lab blank and trip blank non-conformances are summarized in Attachment A in Table's A-5 and A-6.

Blank Non-conformance Chart:

Blank type	Blank result	Sample result	Action for samples
Method, Storage, Trip, Field, or Equipment	Detects	Not detected	No qualification
	< 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	> 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ and < blank contamination	Report the blank result with a U or reject the sample result as unusable R
		≥ 2x LOQ and ≥ blank contamination	If the result is ≤2x blank result, report the sample result U. If the result is > 2x blank result, no qualification is required.
	= 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	Gross contamination	Detects	Qualify results as unusable R

Notes:

LOQ = Limit of quantitation
U = Undetected
R = Rejected

Qualifications Actions

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

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

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-092815-148-150	1,1,1-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,1,2,2-TETRACHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,1,2-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,1-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,1-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,2,4-TRICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3	UJ
8260C	VPB160-GW-092815-148-150	1,2-DIBROMOETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,2-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,2-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,2-DICHLOROETHENE, TOTAL	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	1,2-DICHLOROPROPANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,3-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	1,4-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	2-BUTANONE	UG_L	10	UJ
8260C	VPB160-GW-092815-148-150	2-HEXANONE	UG_L	10	UJ
8260C	VPB160-GW-092815-148-150	4-METHYL-2-PENTANONE	UG_L	10	UJ
8260C	VPB160-GW-092815-148-150	ACETONE	UG_L	15	J
8260C	VPB160-GW-092815-148-150	BENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	BROMODICHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	BROMOFORM	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	BROMOMETHANE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	CARBON DISULFIDE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CARBON TETRACHLORIDE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	CHLOROFORM	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	CIS-1,2-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CIS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	DIBROMOCHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	DICHLORODIFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	ETHYLBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	ISOPROPYLBENZENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	M- AND P-XYLENE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	METHYL ACETATE	UG_L	3	UJ
8260C	VPB160-GW-092815-148-150	METHYL CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	METHYL TERT-BUTYL ETHER	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	METHYLENE CHLORIDE	UG_L	10	UJ
8260C	VPB160-GW-092815-148-150	O-XYLENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	STYRENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	TETRACHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	TOLUENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	TRANS-1,2-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	TRANS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-092815-148-150	TRICHLOROETHENE	UG_L	2	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-092815-148-150	TRICHLOROFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	VINYL CHLORIDE	UG_L	4	UJ
8260C	VPB160-GW-092815-148-150	XYLENES, TOTAL	UG_L	6	UJ
8260C	VPB160-GW-093015-258-260	1,1,1-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,1,2,2-TETRACHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,1,2-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,1-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,1-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,2,4-TRICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3	UJ
8260C	VPB160-GW-093015-258-260	1,2-DIBROMOETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,2-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,2-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,2-DICHLOROETHENE, TOTAL	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	1,2-DICHLOROPROPANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,3-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	1,4-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	2-BUTANONE	UG_L	10	UJ
8260C	VPB160-GW-093015-258-260	2-HEXANONE	UG_L	10	UJ
8260C	VPB160-GW-093015-258-260	4-METHYL-2-PENTANONE	UG_L	10	UJ
8260C	VPB160-GW-093015-258-260	ACETONE	UG_L	10	UJ
8260C	VPB160-GW-093015-258-260	BENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	BROMODICHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	BROMOFORM	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	BROMOMETHANE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	CARBON DISULFIDE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CARBON TETRACHLORIDE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	CHLOROFORM	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	CIS-1,2-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CIS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	DIBROMOCHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	DICHLORODIFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	ETHYLBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	ISOPROPYLBENZENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	M- AND P-XYLENE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	METHYL ACETATE	UG_L	3	UJ
8260C	VPB160-GW-093015-258-260	METHYL CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	METHYL TERT-BUTYL ETHER	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	METHYLENE CHLORIDE	UG_L	10	UJ
8260C	VPB160-GW-093015-258-260	O-XYLENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	STYRENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	TETRACHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	TOLUENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	TRANS-1,2-DICHLOROETHENE	UG_L	2	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-093015-258-260	TRANS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	TRICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-093015-258-260	TRICHLOROFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	VINYL CHLORIDE	UG_L	4	UJ
8260C	VPB160-GW-093015-258-260	XYLENES, TOTAL	UG_L	6	UJ
8260C	VPB160-GW-093015-248-250	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-093015-248-250	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-093015-248-250	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-093015-248-250	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-093015-248-250	ACETONE	UG_L	2.5	UJ
8260C	VPB160-GW-093015-248-250	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-093015-248-250	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-093015-248-250	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	TETRACHLOROETHENE	UG_L	0.5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-093015-248-250	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-093015-248-250	TRICHLOROETHENE	UG_L	0.41	J
8260C	VPB160-GW-093015-248-250	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-093015-248-250	XYLENES, TOTAL	UG_L	1.5	UJ

Notes:

UG_L = Micrograms per liter
UJ = Non-detect estimated value
J = Estimated value

Table A-2
Initial Calibration Non-Conformance

SDG	Method	Analyte	%RSD	Limit	Associated Samples	Qualifier
SI7640	8260C	Chloromethane	15.21596	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Bromomethane	15.30744	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Chloroethane	22.54916	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Acetone	16.25899	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Methyl cyclohexane	15.36496	<15%	All samples in SDG	Detects: J Non-detects: UJ

Notes:

%RSD = Relative standard deviation
SDG = Sample delivery group
J = Detected estimated value
UJ = Non-detect estimated value

Table A-3
Initial Calibration Verification Non-Conformance

SDG	Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
SI7640	8260C	Dichlorodifluoromethane	C4859A.D	67.47	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Trichlorofluoromethane	C4859A.D	79.95	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Carbon Disulfide	C4859A.D	79.65	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	Acetone	C4859A.D	138.88	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	2-Butanone	C4859A.D	159.36	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	4-methyl-2-pentanone	C4859A.D	146.19	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7640	8260C	2-Hexanone	C4859A.D	153.44	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7682	8260C	Carbon Disulfide	C5013A.D	79.48	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7682	8260C	Acetone	C5013A.D	134.34	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7682	8260C	2-Butanone	C5013A.D	143.56	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7682	8260C	4-methyl-2-pentanone	C5013A.D	150.32	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI7682	8260C	2-Hexanone	C5013A.D	156.23	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:

SDG = Sample delivery group
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

Table A-4 Continuing Calibration Verification Non-Conformance						
SDG	**Lab ID /Calibration ID**	**Analyte**	**%D**	**%D Limit**	**Associated Samples**	**Qualifier**
SI7640	WG171374-4 / GCMS-C	Methyl cyclohexane	21.55731	+/- 20	All samples in SDG	Detects: J Non-detects: UJ

Notes:

SDG = Sample delivery group
%D = Percent difference
UJ = Non-detect estimated value
J = Detected estimated value

Table A-5
Lab Blank Non-Conformance

SDG	Method	Blank	Analyte	Blank result (UG_L)	LOQ	Detected Associated Sample	Qualifier
SI7682	8260C	WG171658-9-SI7682	Carbon Disulfide	0.41	1	VPB160-GW-093015-248-250	U
SI7682	8260C	WG171658-9-SI7682	Carbon Disulfide	0.41	1	VPB160-TB-093015	U

Notes:

SDG = Sample delivery group
UG_L = Micrograms per liter
LOQ = Limit of quantitation
U = Non-detect value

Table A-6
Trip Blank Non-Conformance

SDG	Method	Blank	Analyte	Blank result (UG_L)	LOQ	Detected Associated Sample	Qualifier
SI7682	8260C	VPB160-TB-093015	Carbon Disulfide	0.25	1.0	VPB160-GW-093015-248-250	UJ
SI7682	8260C	VPB160-TB-093015	Acetone	5.6	5.0	VPB160-GW-093015-248-250	UJ
SI7682	8260C	VPB160-TB-093015	Acetone	5.6	5.0	VPB160-GW-093015-258-260	UJ

Notes:

SDG = Sample delivery group
UG_L = Micrograms per liter
LOQ = Limit of quantitation
UJ = Non-detect estimated value

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
bm	Missing blank information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument tune
k	Estimated maximum possible concentrations (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Deviation from the method
md	MS/MSD RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature Preservation Issue
x	Low % solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-1		
		Sample ID		VPB160-TB-092815		
		Sample Date		9/28/2015		
		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	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	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	c
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-2DL		
		Sample ID		VPB160-GW-092815-148-150		
		Sample Date		9/28/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	10	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	10	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	15	J	c,mc
8260C	BENZENE	71-43-2	UG_L	2	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	4	UJ	c,mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	4	UJ	c,mc
8260C	CHLOROFORM	67-66-3	UG_L	2	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	4	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	UJ	c,mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	2	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	UJ	c,mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-3		
		Sample ID		VPB160-FD-092915		
		Sample Date		9/29/2015		
		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	UJ	c
8260C	ACETONE	67-64-1	UG_L	5.7	J	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.35	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-4		
		Sample ID		VPB160-GW-092915-218-220		
		Sample Date		9/29/2015		
		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	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	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.82	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-5		
		Sample ID		VPB160-GW-092915-198-200		
		Sample Date		9/29/2015		
		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	UJ	c
8260C	ACETONE	67-64-1	UG_L	3.4	J	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.3	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7640		
		Lab ID		SI7640-6		
		Sample ID		VPB160-GW-092915-183-185		
		Sample Date		9/29/2015		
		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	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	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	U	
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	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.41	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7682		
		Lab ID		SI7682-1		
		Sample ID		VPB160-TB-093015		
		Sample Date		9/30/2015		
		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	UJ	c
8260C	ACETONE	67-64-1	UG_L	5.6	J	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	UJ	bl,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	0.46	J	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7682		
		Lab ID		SI7682-2DL		
		Sample ID		VPB160-GW-093015-258-260		
		Sample Date		9/30/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	10	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	10	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	10	UJ	bt,c,mc
8260C	BENZENE	71-43-2	UG_L	2	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	4	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	4	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	2	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	4	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	2	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7682		
		Lab ID		SI7682-3		
		Sample ID		VPB160-GW-093015-248-250		
		Sample Date		9/30/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	bt,c,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	bt,bl,c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.41	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI7751	
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 11/03/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: SI7751_8260C

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 1 October 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
VPB160-TB-100115	Trip Blank	8260C
VPB160-GW-100115-283-285	Groundwater	8260C
VPB160-GW-100115-298-300	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), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), and Department of Defense (DoD) Quality Systems Manual (QSM) 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 verification /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 initial calibration (ICAL) 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

Data qualification to the analytes associated with the specific ICV 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

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

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 Tables A-1, A-2, and A-3.

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 (LOQ) 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-targets was checked to confirm that the results and/or sample-specific LOQs 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 Table
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 Non-Conformance

Method	Analyte	%RSD	Limit	Associated Samples	Qualifier
8260C	Tetrachloroethene	18.4756	<15%	All samples in SDG	Detects: J Non-detects: UJ

Notes:
%RSD = Relative standard deviation
SDG = Sample delivery group
J = Detected estimated value
UJ = Non-detect estimated value

Table A-2
Initial Calibration Verification Non-Conformance

Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
8260C	Acetone	T4874.D	75.95	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

Table A-3
Continuing Calibration Verification Non-Conformance

Lab ID /Calibration ID	Analyte	%D	%D Limit	Associated Samples	Qualifier
WG171708-4 / GCMS-T	Acetone	-28.81513	+/- 20	All samples in SDG	Detects: J Non-detects: UJ
WG171708-4 / GCMS-T	1,2-Dibromo-3-Chloropropane	-20.86238	+/- 20	All samples in SDG	Detects: J Non-detects: UJ

Notes:
ID = Identification
%D = Percent difference
UJ = Non-detect estimated value
J = Detected estimated value

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
bm	Missing Blank Information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument Tune
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Method compliance non-conformance
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI7751		
		Lab ID		SI7751-1		
		Sample ID		VPB160-GW-100115-283-285		
		Sample Date		10/1/2015		
		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	UJ	c
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	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	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7751		
		Lab ID		SI7751-2		
		Sample ID		VPB160-GW-100115-298-300		
		Sample Date		10/1/2015		
		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	UJ	c
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	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	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7751		
		Lab ID		SI7751-3		
		Sample ID		VPB160-TB-100115		
		Sample Date		10/1/2015		
		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	UJ	c
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	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	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	1.5	J	
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI7869, SI7980, and SI8076	
Analyses/Method:	Volatile Organic Compounds by U.S. EPA SW-846 Method 8260C	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 11/10/2015
Reviewed by:	Tina Clemmey/Resolution Consultants	File Name: SI7869_7980_8076_8260C

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 2 to 13 October 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
VPB160-GW-100215-318-320	Groundwater	8260C
VPB160-GW-100215-338-340	Groundwater	8260C
VPB160-GW-100515-368-370	Groundwater	8260C
VPB160-GW-EB-100515	Equipment Blank	8260C
VPB160-TB-100215	Trip Blank	8260C
VPB160-GW-100815-378-380	Groundwater	8260C
VPB160-TB-100815	Trip Blank	8260C
VPB160-GW-100915-403-405	Groundwater	8260C
VPB160-GW-100915-418-420	Groundwater	8260C
VPB160-GW-101215-438-440	Groundwater	8260C
VPB160-GW-101215-458-460	Groundwater	8260C
VPB160-GW-101315-483-485	Groundwater	8260C
VPB160-GW-101315-498-500	Groundwater	8260C

Sample ID	Matrix/Sample Type	Analysis
VPB160-TB101315	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* (United States Environmental Protection Agency [U.S. EPA] 2006), *U.S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (U.S. EPA, 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 verification (ICV)/continuing calibration verification (CCV)
✗	Laboratory blanks/equipment 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

Data Completeness/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- the COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody;
- the laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory;
- completeness of analyses was verified by comparing the reported results to the COC request.

Below shows a list of samples that were mostly comprised of soil in all vials and not very much liquid:

- Samples SI7869-2, SI7869-3, SI7869-4 and SI7980-2 contained mostly soil in all three vials. Each vial was decanted and analyzed.
- Sample SI8076-4 contained mostly soil in two vials and samples SI8076-5 and SI8076-6 contained mostly soil in all three vials. Each sample vial was decanted, compounded into one vial for each sample and analyzed at a dilution of 1:8, 1:5, and 1:4.

Positive and non-detected results for all decanted samples were qualified as estimated (J and UJ) respectively due to possible loss of sample integrity during the decanting process. Non-conformances are summarized in Attachment A in Table A-1.

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 ICV standard percent recovery acceptance criteria were met
- The CCV method percent difference or percent drift and response factor acceptance criteria were met
- The retention time method acceptance criteria were met

Data qualification to the analytes associated with the specific ICV 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

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

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-2 and A-3.

Laboratory Blanks/ Equipment Blanks/ Trip Blanks

Laboratory blanks, equipment blanks, and trip blanks were analyzed with samples to assess contamination imparted by sample preparation and/or analysis. All results associated with a particular blank were evaluated to determine whether there was an inherent variability in the data, or if a problem was an isolated occurrence that did not affect the data. Samples were flagged in accordance with *Functional Guidelines* (shown below) where detections were not believed to be site-related. Equipment blank and trip blank non-conformances are summarized in Attachment A in Table A-4.

Blank Non-conformance Chart:

Blank type	Blank result	Sample result	Action for samples
Method, Storage, Trip, Field, or Equipment	Detects	Not detected	No qualification
	< 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	> 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ and < blank contamination	Report the blank result with a U or reject the sample result as unusable R
		≥ 2x LOQ and ≥ blank contamination	If the result is ≤2x blank result, report the sample result U. If the result is > 2x blank result, no qualification is required.
	= 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	Gross contamination	Detects	Qualify results as unusable R

Notes:

LOQ = Limit of quantitation
U = Undetected
R = Rejected

Qualifications Actions

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

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

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-100215-318-320	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-100215-318-320	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-318-320	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-318-320	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-318-320	ACETONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-318-320	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-100215-318-320	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-318-320	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-318-320	TRICHLOROETHENE	UG_L	1.1	J

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-100215-318-320	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-100215-318-320	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-100215-338-340	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-100215-338-340	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-338-340	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-338-340	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-338-340	ACETONE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-338-340	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-100215-338-340	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-100215-338-340	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	TETRACHLOROETHENE	UG_L	1.7	J
8260C	VPB160-GW-100215-338-340	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-100215-338-340	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100215-338-340	TRICHLOROETHENE	UG_L	13	J
8260C	VPB160-GW-100215-338-340	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-100215-338-340	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-100515-368-370	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-100515-368-370	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	2-BUTANONE	UG_L	2.2	J
8260C	VPB160-GW-100515-368-370	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100515-368-370	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100515-368-370	ACETONE	UG_L	2.5	UJ
8260C	VPB160-GW-100515-368-370	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-100515-368-370	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-100515-368-370	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	TETRACHLOROETHENE	UG_L	2.7	J

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-100515-368-370	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100515-368-370	TRICHLOROETHENE	UG_L	14	J
8260C	VPB160-GW-100515-368-370	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-100515-368-370	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-100815-378-380	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-100815-378-380	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100815-378-380	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100815-378-380	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-100815-378-380	ACETONE	UG_L	9.4	J
8260C	VPB160-GW-100815-378-380	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	CARBON DISULFIDE	UG_L	0.58	J
8260C	VPB160-GW-100815-378-380	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-100815-378-380	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-100815-378-380	O-XYLENE	UG_L	0.5	UJ

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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-100815-378-380	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	TETRACHLOROETHENE	UG_L	1.8	J
8260C	VPB160-GW-100815-378-380	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-100815-378-380	TRICHLOROETHENE	UG_L	5.5	J
8260C	VPB160-GW-100815-378-380	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-100815-378-380	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-101215-458-460	1,1,1-TRICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,1,2,2-TETRACHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,1,2-TRICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,1-DICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,1-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,2,4-TRICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	6	UJ
8260C	VPB160-GW-101215-458-460	1,2-DIBROMOETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,2-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,2-DICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,2-DICHLOROETHENE, TOTAL	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	1,2-DICHLOROPROPANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,3-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	1,4-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	2-BUTANONE	UG_L	20	UJ
8260C	VPB160-GW-101215-458-460	2-HEXANONE	UG_L	20	UJ
8260C	VPB160-GW-101215-458-460	4-METHYL-2-PENTANONE	UG_L	20	UJ
8260C	VPB160-GW-101215-458-460	ACETONE	UG_L	27	J
8260C	VPB160-GW-101215-458-460	BENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	BROMODICHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	BROMOFORM	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	BROMOMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	CARBON DISULFIDE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CARBON TETRACHLORIDE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	CHLOROFORM	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CHLOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	CIS-1,2-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CIS-1,3-DICHLOROPROPENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	CYCLOHEXANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	DIBROMOCHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	DICHLORODIFLUOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	ETHYLBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	ISOPROPYLBENZENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	M- AND P-XYLENE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	METHYL ACETATE	UG_L	6	UJ
8260C	VPB160-GW-101215-458-460	METHYL CYCLOHEXANE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	METHYL TERT-BUTYL ETHER	UG_L	4	UJ

Table A-1
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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101215-458-460	METHYLENE CHLORIDE	UG_L	20	UJ
8260C	VPB160-GW-101215-458-460	O-XYLENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	STYRENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TETRACHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TOLUENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TRANS-1,2-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TRANS-1,3-DICHLOROPROPENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TRICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-101215-458-460	TRICHLOROFLUOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	VINYL CHLORIDE	UG_L	8	UJ
8260C	VPB160-GW-101215-458-460	XYLENES, TOTAL	UG_L	12	UJ
8260C	VPB160-GW-101315-483-485	1,1,1-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,1,2,2-TETRACHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,1,2-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,1-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,1-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,2,4-TRICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3.8	UJ
8260C	VPB160-GW-101315-483-485	1,2-DIBROMOETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,2-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,2-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,2-DICHLOROETHENE, TOTAL	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	1,2-DICHLOROPROPANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,3-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	1,4-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	2-BUTANONE	UG_L	12	UJ
8260C	VPB160-GW-101315-483-485	2-HEXANONE	UG_L	12	UJ
8260C	VPB160-GW-101315-483-485	4-METHYL-2-PENTANONE	UG_L	12	UJ
8260C	VPB160-GW-101315-483-485	ACETONE	UG_L	15	J
8260C	VPB160-GW-101315-483-485	BENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	BROMODICHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	BROMOFORM	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	BROMOMETHANE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	CARBON DISULFIDE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CARBON TETRACHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CHLOROETHANE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	CHLOROFORM	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CHLOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	CIS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CIS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	DIBROMOCHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	DICHLORODIFLUOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	ETHYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	ISOPROPYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	M- AND P-XYLENE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	METHYL ACETATE	UG_L	3.8	UJ

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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101315-483-485	METHYL CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	METHYL TERT-BUTYL ETHER	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	METHYLENE CHLORIDE	UG_L	12	UJ
8260C	VPB160-GW-101315-483-485	O-XYLENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	STYRENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TETRACHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TOLUENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TRANS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TRANS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TRICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-101315-483-485	TRICHLOROFLUOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	VINYL CHLORIDE	UG_L	5	UJ
8260C	VPB160-GW-101315-483-485	XYLENES, TOTAL	UG_L	7.5	UJ
8260C	VPB160-GW-101315-498-500	1,1,1-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,1,2,2-TETRACHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,1,2-TRICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,1-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,1-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,2,4-TRICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3	UJ
8260C	VPB160-GW-101315-498-500	1,2-DIBROMOETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,2-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,2-DICHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,2-DICHLOROETHENE, TOTAL	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	1,2-DICHLOROPROPANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,3-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	1,4-DICHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	2-BUTANONE	UG_L	10	UJ
8260C	VPB160-GW-101315-498-500	2-HEXANONE	UG_L	10	UJ
8260C	VPB160-GW-101315-498-500	4-METHYL-2-PENTANONE	UG_L	10	UJ
8260C	VPB160-GW-101315-498-500	ACETONE	UG_L	10	UJ
8260C	VPB160-GW-101315-498-500	BENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	BROMODICHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	BROMOFORM	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	BROMOMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	CARBON DISULFIDE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CARBON TETRACHLORIDE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CHLOROBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	CHLOROFORM	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	CIS-1,2-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CIS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	DIBROMOCHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	DICHLORODIFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	ETHYLBENZENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	ISOPROPYLBENZENE	UG_L	2	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101315-498-500	M- AND P-XYLENE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	METHYL ACETATE	UG_L	3	UJ
8260C	VPB160-GW-101315-498-500	METHYL CYCLOHEXANE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	METHYL TERT-BUTYL ETHER	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	METHYLENE CHLORIDE	UG_L	10	UJ
8260C	VPB160-GW-101315-498-500	O-XYLENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	STYRENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TETRACHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TOLUENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TRANS-1,2-DICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TRANS-1,3-DICHLOROPROPENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TRICHLOROETHENE	UG_L	2	UJ
8260C	VPB160-GW-101315-498-500	TRICHLOROFLUOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	VINYL CHLORIDE	UG_L	4	UJ
8260C	VPB160-GW-101315-498-500	XYLENES, TOTAL	UG_L	6	UJ

Notes:

UG_L = Micrograms per liter
UJ = Non-detect estimated value
J = Estimated value

Table A-2
Initial Calibration Verification Non-Conformance

SDG	Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
SI7869 SI7980	8260C	Bromochloromethane	P3184.D	124.97	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8076	8260C	Dichlorodifluoromethane	C5123.D	71.61	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8076	8260C	Carbon Disulfide	C5123.D	72.66	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:

SDG = Sample delivery group
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

Table A-3
Continuing Calibration Verification Non-Conformance

SDG	Lab ID /Calibration ID	Analyte	%D	%D Limit	Associated Samples	Qualifier
SI7980	WG171989-4 / GCMS-P	Bromomethane	-25.95267	+/- 20	All samples in SDG	Detects: J Non-detects: UJ
SI7980	WG171989-4 / GCMS-P	Acetone	-23.556952	+/- 20	All samples in SDG	Detects: J Non-detects: UJ
SI8076	WG172251-4 / GCMS-C	Acetone	-29.22544	+/- 20	All samples in SDG	Detects: J Non-detects: UJ

Notes:

SDG = Sample delivery group
%D = Percent difference
UJ = Non-detect estimated value
J = Detected estimated value

Table A-4
Equipment Blank and Trip Blank Non-Conformance

SDG	Method	Blank	Analyte	Blank result (UG_L)	LOQ	Detected Associated Sample	Qualifier
SI7869	8260C	VPB160-GW-EB-100515	Acetone	9.8	5	VPB160-GW-100215-318-320 VPB160-GW-100515-368-370	UJ
SI7869	8260C	VPB160-TB-100215	Acetone	2.8	5	VPB160-GW-100215-318-320 VPB160-GW-100515-368-370	UJ

Notes:

SDG = Sample delivery group
UG_L = Micrograms per liter
LOQ = Limit of quantitation
UJ = Non-detect estimated value

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
bm	Missing blank information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument tune
k	Estimated maximum possible concentrations (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Deviation from the method
md	MS/MSD RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature Preservation Issue
x	Low % solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI7869		
		Lab ID		SI7869-1		
		Sample ID		VPB160-TB-100215		
		Sample Date		10/2/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.8	J	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7869		
		Lab ID		SI7869-2		
		Sample ID		VPB160-GW-100215-318-320		
		Sample Date		10/2/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	be,bt,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c,mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	1.1	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7869		
		Lab ID		SI7869-3		
		Sample ID		VPB160-GW-100215-338-340		
		Sample Date		10/2/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c,mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1.7	J	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	13	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7869		
		Lab ID		SI7869-4		
		Sample ID		VPB160-GW-100515-368-370		
		Sample Date		10/5/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.2	J	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	be,bt,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c,mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2.7	J	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	14	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7869		
		Lab ID		SI7869-5		
		Sample ID		VPB160-GW-EB-100515		
		Sample Date		10/5/2015		
		Sample Type		Equipment Blank		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	9.8		
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7980		
		Lab ID		SI7980-1		
		Sample ID		VPB160-TB-100815		
		Sample Date		10/8/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	UJ	c
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c
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	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI7980		
		Lab ID		SI7980-2		
		Sample ID		VPB160-GW-100815-378-380		
		Sample Date		10/8/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	9.4	J	c,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	c,mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	c,mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.58	J	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1.8	J	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	5.5	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-1		
		Sample ID		VPB160-GW-100915-403-405		
		Sample Date		10/9/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	6.3	J	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	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	0.73	J	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	5.3		
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-2		
		Sample ID		VPB160-GW-100915-418-420		
		Sample Date		10/9/2015		
		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	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	10	J	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	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	0.69	J	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	8.2		
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	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-3		
		Sample ID		VPB160-GW-101215-438-440		
		Sample Date		10/12/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	4.3	J	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	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	1.2		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	2.9		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-4DL		
		Sample ID		VPB160-GW-101215-458-460		
		Sample Date		10/12/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	4	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	4	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	4	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	4	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	4	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	4	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	4	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	6	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	4	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	4	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	4	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	8	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	4	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	4	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	4	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	20	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	20	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	20	UJ	mc
8260C	ACETONE	67-64-1	UG_L	27	J	c,mc
8260C	BENZENE	71-43-2	UG_L	4	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	4	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	4	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	8	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	4	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	4	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	4	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	8	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	4	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	8	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	4	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	4	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	4	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	8	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	4	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	4	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	8	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	6	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	4	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	4	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	20	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	4	UJ	mc
8260C	STYRENE	100-42-5	UG_L	4	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	4	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	4	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	4	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	4	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	4	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	8	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	8	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	12	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-5DL		
		Sample ID		VPB160-GW-101315-483-485		
		Sample Date		10/13/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3.8	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	5	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	12	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	12	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	12	UJ	mc
8260C	ACETONE	67-64-1	UG_L	15	J	c,mc
8260C	BENZENE	71-43-2	UG_L	2.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	5	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	5	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	2.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	5	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	5	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	5	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3.8	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	12	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	2.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	5	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	5	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	7.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-6DL		
		Sample ID		VPB160-GW-101315-498-500		
		Sample Date		10/13/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	10	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	10	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	UJ	mc
8260C	ACETONE	67-64-1	UG_L	10	UJ	c,mc
8260C	BENZENE	71-43-2	UG_L	2	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	4	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	4	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	2	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	4	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	2	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8076		
		Lab ID		SI8076-7		
		Sample ID		VPB160-TB101315		
		Sample Date		10/13/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	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	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI8173, SI8325, and SI8451	
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C Total Organic Carbon (TOC) by U.S. EPA SW-846 Method 9060A	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 11/30/2015
Reviewed by:	Tina Clemmey/Resolution Consultants	File Name: SI8173_8325_8451_8260C_9060A

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 14 to 22 October 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
VPB160-GW-101615-583-585	Groundwater	8260C
VPB160-TB-101615	Trip Blank	8260C
VPB160-GW-102115-598-600	Groundwater	8260C
VPB160-GW-102215-608-610	Equipment Blank	8260C
VPB160-GW-102215-618-620	Trip Blank	8260C
VPB160-TB-102115	Trip Blank	8260C
VPB160-FB-101515	Field Blank	8260C
VPB160-FD-101515	Duplicate of VPB160-GW-101515-558-560	8260C
VPB160-GW-101415-518-520	Groundwater	8260C
VPB160-GW-101515-543-545	Groundwater	8260C
VPB160-GW-101515-558-560	Groundwater	8260C

Sample ID	Matrix/Sample Type	Analysis
VPB160-TB-101415	Trip Blank	8260C
VPB160-EB-102115-603-605	Equipment Blank	5310B
VPB160-SO-102115-603-605	Soil	9060A
VPB160-SO-FD-102115	Duplicate of VPB160-SO-102115-603-605	9060A

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 9060A, Total Organic Carbon* (U.S. EPA, 1996), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (NFG, January 2010, and Department of Defense (DoD) Quality Systems Manual (QSM) 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 verification (ICV)/continuing calibration verification (CCV)
- ✗ Laboratory blanks/field blanks/equipment blanks/trip blanks
- ✗ Surrogate spike recoveries
- ✓ Matrix spike and/or matrix spike duplicate results
- ✓ Laboratory control sample/laboratory control sample duplicate results
- ✗ Field duplicates
- ✓ Internal standards
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. Acceptable data parameters for which all criteria were met 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

Data Completeness/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- the COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody;
- the laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory;
- completeness of analyses was verified by comparing the reported results to the COC request.

Below shows a list of samples that were mostly comprised of soil in all vials and not very much liquid:

- Samples SI8173-2, SI8173-3, SI8173-4 SI8173-5 and SI8451-6 contained mostly soil in all three vials. Each vial was decanted and analyzed.
- Samples SI8325-1, SI8451-5, and SI8451-7 contained mostly soil in all three vials. Each sample vial was decanted, compounded into one vial for each sample and analyzed at a dilution of 1:16, 1:5, and 1:1.9.

Positive and non-detected results for all decanted samples were qualified as estimated (J and UJ) respectively due to possible loss of sample integrity during the decanting process. Non-conformances are summarized in Attachment A in Table A-1.

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 ICV standard percent recovery acceptance criteria were met
- The CCV method percent difference or percent drift and response factor acceptance criteria were met
- The retention time method acceptance criteria were met

Data qualification to the analytes associated with the specific initial calibration (ICAL) 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

Data qualification to the analytes associated with the specific ICV 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

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

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 Tables A-2, A-3, and A-4.

Laboratory Blanks/ Field Blanks/ Equipment Blanks/ Trip Blanks

Laboratory blanks, field blanks, equipment blanks, and trip blanks were analyzed with samples to assess contamination imparted by sample preparation and/or analysis. All results associated with a particular blank were evaluated to determine whether there was an inherent variability in the data,

or if a problem was an isolated occurrence that did not affect the data. Samples were flagged in accordance with *Functional Guidelines* (shown below) where detections were not believed to be site-related. Trip blank non-conformances are summarized in Attachment A in Table A-5.

Blank Non-conformance Chart:

Blank type	Blank result	Sample result	Action for samples
Method, Storage, Trip, Field, or Equipment	Detects	Not detected	No qualification
	< 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	> 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ and < blank contamination	Report the blank result with a U or reject the sample result as unusable R
		≥ 2x LOQ and ≥ blank contamination	If the result is ≤2x blank result, report the sample result U. If the result is > 2x blank result, no qualification is required.
	= 2x LOQ	< 2x LOQ	Report sample LOQ value with a U
		≥ 2x LOQ	Use professional judgment
	Gross contamination	Detects	Qualify results as unusable R

Notes:
LOQ = Limit of quantitation
U = Undetected
R = Rejected

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 > Upper Limit	J	No qualification
20% ≤ %R < Lower Limit	J	UJ
% R < 20%	J	Rejected

Notes:
%R = Percent recovery
J = Estimated
UJ = Undetected and estimated

Surrogate recovery non-conformance is summarized in Attachment A in Table A-6.

Field Duplicate

Two field duplicate pairs were collected to assess precision: VPB160-GW-101515-558-560/VPB160-FD-101515 and VPB160-SO-102115-603-605/VPB160-SO-FD-102115. Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤30% for aqueous matrices and ≤50% for solid matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). Data qualification to the analytes associated with the specific field duplicate RPDs was as follows:

Field Duplicate Non-conformances Chart:

Criteria	RPD	Action	
		Detected	Non-
Sample and duplicate are non-detect	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results ≥2x LOQ	>30 (aqueous)	J	Not Applicable
	>50 (solids)		
If sample or duplicate result is >2x LOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <2x LOQ and the other is not detected	NC	No qualification	No qualification

Notes:

LOQ	=	Limit of quantitation
J	=	Estimated
UJ	=	Undetected and estimated

Field duplicate non-conformances for soil are summarized in Attachment A in Table A-7.

Qualifications Actions

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

No results were rejected; therefore, analytical completeness was calculated to be 100 percent. Data not qualified during data review are considered usable by the project. The remaining results qualified as estimated may be high or low, but the data are usable for their intended purpose, according to

U.S. EPA and Department of Defense guidelines. 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 Tables

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101415-518-520	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-101415-518-520	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,2-DICHLOROETHENE, TOTAL	UG_L	0.24	J
8260C	VPB160-GW-101415-518-520	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101415-518-520	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101415-518-520	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101415-518-520	ACETONE	UG_L	3.2	J
8260C	VPB160-GW-101415-518-520	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	CIS-1,2-DICHLOROETHENE	UG_L	0.24	J
8260C	VPB160-GW-101415-518-520	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-101415-518-520	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-101415-518-520	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	TETRACHLOROETHENE	UG_L	0.93	J
8260C	VPB160-GW-101415-518-520	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101415-518-520	TRICHLOROETHENE	UG_L	57	J

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101415-518-520	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-101415-518-520	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-FD-101515	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	1.9	J
8260C	VPB160-FD-101515	1,1,2-TRICHLOROETHANE	UG_L	0.36	J
8260C	VPB160-FD-101515	1,1-DICHLOROETHANE	UG_L	3	J
8260C	VPB160-FD-101515	1,1-DICHLOROETHENE	UG_L	1.6	J
8260C	VPB160-FD-101515	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-FD-101515	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,2-DICHLOROETHENE, TOTAL	UG_L	2.3	J
8260C	VPB160-FD-101515	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-FD-101515	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-FD-101515	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-FD-101515	ACETONE	UG_L	3.4	J
8260C	VPB160-FD-101515	BENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-FD-101515	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-FD-101515	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	CARBON TETRACHLORIDE	UG_L	0.69	J
8260C	VPB160-FD-101515	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-FD-101515	CHLOROFORM	UG_L	0.94	J
8260C	VPB160-FD-101515	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-FD-101515	CIS-1,2-DICHLOROETHENE	UG_L	2.3	J
8260C	VPB160-FD-101515	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-FD-101515	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-FD-101515	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-FD-101515	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-FD-101515	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-FD-101515	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	STYRENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ

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Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-FD-101515	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-FD-101515	TRICHLOROETHENE	UG_L	520	J
8260C	VPB160-FD-101515	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-FD-101515	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-FD-101515	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-101515-543-545	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,1-DICHLOROETHANE	UG_L	0.53	J
8260C	VPB160-GW-101515-543-545	1,1-DICHLOROETHENE	UG_L	0.61	J
8260C	VPB160-GW-101515-543-545	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-101515-543-545	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,2-DICHLOROETHENE, TOTAL	UG_L	0.39	J
8260C	VPB160-GW-101515-543-545	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-543-545	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-543-545	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-543-545	ACETONE	UG_L	8.9	J
8260C	VPB160-GW-101515-543-545	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	CIS-1,2-DICHLOROETHENE	UG_L	0.39	J
8260C	VPB160-GW-101515-543-545	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-101515-543-545	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-543-545	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	TETRACHLOROETHENE	UG_L	0.6	J

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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101515-543-545	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-543-545	TRICHLOROETHENE	UG_L	85	J
8260C	VPB160-GW-101515-543-545	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-101515-543-545	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-101515-558-560	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	1.7	J
8260C	VPB160-GW-101515-558-560	1,1,2-TRICHLOROETHANE	UG_L	0.33	J
8260C	VPB160-GW-101515-558-560	1,1-DICHLOROETHANE	UG_L	3.1	J
8260C	VPB160-GW-101515-558-560	1,1-DICHLOROETHENE	UG_L	1.8	J
8260C	VPB160-GW-101515-558-560	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-101515-558-560	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,2-DICHLOROETHENE, TOTAL	UG_L	2.4	J
8260C	VPB160-GW-101515-558-560	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-558-560	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-558-560	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-558-560	ACETONE	UG_L	4.9	J
8260C	VPB160-GW-101515-558-560	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	CARBON TETRACHLORIDE	UG_L	0.74	J
8260C	VPB160-GW-101515-558-560	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	CHLOROFORM	UG_L	0.91	J
8260C	VPB160-GW-101515-558-560	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	CIS-1,2-DICHLOROETHENE	UG_L	2.4	J
8260C	VPB160-GW-101515-558-560	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-101515-558-560	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-101515-558-560	O-XYLENE	UG_L	0.5	UJ

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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101515-558-560	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-101515-558-560	TRICHLOROETHENE	UG_L	520	J
8260C	VPB160-GW-101515-558-560	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-101515-558-560	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-101615-583-585	1,1,1-TRICHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,1,2,2-TETRACHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,1,2-TRICHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,1-DICHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,1-DICHLOROETHENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,2,4-TRICHLOROBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	12	UJ
8260C	VPB160-GW-101615-583-585	1,2-DIBROMOETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,2-DICHLOROBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,2-DICHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,2-DICHLOROETHENE, TOTAL	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	1,2-DICHLOROPROPANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,3-DICHLOROBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	1,4-DICHLOROBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	2-BUTANONE	UG_L	40	UJ
8260C	VPB160-GW-101615-583-585	2-HEXANONE	UG_L	40	UJ
8260C	VPB160-GW-101615-583-585	4-METHYL-2-PENTANONE	UG_L	40	UJ
8260C	VPB160-GW-101615-583-585	ACETONE	UG_L	40	UJ
8260C	VPB160-GW-101615-583-585	BENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	BROMODICHLOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	BROMOFORM	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	BROMOMETHANE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	CARBON DISULFIDE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CARBON TETRACHLORIDE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CHLOROBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CHLOROETHANE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	CHLOROFORM	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CHLOROMETHANE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	CIS-1,2-DICHLOROETHENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CIS-1,3-DICHLOROPROPENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	CYCLOHEXANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	DIBROMOCHLOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	DICHLORODIFLUOROMETHANE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	ETHYLBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	ISOPROPYLBENZENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	M- AND P-XYLENE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	METHYL ACETATE	UG_L	12	UJ
8260C	VPB160-GW-101615-583-585	METHYL CYCLOHEXANE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	METHYL TERT-BUTYL ETHER	UG_L	8	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-101615-583-585	METHYLENE CHLORIDE	UG_L	40	UJ
8260C	VPB160-GW-101615-583-585	O-XYLENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	STYRENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TETRACHLOROETHENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TOLUENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TRANS-1,2-DICHLOROETHENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TRANS-1,3-DICHLOROPROPENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TRICHLOROETHENE	UG_L	8	UJ
8260C	VPB160-GW-101615-583-585	TRICHLOROFLUOROMETHANE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	VINYL CHLORIDE	UG_L	16	UJ
8260C	VPB160-GW-101615-583-585	XYLENES, TOTAL	UG_L	24	UJ
8260C	VPB160-GW-102115-598-600	1,1,1-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,1,2,2-TETRACHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,1,2-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,1-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,1-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,2,4-TRICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3.8	UJ
8260C	VPB160-GW-102115-598-600	1,2-DIBROMOETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,2-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,2-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,2-DICHLOROETHENE, TOTAL	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	1,2-DICHLOROPROPANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,3-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	1,4-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	2-BUTANONE	UG_L	12	UJ
8260C	VPB160-GW-102115-598-600	2-HEXANONE	UG_L	12	UJ
8260C	VPB160-GW-102115-598-600	4-METHYL-2-PENTANONE	UG_L	12	UJ
8260C	VPB160-GW-102115-598-600	ACETONE	UG_L	17	J
8260C	VPB160-GW-102115-598-600	BENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	BROMODICHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	BROMOFORM	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	BROMOMETHANE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	CARBON DISULFIDE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CARBON TETRACHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CHLOROETHANE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	CHLOROFORM	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CHLOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	CIS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CIS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	DIBROMOCHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	DICHLORODIFLUOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	ETHYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	ISOPROPYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	M- AND P-XYLENE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	METHYL ACETATE	UG_L	3.8	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-102115-598-600	METHYL CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	METHYL TERT-BUTYL ETHER	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	METHYLENE CHLORIDE	UG_L	12	UJ
8260C	VPB160-GW-102115-598-600	O-XYLENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	STYRENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TETRACHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TOLUENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TRANS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TRANS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TRICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-102115-598-600	TRICHLOROFLUOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	VINYL CHLORIDE	UG_L	5	UJ
8260C	VPB160-GW-102115-598-600	XYLENES, TOTAL	UG_L	7.5	UJ
8260C	VPB160-GW-102215-618-620	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-102215-618-620	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102215-618-620	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102215-618-620	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102215-618-620	ACETONE	UG_L	8.9	J
8260C	VPB160-GW-102215-618-620	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	ISOPROPYLBENZENE	UG_L	0.5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-102215-618-620	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-102215-618-620	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-102215-618-620	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102215-618-620	TRICHLOROETHENE	UG_L	1.3	J
8260C	VPB160-GW-102215-618-620	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-102215-618-620	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-102215-608-610	1,1,1-TRICHLOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,1,2,2-TETRACHLOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,1,2-TRICHLOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,1-DICHLOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,1-DICHLOROETHENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,2,4-TRICHLOROBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	1.4	UJ
8260C	VPB160-GW-102215-608-610	1,2-DIBROMOETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,2-DICHLOROBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,2-DICHLOROETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,2-DICHLOROETHENE, TOTAL	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	1,2-DICHLOROPROPANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,3-DICHLOROBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	1,4-DICHLOROBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	2-BUTANONE	UG_L	4.8	UJ
8260C	VPB160-GW-102215-608-610	2-HEXANONE	UG_L	4.8	UJ
8260C	VPB160-GW-102215-608-610	4-METHYL-2-PENTANONE	UG_L	4.8	UJ
8260C	VPB160-GW-102215-608-610	ACETONE	UG_L	20	J
8260C	VPB160-GW-102215-608-610	BENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	BROMODICHLOROMETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	BROMOFORM	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	BROMOMETHANE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	CARBON DISULFIDE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CARBON TETRACHLORIDE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CHLOROBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CHLOROETHANE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	CHLOROFORM	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CHLOROMETHANE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	CIS-1,2-DICHLOROETHENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CIS-1,3-DICHLOROPROPENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	CYCLOHEXANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	DIBROMOCHLOROMETHANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	DICHLORODIFLUOROMETHANE	UG_L	1.9	UJ

Table A-1 Sample Integrity Non-Conformance					
Method	**Sample ID**	**Analyte**	**Units**	**Result**	**Qualifier**
8260C	VPB160-GW-102215-608-610	ETHYLBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	ISOPROPYLBENZENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	M- AND P-XYLENE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	METHYL ACETATE	UG_L	1.4	UJ
8260C	VPB160-GW-102215-608-610	METHYL CYCLOHEXANE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	METHYL TERT-BUTYL ETHER	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	METHYLENE CHLORIDE	UG_L	4.8	UJ
8260C	VPB160-GW-102215-608-610	O-XYLENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	STYRENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	TETRACHLOROETHENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	TOLUENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	TRANS-1,2-DICHLOROETHENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	TRANS-1,3-DICHLOROPROPENE	UG_L	0.95	UJ
8260C	VPB160-GW-102215-608-610	TRICHLOROETHENE	UG_L	1.2	J
8260C	VPB160-GW-102215-608-610	TRICHLOROFLUOROMETHANE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	VINYL CHLORIDE	UG_L	1.9	UJ
8260C	VPB160-GW-102215-608-610	XYLENES, TOTAL	UG_L	2.8	UJ

Notes:

UG_L = Micrograms per liter
UJ = Non-detect estimated value
J = Estimated value

Table A-2
Initial Calibration Non-Conformance

SDG	Method	Analyte	Instrument ID Date	RSD	Limit	Associated Samples	Qualifier
SI8173	8260C	o-Xylene	GCMS-C 10/09/2015	15.44317	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8325	8260C	Acetone	GCMS-T 10/21/2015	16.18713	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	Acetone	GCMS-C 10/23/2015	19.31071	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	Bromoform	GCMS-C 10/23/2015	15.2415	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	Isopropylbenzene	GCMS-C 10/23/2015	15.15801	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	1,2,4-Trichlorobenzene	GCMS-C 10/23/2015	15.24062	<15%	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
RSD = Relative standard deviation
J = Detected estimated value
UJ = Non-detect estimated value

Table A-3
Initial Calibration Verification Non-Conformance

SDG	Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
SI8173	8260C	Dichlorodifluoromethane	C5123.D	71.61	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8173	8260C	Carbon Disulfide	C5123.D	72.66	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8325	8260C	Acetone	T5049A.D	71.78	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8325	8260C	1,2-Dibromo-3-Chloropropane	T5049A.D	71.26	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	Dichlorodifluoromethane	C5358A.D	74.88	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	Acetone	C5358A.D	128.86	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	2-Butanone	C5358A.D	140.76	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI8451	8260C	2-Hexanone	C5358A.D	125.57	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

Table A-4
Continuing Calibration Verification Non-Conformance

SDG	Lab ID /Calibration ID	Analyte	%D	%D Limit	Associated Samples	Qualifier
SI8173	WG172541-4 / GCMS-C	Dichlorodifluoromethane	-22.29915	+/- 20	All samples in SDG	Detects: J Non-detects: UJ
SI8173	WG172541-4 / GCMS-C	Chloromethane	-27.72315	+/- 20	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
%D = Percent difference
UJ = Non-detect estimated value
J = Detected estimated value

Table A-5
Trip Blank Non-Conformance

SDG	Method	Blank	Analyte	Blank result (UG_L)	LOQ	Detected Associated Sample	Qualifier
SI8325	8260C	VPB160-TB-101615	Acetone	2.6	5	VPB160-GW101615-583-585	UJ

Notes:
SDG = Sample delivery group
UG_L = Micrograms per liter
LOQ = Limit of quantitation
UJ = Non-detect estimated value

Table A-6
Surrogate Non-Conformance

Method	Surrogate	%R	Limits	Associated Sample	Qualifier
8260C	1,2-Dichloroethane-d4	121	70-120	VPB160-FD-101515	Trichloroethene apply J qualifier
8260C	1,2-Dichloroethane-d4	116	85-115	VPB160-GW-101515-558-560	Trichloroethene apply J qualifier

Notes:
%R = Percent recovery
J = Detected estimated value

Table A-7
Field Duplicate

Sample ID	Duplicate ID	Analyte	Sample Result (UG_G)	Duplicate Result (UG_G)	RPD	Qualifiers
VPB160-SO-102115-603-605	VPB160-SO-FD-102115	Total Organic Carbon	3.6	5	32.6	J - both results

Notes:
RPD = Relative percent difference
J = Estimated value

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
bm	Missing blank information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument tune
k	Estimated maximum possible concentrations (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Deviation from the method
md	MS/MSD RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature Preservation Issue
x	Low % solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-1		
		Sample ID		VPB160-TB-101415		
		Sample Date		10/14/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	UJ	c
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-2		
		Sample ID		VPB160-GW-101415-518-520		
		Sample Date		10/14/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	0.24	J	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	3.2	J	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.24	J	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	c,mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.93	J	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	57	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-3		
		Sample ID		VPB160-FD-101515		
		Sample Date		10/15/2015		
		Sample Type		Field Duplicate		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1.9	J	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.36	J	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	3	J	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1.6	J	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.3	J	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	3.4	J	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.69	J	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.94	J	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.3	J	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	c,mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	520	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-4		
		Sample ID		VPB160-GW-101515-543-545		
		Sample Date		10/15/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.53	J	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.61	J	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	0.39	J	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	8.9	J	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.39	J	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	c,mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.6	J	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	85	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-5		
		Sample ID		VPB160-GW-101515-558-560		
		Sample Date		10/15/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1.7	J	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.33	J	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	3.1	J	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1.8	J	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.4	J	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	4.9	J	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.74	J	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.91	J	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.4	J	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	c,mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	520	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8173		
		Lab ID		SI8173-6		
		Sample ID		VPB160-FB-101515		
		Sample Date		10/15/2015		
		Sample Type		Field Blank		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	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	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	UJ	c
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8325		
		Lab ID		SI8325-1DL		
		Sample ID		VPB160-GW-101615-583-585		
		Sample Date		10/16/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	8	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	8	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	8	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	8	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	8	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	8	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	8	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	12	UJ	c,mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	8	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	8	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	8	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	16	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	8	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	8	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	8	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	40	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	40	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	40	UJ	mc
8260C	ACETONE	67-64-1	UG_L	40	UJ	bt,c,mc
8260C	BENZENE	71-43-2	UG_L	8	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	8	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	8	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	16	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	8	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	8	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	8	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	16	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	8	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	16	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	8	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	8	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	8	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	8	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	16	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	8	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	8	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	16	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	12	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	8	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	8	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	40	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	8	UJ	mc
8260C	STYRENE	100-42-5	UG_L	8	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	8	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	8	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	8	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	8	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	8	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	16	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	16	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	24	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8325		
		Lab ID		SI8325-2		
		Sample ID		VPB160-TB-101615		
		Sample Date		10/16/2015		
		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	UJ	c
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.6	J	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	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8451		
		Lab ID		SI8451-1		
		Sample ID		VPB160-TB-102115		
		Sample Date		10/21/2015		
		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	UJ	c
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	UJ	c
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	c
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8451		
		Lab ID		SI8451-5DL		
		Sample ID		VPB160-GW-102115-598-600		
		Sample Date		10/21/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2.5	UJ	c,mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3.8	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	5	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	12	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	12	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	12	UJ	mc
8260C	ACETONE	67-64-1	UG_L	17	J	c,mc
8260C	BENZENE	71-43-2	UG_L	2.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2.5	UJ	c,mc
8260C	BROMOMETHANE	74-83-9	UG_L	5	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	5	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	2.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	5	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	5	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2.5	UJ	c,mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	5	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3.8	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	12	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	2.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	5	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	5	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	7.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8451		
		Lab ID		SI8451-6		
		Sample ID		VPB160-GW-102215-618-620		
		Sample Date		10/22/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	c,mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	8.9	J	c,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	c,mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	c,mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	1.3	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8451		
		Lab ID		SI8451-7DL		
		Sample ID		VPB160-GW-102215-608-610		
		Sample Date		10/22/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.95	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.95	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.95	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.95	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.95	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.95	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.95	UJ	c,mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.4	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.95	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.95	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.95	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1.9	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.95	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.95	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.95	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	4.8	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	4.8	UJ	c,mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	4.8	UJ	mc
8260C	ACETONE	67-64-1	UG_L	20	J	c,mc
8260C	BENZENE	71-43-2	UG_L	0.95	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.95	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.95	UJ	c,mc
8260C	BROMOMETHANE	74-83-9	UG_L	1.9	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.95	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.95	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.95	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1.9	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.95	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1.9	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.95	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.95	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.95	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.95	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1.9	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.95	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.95	UJ	c,mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1.9	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	1.4	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.95	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.95	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	4.8	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.95	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.95	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.95	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.95	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.95	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.95	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	1.2	J	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1.9	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1.9	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	2.8	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

			Sample Delivery Group	SI8451			SI8451			SI8451		
			Lab ID	SI8451-2			SI8451-3			SI8451-4		
			Sample ID	VPB160-EB-102115-603-605			VPB160-SO-102115-603-605			VPB160-SO-FD-102115		
			Sample Date	10/21/2015			10/21/2015			10/21/2015		
			Sample Type	Equipment Blank			Soil			Field Duplicate		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC	Result	Qual	RC	Result	Qual	RC
2540G	TOTAL SOLIDS	-29	PCT	NA			80			81		
5310B	TOTAL ORGANIC CARBON	-28	MG_L	0.24	J		NA			NA		
9060A	TOTAL ORGANIC CARBON	-28	UG_G	NA			1200	J	fd	510	J	fd

Notes:

PCT	=	Percent
MG_L	=	Milligrams per liter
UG_G	=	Micrograms per gram
Qual	=	Final qualifiers (See Attachment B)
RC	=	Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	SI8520, SI9174, and SI9303	
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 12/18/2015
Reviewed by:	Tina Clemmey/Resolution Consultants	File Name: SI8520_9174_9303_8260C

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 23 October to 16 November 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
VPB160-GW-102315-638-640	Groundwater	8260C
VPB160-GW-102315-643-645	Groundwater	8260C
VPB160-GW-102615-658-660	Groundwater	8260C
VPB160-TB-102315	Trip Blank	8260C
VPB160-GW-111015-718-720	Groundwater	8260C
VPB160-GW-111115-758-760	Groundwater	8260C
VPB160-GW-111215-768-770	Groundwater	8260C
VPB160-TB-111015	Trip Blank	8260C
VPB160-EB-111615	Equipment Blank	8260C
VPB160-GW-102315-638-640	Groundwater	8260C
VPB160-GW-102315-643-645	Groundwater	8260C

Sample ID	Matrix/Sample Type	Analysis
VPB160-GW-102615-658-660	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), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (NFG, January 2010, and Department of Defense (DoD) Quality Systems Manual (QSM) 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 verification (ICV)/continuing calibration verification (CCV)
✓	Laboratory blanks/field blanks/equipment 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. 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

Data Completeness/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- the COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody;
- the laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory;
- completeness of analyses was verified by comparing the reported results to the COC request.

Below shows a list of samples that were mostly comprised of soil in all vials and not very much liquid:

- Samples SI8520-2, SI81520-3, SI9174-4, and SI9303-2 contained mostly soil in all three vials. Each vial was decanted and analyzed.
- Samples SI8520-4, SI9174-2, SI9174-3 and SI9303-4 contained mostly soil in all three vials. Each sample vial was decanted, compounded into one vial for each sample and analyzed at a dilution of 1:8, 2:0, 2:5, and 1:5.

Positive and non-detected results for all decanted samples were qualified as estimated (J and UJ) respectively due to possible loss of sample integrity during the decanting process. Non-conformances are summarized in Attachment A in Table A-1.

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 ICV standard percent recovery acceptance criteria were met
- The CCV method percent difference or percent drift and response factor acceptance criteria were met
- The retention time method acceptance criteria were met

Data qualification to the analytes associated with the specific initial calibration (ICAL) 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

Data qualification to the analytes associated with the specific ICV 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

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

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 Tables A-2, A-3, and A-4.

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 > Upper Limit	J	No qualification
20% ≤ %R < Lower Limit	J	UJ
% R < 20%	J	Rejected

Notes:

%R	=	Percent recovery	UJ	=	Undetected and estimated
J	=	Estimated			

Surrogate recovery non-conformance is summarized in Attachment A in Table A-5.

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. 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

Non-conformance is summarized in Attachment A in Table A-6.

Qualifications Actions

The data were reviewed independently from the laboratory to assess data quality. All compounds detected at concentrations less than the limit of quantitation but greater than the method detection limit were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data

validation. Any sample that was analyzed at a dilution because of high concentrations of target or non-target analytes was checked to confirm that the results and/or sample-specific limit of quantitation and limit of detections were adjusted accordingly by the laboratory.

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

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-102315-638-640	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-102315-638-640	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-638-640	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-638-640	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-638-640	ACETONE	UG_L	7.7	J
8260C	VPB160-GW-102315-638-640	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-102315-638-640	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-638-640	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-638-640	TRICHLOROETHENE	UG_L	0.54	J

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-102315-638-640	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-102315-638-640	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-102315-643-645	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-102315-643-645	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	2-BUTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-643-645	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-643-645	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-643-645	ACETONE	UG_L	14	J
8260C	VPB160-GW-102315-643-645	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-102315-643-645	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-102315-643-645	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	TOLUENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-102315-643-645	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-102315-643-645	TRICHLOROETHENE	UG_L	0.45	J
8260C	VPB160-GW-102315-643-645	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-102315-643-645	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-102615-658-660	1,1,1-TRICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,1,2,2-TETRACHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,1,2-TRICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,1-DICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,1-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,2,4-TRICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	6	UJ
8260C	VPB160-GW-102615-658-660	1,2-DIBROMOETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,2-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,2-DICHLOROETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,2-DICHLOROETHENE, TOTAL	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	1,2-DICHLOROPROPANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,3-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	1,4-DICHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	2-BUTANONE	UG_L	20	UJ
8260C	VPB160-GW-102615-658-660	2-HEXANONE	UG_L	20	UJ
8260C	VPB160-GW-102615-658-660	4-METHYL-2-PENTANONE	UG_L	20	UJ
8260C	VPB160-GW-102615-658-660	ACETONE	UG_L	20	UJ
8260C	VPB160-GW-102615-658-660	BENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	BROMODICHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	BROMOFORM	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	BROMOMETHANE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	CARBON DISULFIDE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CARBON TETRACHLORIDE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CHLOROBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CHLOROETHANE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	CHLOROFORM	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CHLOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	CIS-1,2-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CIS-1,3-DICHLOROPROPENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	CYCLOHEXANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	DIBROMOCHLOROMETHANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	DICHLORODIFLUOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	ETHYLBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	ISOPROPYLBENZENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	M- AND P-XYLENE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	METHYL ACETATE	UG_L	6	UJ
8260C	VPB160-GW-102615-658-660	METHYL CYCLOHEXANE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	METHYL TERT-BUTYL ETHER	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	METHYLENE CHLORIDE	UG_L	20	UJ
8260C	VPB160-GW-102615-658-660	O-XYLENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	STYRENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	TETRACHLOROETHENE	UG_L	4	UJ

Table A-1 Sample Integrity Non-Conformance					
Method	**Sample ID**	**Analyte**	**Units**	**Result**	**Qualifier**
8260C	VPB160-GW-102615-658-660	TOLUENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	TRANS-1,2-DICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	TRANS-1,3-DICHLOROPROPENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	TRICHLOROETHENE	UG_L	4	UJ
8260C	VPB160-GW-102615-658-660	TRICHLOROFLUOROMETHANE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	VINYL CHLORIDE	UG_L	8	UJ
8260C	VPB160-GW-102615-658-660	XYLENES, TOTAL	UG_L	12	UJ
8260C	VPB160-GW-111015-718-720	1,1,1-TRICHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,1,2,2-TETRACHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,1,2-TRICHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,1-DICHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,1-DICHLOROETHENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,2,4-TRICHLOROBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	1.5	UJ
8260C	VPB160-GW-111015-718-720	1,2-DIBROMOETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,2-DICHLOROBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,2-DICHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,2-DICHLOROETHENE, TOTAL	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	1,2-DICHLOROPROPANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,3-DICHLOROBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	1,4-DICHLOROBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	2-BUTANONE	UG_L	5	UJ
8260C	VPB160-GW-111015-718-720	2-HEXANONE	UG_L	5	UJ
8260C	VPB160-GW-111015-718-720	4-METHYL-2-PENTANONE	UG_L	5	UJ
8260C	VPB160-GW-111015-718-720	ACETONE	UG_L	15	J
8260C	VPB160-GW-111015-718-720	BENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	BROMODICHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	BROMOFORM	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	BROMOMETHANE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	CARBON DISULFIDE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CARBON TETRACHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CHLOROBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CHLOROETHANE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	CHLOROFORM	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CHLOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	CIS-1,2-DICHLOROETHENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CIS-1,3-DICHLOROPROPENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	CYCLOHEXANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	DIBROMOCHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	DICHLORODIFLUOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	ETHYLBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	ISOPROPYLBENZENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	M- AND P-XYLENE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	METHYL ACETATE	UG_L	1.5	UJ
8260C	VPB160-GW-111015-718-720	METHYL CYCLOHEXANE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	METHYL TERT-BUTYL ETHER	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	METHYLENE CHLORIDE	UG_L	5	UJ
8260C	VPB160-GW-111015-718-720	O-XYLENE	UG_L	1	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-111015-718-720	STYRENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TETRACHLOROETHENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TOLUENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TRANS-1,2-DICHLOROETHENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TRANS-1,3-DICHLOROPROPENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TRICHLOROETHENE	UG_L	1	UJ
8260C	VPB160-GW-111015-718-720	TRICHLOROFLUOROMETHANE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	VINYL CHLORIDE	UG_L	2	UJ
8260C	VPB160-GW-111015-718-720	XYLENES, TOTAL	UG_L	3	UJ
8260C	VPB160-GW-111115-758-760	1,1,1-TRICHLOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,1,2,2-TETRACHLOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,1,2-TRICHLOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,1-DICHLOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,1-DICHLOROETHENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,2,4-TRICHLOROBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	1.9	UJ
8260C	VPB160-GW-111115-758-760	1,2-DIBROMOETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,2-DICHLOROBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,2-DICHLOROETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,2-DICHLOROETHENE, TOTAL	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	1,2-DICHLOROPROPANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,3-DICHLOROBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	1,4-DICHLOROBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	2-BUTANONE	UG_L	6.2	UJ
8260C	VPB160-GW-111115-758-760	2-HEXANONE	UG_L	6.2	UJ
8260C	VPB160-GW-111115-758-760	4-METHYL-2-PENTANONE	UG_L	6.2	UJ
8260C	VPB160-GW-111115-758-760	ACETONE	UG_L	9.8	J
8260C	VPB160-GW-111115-758-760	BENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	BROMODICHLOROMETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	BROMOFORM	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	BROMOMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	CARBON DISULFIDE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CARBON TETRACHLORIDE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CHLOROBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	CHLOROFORM	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	CIS-1,2-DICHLOROETHENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CIS-1,3-DICHLOROPROPENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	CYCLOHEXANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	DIBROMOCHLOROMETHANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	DICHLORODIFLUOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	ETHYLBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	ISOPROPYLBENZENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	M- AND P-XYLENE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	METHYL ACETATE	UG_L	1.9	UJ
8260C	VPB160-GW-111115-758-760	METHYL CYCLOHEXANE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	METHYL TERT-BUTYL ETHER	UG_L	1.2	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-111115-758-760	METHYLENE CHLORIDE	UG_L	6.2	UJ
8260C	VPB160-GW-111115-758-760	O-XYLENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	STYRENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	TETRACHLOROETHENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	TOLUENE	UG_L	1.7	J
8260C	VPB160-GW-111115-758-760	TRANS-1,2-DICHLOROETHENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	TRANS-1,3-DICHLOROPROPENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	TRICHLOROETHENE	UG_L	1.2	UJ
8260C	VPB160-GW-111115-758-760	TRICHLOROFLUOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	VINYL CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-111115-758-760	XYLENES, TOTAL	UG_L	3.8	UJ
8260C	VPB160-GW-111215-768-770	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-111215-768-770	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	2-BUTANONE	UG_L	3.2	J
8260C	VPB160-GW-111215-768-770	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-111215-768-770	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-111215-768-770	ACETONE	UG_L	8.7	J
8260C	VPB160-GW-111215-768-770	BENZENE	UG_L	0.28	J
8260C	VPB160-GW-111215-768-770	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	ISOPROPYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	METHYL ACETATE	UG_L	0.75	UJ

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Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-111215-768-770	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-111215-768-770	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	TOLUENE	UG_L	6.4	J
8260C	VPB160-GW-111215-768-770	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	TRICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111215-768-770	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-111215-768-770	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-111615-838-840	1,1,1-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,1,2,2-TETRACHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,1,2-TRICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,1-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,1-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,2,4-TRICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	0.75	UJ
8260C	VPB160-GW-111615-838-840	1,2-DIBROMOETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,2-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,2-DICHLOROETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,2-DICHLOROETHENE, TOTAL	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	1,2-DICHLOROPROPANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,3-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	1,4-DICHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	2-BUTANONE	UG_L	3.5	J
8260C	VPB160-GW-111615-838-840	2-HEXANONE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-838-840	4-METHYL-2-PENTANONE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-838-840	ACETONE	UG_L	13	J
8260C	VPB160-GW-111615-838-840	BENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	BROMODICHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	BROMOFORM	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	BROMOMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	CARBON DISULFIDE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CARBON TETRACHLORIDE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CHLOROBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CHLOROETHANE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	CHLOROFORM	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CHLOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	CIS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CIS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	DIBROMOCHLOROMETHANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	DICHLORODIFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	ETHYLBENZENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	ISOPROPYLBENZENE	UG_L	0.5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-111615-838-840	M- AND P-XYLENE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	METHYL ACETATE	UG_L	0.75	UJ
8260C	VPB160-GW-111615-838-840	METHYL CYCLOHEXANE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	METHYL TERT-BUTYL ETHER	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	METHYLENE CHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-838-840	O-XYLENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	STYRENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	TETRACHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	TOLUENE	UG_L	0.33	J
8260C	VPB160-GW-111615-838-840	TRANS-1,2-DICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	TRANS-1,3-DICHLOROPROPENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	TRICHLOROETHENE	UG_L	0.5	UJ
8260C	VPB160-GW-111615-838-840	TRICHLOROFLUOROMETHANE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	VINYL CHLORIDE	UG_L	1	UJ
8260C	VPB160-GW-111615-838-840	XYLENES, TOTAL	UG_L	1.5	UJ
8260C	VPB160-GW-111615-818-820	1,1,1-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,1,2,2-TETRACHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,1,2-TRICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,1-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,1-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,2,4-TRICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,2-DIBROMO-3-CHLOROPROPANE	UG_L	3.8	UJ
8260C	VPB160-GW-111615-818-820	1,2-DIBROMOETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,2-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,2-DICHLOROETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,2-DICHLOROETHENE, TOTAL	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	1,2-DICHLOROPROPANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,3-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	1,4-DICHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	2-BUTANONE	UG_L	12	UJ
8260C	VPB160-GW-111615-818-820	2-HEXANONE	UG_L	12	UJ
8260C	VPB160-GW-111615-818-820	4-METHYL-2-PENTANONE	UG_L	12	UJ
8260C	VPB160-GW-111615-818-820	ACETONE	UG_L	33	J
8260C	VPB160-GW-111615-818-820	BENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	BROMODICHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	BROMOFORM	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	BROMOMETHANE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	CARBON DISULFIDE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CARBON TETRACHLORIDE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CHLOROBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CHLOROETHANE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	CHLOROFORM	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CHLOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	CIS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CIS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	DIBROMOCHLOROMETHANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	DICHLORODIFLUOROMETHANE	UG_L	5	UJ

Table A-1
Sample Integrity Non-Conformance

Method	Sample ID	Analyte	Units	Result	Qualifier
8260C	VPB160-GW-111615-818-820	ETHYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	ISOPROPYLBENZENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	M- AND P-XYLENE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	METHYL ACETATE	UG_L	3.8	UJ
8260C	VPB160-GW-111615-818-820	METHYL CYCLOHEXANE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	METHYL TERT-BUTYL ETHER	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	METHYLENE CHLORIDE	UG_L	12	UJ
8260C	VPB160-GW-111615-818-820	O-XYLENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	STYRENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	TETRACHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	TOLUENE	UG_L	11	J
8260C	VPB160-GW-111615-818-820	TRANS-1,2-DICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	TRANS-1,3-DICHLOROPROPENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	TRICHLOROETHENE	UG_L	2.5	UJ
8260C	VPB160-GW-111615-818-820	TRICHLOROFLUOROMETHANE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	VINYL CHLORIDE	UG_L	5	UJ
8260C	VPB160-GW-111615-818-820	XYLENES, TOTAL	UG_L	7.5	UJ

Notes:

UG_L = Micrograms per liter
UJ = Non-detect estimated value
J = Estimated value

Table A-2
Initial Calibration Non-Conformance

SDG	Method	Analyte	Instrument ID Date	RSD	Limit	Associated Samples	Qualifier
SI8520	8260C	Chloromethane	GCMS-W 10/28/2015	15.39851	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8520	8260C	Methylene Chloride	GCMS-W 10/28/2015	15.35476	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8520	8260C	Chloromethane	GCMS-W 10/28/2015	15.39851	<15%	All samples in SDG	Detects: J Non-detects: UJ
SI8520	8260C	Methylene Chloride	GCMS-W 10/28/2015	15.35476	<15%	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
RSD = Relative standard deviation
J = Detected estimated value
UJ = Non-detect estimated value

Table A-3
Initial Calibration Verification Non-Conformance

SDG	Method	Analyte	ICV ID	%R	Limit	Associated Samples	Qualifier
SI8520	8260C	Acetone	W4194.D	71.82	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	Dichlorodifluoromethane	C5632.D	29.75	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	Chloromethane	C5632.D	56.54	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	Vinyl chloride	C5632.D	67.6	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	Bromomethane	C5632.D	75.78	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	Carbon Disulfide	C5632.D	71.94	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9174	8260C	2-Butanone	C5632.D	77.98	80-120	All samples in SDG	Detects: J Non-detects: UJ
SI9303	8260C	Dichlorodifluoromethane	P3459.D	74.34	80-120	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
ICV = Initial calibration verification
%R = Percent recovery
J = Detected estimated value
UJ = Non-detect estimated value

Table A-4
Continuing Calibration Verification Non-Conformance

SDG	Lab ID /Calibration ID	Analyte	%D	%D Limit	Associated Samples	Qualifier
SI8520	WG173189-4 / GCMS-W	Chloroethane	28.6873	+/-20	All samples in SDG	Detects: J Non-detects: UJ
SI9174	WG174370-4 / GCMS-C	Chloromethane	-20.44388	+/-20	All samples in SDG	Detects: J Non-detects: UJ
SI9174	WG174370-4 / GCMS-C	Acetone	-31.36863	+/-20	All samples in SDG	Detects: J Non-detects: UJ
SI9174	WG174370-4 / GCMS-C	2-Butanone	-22.52441	+/-20	All samples in SDG	Detects: J Non-detects: UJ

Notes:
SDG = Sample delivery group
%D = Percent difference
UJ = Non-detect estimated value
J = Detected estimated value

Table A-5
Surrogate Non-Conformance

SDG	Method	Surrogate	%R	Limits	Associated Sample	Qualifier
SI8520	8260C	1,2-Dichloroethane-d4	133	70-120	VPB160-GW-102315-638-640	Acetone and Trichloroethene: J
SI8520	8260C	Dibromofluoromethane	122	85-115	VPB160-GW-102315-638-640	Acetone and Trichloroethene: J
SI8520	8260C	1,2-Dichloroethane-d4	135	70-120	VPB160-GW-102315-643-645	Acetone and Trichloroethene: J
SI8520	8260C	Dibromofluoromethane	124	85-115	VPB160-GW-102315-643-645	Acetone and Trichloroethene: J
SI8520	8260C	1,2-Dichloroethane-d4	122	70-120	VPB160-FD-101515	Trichloroethene: J
SI8520	8260C	Dibromofluoromethane	122	70-120	VPB160-GW-101515-558-560	Trichloroethene: J

Notes:
%R = Percent recovery
J = Detected estimated value

Table A-6
Laboratory Control Sample Non-Conformance

SDG	LCS	Batch	Analyte	%R	Limits	Associated Sample	Qualifier
SI9174	WG174370-1	WG174370	Dichlorodifluoromethane	20.4	30-155	VPB160-GW-111015-718-720	UJ
SI9174	WG174370-1	WG174370	Dichlorodifluoromethane	20.4	30-155	VPB160-GW-111115-758-760	UJ
SI9174	WG174370-1	WG174370	Dichlorodifluoromethane	20.4	30-155	VPB160-GW-111215-768-770	UJ
SI9174	WG174370-1	WG174370	Dichlorodifluoromethane	20.4	30-155	VPB160-TB-111015	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
bm	Missing blank information
bt	Trip blank contamination
c	Calibration issue
cr	Chromatographic resolution
d	Reporting limit raised due to chromatographic interference
dt	Dissolved result > total over limit
e	Ether interference
ej	Above calibration range; result estimated.
f	Presumed contamination from FB or ER.
fd	Field duplicate RPDs
h	Holding times
hs	Headspace greater than 6mm in all sample vials
i	Internal standard areas
ii	Injection internal standard area or retention time exceedance
it	Instrument tune
k	Estimated maximum possible concentrations (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
mc	Deviation from the method
md	MS/MSD RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
p-h	Uncertainty near detection limit (< Reporting Limit), historical reason code applied.
pe	Post Extraction Spike
q	Quantitation issue
r	Dual column RPD
rt	SIM ions not within + 2 seconds
s	Surrogate recovery
sp	Sample preparation issue
su	Evidence of ion suppression
t	Temperature Preservation Issue
x	Low % solids
y	Serial dilution results
z	ICS results

Attachment D
Final Results after Data Review

		Sample Delivery Group		SI8520		
		Lab ID		SI8520-1		
		Sample ID		VPB160-TB-102315		
		Sample Date		10/23/2015		
		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	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	UJ	c
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	0.92	J	s,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	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	UJ	c
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8520		
		Lab ID		SI8520-2		
		Sample ID		VPB160-GW-102315-638-640		
		Sample Date		10/23/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	7.7	J	s,c,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	c,mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	c,mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.54	J	s,mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8520		
		Lab ID		SI8520-3		
		Sample ID		VPB160-GW-102315-643-645		
		Sample Date		10/23/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	2.5	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	14	J	s,c,mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	c,mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	c,mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.5	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.45	J	s,mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI8520		
		Lab ID		SI8520-4DL		
		Sample ID		VPB160-GW-102615-658-660		
		Sample Date		10/26/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	4	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	4	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	4	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	4	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	4	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	4	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	4	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	6	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	4	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	4	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	4	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	8	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	4	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	4	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	4	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	20	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	20	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	20	UJ	c,mc
8260C	ACETONE	67-64-1	UG_L	20	UJ	c,mc
8260C	BENZENE	71-43-2	UG_L	4	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	4	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	4	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	8	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	4	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	4	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	4	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	8	UJ	c,mc
8260C	CHLOROFORM	67-66-3	UG_L	4	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	8	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	4	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	4	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	4	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	8	UJ	mc
8260C	ETHYLBENZENE	100-41-4	UG_L	4	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	4	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	8	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	6	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	4	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	4	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	20	UJ	c,mc
8260C	O-XYLENE	95-47-6	UG_L	4	UJ	mc
8260C	STYRENE	100-42-5	UG_L	4	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	4	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	4	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	4	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	4	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	4	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	8	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	8	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	12	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9174		
		Lab ID		SI9174-1		
		Sample ID		VPB160-TB-111015		
		Sample Date		11/10/2015		
		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	U	
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	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	l,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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	c
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9174		
		Lab ID		SI9174-2DL		
		Sample ID		VPB160-GW-111015-718-720		
		Sample Date		11/10/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	5	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	15	J	c,mc
8260C	BENZENE	71-43-2	UG_L	1	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	1	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	2	UJ	c,mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	1	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	2	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	1	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	2	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	1	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	UJ	l,c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	1	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	1	UJ	mc
8260C	STYRENE	100-42-5	UG_L	1	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	1	UJ	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	1	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	UJ	c,mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9174		
		Lab ID		SI9174-3DL		
		Sample ID		VPB160-GW-111115-758-760		
		Sample Date		11/11/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1.2	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1.2	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1.2	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1.2	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1.2	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1.2	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1.2	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.9	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1.2	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1.2	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1.2	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1.2	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1.2	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1.2	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	6.2	UJ	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	6.2	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	6.2	UJ	mc
8260C	ACETONE	67-64-1	UG_L	9.8	J	c,mc
8260C	BENZENE	71-43-2	UG_L	1.2	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1.2	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	1.2	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	2.5	UJ	c,mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	1.2	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1.2	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	1.2	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	2.5	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	1.2	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	2.5	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.2	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1.2	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	1.2	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1.2	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2.5	UJ	l,c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	1.2	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1.2	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2.5	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	1.9	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1.2	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1.2	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	6.2	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	1.2	UJ	mc
8260C	STYRENE	100-42-5	UG_L	1.2	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1.2	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	1.7	J	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1.2	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1.2	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	1.2	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2.5	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	2.5	UJ	c,mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3.8	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9174		
		Lab ID		SI9174-4		
		Sample ID		VPB160-GW-111215-768-770		
		Sample Date		11/12/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	3.2	J	c,mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	8.7	J	c,mc
8260C	BENZENE	71-43-2	UG_L	0.28	J	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	c,mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	c,mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	c,mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	l,c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	6.4	J	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	c,mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9303		
		Lab ID		SI9303-1		
		Sample ID		VPB160-TB-111615		
		Sample Date		11/16/2015		
		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	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9303		
		Lab ID		SI9303-2		
		Sample ID		VPB160-GW-111615-838-840		
		Sample Date		11/16/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	3.5	J	mc
8260C	2-HEXANONE	591-78-6	UG_L	2.5	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	UJ	mc
8260C	ACETONE	67-64-1	UG_L	13	J	mc
8260C	BENZENE	71-43-2	UG_L	0.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	0.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	1	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	1	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	0.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	1	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	0.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	0.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	0.33	J	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9303		
		Lab ID		SI9303-3		
		Sample ID		VPB160-EB-111615		
		Sample Date		11/16/2015		
		Sample Type		Equipment Blank		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	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	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

		Sample Delivery Group		SI9303		
		Lab ID		SI9303-4DL		
		Sample ID		VPB160-GW-111615-818-820		
		Sample Date		11/16/2015		
		Sample Type		Groundwater		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2.5	UJ	mc
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2.5	UJ	mc
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2.5	UJ	mc
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.5	UJ	mc
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2.5	UJ	mc
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3.8	UJ	mc
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2.5	UJ	mc
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	5	UJ	mc
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2.5	UJ	mc
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2.5	UJ	mc
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2.5	UJ	mc
8260C	2-BUTANONE	78-93-3	UG_L	12	UJ	mc
8260C	2-HEXANONE	591-78-6	UG_L	12	UJ	mc
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	12	UJ	mc
8260C	ACETONE	67-64-1	UG_L	33	J	mc
8260C	BENZENE	71-43-2	UG_L	2.5	UJ	mc
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2.5	UJ	mc
8260C	BROMOFORM	75-25-2	UG_L	2.5	UJ	mc
8260C	BROMOMETHANE	74-83-9	UG_L	5	UJ	mc
8260C	CARBON DISULFIDE	75-15-0	UG_L	2.5	UJ	mc
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2.5	UJ	mc
8260C	CHLOROBENZENE	108-90-7	UG_L	2.5	UJ	mc
8260C	CHLOROETHANE	75-00-3	UG_L	5	UJ	mc
8260C	CHLOROFORM	67-66-3	UG_L	2.5	UJ	mc
8260C	CHLOROMETHANE	74-87-3	UG_L	5	UJ	mc
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.5	UJ	mc
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2.5	UJ	mc
8260C	CYCLOHEXANE	110-82-7	UG_L	2.5	UJ	mc
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2.5	UJ	mc
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	5	UJ	c,mc
8260C	ETHYLBENZENE	100-41-4	UG_L	2.5	UJ	mc
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2.5	UJ	mc
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	5	UJ	mc
8260C	METHYL ACETATE	79-20-9	UG_L	3.8	UJ	mc
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2.5	UJ	mc
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2.5	UJ	mc
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	12	UJ	mc
8260C	O-XYLENE	95-47-6	UG_L	2.5	UJ	mc
8260C	STYRENE	100-42-5	UG_L	2.5	UJ	mc
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2.5	UJ	mc
8260C	TOLUENE	108-88-3	UG_L	11	J	mc
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2.5	UJ	mc
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROETHENE	79-01-6	UG_L	2.5	UJ	mc
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	5	UJ	mc
8260C	VINYL CHLORIDE	75-01-4	UG_L	5	UJ	mc
8260C	XYLENES, TOTAL	1330-20-7	UG_L	7.5	UJ	mc

Notes:

UG_L = Micrograms per liter

Qual = Final qualifiers (See Attachment B)

RC = Reason codes (See Attachment C)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage	
Laboratory:	Katahdin Analytical	
Sample Delivery Group:	200-30423	
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA Method TO-15	
Validation Level:	3	
Project Number:	0888812477.SA.DV	
Prepared by:	Dana Miller/Resolution Consultants	Completed on: 12/01/2015
Reviewed by:	Tina Cantwell/Resolution Consultants	File Name: 200-30423_TO15

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 22 October 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
VPB160-AIR-102215	Air	TO-15

Data validation activities were conducted using the following guidance documents: *Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)* (*U.S. EPA*, Method TO-15), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), and Department of Defense (DoD) Quality Systems Manual (QSM) 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 (COC)/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks
NA	Matrix duplicate (MD) results
✓	Laboratory control sample (LCS) 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.

Qualifications Actions

The data was reviewed independently from the laboratory to assess data quality and no results were qualified during this data review. Analytical completeness was calculated to be 100% and the data are usable for their intended purpose, according to U.S. EPA guidelines and Department of Defense guidelines. Attachment A provides final results after data review.

ATTACHMENTS

Attachment A: Final Results after Data Review

Attachment A
Final Results after Data Review

		Sample Delivery Group		200-30423	
		Lab ID		200-30423-1	
		Sample ID		VPB160-AIR-102215	
		Sample Date		10/22/2015	
		Sample Type		Air	
Method	**Analyte**	**CAS No**	**Units**	Result	Qual
TO-15	1,1,1-TRICHLOROETHANE	71-55-6	PPBV	0.2	U
TO-15	1,1,2,2-TETRACHLOROETHANE	79-34-5	PPBV	0.2	U
TO-15	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	PPBV	0.2	U
TO-15	1,1,2-TRICHLOROETHANE	79-00-5	PPBV	0.2	U
TO-15	1,1-DICHLOROETHANE	75-34-3	PPBV	0.2	U
TO-15	1,1-DICHLOROETHENE	75-35-4	PPBV	0.2	U
TO-15	1,2,4-TRICHLOROBENZENE	120-82-1	PPBV	0.5	U
TO-15	1,2-DIBROMOETHANE	106-93-4	PPBV	0.2	U
TO-15	1,2-DICHLOROBENZENE	95-50-1	PPBV	0.2	U
TO-15	1,2-DICHLOROETHANE	107-06-2	PPBV	0.2	U
TO-15	1,2-DICHLOROPROPANE	78-87-5	PPBV	0.2	U
TO-15	1,3-DICHLOROBENZENE	541-73-1	PPBV	0.2	U
TO-15	1,4-DICHLOROBENZENE	106-46-7	PPBV	0.2	U
TO-15	2-BUTANONE	78-93-3	PPBV	0.62	
TO-15	2-HEXANONE	591-78-6	PPBV	0.5	U
TO-15	4-METHYL-2-PENTANONE	108-10-1	PPBV	0.5	U
TO-15	ACETONE	67-64-1	PPBV	9.2	
TO-15	BENZENE	71-43-2	PPBV	0.71	
TO-15	BROMODICHLOROMETHANE	75-27-4	PPBV	0.2	U
TO-15	BROMOFORM	75-25-2	PPBV	0.2	U
TO-15	BROMOMETHANE	74-83-9	PPBV	0.2	U
TO-15	CARBON DISULFIDE	75-15-0	PPBV	0.5	U
TO-15	CARBON TETRACHLORIDE	56-23-5	PPBV	0.2	U
TO-15	CHLOROBENZENE	108-90-7	PPBV	0.2	U
TO-15	CHLOROETHANE	75-00-3	PPBV	0.5	U
TO-15	CHLOROFORM	67-66-3	PPBV	0.2	U
TO-15	CHLOROMETHANE	74-87-3	PPBV	1.3	
TO-15	CIS-1,2-DICHLOROETHENE	156-59-2	PPBV	0.2	U
TO-15	CIS-1,3-DICHLOROPROPENE	10061-01-5	PPBV	0.2	U
TO-15	CYCLOHEXANE	110-82-7	PPBV	0.27	
TO-15	DIBROMOCHLOROMETHANE	124-48-1	PPBV	0.2	U
TO-15	DICHLORODIFLUOROMETHANE	75-71-8	PPBV	0.57	
TO-15	ETHYLBENZENE	100-41-4	PPBV	0.24	
TO-15	ISOPROPYLBENZENE	98-82-8	PPBV	0.2	U
TO-15	M- AND P-XYLENE	108-38-3/106-42	PPBV	0.66	
TO-15	METHYL TERT-BUTYL ETHER	1634-04-4	PPBV	0.2	U
TO-15	METHYLENE CHLORIDE	75-09-2	PPBV	0.54	
TO-15	O-XYLENE	95-47-6	PPBV	0.24	
TO-15	STYRENE	100-42-5	PPBV	0.2	U
TO-15	TETRACHLOROETHENE	127-18-4	PPBV	0.2	U
TO-15	TOLUENE	108-88-3	PPBV	1.3	
TO-15	TRANS-1,2-DICHLOROETHENE	156-60-5	PPBV	0.2	U
TO-15	TRANS-1,3-DICHLOROPROPENE	10061-02-6	PPBV	0.2	U
TO-15	TRICHLOROETHENE	79-01-6	PPBV	0.2	U
TO-15	TRICHLOROFLUOROMETHANE	75-69-4	PPBV	0.25	
TO-15	VINYL CHLORIDE	75-01-4	PPBV	0.2	U
TO-15	XYLENES, TOTAL	1330-20-7	PPBV	0.9	

Notes:

PPBV = Parts per billion by volume
Qual = Final qualifier
U = The analyte was analyzed for and not detected above the reported sample quantitation limit.

Section 5

VPB160 Analytical Data Table

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		9/23/2015	9/24/2015	9/28/2015	9/29/2015
Sample ID		VPB160-GW-092315-58-60	VPB160-GW-092415-98-100	VPB160-GW-092815-148-150	VPB160-GW-092915-183-185
Sample Interval (ft bgs)		58-60	98-100	148-150	183-185
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,1,2-TRICHLOROETHANE	1	< 0.50 U	< 0.50 U	***< 2.0 UJ***	< 0.50 U
1,1-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,1-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 3.0 UJ***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 U	< 1.0 U	< 4.0 UJ	< 1.0 U
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	***< 2.0 UJ***	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 10 UJ	< 2.5 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 10 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 UJ	< 2.5 UJ	< 10 UJ	< 2.5 UJ
ACETONE	50	**11 J**	**6.9 J**	**15 J**	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	***< 2.0 UJ***	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
BROMOFORM	50	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	**0.25 J**	< 0.50 UJ	< 2.0 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
CHLOROETHANE	5	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ
CHLOROFORM	7	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 2.0 UJ***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	**0.27 J**	< 0.50 U	< 2.0 UJ	< 0.50 U
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 4.0 UJ	< 1.0 U
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 3.0 UJ	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 2.0 UJ	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	***< 10 UJ***	< 2.5 U
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
STYRENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
TETRACHLOROETHENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
TOLUENE	5	**0.40 J**	< 0.50 U	< 2.0 UJ	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 2.0 UJ	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 2.0 UJ***	***< 0.50 U***
TRICHLOROETHENE	5	< 0.50 U	**0.42 J**	< 2.0 UJ	**0.41 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 4.0 UJ	< 1.0 UJ
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	***< 4.0 UJ***	< 1.0 U
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	***< 6.0 UJ***	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		9/29/2015	9/29/2015	9/29/2015	9/30/2015
Sample ID		VPB160-FD-092915	VPB160-GW-092915-198-200	VPB160-GW-092915-218-220	VPB160-GW-093015-248-250
Sample Interval (ft bgs)		198-200	198-200	218-220	248-250
Sample type code		FD	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,1,2-TRICHLOROETHANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,1-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,1-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 0.75 U***	***< 0.75 UJ***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
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 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
ACETONE	50	**5.7 J**	**3.4 J**	< 2.5 UJ	< 2.5 UJ
BENZENE	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
BROMOFORM	50	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
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 UJ
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
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 UJ
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 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 UJ***
CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
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 UJ
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 0.75 U	< 0.75 UJ
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 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 UJ
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
STYRENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
TETRACHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
TOLUENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 0.50 U***	***< 0.50 UJ***
TRICHLOROETHENE	5	**0.35 J**	**0.30 J**	**0.82 J**	**0.41 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 UJ

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		9/30/2015	10/1/2015	10/1/2015	10/2/2015
Sample ID		VPB160-GW-093015-258-260	VPB160-GW-100115-283-285	VPB160-GW-100115-298-300	VPB160-GW-100215-318-320
Sample Interval (ft bgs)		258-260	283-285	298-300	318-320
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,1,2-TRICHLOROETHANE	1	***< 2.0 UJ***	< 0.50 U	< 0.50 U	< 0.5 UJ
1,1-DICHLOROETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,1-DICHLOROETHENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,2,4-TRICHLOROBENZENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 3.0 UJ***	***< 0.75 UJ***	***< 0.75 UJ***	***< 0.75 UJ***
1,2-DIBROMOETHANE	NL	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,2-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,2-DICHLOROETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
1,2-DICHLOROPROPANE	1	***< 2.0 UJ***	< 0.50 U	< 0.50 U	< 0.5 UJ
1,3-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
1,4-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
2-BUTANONE	50	< 10 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ
2-HEXANONE	50	< 10 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 10 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ
ACETONE	50	< 10 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
BENZENE	1	***< 2.0 UJ***	< 0.50 U	< 0.50 U	< 0.5 UJ
BROMODICHLOROMETHANE	50	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
BROMOFORM	50	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
BROMOMETHANE	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
CARBON DISULFIDE	60	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
CARBON TETRACHLORIDE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
CHLOROBENZENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
CHLOROETHANE	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
CHLOROFORM	7	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
CHLOROMETHANE	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
CIS-1,2-DICHLOROETHENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 2.0 UJ***	***< 0.50 U***	***< 0.50 U***	***< 0.5 UJ***
CYCLOHEXANE	NL	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
DIBROMOCHLOROMETHANE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
DICHLORODIFLUOROMETHANE	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
ETHYLBENZENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
ISOPROPYLBENZENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
M- AND P-XYLENE	NL	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
METHYL ACETATE	NL	< 3.0 UJ	< 0.75 U	< 0.75 U	< 0.75 UJ
METHYL CYCLOHEXANE	NL	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
METHYL TERT-BUTYL ETHER	10	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
METHYLENE CHLORIDE	5	***< 10 UJ***	< 2.5 U	< 2.5 U	< 2.5 UJ
O-XYLENE	NL	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
STYRENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
TETRACHLOROETHENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.5 UJ
TOLUENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
TRANS-1,2-DICHLOROETHENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	< 0.5 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 2.0 UJ***	***< 0.50 U***	***< 0.50 U***	***< 0.5 UJ***
TRICHLOROETHENE	5	< 2.0 UJ	< 0.50 U	< 0.50 U	**1.1 J**
TRICHLOROFLUOROMETHANE	5	< 4.0 UJ	< 1.0 U	< 1.0 U	< 1 UJ
VINYL CHLORIDE	2	***< 4.0 UJ***	< 1.0 U	< 1.0 U	< 1 UJ
XYLENES, TOTAL	5	***< 6.0 UJ***	< 1.5 U	< 1.5 U	< 1.5 UJ

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		10/2/2015	10/5/2015	10/8/2015	10/9/2015
Sample ID		VPB160-GW-100215-338-340	VPB160-GW-100515-368-370	VPB160-GW-100815-378-380	VPB160-GW-100915-403-405
Sample Interval (ft bgs)		338-340	368-370	378-380	403-405
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,1,2,2-TETRACHLOROETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,1,2-TRICHLOROETHANE	1	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,1-DICHLOROETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,1-DICHLOROETHENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,2,4-TRICHLOROBENZENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 UJ***	***< 0.75 UJ***	***< 0.75 UJ***	***< 0.75 U***
1,2-DIBROMOETHANE	NL	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,2-DICHLOROBENZENE	3	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,2-DICHLOROETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,2-DICHLOROETHENE, TOTAL	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
1,2-DICHLOROPROPANE	1	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,3-DICHLOROBENZENE	3	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
1,4-DICHLOROBENZENE	3	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
2-BUTANONE	50	< 2.5 UJ	**2.2 J**	< 2.5 UJ	< 2.5 U
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 U
4-METHYL-2-PENTANONE	NL	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 U
ACETONE	50	< 2.5 UJ	< 2.5 UJ	**9.4 J**	**6.3 J**
BENZENE	1	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
BROMODICHLOROMETHANE	50	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
BROMOFORM	50	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
BROMOMETHANE	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
CARBON DISULFIDE	60	< 0.5 UJ	< 0.5 UJ	**0.58 J**	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
CHLOROBENZENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
CHLOROETHANE	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
CHLOROFORM	7	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
CHLOROMETHANE	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
CIS-1,2-DICHLOROETHENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.5 UJ***	***< 0.5 UJ***	***< 0.50 UJ***	***< 0.50 U***
CYCLOHEXANE	NL	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
DIBROMOCHLOROMETHANE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
DICHLORODIFLUOROMETHANE	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
ISOPROPYLBENZENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
M- AND P-XYLENE	NL	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
METHYL ACETATE	NL	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ	< 0.75 U
METHYL CYCLOHEXANE	NL	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
METHYL TERT-BUTYL ETHER	10	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
METHYLENE CHLORIDE	5	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 U
O-XYLENE	NL	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
STYRENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
TETRACHLOROETHENE	5	**1.7 J**	**2.7 J**	**1.8 J**	**0.73 J**
TOLUENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
TRANS-1,2-DICHLOROETHENE	5	< 0.5 UJ	< 0.5 UJ	< 0.50 UJ	< 0.50 U
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.5 UJ***	***< 0.5 UJ***	***< 0.50 UJ***	***< 0.50 U***
TRICHLOROETHENE	5	**13 J**	**14 J**	**5.5 J**	**5.3**
TRICHLOROFLUOROMETHANE	5	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
VINYL CHLORIDE	2	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U
XYLENES, TOTAL	5	< 1.5 UJ	< 1.5 UJ	< 1.5 UJ	< 1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		10/9/2015	10/12/2015	10/12/2015	10/13/2015
Sample ID		VPB160-GW-100915-418-420	VPB160-GW-101215-438-440	VPB160-GW-101215-458-460	VPB160-GW-101315-483-485
Sample Interval (ft bgs)		418-420	438-440	458-460	483-485
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**0.50 J**	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,1,2-TRICHLOROETHANE	1	< 0.50 U	< 0.50 U	***< 4.0 UJ***	***< 2.5 UJ***
1,1-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,1-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,2,4-TRICHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 U***	***< 0.75 U***	***< 6.0 UJ***	***< 3.8 UJ***
1,2-DIBROMOETHANE	NL	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,2-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	***< 4.0 UJ***	< 2.5 UJ
1,2-DICHLOROETHANE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 U	< 1.0 U	***< 8.0 UJ***	< 5.0 UJ
1,2-DICHLOROPROPANE	1	< 0.50 U	< 0.50 U	***< 4.0 UJ***	***< 2.5 UJ***
1,3-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	***< 4.0 UJ***	< 2.5 UJ
1,4-DICHLOROBENZENE	3	< 0.50 U	< 0.50 U	***< 4.0 UJ***	< 2.5 UJ
2-BUTANONE	50	< 2.5 U	< 2.5 U	< 20 UJ	< 12 UJ
2-HEXANONE	50	< 2.5 U	< 2.5 U	< 20 UJ	< 12 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 U	< 2.5 U	< 20 UJ	< 12 UJ
ACETONE	50	**10 J**	**4.3 J**	**27 J**	**15 J**
BENZENE	1	< 0.50 U	< 0.50 U	***< 4.0 UJ***	***< 2.5 UJ***
BROMODICHLOROMETHANE	50	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
BROMOFORM	50	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
BROMOMETHANE	5	< 1.0 U	< 1.0 U	***< 8.0 UJ***	< 5.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ	< 2.5 UJ
CARBON TETRACHLORIDE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
CHLOROBENZENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
CHLOROETHANE	5	< 1.0 U	< 1.0 U	***< 8.0 UJ***	< 5.0 UJ
CHLOROFORM	7	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
CHLOROMETHANE	5	< 1.0 U	< 1.0 U	***< 8.0 UJ***	< 5.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 4.0 UJ***	***< 2.5 UJ***
CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***	< 5.0 UJ
ETHYLBENZENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
ISOPROPYLBENZENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
M- AND P-XYLENE	NL	< 1.0 U	< 1.0 U	< 8.0 UJ	< 5.0 UJ
METHYL ACETATE	NL	< 0.75 U	< 0.75 U	< 6.0 UJ	< 3.8 UJ
METHYL CYCLOHEXANE	NL	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
METHYLENE CHLORIDE	5	< 2.5 U	< 2.5 U	***< 20 UJ***	***< 12 UJ***
O-XYLENE	NL	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
STYRENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
TETRACHLOROETHENE	5	**0.69 J**	1.2	< 4.0 UJ	< 2.5 UJ
TOLUENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
TRANS-1,2-DICHLOROETHENE	5	< 0.50 U	< 0.50 U	< 4.0 UJ	< 2.5 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 U***	***< 0.50 U***	***< 4.0 UJ***	***< 2.5 UJ***
TRICHLOROETHENE	5	**8.2**	**2.9**	< 4.0 UJ	< 2.5 UJ
TRICHLOROFLUOROMETHANE	5	< 1.0 U	< 1.0 U	***< 8.0 UJ***	< 5.0 UJ
VINYL CHLORIDE	2	< 1.0 U	< 1.0 U	***< 8.0 UJ***	***< 5.0 UJ***
XYLENES, TOTAL	5	< 1.5 U	< 1.5 U	***< 12 UJ***	***< 7.5 UJ***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		10/13/2015	10/14/2015	10/15/2015	10/15/2015
Sample ID		VPB160-GW-101315-498-500	VPB160-GW-101415-518-520	VPB160-GW-101515-543-545	VPB160-GW-101515-558-560
Sample Interval (ft bgs)		498-500	518-520	543-545	558-560
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	**1.7 J**
1,1,2-TRICHLOROETHANE	1	***< 2.0 UJ***	< 0.50 UJ	< 0.50 UJ	**0.33 J**
1,1-DICHLOROETHANE	5	< 2.0 UJ	< 0.50 UJ	**0.53 J**	**3.1 J**
1,1-DICHLOROETHENE	5	< 2.0 UJ	< 0.50 UJ	**0.61 J**	**1.8 J**
1,2,4-TRICHLOROBENZENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 3.0 UJ***	***< 0.75 UJ***	***< 0.75 UJ***	***< 0.75 UJ***
1,2-DIBROMOETHANE	NL	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,2-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,2-DICHLOROETHANE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 4.0 UJ	**0.24 J**	**0.39 J**	**2.4 J**
1,2-DICHLOROPROPANE	1	***< 2.0 UJ***	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,3-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
1,4-DICHLOROBENZENE	3	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
2-BUTANONE	50	< 10 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
2-HEXANONE	50	< 10 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 10 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
ACETONE	50	< 10 UJ	**3.2 J**	**8.9 J**	**4.9 J**
BENZENE	1	***< 2.0 UJ***	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
BROMODICHLOROMETHANE	50	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
BROMOFORM	50	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
BROMOMETHANE	5	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CARBON DISULFIDE	60	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	**0.74 J**
CHLOROBENZENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
CHLOROETHANE	5	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CHLOROFORM	7	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	**0.91 J**
CHLOROMETHANE	5	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 2.0 UJ	**0.24 J**	**0.39 J**	**2.4 J**
CIS-1,3-DICHLOROPROPENE	0.4	***< 2.0 UJ***	***< 0.50 UJ***	***< 0.50 UJ***	***< 0.50 UJ***
CYCLOHEXANE	NL	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
DICHLORODIFLUOROMETHANE	5	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
ETHYLBENZENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
ISOPROPYLBENZENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
M- AND P-XYLENE	NL	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
METHYL ACETATE	NL	< 3.0 UJ	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ
METHYL CYCLOHEXANE	NL	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
METHYLENE CHLORIDE	5	***< 10 UJ***	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ
O-XYLENE	NL	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
STYRENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TETRACHLOROETHENE	5	< 2.0 UJ	**0.93 J**	**0.60 J**	< 0.50 UJ
TOLUENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TRANS-1,2-DICHLOROETHENE	5	< 2.0 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 2.0 UJ***	***< 0.50 UJ***	***< 0.50 UJ***	***< 0.50 UJ***
TRICHLOROETHENE	5	< 2.0 UJ	**57 J**	**85 J**	**520 J**
TRICHLOROFLUOROMETHANE	5	< 4.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
VINYL CHLORIDE	2	***< 4.0 UJ***	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
XYLENES, TOTAL	5	***< 6.0 UJ***	< 1.5 UJ	< 1.5 UJ	< 1.5 UJ

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		10/15/2015	10/16/2015	10/21/2015	10/22/2015
Sample ID		VPB160-FD-101515	VPB160-GW-101615-583-585	VPB160-GW-102115-598-600	VPB160-GW-102215-608-610
Sample Interval (ft bgs)		558-560	583-585	598-600	608-610
Sample type code		FD	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**1.9 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,1,2-TRICHLOROETHANE	1	**0.36 J**	***< 8.0 UJ***	***< 2.5 UJ***	< 0.95 UJ
1,1-DICHLOROETHANE	5	**3.0 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,1-DICHLOROETHENE	5	**1.6 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,2,4-TRICHLOROBENZENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 UJ***	***< 12 UJ***	***< 3.8 UJ***	***< 1.4 UJ***
1,2-DIBROMOETHANE	NL	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
1,2-DICHLOROBENZENE	3	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,2-DICHLOROETHANE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,2-DICHLOROETHENE, TOTAL	5	**2.3 J**	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
1,2-DICHLOROPROPANE	1	< 0.50 UJ	***< 8.0 UJ***	***< 2.5 UJ***	< 0.95 UJ
1,3-DICHLOROBENZENE	3	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
1,4-DICHLOROBENZENE	3	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
2-BUTANONE	50	< 2.5 UJ	< 40 UJ	< 12 UJ	< 4.8 UJ
2-HEXANONE	50	< 2.5 UJ	< 40 UJ	< 12 UJ	< 4.8 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 UJ	< 40 UJ	< 12 UJ	< 4.8 UJ
ACETONE	50	**3.4 J**	< 40 UJ	**17 J**	**20 J**
BENZENE	1	< 0.50 UJ	***< 8.0 UJ***	***< 2.5 UJ***	< 0.95 UJ
BROMODICHLOROMETHANE	50	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
BROMOFORM	50	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
BROMOMETHANE	5	< 1.0 UJ	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
CARBON DISULFIDE	60	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
CARBON TETRACHLORIDE	5	**0.69 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
CHLOROBENZENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
CHLOROETHANE	5	< 1.0 UJ	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
CHLOROFORM	7	**0.94 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
CHLOROMETHANE	5	< 1.0 UJ	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
CIS-1,2-DICHLOROETHENE	5	**2.3 J**	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***	***< 8.0 UJ***	***< 2.5 UJ***	***< 0.95 UJ***
CYCLOHEXANE	NL	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
ETHYLBENZENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
ISOPROPYLBENZENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
M- AND P-XYLENE	NL	< 1.0 UJ	< 16 UJ	< 5.0 UJ	< 1.9 UJ
METHYL ACETATE	NL	< 0.75 UJ	< 12 UJ	< 3.8 UJ	< 1.4 UJ
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
METHYLENE CHLORIDE	5	< 2.5 UJ	***< 40 UJ***	***< 12 UJ***	< 4.8 UJ
O-XYLENE	NL	< 0.50 UJ	< 8.0 UJ	< 2.5 UJ	< 0.95 UJ
STYRENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
TETRACHLOROETHENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
TOLUENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
TRANS-1,2-DICHLOROETHENE	5	< 0.50 UJ	***< 8.0 UJ***	< 2.5 UJ	< 0.95 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***	***< 8.0 UJ***	***< 2.5 UJ***	***< 0.95 UJ***
TRICHLOROETHENE	5	**520 J**	***< 8.0 UJ***	< 2.5 UJ	**1.2 J**
TRICHLOROFLUOROMETHANE	5	< 1.0 UJ	***< 16 UJ***	< 5.0 UJ	< 1.9 UJ
VINYL CHLORIDE	2	< 1.0 UJ	***< 16 UJ***	***< 5.0 UJ***	< 1.9 UJ
XYLENES, TOTAL	5	< 1.5 UJ	***< 24 UJ***	***< 7.5 UJ***	< 2.8 UJ

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		10/22/2015	10/23/2015	10/23/2015	10/26/2015
Sample ID		VPB160-GW-102215-618-620	VPB160-GW-102315-638-640	VPB160-GW-102315-643-645	VPB160-GW-102615-658-660
Sample Interval (ft bgs)		618-620	638-640	643-645	658-660
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,1,2-TRICHLOROETHANE	1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
1,1-DICHLOROETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,1-DICHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,2,4-TRICHLOROBENZENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 UJ***	***< 0.75 UJ***	***< 0.75 UJ***	***< 6.0 UJ***
1,2-DIBROMOETHANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,2-DICHLOROBENZENE	3	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
1,2-DICHLOROETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
1,2-DICHLOROPROPANE	1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
1,3-DICHLOROBENZENE	3	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
1,4-DICHLOROBENZENE	3	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
2-BUTANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 20 UJ
2-HEXANONE	50	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 20 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 20 UJ
ACETONE	50	**8.9 J**	**7.7 J**	**14 J**	< 20 UJ
BENZENE	1	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	***< 4.0 UJ***
BROMODICHLOROMETHANE	50	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
BROMOFORM	50	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
BROMOMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
CARBON DISULFIDE	60	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
CARBON TETRACHLORIDE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
CHLOROBENZENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
CHLOROETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
CHLOROFORM	7	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
CHLOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
CIS-1,2-DICHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***	***< 0.50 UJ***	***< 0.50 UJ***	***< 4.0 UJ***
CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
ETHYLBENZENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
ISOPROPYLBENZENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
M- AND P-XYLENE	NL	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 8.0 UJ
METHYL ACETATE	NL	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ	< 6.0 UJ
METHYL CYCLOHEXANE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
METHYLENE CHLORIDE	5	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	***< 20 UJ***
O-XYLENE	NL	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
STYRENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
TETRACHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
TOLUENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
TRANS-1,2-DICHLOROETHENE	5	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 4.0 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***	***< 0.50 UJ***	***< 0.50 UJ***	***< 4.0 UJ***
TRICHLOROETHENE	5	**1.3 J**	**0.54 J**	**0.45 J**	< 4.0 UJ
TRICHLOROFLUOROMETHANE	5	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
VINYL CHLORIDE	2	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	***< 8.0 UJ***
XYLENES, TOTAL	5	< 1.5 UJ	< 1.5 UJ	< 1.5 UJ	***< 12 UJ***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160	VPB160	VPB160	VPB160
Sample Date		11/10/2015	11/11/2015	11/12/2015	11/16/2015
Sample ID		VPB160-GW-111015-718-720	VPB160-GW-111115-758-760	VPB160-GW-111215-768-770	VPB160-GW-111615-818-820
Sample Interval (ft bgs)		718-720	758-760	768-770	818-820
Sample type code		N	N	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,1,2-TRICHLOROETHANE	1	< 1.0 UJ	***< 1.2 UJ***	< 0.50 UJ	***< 2.5 UJ***
1,1-DICHLOROETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,1-DICHLOROETHENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,2,4-TRICHLOROBENZENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 1.5 UJ***	***< 1.9 UJ***	***< 0.75 UJ***	***< 3.8 UJ***
1,2-DIBROMOETHANE	NL	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,2-DICHLOROBENZENE	3	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,2-DICHLOROETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
1,2-DICHLOROPROPANE	1	< 1.0 UJ	***< 1.2 UJ***	< 0.50 UJ	***< 2.5 UJ***
1,3-DICHLOROBENZENE	3	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
1,4-DICHLOROBENZENE	3	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
2-BUTANONE	50	< 5.0 UJ	< 6.2 UJ	**3.2 J**	< 12 UJ
2-HEXANONE	50	< 5.0 UJ	< 6.2 UJ	< 2.5 UJ	< 12 UJ
4-METHYL-2-PENTANONE	NL	< 5.0 UJ	< 6.2 UJ	< 2.5 UJ	< 12 UJ
ACETONE	50	**15 J**	**9.8 J**	**8.7 J**	**33 J**
BENZENE	1	< 1.0 UJ	***< 1.2 UJ***	**0.28 J**	***< 2.5 UJ***
BROMODICHLOROMETHANE	50	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
BROMOFORM	50	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
BROMOMETHANE	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
CARBON DISULFIDE	60	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
CARBON TETRACHLORIDE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
CHLOROBENZENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
CHLOROETHANE	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
CHLOROFORM	7	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
CHLOROMETHANE	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 1.0 UJ***	***< 1.2 UJ***	***< 0.50 UJ***	***< 2.5 UJ***
CYCLOHEXANE	NL	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
DIBROMOCHLOROMETHANE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
DICHLORODIFLUOROMETHANE	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
ETHYLBENZENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
ISOPROPYLBENZENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
M- AND P-XYLENE	NL	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
METHYL ACETATE	NL	< 1.5 UJ	< 1.9 UJ	< 0.75 UJ	< 3.8 UJ
METHYL CYCLOHEXANE	NL	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
METHYL TERT-BUTYL ETHER	10	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
METHYLENE CHLORIDE	5	< 5.0 UJ	***< 6.2 UJ***	< 2.5 UJ	***< 12 UJ***
O-XYLENE	NL	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
STYRENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
TETRACHLOROETHENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
TOLUENE	5	< 1.0 UJ	**1.7 J**	**6.4 J**	**11 J**
TRANS-1,2-DICHLOROETHENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 1.0 UJ***	***< 1.2 UJ***	***< 0.50 UJ***	***< 2.5 UJ***
TRICHLOROETHENE	5	< 1.0 UJ	< 1.2 UJ	< 0.50 UJ	< 2.5 UJ
TRICHLOROFLUOROMETHANE	5	< 2.0 UJ	< 2.5 UJ	< 1.0 UJ	< 5.0 UJ
VINYL CHLORIDE	2	< 2.0 UJ	***< 2.5 UJ***	< 1.0 UJ	***< 5.0 UJ***
XYLENES, TOTAL	5	< 3.0 UJ	< 3.8 UJ	< 1.5 UJ	***< 7.5 UJ***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB160
Sample Date		11/16/2015
Sample ID		VPB160-GW-111615-838-840
Sample Interval (ft bgs)		838-840
Sample type code		N
VOC 8260C (ug/L)		
1,1,1-TRICHLOROETHANE	5	< 0.50 UJ
1,1,2,2-TETRACHLOROETHANE	5	< 0.50 UJ
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 0.50 UJ
1,1,2-TRICHLOROETHANE	1	< 0.50 UJ
1,1-DICHLOROETHANE	5	< 0.50 UJ
1,1-DICHLOROETHENE	5	< 0.50 UJ
1,2,4-TRICHLOROBENZENE	5	< 0.50 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***< 0.75 UJ***
1,2-DIBROMOETHANE	NL	< 0.50 UJ
1,2-DICHLOROBENZENE	3	< 0.50 UJ
1,2-DICHLOROETHANE	5	< 0.50 UJ
1,2-DICHLOROETHENE, TOTAL	5	< 1.0 UJ
1,2-DICHLOROPROPANE	1	< 0.50 UJ
1,3-DICHLOROBENZENE	3	< 0.50 UJ
1,4-DICHLOROBENZENE	3	< 0.50 UJ
2-BUTANONE	50	**3.5 J**
2-HEXANONE	50	< 2.5 UJ
4-METHYL-2-PENTANONE	NL	< 2.5 UJ
ACETONE	50	**13 J**
BENZENE	1	< 0.50 UJ
BROMODICHLOROMETHANE	50	< 0.50 UJ
BROMOFORM	50	< 0.50 UJ
BROMOMETHANE	5	< 1.0 UJ
CARBON DISULFIDE	60	< 0.50 UJ
CARBON TETRACHLORIDE	5	< 0.50 UJ
CHLOROBENZENE	5	< 0.50 UJ
CHLOROETHANE	5	< 1.0 UJ
CHLOROFORM	7	< 0.50 UJ
CHLOROMETHANE	5	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	5	< 0.50 UJ
CIS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***
CYCLOHEXANE	NL	< 0.50 UJ
DIBROMOCHLOROMETHANE	5	< 0.50 UJ
DICHLORODIFLUOROMETHANE	5	< 1.0 UJ
ETHYLBENZENE	5	< 0.50 UJ
ISOPROPYLBENZENE	5	< 0.50 UJ
M- AND P-XYLENE	NL	< 1.0 UJ
METHYL ACETATE	NL	< 0.75 UJ
METHYL CYCLOHEXANE	NL	< 0.50 UJ
METHYL TERT-BUTYL ETHER	10	< 0.50 UJ
METHYLENE CHLORIDE	5	< 2.5 UJ
O-XYLENE	NL	< 0.50 UJ
STYRENE	5	< 0.50 UJ
TETRACHLOROETHENE	5	< 0.50 UJ
TOLUENE	5	**0.33 J**
TRANS-1,2-DICHLOROETHENE	5	< 0.50 UJ
TRANS-1,3-DICHLOROPROPENE	0.4	***< 0.50 UJ***
TRICHLOROETHENE	5	< 0.50 UJ
TRICHLOROFLUOROMETHANE	5	< 1.0 UJ
VINYL CHLORIDE	2	< 1.0 UJ
XYLENES, TOTAL	5	< 1.5 UJ

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 interval (ft bgs): sample interval in feet below ground surface

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.

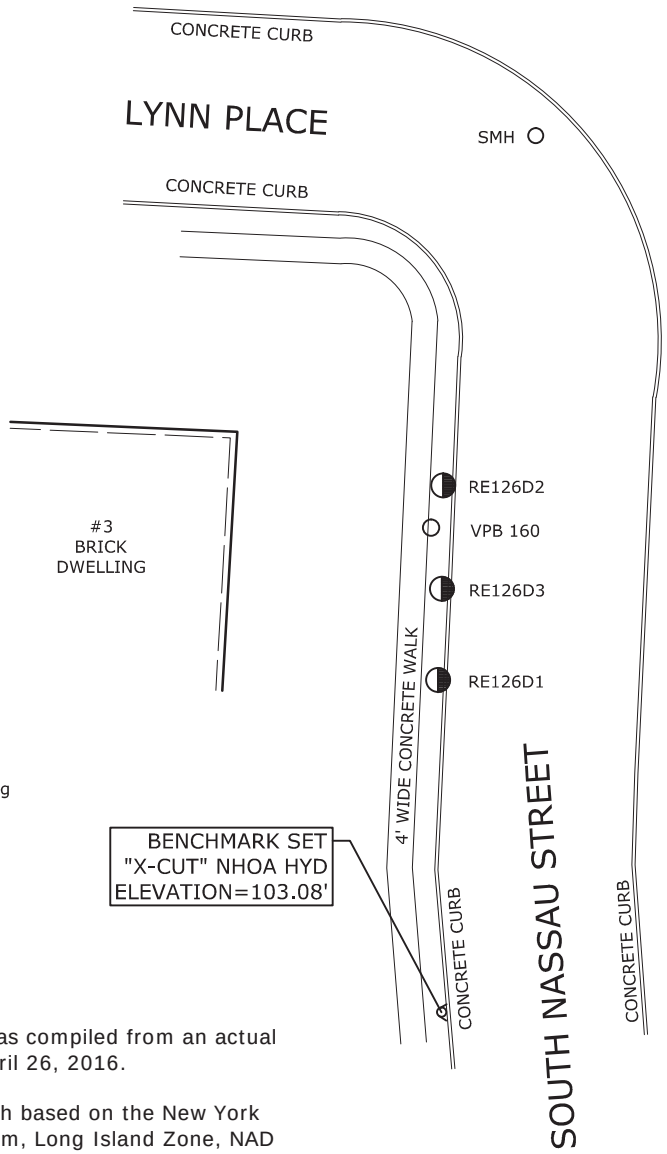
M = the matrix spike or matrix spike duplicate did not meet recovery or precision requirements.

Section 6

VPB160 Survey

NONE :XREFS

Description	Northing	Easting	Latitude	Longitude	Ground	Rim	PVC
VPB 160	208577.64	1125641.89	N40-44-16.96	W73-29-23.22	101.68	NA	NA
RE126D1	208553.86	1125643.00	N40-44-16.72	W73-29-23.21	101.65	101.65	101.03
RE126D2	208584.28	1125643.78	N40-44-17.02	W73-29-23.19	101.74	101.74	101.39
RE126D3	208568.11	1125643.60	N40-44-16.86	W73-29-23.20	101.66	101.66	101.10



Legend

◑		Monitoring Well
○	SMH	Sanitary Manhole
○	VPB 160	Vertical Profile Boring

Map Notes

1. Information shown hereon was compiled from an actual field survey conducted on April 26, 2016.
2. North orientation is Grid North based on the New York State Plane Coordinate System, Long Island Zone, NAD 83(2011) epoch 2010.00 as obtained from GPS observations.
3. Vertical datum shown hereon is NAVD 88(Geoid12A) as obtained from RTK GPS observations using the Queens CORS as a base station.

DWG NO. 16-326

Date	RECORD OF WORK	Appr.

Drafter: LMK | Checker: JFC

Appr. by: JFC | Proj. No. 14.4121

VERTICAL PROFILE BORING 160 SURVEY LOCATION
3 LYNN PLACE

TOWN OF OYSTER BAY | NASSAU COUNTY, NEW YORK

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SCALE: 1"=30' | DATE: APRIL 26, 2016

CAD DWG. FILE NAME: K:\Projects\144121\Survey\Drawings and Maps\VPB 160.dwg