2017 OPERABLE UNIT 2 GROUNDWATER INVESTIGATION DATA SUMMARY REPORT VPB168

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

Prepared for:

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

December 2018

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Department of the Navy
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9324 Virginia Avenue
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Norfolk, Virginia 23511

Prepared by:

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

Contract Number: N62470-11-D-8013
CONTRACT TASK ORDER WE15

December 2018

Brian Caldwell

Brian Caldwell
Contract Task Order Manager

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List of Acronyms and Abbreviations

AOC	Area of Concern
bgs	below ground surface
COR	Continuously Operating Reference
CSM	Conceptual Site Model
DoD	Department of Defense
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency, United States
ESS	Environmental Sequence Stratigraphy
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
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 VPB168 location) in 2017 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 VPB168. The purpose of the VPB168 investigation was to ascertain subsurface conditions and contaminant levels, and the western extend of the offsite plume north of Hempstead Turnpike and west of Wantagh Avenue. VPB locations within the general vicinity of VPB168 are shown in Figure 2. VPB168 was completed to 890 feet (ft) below ground surface (bgs).

Field tasks were conducted in 2017 in accordance with the *United Federal Programs Sampling and Analysis Plan (UFP SAP) Site 1 OU2 Offsite TCE Groundwater Plume Investigation*, NWIRP, 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

1.3.1 Depositional Environment

Resolution Consultants applied a technique known as Environmental Sequence Stratigraphy (ESS) to combine results from regional studies with onsite continuous boring and gamma logs to develop a sequence stratigraphic framework for the Late Cretaceous Turonian age (~94 million years ago) Magothy Formation underlying NWIRP Bethpage. The ESS analysis, including the construction of high-resolution base-wide cross sections, is documented in Appendix B. A summary of salient conclusions regarding the depositional environment, stratigraphy and impact on hydrogeology at the site is provided here.

Previous sequence stratigraphic studies of the New Jersey and New York Coastal Plains have shown that facies successions in the region can largely be explained by global sea level oscillations and sediment supply. The Turonian age sea level changes resulted in several phases of seaward progradation and landward retrogradation that affected the deposition and preservation of lithologic sequences in the Magothy. Periods of elevated or low sea level have a distinct effect on shoreline position and the types of deltaic facies that are deposited on the coastal plain. During high sea level, marine to distal deltaic facies tend to form. In contrast, during periods of low relative sea level, marginal to nonmarine deltaic facies are deposited.

Changes in sediment supply resulting from the tectonic uplift and weathering of the ancestral Appalachians during the Albian stage (~100 million years ago) also influenced depositional environments in the region. The large influx of coarse sediments is reflected in the rapid seaward progradation of the shoreline and extensive delta plain deposits (Magothy Formation) on the New Jersey Coastal Plain.

1.3.2 Stratigraphy

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 in descending order: 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 consists of till and outwash deposits of medium to coarse sand and gravel with lenses of fine sand, silt and clay (Smolensky and Feldman, 1988); these deposits form the Upper Glacial Aquifer. The ESS analysis concluded that these continental deposits are considerably thicker than previously thought, ranging from 50 – 300 feet. Directly underlying this unit is the Magothy Formation with a thickness of 650 to 900 ft that extends to a depth 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 VPB168, the bottom of the Magothy (top of the Raritan Clay) is encountered at approximately 878 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 groundwater 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.

1.3.3 Hydrogeology

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. Because of the presence of intermittent clay layers and the depths, the Magothy Aquifer is commonly regarded to function overall as an unconfined aquifer at shallow depths and a confined aquifer at greater 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.

Groundwater is encountered at an average 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 15 to 60 ft bgs. Depth to water in the vicinity of VPB168 is approximately 38 feet bgs based on the RE134D well cluster. The groundwater flow in the area is to the south-southeast.

The ESS results provide important insight into the distribution of transmissive and storage zones at the Site. Considerable heterogeneity exists in the subsurface due to alternating depositional environments that resulted from changes in sea level and sediment supply. Laterally continuous fluvial sands and distributary mouth bars are inferred to represent high permeability units and conduits for groundwater flow/contaminant transport, however the continuity of those units is variable. Fine grained muds deposited during maximum flooding appear to correlate to contamination data peaks, potentially acting as storage units by adsorption of contamination within the matrix of fine-grained muds.

2.0 FIELD PROGRAM

Field investigation activities at VPB168 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 (VPB168) was completed during this field effort between October 10, 2017 and November 27, 2017. The total depth of VPB168 was 890 ft. The location is shown in Figure 2 and details are summarized in Table 1.

2.1.1 Drilling

In order to prevent sloughing of the borehole through unconsolidated lithologies, VPB168 was installed by setting a 10-inch diameter surface casing to 54.3 ft bgs and then setting an 8-inch diameter casing to a depth of 120 ft bgs using mud rotary drilling techniques. Drilling mud consisted of potable water and polymer-free sodium bentonite. 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 nine (9) 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 853 ft bgs and three (3) split spoon samples were subsequently collected to confirm the presence of the Raritan Clay. Samples were logged by the field geologist and screened for Volatile Organic Compounds (VOCs) utilizing a photoionization detector (PID). A detailed boring log for VPB168 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 from a depth of 563-565 feet bgs 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 Luminox 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 the 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 NYS Net 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 1 OU2 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., 1988. *Geohydrology of the Bethpage-Hicksville-Levittown Area, Long Island, New York, U.S*. Geological Survey Water-Resourced Investigations Report 88-4135, 25 pp.

Tables

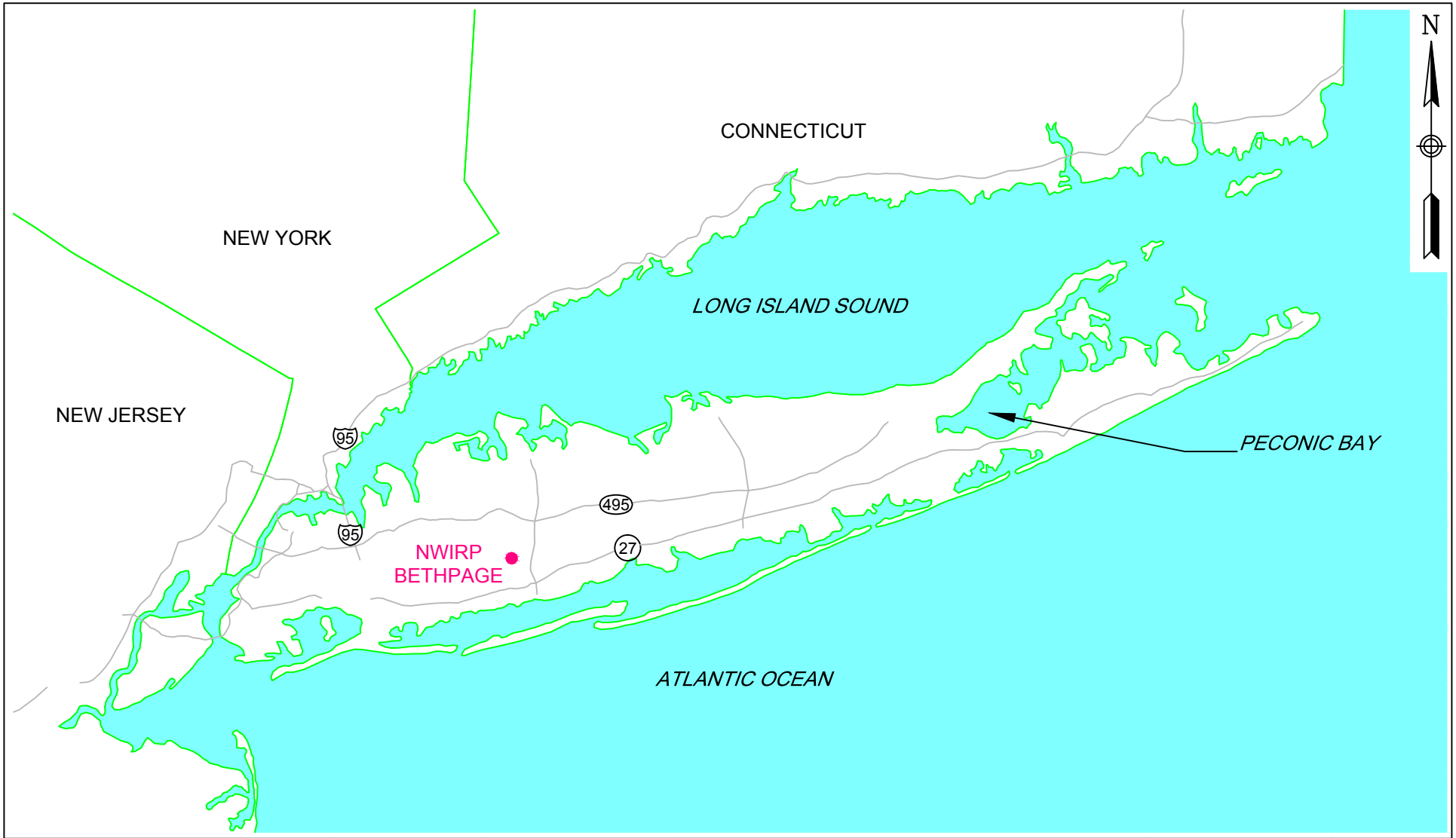
TABLE 1
VERTICAL PROFILE BORING SUMMARY
2017 OU2 GROUNDWATER INVESTIGATION
NWIRP BETHPAGE, NY

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
VPB168	10/10/2017	11/27/2017	90.74	890	54.3	9	887	33/2/9	563-565	11/9/2017	RE134D1, RE134D2, RE134D3, RE134D4

MSL - mean sea level
ft bgs - feet below ground surface
GW - Groundwater
TOC - Total Organic Carbon
*8-inch casing installed to 120 feet inside 10-inch casing

Figures

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



0 15 30

SCALE IN MILES

NAVFAC

GENERAL LOCATION MAP
NWIRP BETHPAGE
BETHPAGE, NEW YORK

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

F:\Projects\Navy\Bethpage WXE0817.0 Deliverables\7.2 CADD\GIS_files\Bethpage\MAP DOCS\MXD\MISC\Location MapsIF2 VPB168 2018 08 20 R1.mxd

VPB168 LOCATION MAP
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

Former Naval Weapons Industrial Reserve Plant

Former Northrop Grumman Site

Old Bethpage

Bethpage

Plainedge

South Farmingdale

Levittown

North Wantagh

Inset: VPB168 Location

RE134D1
RE134D2
RE134D3
RE134D4

VPB168

GM-34D
GM-34D2

RE125D1
RE125D2
RE125D3

VPB122

0 375 750 Feet

Legend

- Monitoring Well
- Vertical Profile Boring
- Vertical Profile Boring - Proposed
- Water Supply Well
- Extraction Well

0 750 1,500 3,000 Feet

CONTRACT NUMBER N62470-11-D8013	CTO NUMBER WE15
APPROVED BY PS	DATE 8/20/2018
APPROVED BY —	DATE —
FIGURE NO. 2	REV 0

Appendices

Appendix A

VPB168

Section 1

VPB168 Boring and Gamma Logs

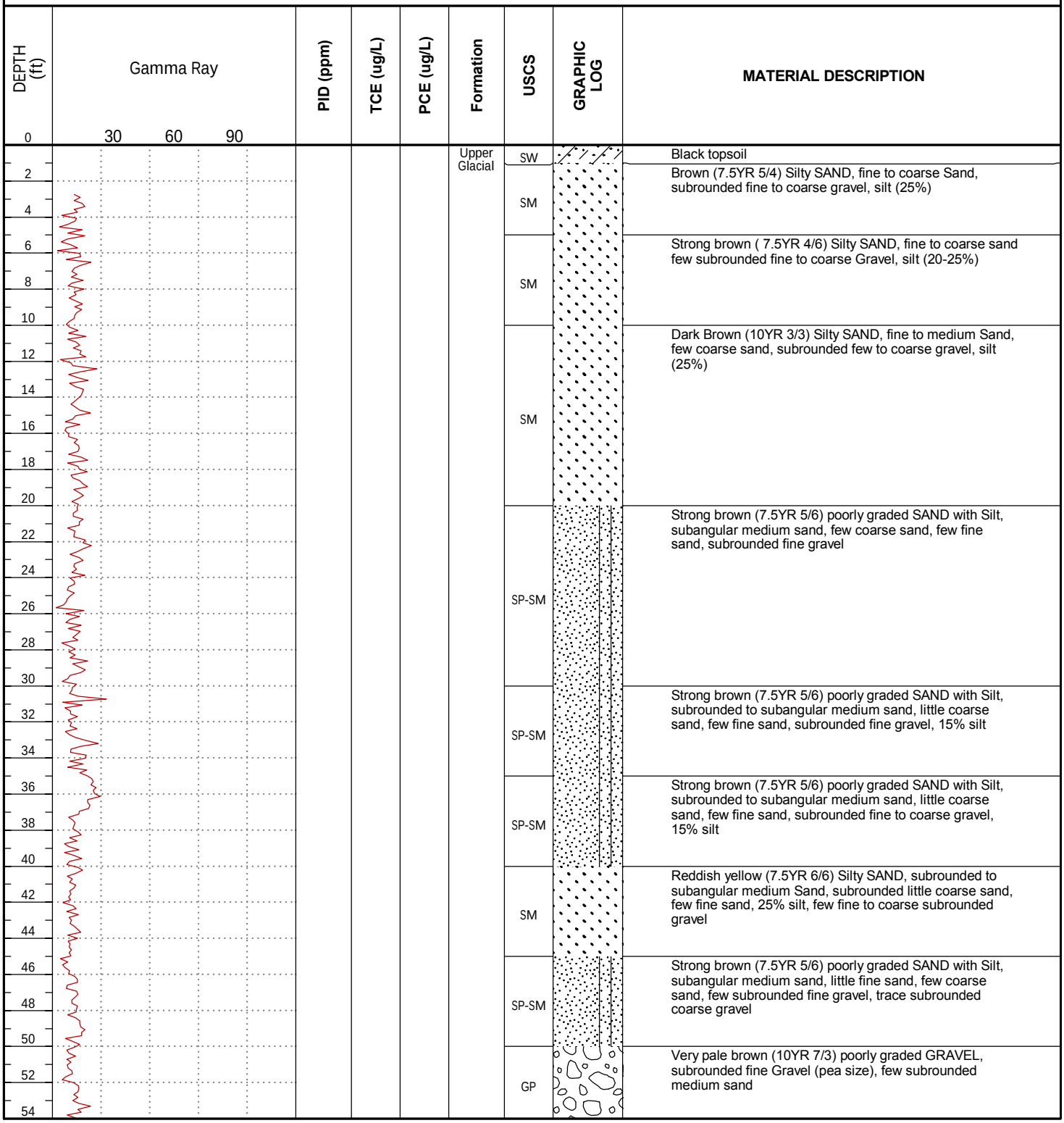
Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 1 of 15

Client: Department of the Navy, Naval Facilities Engineering Command, Mid-Atlantic		**Logged By:** V. Thayer
Location: Lark St and Mallard Rd, Levittown, NY	**Northing:** 206118.97 **Easting:** 1123197.99	**Drilling Company:** Delta Well & Pump
Project #: 60266526	**Ground Elevation (ft amsl):** 90.74	**Well Screen Interval (ft):** NA
Start Date: 10/10/2017	**Drilling Method:** Auger (0-50' bgs) Mud Rotary (>50' bgs)	**Water Level (ft):** NA
Finish Date: 11/27/2017		**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.



MATERIAL DESCRIPTION

Black topsoil

Brown (7.5YR 5/4) Silty SAND, fine to coarse Sand, subrounded fine to coarse gravel, silt (25%)

Strong brown (7.5YR 4/6) Silty SAND, fine to coarse sand few subrounded fine to coarse Gravel, silt (20-25%)

Dark Brown (10YR 3/3) Silty SAND, fine to medium Sand, few coarse sand, subrounded few to coarse gravel, silt (25%)

Strong brown (7.5YR 5/6) poorly graded SAND with Silt, subangular medium sand, few coarse sand, few fine sand, subrounded fine gravel

Strong brown (7.5YR 5/6) poorly graded SAND with Silt, subrounded to subangular medium sand, little coarse sand, few fine sand, subrounded fine gravel, 15% silt

Strong brown (7.5YR 5/6) poorly graded SAND with Silt, subrounded to subangular medium sand, little coarse sand, few fine sand, subrounded fine to coarse gravel, 15% silt

Reddish yellow (7.5YR 6/6) Silty SAND, subrounded to subangular medium Sand, subrounded little coarse sand, few fine sand, 25% silt, few fine to coarse subrounded gravel

Strong brown (7.5YR 5/6) poorly graded SAND with Silt, subangular medium sand, little fine sand, few coarse sand, few subrounded fine gravel, trace subrounded coarse gravel

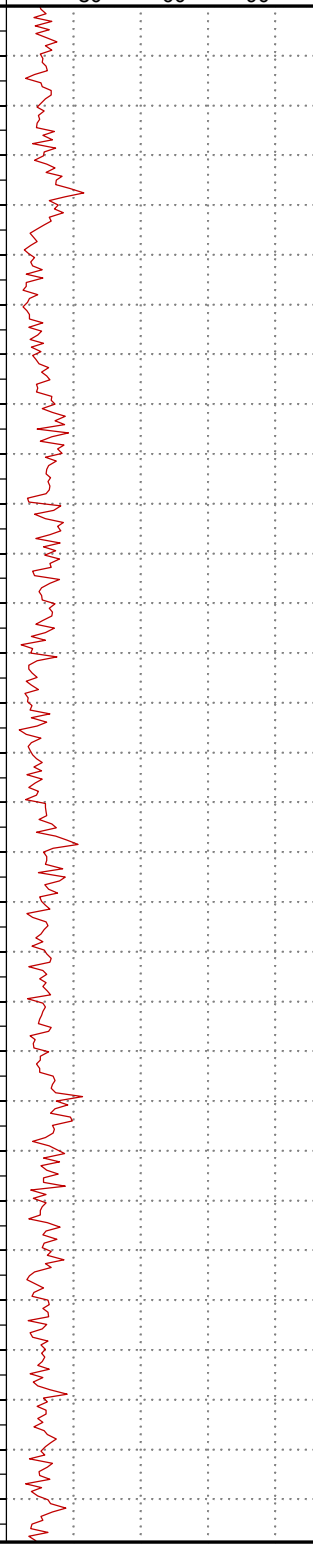
Very pale brown (10YR 7/3) poorly graded GRAVEL, subrounded fine Gravel (pea size), few subrounded medium sand

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 2 of 15



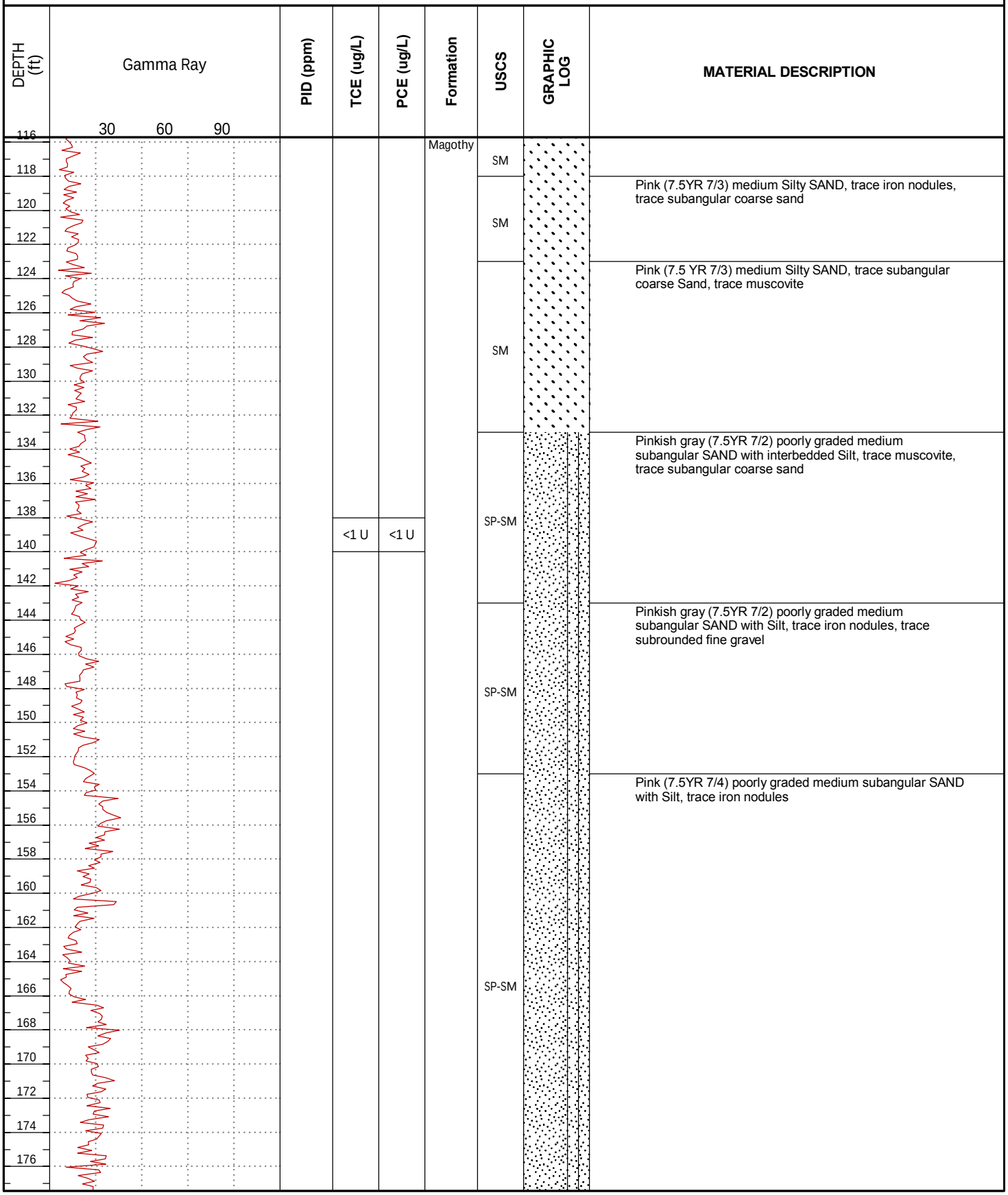
PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
			Upper Glacial	GP		Very pale brown (10YR 7/3) poorly graded SAND with Silt and Gravel, subangular medium sand, 30% fine to coarse gravel, 15% fine (silt)
	<2 U	<2 U		SP-SM		
				SW-SM		Very pale brown (10YR 7/4) widely graded SAND with Silty, subangular fine to coarse sand, 10% silt (fines)
				SM		Very pale brown (10YR 7/4) Silty SAND, subangular fine to coarse Sand, 25% fines, interbedded gray clay lenses; iron concretions
				SP-SM		Very pale brown (10YR 7/4) poorly graded SAND with Silt, subangular medium sand, few coarse sand, 10 to 15% silt (fines), few interbedded pale gray clay lenses, several iron concretions
				SM-CL		Pink (7.5YR 7/3) Silty SAND; subangular fine to medium sand, trace coarse Sand, 25% fines (silt), iron nodules, possible interbedded clay lenses
				SW-SP		Reddish yellow (7.5YR 6/8) widely graded SAND with Silt, subrounded to subangular fine to coarse sand, numerous iron nodules, trace fine gravel, 10% silt, few clay stringers
				SM-CL		Brownish yellow (10YR 6/6) Silty SAND, subangular fine to coarse Sand, numerous iron concretions, interbedded clay lenses
	<0.5 U	<0.5 U		SM		Yellow (10YR 7/6) Silty SAND, fine to coarse Sand, 25% fines; possible gray clay lenses interbedded; iron concretions
			Magothy			
				SM		Light brown (7.5YR 6/4) Silty SAND, subangular medium Sand, little fine sand, trace coarse sand, iron concretions, 30-40% silt (fines); possible interbedded clay lens
				SM		Very pale brown (10YR 7/4) Silty SAND; subangular medium Sand, 40% clay (fines), several interbedded gray clay lenses, trace coarse gravel, iron concretions

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 3 of 15



(Continued Next Page)

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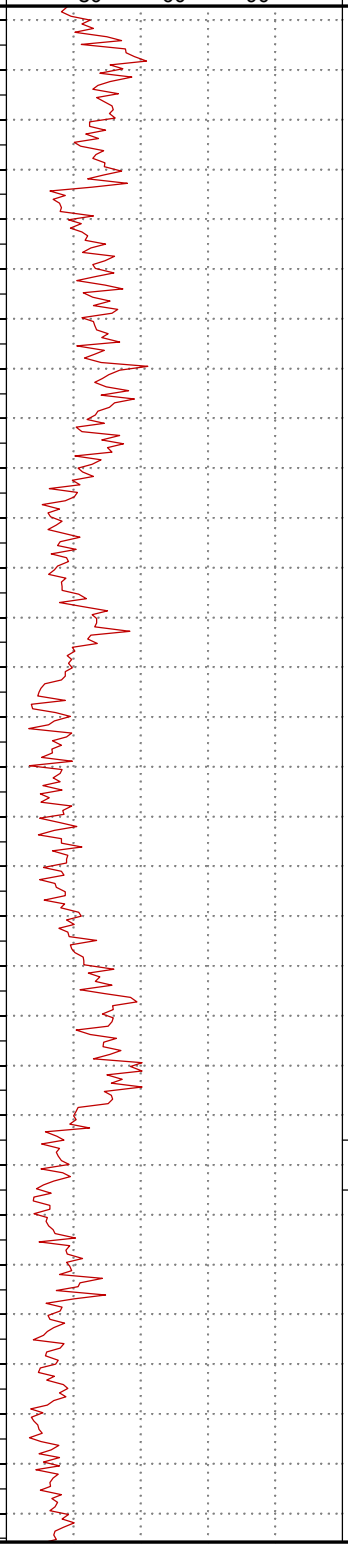
Boring Log

BORING #: **VPB168**
Sheet 4 of 15



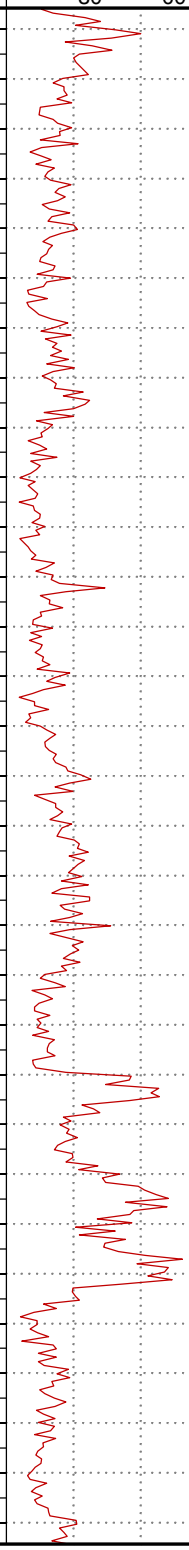
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	MATERIAL DESCRIPTION
178				Magothy		
180					SP-SM	Reddish yellow (7.5YR 5/6) poorly graded medium SAND with Silt, trace iron nodules, trace subangular coarse sand
182						
184						
186						
188						
190					SM	Strong brown (7.5YR 5/6) Silty SAND with few iron nodules
192						
194					SM	Dark brown (7.5YR 3/4) Silty SAND with trace lignite and trace iron nodules
196						
198						
200		0.6 J	<0.5 U		SM	Pinkish gray (7.5YR 7/2) Silty SAND, few streaks of black lignite, few gray clay
202						
204					SM	Silty SAND; micaceous fine sand, 25% silt (fines), interbedded lignite laminae; a few clay laminae
206						
208						
210						
212						
214					SM	Brownish yellow (10YR 6/8) Silty SAND; micaceous fine Sand, 30% silt (fines); interbedded orange and white sand with a few clay laminae, iron nodules
216						
218						
220		1.8	0.49J			
222						
224	0				SP	Reddish yellow (7.5YR 6/6) and strong brown (7.5YR 5/6) poorly graded SAND, subangular medium Sand, little fine sand, one quarter inch gray clay lens, 2 gray clay laminae; iron concretions
226					SP	Strong brown (7.5YR 5/6) poorly graded SAND, a few thin gray Clay layers
228						
230					SM	Strong brown (7.5YR) Silty SAND, lignite laminae
232						
234					SM	Strong brown (7.5YR 6/6) Silty SAND, micaceous fine Sand, 40% silt (fines), lignite laminae, iron nodules
236						
238		<5 U	<5 U		SM	Strong brown (7.5YR 5/8) Silty SAND

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 5 of 15



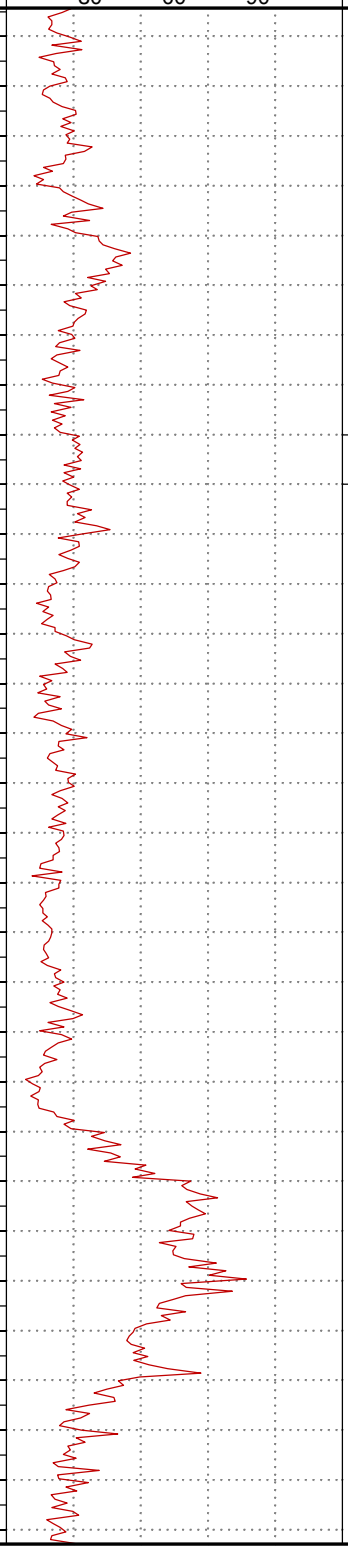
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
240		<5 U	<5 U	Magothy	SM		Strong brown (7.5YR 5/8) Silty SAND *(continued)*
242							
244					SM		Strong brown (7.5YR 5/8) Silty SAND, iron nodules
246							
248							
250					SM		Strong brown (7.5YR 5/8) Silty SAND
252							
254					SM		Strong brown (7.5YR 5/8) Silty SAND; medium Sand, little fine sand, 30% silt (fines), one thin gray clay stringer, iron nodules, lignite laminae
256							
258							
260		3.4 J	<2 U		SM		Light yellowish brown (10YR 6/4) Silty SAND
262							
264					SP		Yellowish brown (10YR 5/4) poorly graded SAND; medium Sand
266							
268							
270							
272							
274					SM		Yellowish brown (10YR 5/4) Silty SAND, numerous iron nodules
276							
278							
280		51	5.1		SP		Yellowish brown (10YR 5/6) poorly graded SAND; medium Sand, iron nodules, lignite laminae
282							
284					SP		Yellowish brown (10YR 5/6) poorly graded SAND
286							
288							
290					SP-SM		Reddish yellow (7.5YR 7/6) poorly graded SAND with Silt, lignite laminae, iron nodules
292							
294					SP-SM		Reddish yellow (7.5YR 7/6) poorly graded SAND with Silt
296							
298							
300		1.2 J	<2 U		SM		Brownish yellow (10YR 6/6) Silty SAND, fine to medium Sand, iron concretions, 40% fines

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 6 of 15



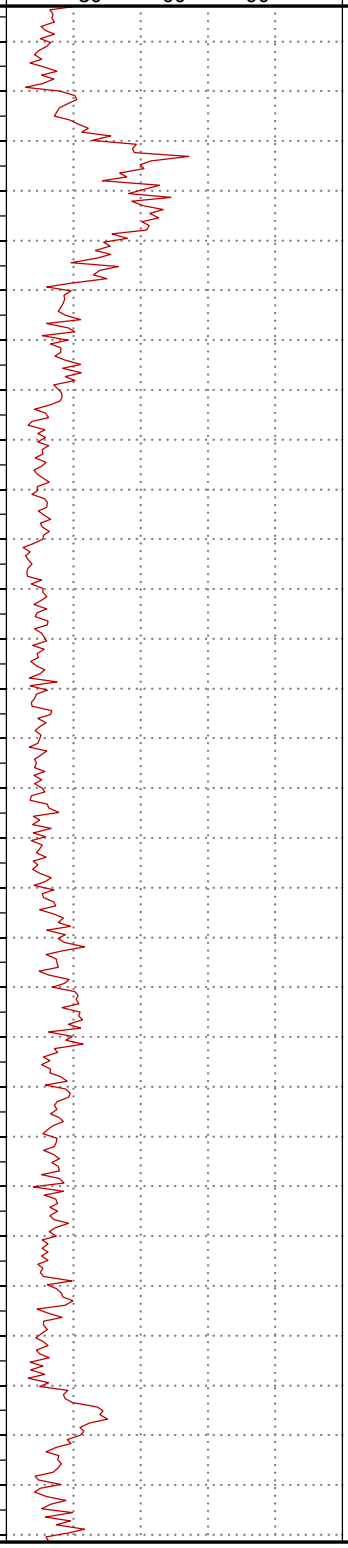
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
302				Magothy	SM		Brownish yellow (10YR 6/6) Silty SAND, fine to medium Sand, iron concretions, 40% fines *(continued)*
304					SM		Brownish yellow (10YR 6/6) Silty SAND, fine Sand, little medium sand, 40% fines, iron concretions
306							
308							
310							
312							
314					SP-SM		Brownish yellow (10YR 6/6) poorly graded SAND with Silt
316							
318							
320	0				SP-SM		Light gray (10YR 7/1) mottled with yellow (7.5YR 6/6) poorly graded SAND with Silt; fine sand, 15% silt
322							
324		12	1.3		SM		Light brown (7.5YR 6/3) Silty SAND, fine to medium sand, 30% fines (silt), iron nodules
326							
328							
330					SM		Pale brown (10YR 6/3) Silty SAND; fine to medium sand, 40% silt, iron nodules
332							
334					SP-SM		Very pale brown (10YR 7/3) poorly graded SAND with Silt, fine to medium sand; 15% silt, lignite laminae, iron nodules
336							
338							
340		42 J	5 J		SM		Light brownish gray (10YR 6/2) Silty SAND, medium Sand, little fine sand, 25% silt; iron concretion, black lignite streaks
342							
344					SM-CL		Light brownish gray (10YR 6/2) Silty SAND with an interbedded pinkish gray clay lens
346							
348							
350					CL		Gray (7.5YR 6/1) Lean CLAY
352							
354					CL		Black (10YR 2/1) Lean Clay
356							
358							
360		<1 U	<1 U		SC		Light yellowish brown (10YR 6/4) Clayey SAND, fine to medium Sand, 30% clay
362							

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 7 of 15



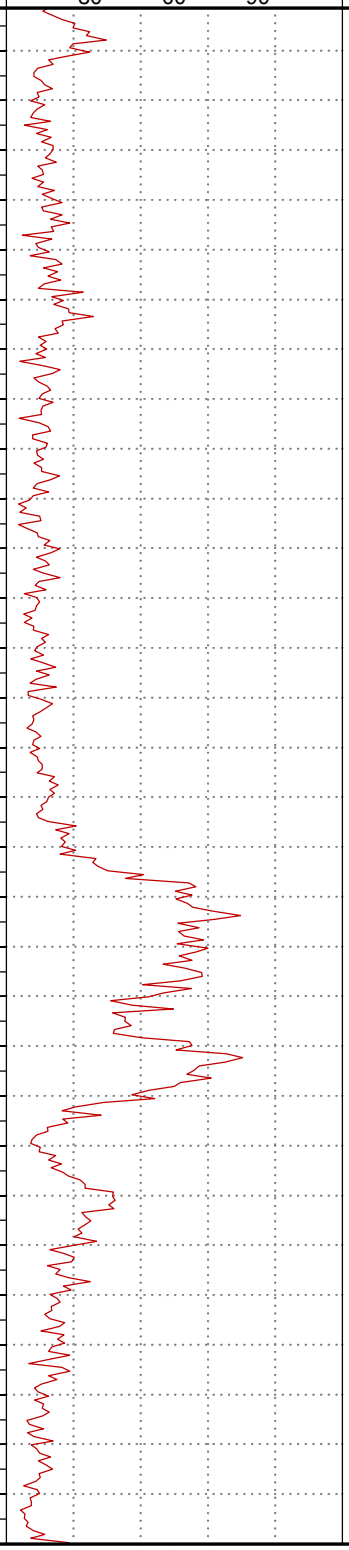
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
364				Magothy	SP-SM		Light yellowish brown (10YR 6/4) poorly graded SAND with Silt
366							
368							
370					SP-SM		Light yellowish brown (10YR 6/4) poorly graded SAND with Silt, fine to medium sand, less than 10% silt
372							
374					SP-SM		Light yellowish brown (10YR 6/4) poorly graded SAND, fine to medium Sand
376							
378							
380		67	7.4				
382							
384					SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, fine to medium Sand, thin interbedded clay lens
386							
388							
390					SP		Pale brown (10YR 6/3) poorly graded SAND, fine to medium Sand, muscovite flakes
392							
394					SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, 10% fines (silt), interbedded clay lens
396							
398							
400					SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, fine to medium subangular Sand, interbedded lignite and clay laminae
402							
404		61	7.7		SP-SM		Yellowish brown (10YR 5/4) poorly graded SAND with Silt, subangular fine to medium Sand, interbedded lignite and gray clay laminae
406							
408							
410					SP-SM		Light brownish gray (10YR 6/2) poorly graded SAND with Silt, subangular micaceous fine to medium Sand, 15% silt
412							
414					SM		Light brownish gray (10YR 6/2) Silty SAND, subangular fine to medium Sand, lignite laminae
416							
418							
420		31	3.3		SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, fine to medium Sand, lignite seams
422							
424					SM-CL		

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 8 of 15



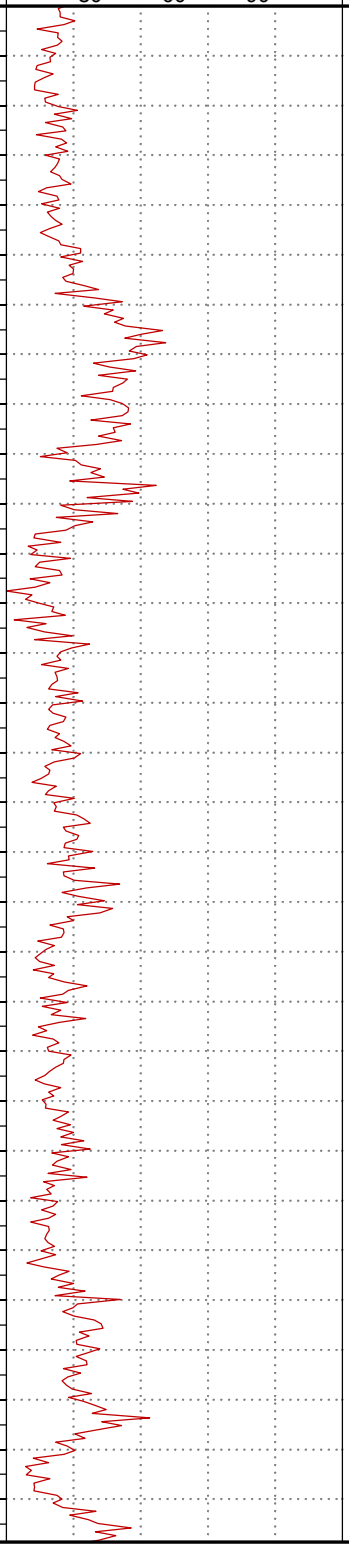
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
426				Magothy	SM-CL		Pale brown (10YR 6/3) Silty SAND; fine to medium Sand, interbedded light gray clay lenses, lignite laminae *(continued)*
428							
430							
432							
434					SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, fine to medium sand
436							
438							
440					SP-SM		Pale brown (10YR 6/3) poorly graded SAND with Silt, fine to medium sand, trace lignite, iron concretion, trace clay clumps
442							
444		10	1.8		SP-SM		Light yellowish brown (10YR 5/6) subangular fine to medium SAND, trace lignite seams
446							
448							
450					SP-SM		Light yellowish brown (10YR 5/6) subangular fine to medium SAND, trace lignite seams, one clump of clay indicative of clay lens
452							
454					SP-CL		Light yellowish brown (10YR 5/6) poorly graded SAND with Silt, subangular fine to coarse sand, interbedded clay seams
456							
458							
460		36	4.5		SM-CL		Light yellowish brown (10YR 5/6) Silty SAND, subangular fine to coarse SAND, interbedded lignite and clay seams
462							
464					CL		Gray (10YR 6/1) CLAY; clay interbedded with fine to medium Sand
466							
468							
470							
472							
474					SP		Light yellowish brown (10YR 5/6) poorly graded SAND, fine to medium Sand; iron concretion
476							
478							
480		35 J	3.2 J		SM-CL		Light yellowish brown (10YR 5/6) Silty SAND; fine to medium Sand, interbedded gray clay lenses
482							
484					SP-CL		Light yellowish brown (10YR 5/6) poorly graded SAND, fine to medium Sand, interbedded clay lens
486							

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 9 of 15

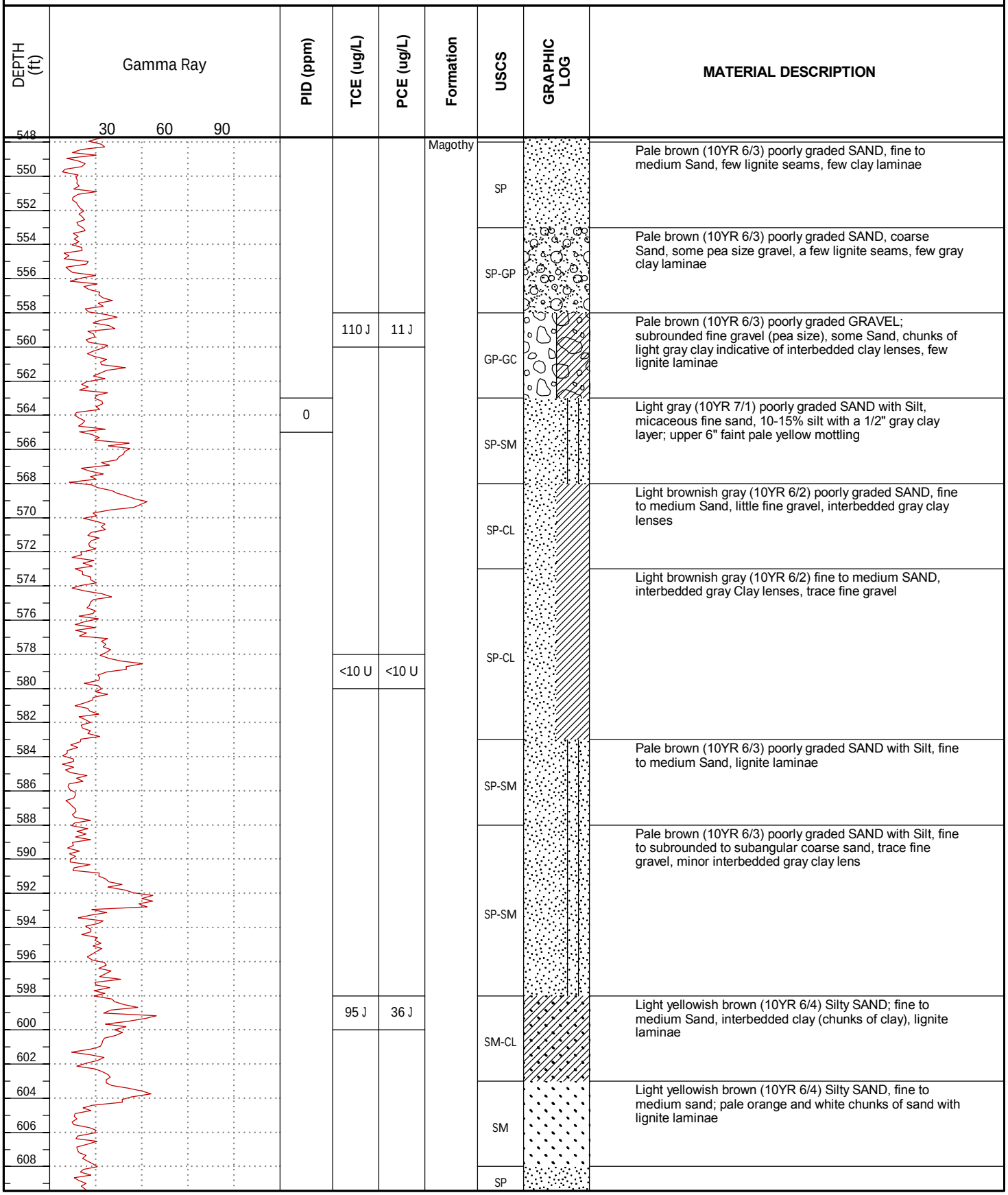


(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 10 of 15



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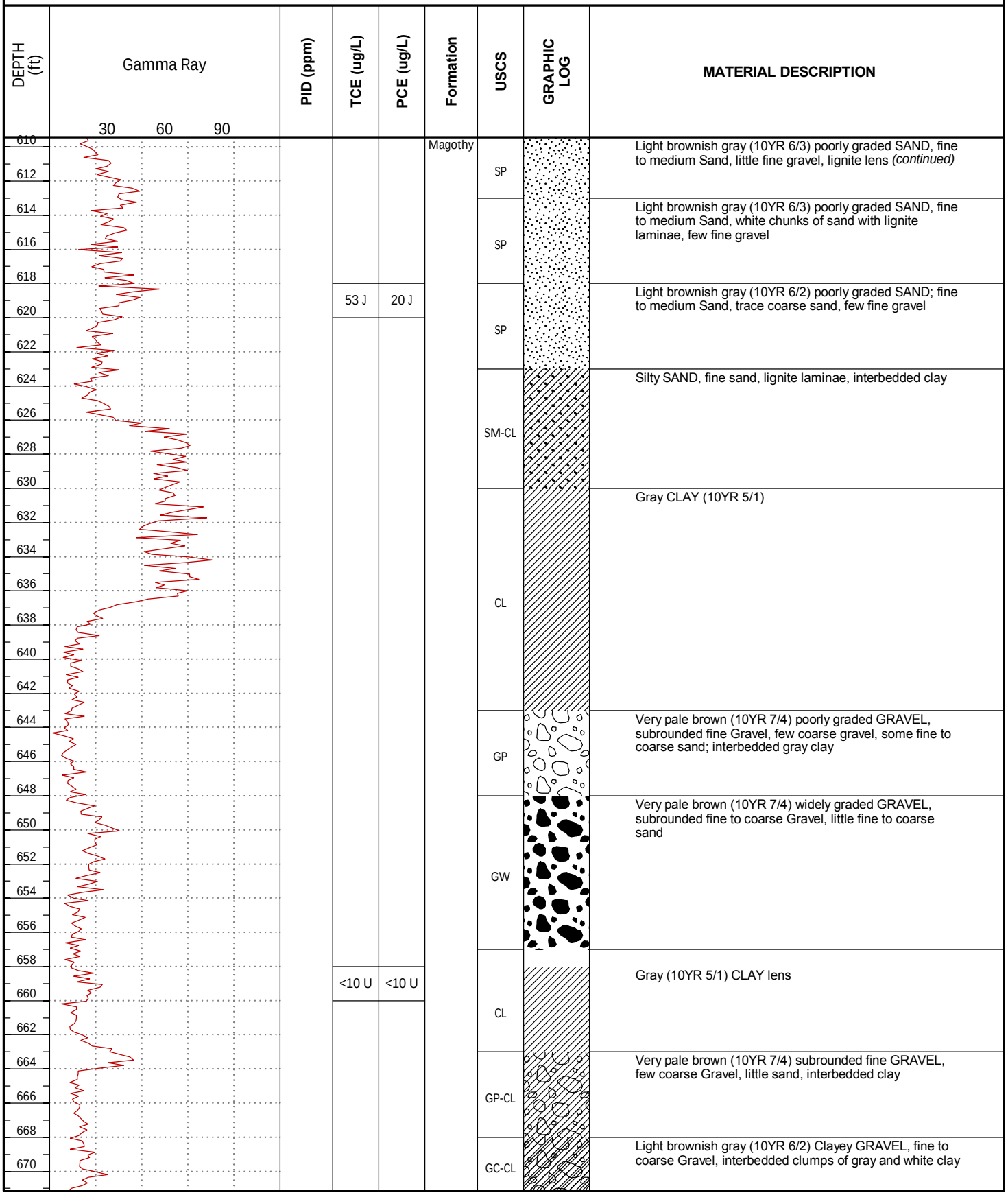
Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 11 of 15



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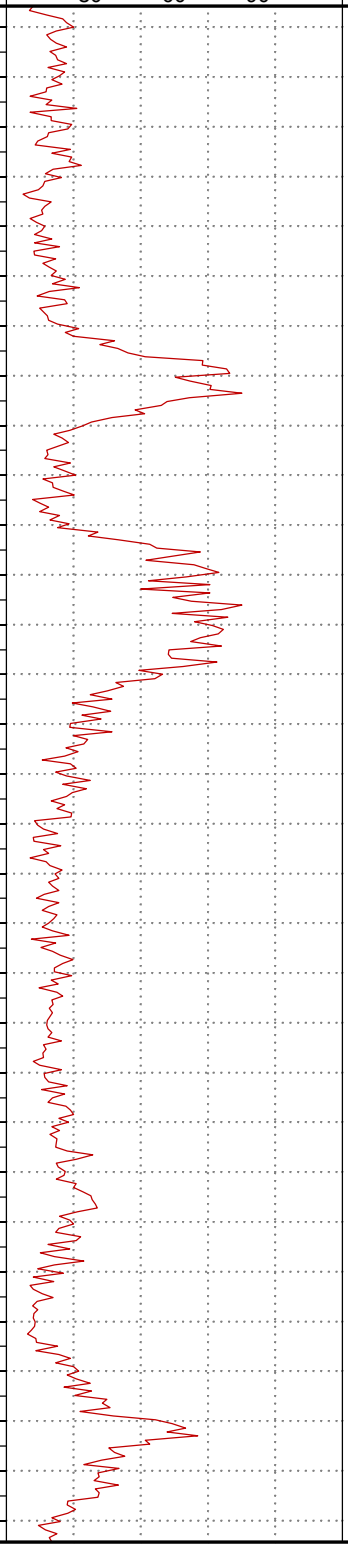
Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 12 of 15



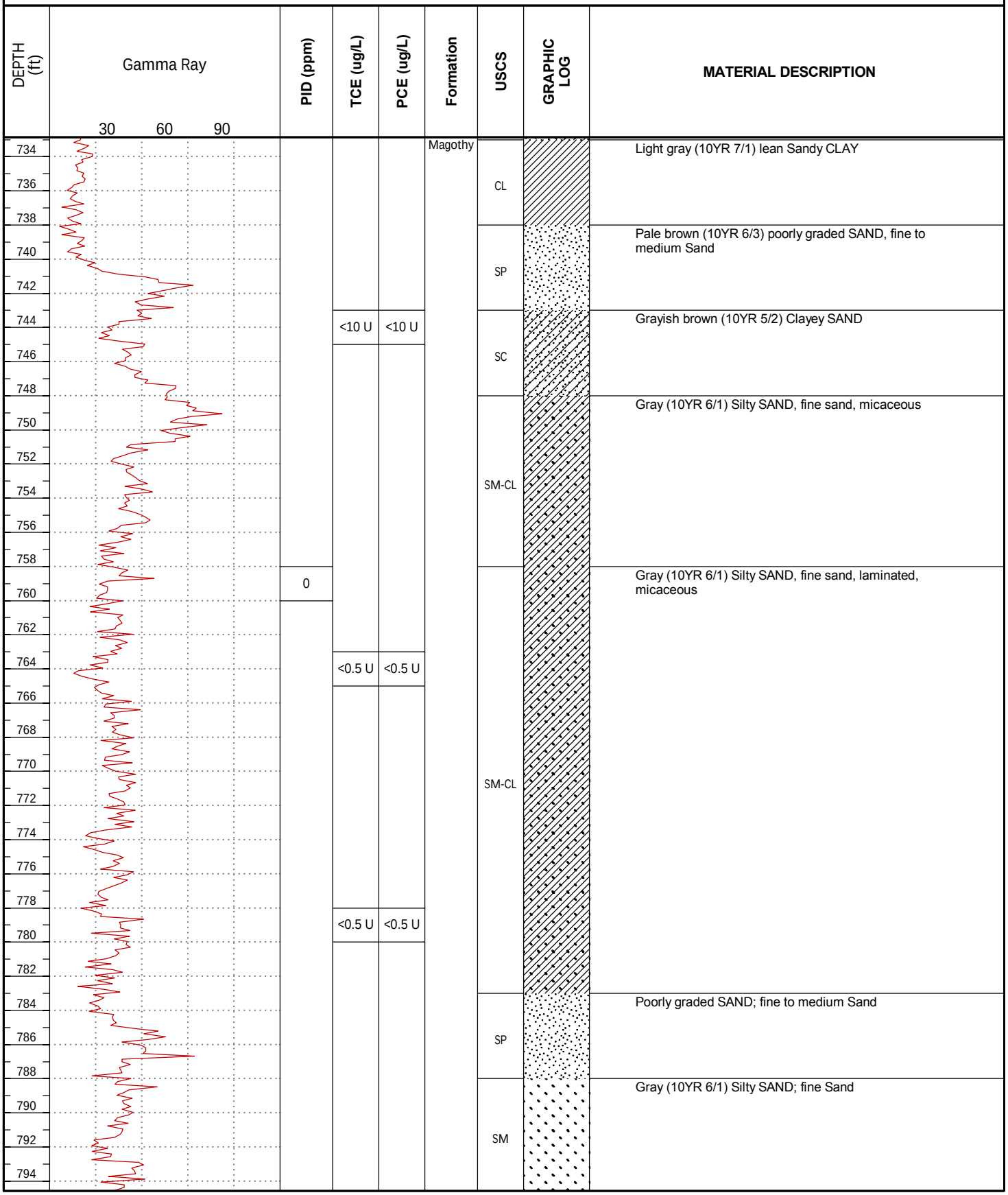
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
672				Magothy	GC-CL		Light brownish gray (10YR 6/2) Clayey GRAVEL, fine to coarse Gravel, interbedded clumps of gray and white clay *(continued)*
674							
676					GC-CL		Light brownish gray (10YR /2) Gravelly CLAY, fine to coarse gravel, some sand, interbedded clay
678							
680					GC-CL		Light brownish gray (10YR 6/2) Gravelly CLAY, fine gravel, interbedded clay
682							
684		9	9.5		GP-GC		Light brownish gray (10YR 6/2) poorly graded GRAVEL with Clay, subrounded fine gravel, several clumps of white clay possibly interbedded
686							
688					CL		Gray (10YR 5/1) CLAY lens
690					GC-CL		Light brownish gray (10YR 6/2) poorly graded GRAVEL with Clay, subrounded fine to coarse gravel, white, light gray clay (chunks)
692					CL		Gray (10YR 5/1) CLAY lens
694							Light brownish gray (10YR 6/2) poorly graded GRAVEL, fine Gravel, some fine to coarse sand, strips of white and gray clay, most likely interbedded
696					GC-CL		
698							
700		<5 U	<5 U		CL		Gray (10YR 5/1) CLAY
702							
704					CL		White (10YR 8/1) lean CLAY, few fine Gravel
706							
708					CL		Gray (10YR 6/1) lean CLAY, few medium to coarse Sand, few fine gravel
710							
712							
714					SP-SC		Light brownish gray (10YR 6/2) poorly graded SAND with Clay, fine to medium sand; clay nodules
716							
718							
720					SP-SC		Light brownish gray (10YR 6/2) poorly graded SAND with Clay, fine to medium sand; clay nodules, trace fine gravel
722							
724		<10 U	<10 U		SP-SC		Pale brown (10YR 6/3) poorly graded SAND with Clay, fine to coarse sand, few clay nodules (clumps)
726							
728							
730							
732							

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 13 of 15



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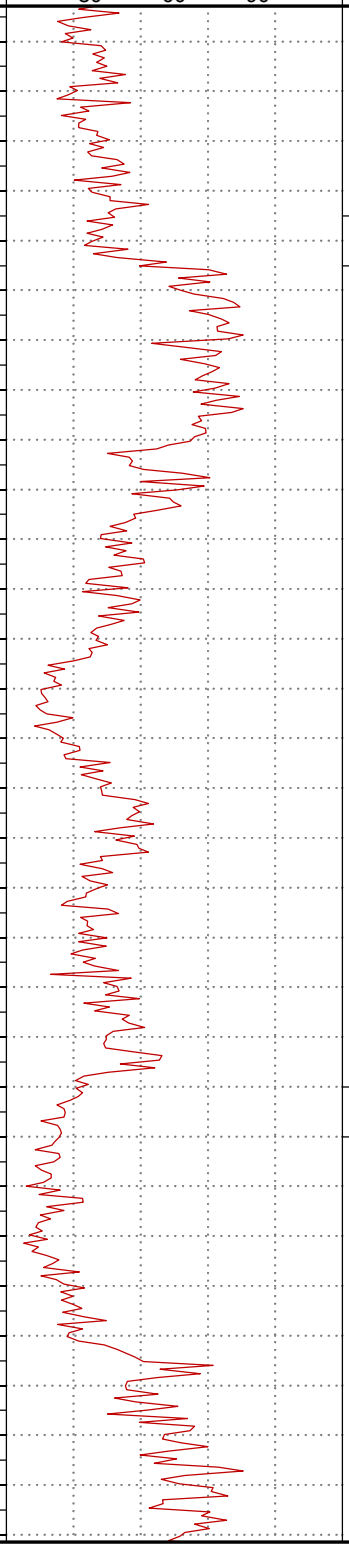
Boring Log

BORING #: **VPB168**
Sheet 14 of 15



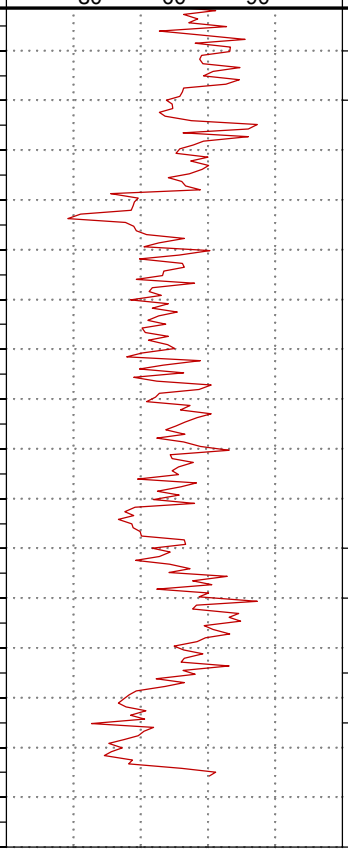
DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
796				Magothy	SM		Gray (10YR 6/1) Silty SAND; fine Sand *(continued)*
798							
800							
802							
804	0				SM		Gray (10YR 5/1) micaceous Silty SAND; fine Sand
806							
808							
810							
812							
814							
816							
818							
820		<20 U	<20 U				
822							
824					SM		Gray (10YR 6/1) Silty SAND, micaceous fine Sand
826							
828							
830					SM		Gray (10YR 6/1) Silty SAND, micaceous fine to medium Sand
832							
834					SM		Gray (10YR 6/1) Silty SAND, fine to medium Sand
836							
838							
840	0				SM		Gray (10YR 6/1) Silty SAND, fine to medium sand, trace coarse sand
842							
844					SP		Gray (10YR 6/1) poorly graded SAND, subangular medium to coarse Sand
846							
848							
850					SP		Gray (10YR 6/1) poorly graded SAND, medium to coarse Sand, pea size fine gravel
852							
854					CL		Dark gray (7.5YR 4/1) and black (7.5YR 2.5/1) CLAY
856							

(Continued Next Page)

Resolution Consultants

Boring Log

BORING #: **VPB168**
Sheet 15 of 15

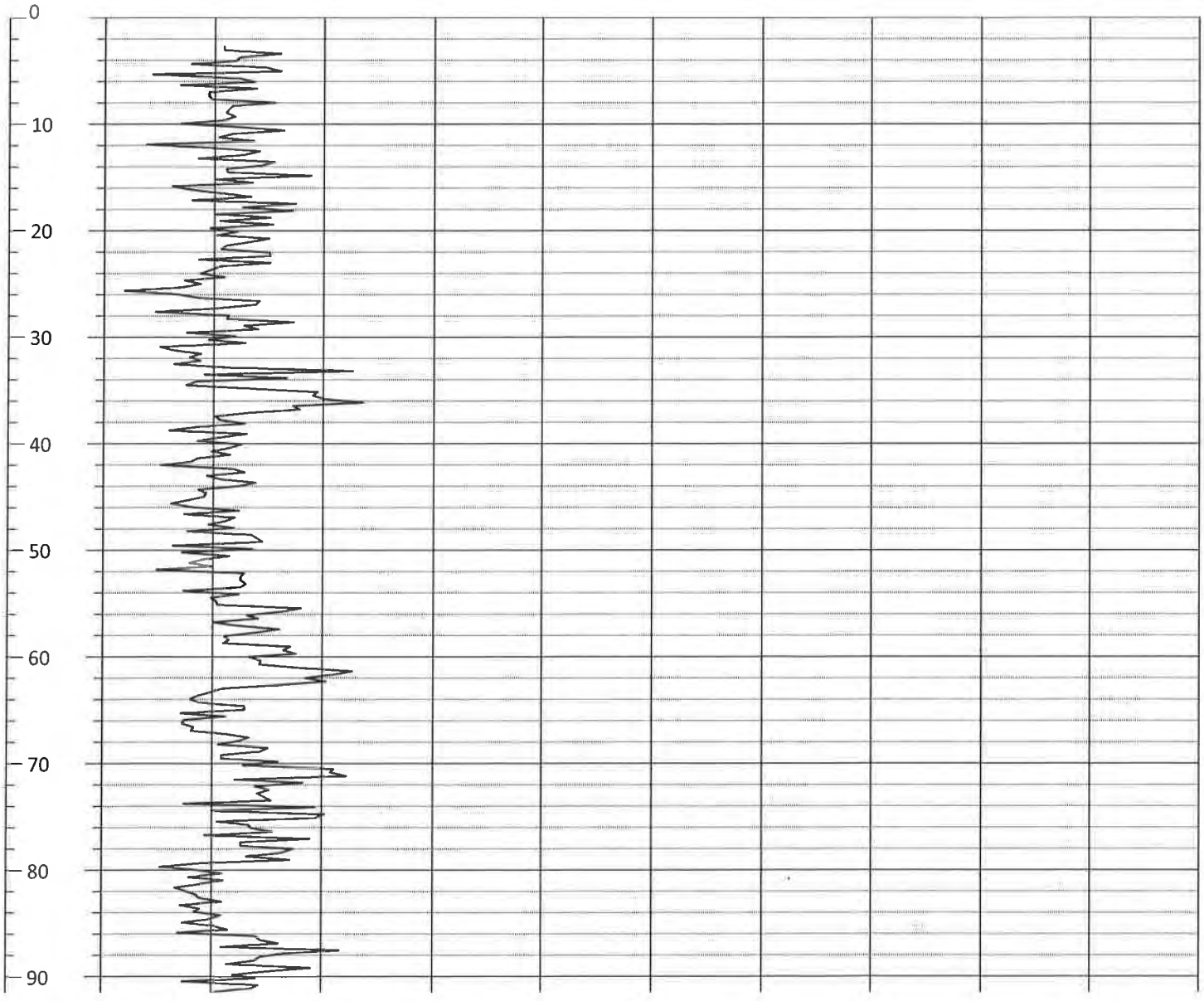


DEPTH (ft)	PID (ppm)	TCE (ug/L)	PCE (ug/L)	Formation	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION
858				Magothy	CL		Dark gray (7.5YR 4/1) and black (7.5YR 2.5/1) CLAY *(continued)*
860	0				CL		Black (7.5YR 2.5/1) CLAY, Lignite
862							
864					CL		Gray (10YR 5/1) lean CLAY and Lignite
866							
868							
870							
872							
874							
876							
878							
880	0			Raritan	CH		Black (10YR 2/1) CLAY
882							
884	0				CH		Red (10R 5/8) and gray (10YR 6/2) mottled fat CLAY
886							
888					CH		Red (10 R 5/8) fat CLAY
890							End of boring at 890.0 ft. bgs.

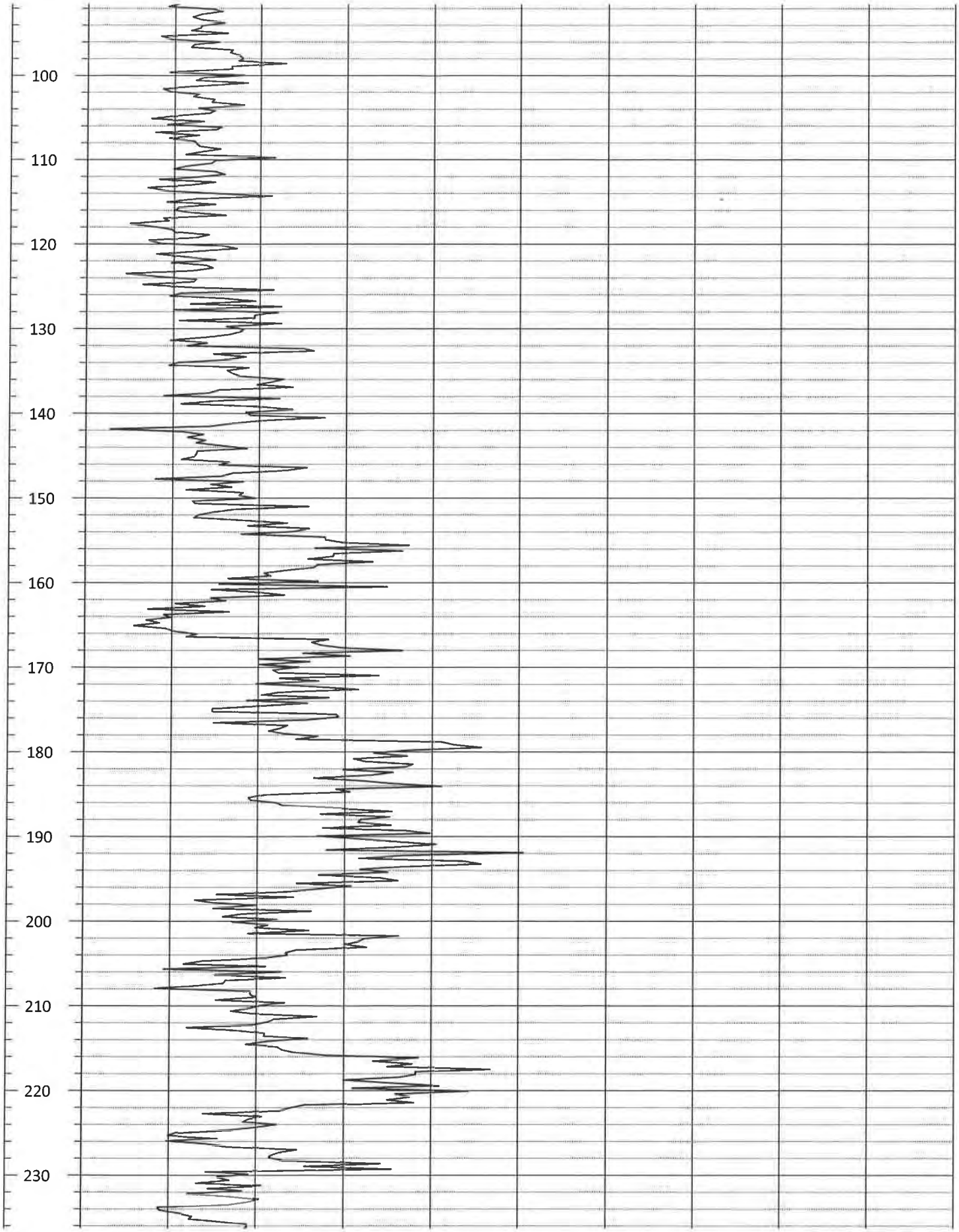
	COMPANY: DELTA WELL & PUMP CO., INC.
	LOCATION: LARK STREET

Well: VPB-168		Depth Driller:
		Depth Logger:
Date: 11/20/17	Time:	Logged by: CMO
File Name: 739		Witness: VAL

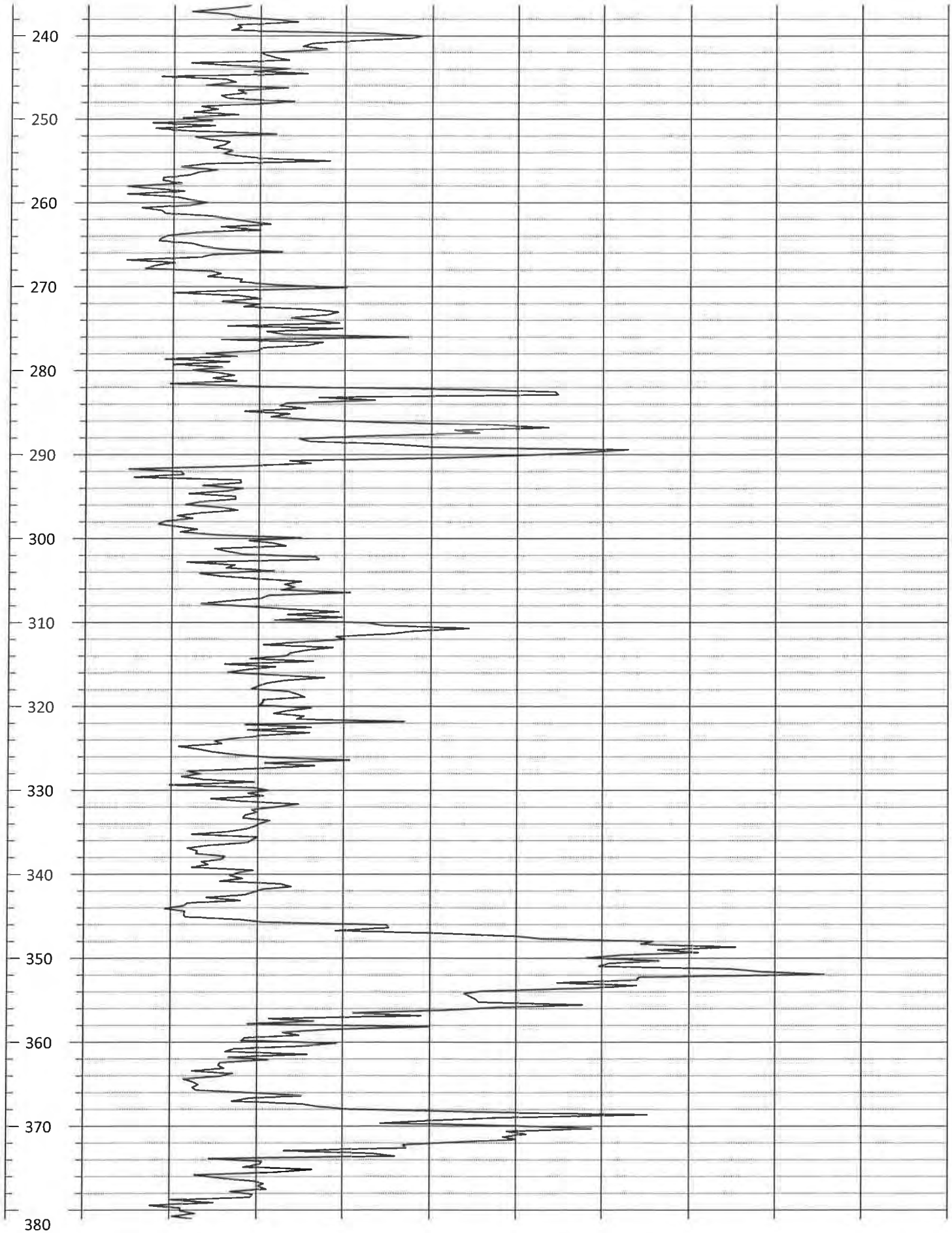
Depth (ft.)	GAMMA (cps)	
0.0		100.0



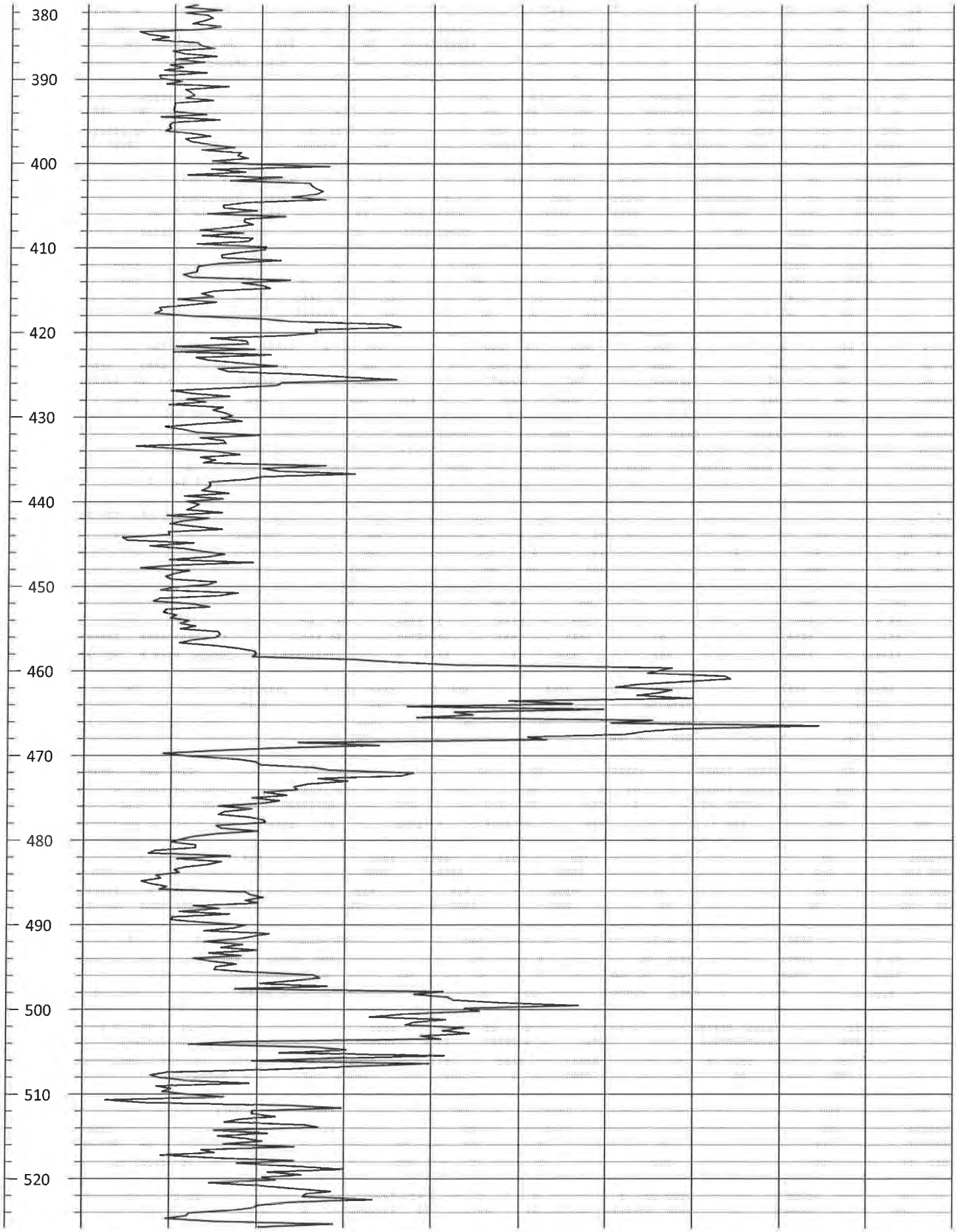
Depth (ft.)	GAMMA (cps)	
0.0		100.0



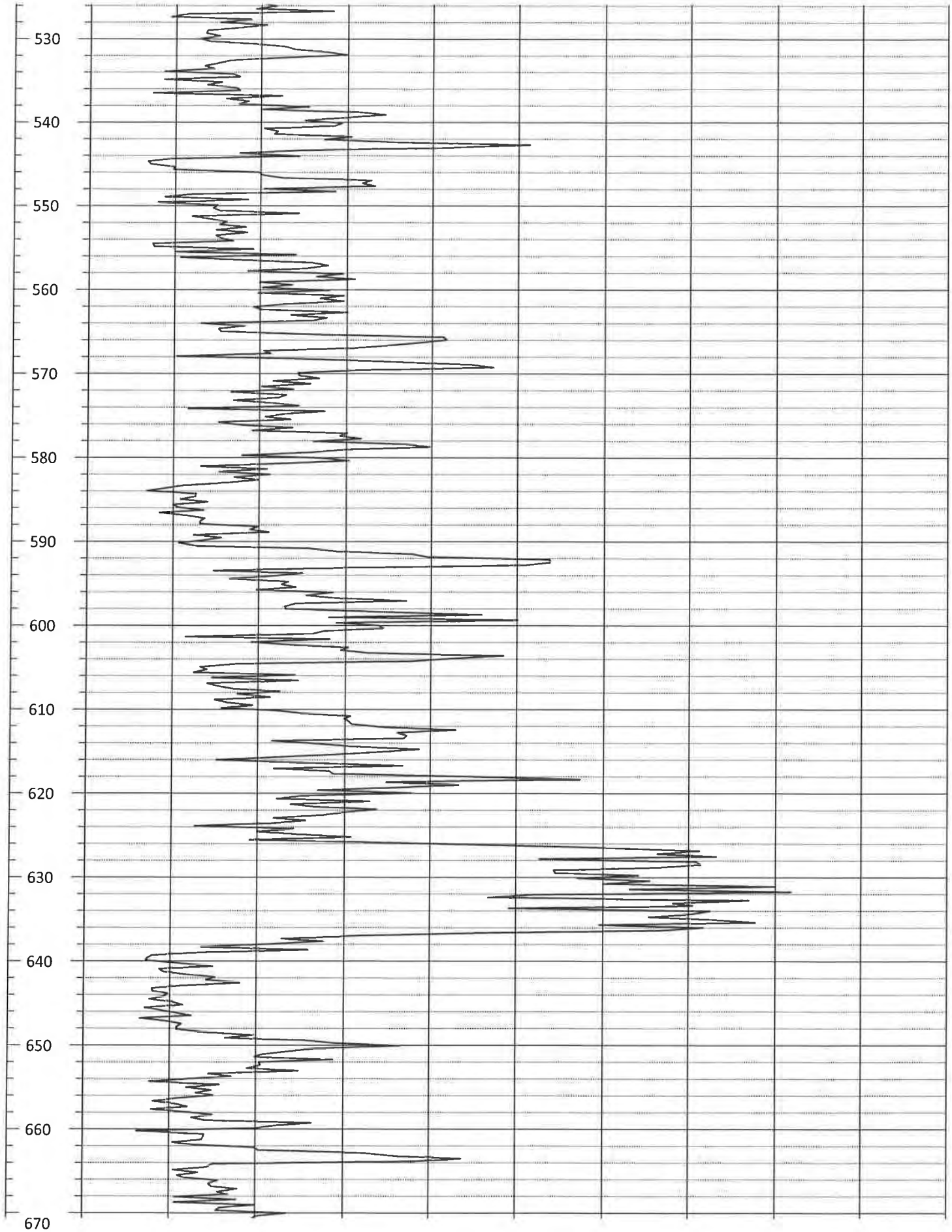
Depth (ft.)	0.0	GAMMA (cps)	100.0



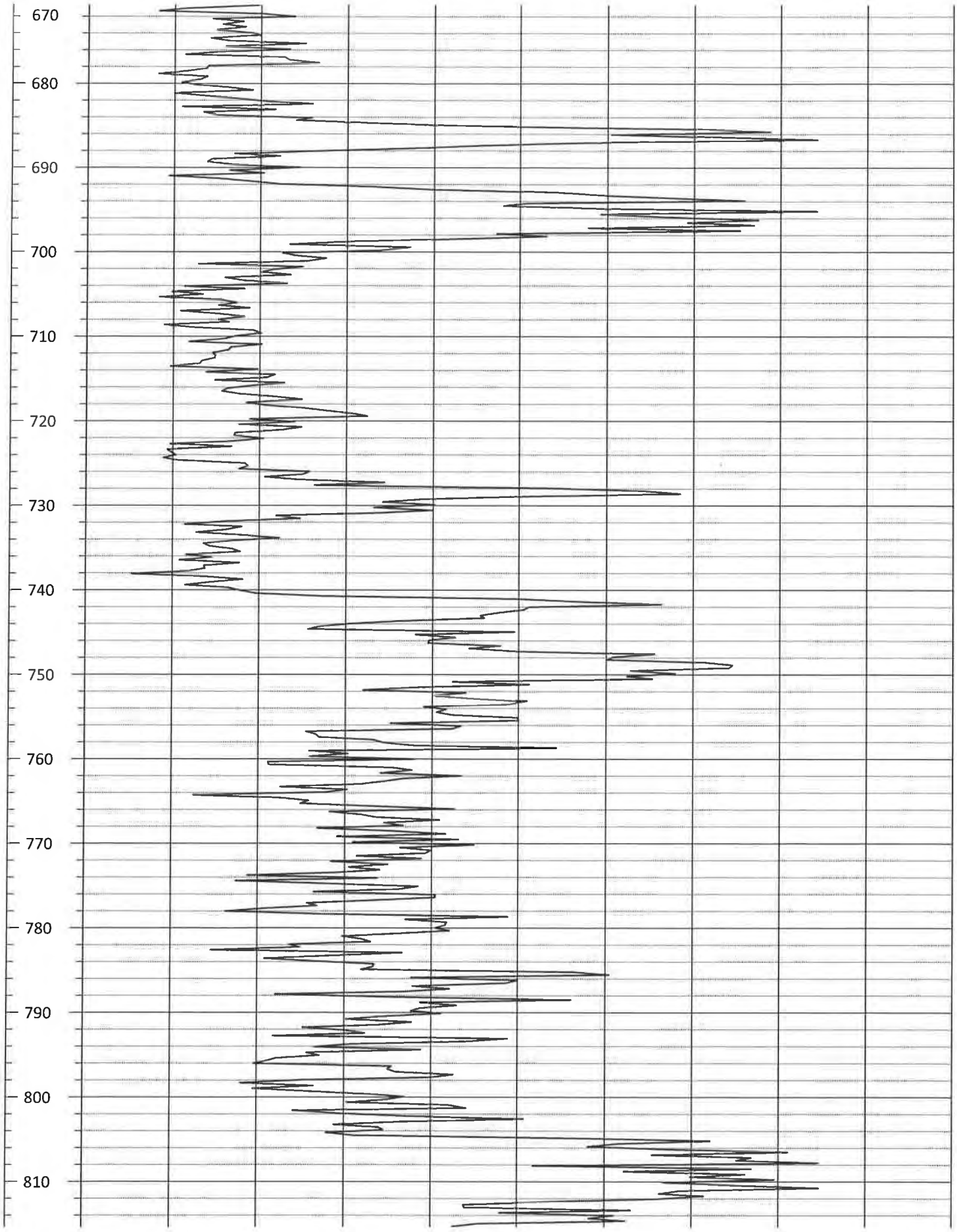
Depth (ft.)	0.0	GAMMA (cps)	100.0



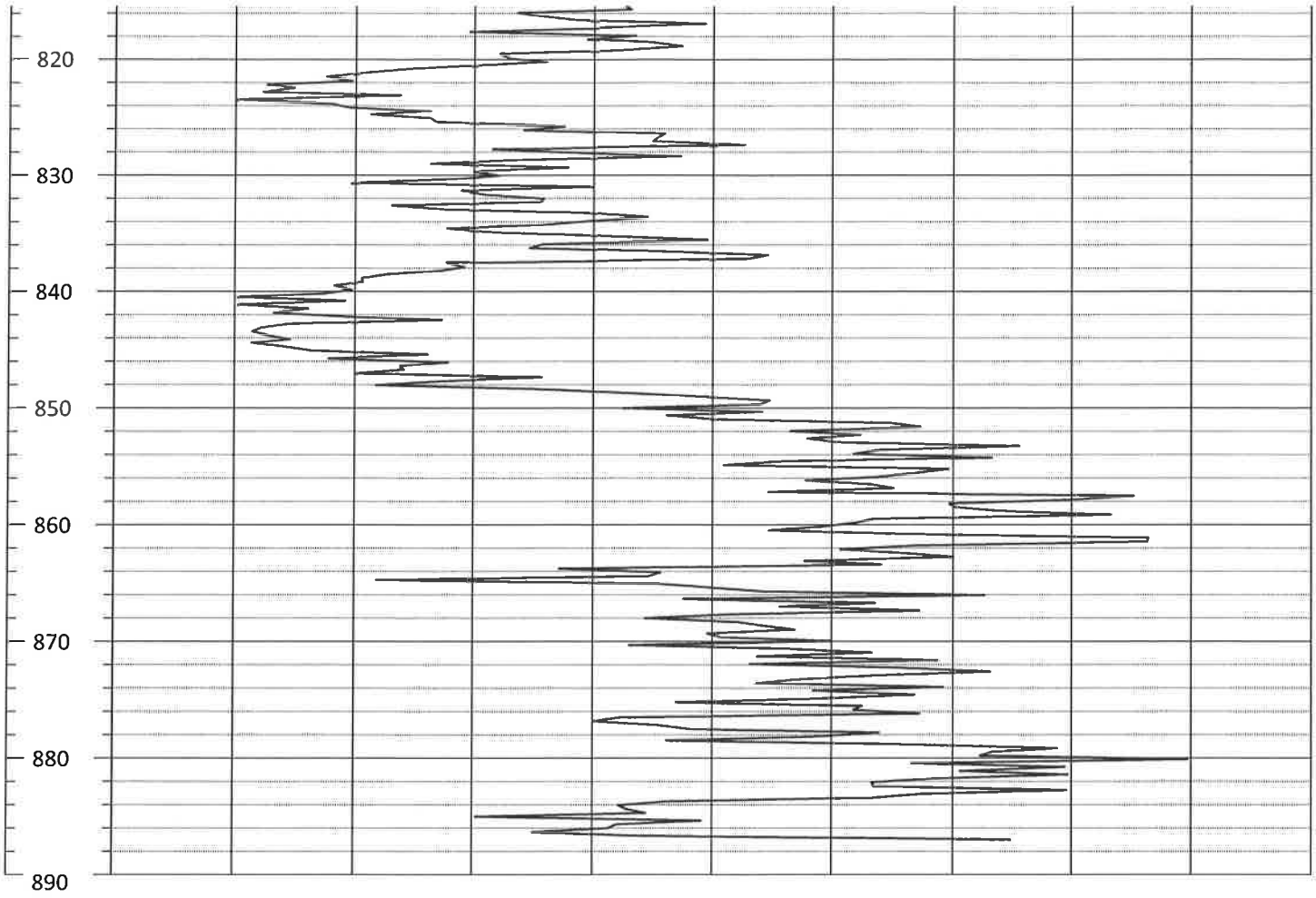
Depth (ft.)	0.0	GAMMA (cps)	100.0



Depth (ft.)	0.0	GAMMA (cps)	100.0



Depth (ft.)	0.0	GAMMA (cps)	100.0

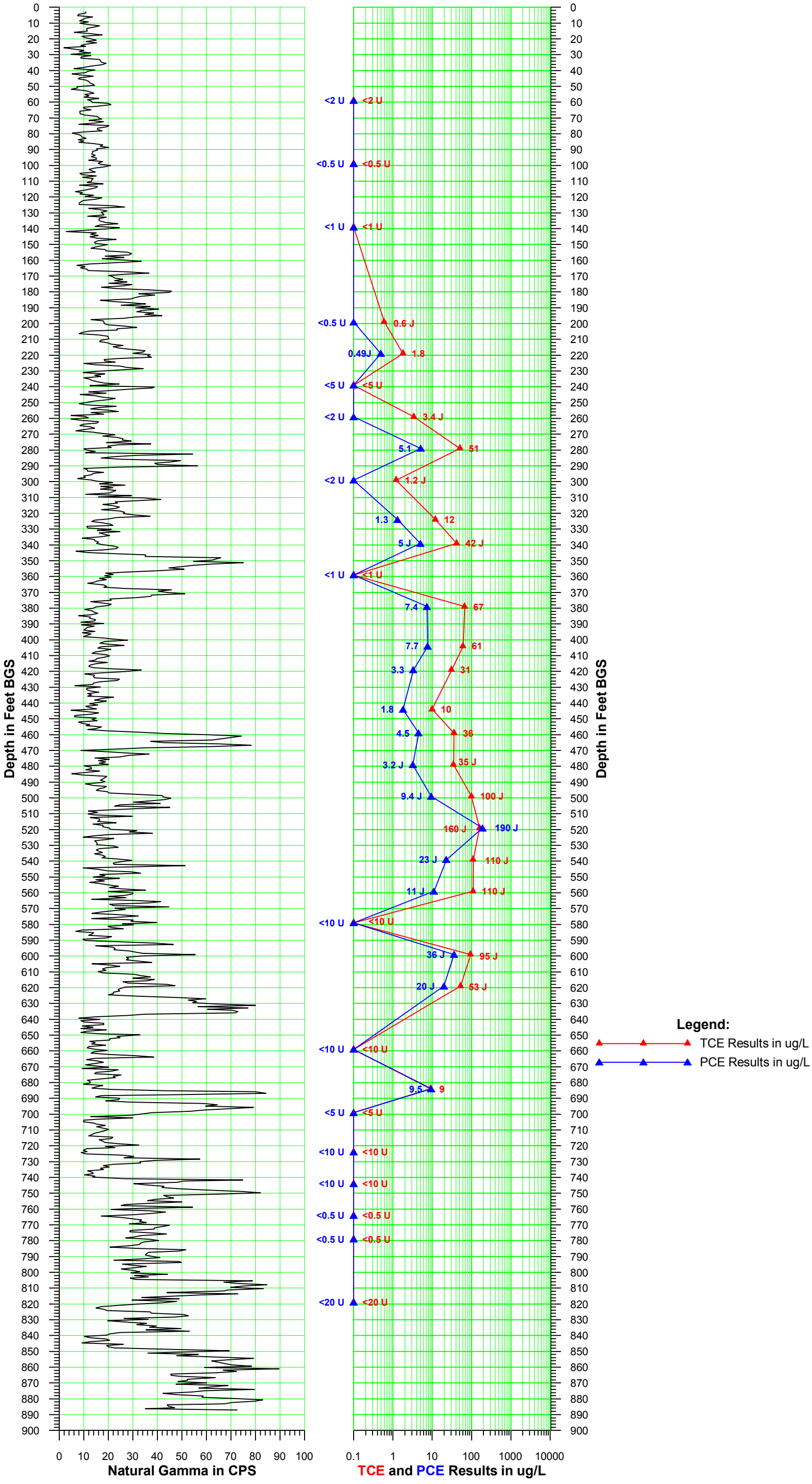


Depth (ft.)	0.0	GAMMA (cps)	100.0

Section 2

VPB168 Gamma and PCE/TCE Plot

Vertical Profile Boring VPB168
Downward Run - November 20, 2017
Validated Analytical Data



Section 3

VPB168 Groundwater Sample Log Sheets

HYDROPUNCH LOG: VPB168

VPB168	Project #60266526			Collector:				NWIRP Bethpage			
Sample date	Time	Temp (oC)	pH	Spec. Cond. (us/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Starting depth (ft)	Ending depth (ft)	Color	Comments
10/18/2017	14:35:00	21.1	7.12	470.6	2.43	14.7	127.4	58	60	brown	TB
10/19/2017	11:45:00	21.1	5.97	558	2.62	47.3	179.9	98	100	clear ot very pale yellow	
10/23/2017	10:15:00	20.2	6.86	484.0	3.28	23.7	148.9	138	140	yellowish orange	TB
10/23/2017			(no recovery)					158	160		
10/24/2017	9:45:00	20.2	7.03	457.7	2.15	19.6	1,100	198	200	clear to milky brown	MS/MSD, Dup
10/24/2017	12:00:00	20.6	6.41	260	5.85	33.3	74.63	218	220	clear to pale brown	
10/25/2017	11:45:00	(not enough sample for YSI)						238	240		no sample, poor recovery
10/25/2017	14:45:00	(no field parameters recorded)						258	260	milky brown	
10/26/2017	10:30:00	16.3	6.74	216.2	2.22	35.5	off-scale	278	280	brownish yellow	Dup
10/26/2017	12:30:00	(not enough sample for YSI)						298	300	brownish yellow	
10/26/2017	15:30:00	16.5	6.45	258.7	2.32	43.5	337.7	323	325	clear to pale brown	
10/27/2017	10:00:00	16.2	6.32	191.4	1.82	19.8	556	338	340	clear	TB
10/27/2017	12:30:00	17	6.58	366.5	0.2	-11.3	not collected	358	360	milky gray	
10/27/2017	14:45:00	17.7	5.47	131.4	3.4	124.9	447.5	378	380	clear	
10/30/2017	10:15:00		(no recovery)					398	400		
10/30/2017	13:30:00	na	6.91	112.0	8.70	242.6	698.6	403	405	clear	EB
10/31/2017	10:00:00	na	6.87	360.2	0.38	-352	off-scale	418	420	milky brown	TB
10/31/2017	12:45:00		(no recovery)					438	440		
10/31/2017	14:40:00	15.5	7.18	179.3	302	10.6	> 1,100	443	445		
11/1/2017	10:30:00	14.0	7.74	290.9	3.02	26.6	off-scale	458	460	milky opaque brown	
11/1/2017	12:45:00	15.0	7.70	11153.3	4.2	95.1	off-scale	478	480	milky opaque brown	
11/1/2017	15:00:00	15.0	7.40	179.1	3.26	35.19	off-scale	498	500	milky opaque brown	
11/2/2017	10:30:00	25.1	8.48	10.8	6.8	166	(not working)	518	520	pale brown	TB
11/2/2017	13:10:00	19.6	7.78	213.2	2.63	-98.1	(not working)	538	540	clear	
11/3/2017	10:30:00	(not enough sample for YSI)						558	560	pale gray	Soil from 563-565 (+EB)
11/3/2017	13:45:00	(not enough sample for YSI)						578	580	milky gray	
11/6/2017	11:00:00	17.0	7.79	128.1	5.47	34.9	41.06	598	600	clear	TB, Duplicate
11/6/2017	13:30:00	17.3	6.28	128.4	1.66	-96.2	1062	618	620	clear to pale brown	MS/MSD
11/7/2017	8:30:00		(no recovery)					643	645		
11/7/2017	12:30:00	10.9	8.57	710	--	-663.0	off-scale	658	660		TB
11/7/2017	15:00:00		(no recovery)					678	680		
11/8/2017	10:30:00	12.5	7.18	135.7	9.47	17.3	(not collected)	683	685	clear to opaque brown	
11/8/2017	13:00:00	14.5	6.66	606.5	0.19	6.4	off-scale	698	700	dark gray	
11/8/2017	14:20:00		(no recovery)					718	720		
11/9/2017	10:30:00	14.1	8.04	737	0.23	-319	off-scale	723	725	brown	TB, summa canister
11/13/2017	13:30:00	(drilling mud, no sample collected)						738	740		TB, EB, FB
11/13/2017	15:15:00	11.9	8.12	768	3.08	188.2	(not collected)	743	745	grayish brown	
11/14/2017	11:30:00	12.3	8.04	120.6	8.8	22.6	942.3	763	765	pale brown	TB
11/14/2017	14:45:00	(not enough sample for YSI, only 2 VOA vials)						778	780	Clean and clear	
11/15/2017	10:11:00		(no recovery)					798	800		
11/15/2017	15:15:00	(no field parameters recorded)						818	820		
11/16/2017	13:00:00		(no recovery)					843	845		

Section 4

VPB168 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:	BETHPAGE VPB168
Analyses/Method:	Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C and 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: 01/15/2018

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage Site on 18 October to 6 November 2017 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	Lab ID	Matrix/Sample Type	Analysis
VPB168-GW-101817-58-60	SK9810-2DL	Groundwater	8260C
VPB168-GW-101917-98-100	SK9810-3	Groundwater	8260C
VPB168-GW-102317-138-140	SK9920-2DL	Groundwater	8260C
VPB168-GW-102417-198-200	SK9920-3	Groundwater	8260C
VPB168-GW-102417-218-220	SK9920-4	Groundwater	8260C
VPB168-GW-102517-238-240	TK0045-2DL	Groundwater	8260C
VPB168-GW-102517-258-260	TK0045-3DL	Groundwater	8260C
VPB168-GW-D-102617	TK0045-4	Duplicate of VPB168-GW-102617-278-280	8260C
VPB168-GW-102617-278-280	TK0045-5	Groundwater	8260C
VPB168-GW-102617-323-325	TK0045-6	Groundwater	8260C
VPB168-GW-102617-298-300	TK0045-7DL	Groundwater	8260C
VPB168-GW-102717-378-380	TK0162-2	Groundwater	8260C
VPB168-GW-102717-338-340	TK0162-3	Groundwater	8260C

Sample ID	Lab ID	Matrix/Sample Type	Analysis
VPB168-GW-102717-358-360	TK0162-4DL	Groundwater	8260C
VPB168-GW-103017-403-405	TK0162-5RA	Groundwater	8260C
VPB168-GW-103117-418-420	TK0255-2DL	Groundwater	8260C
VPB168-GW-103117-443-445	TK0255-3	Groundwater	8260C
VPB168-GW-110117-458-460	TK0255-4DL	Groundwater	8260C
VPB168-GW-110117-478-480	TK0255-5	Groundwater	8260C
VPB168-GW-110117-498-500	TK0255-6	Groundwater	8260C
VPB168-GW-110217-518-520	TK0383-2DL	Groundwater	8260C
VPB168-GW-110217-538-540	TK0383-3DL	Groundwater	8260C
VPB168-GW-110317-558-560	TK0428-1	Groundwater	8260C
VPB168-SOIL-110317-563-565	TK0428-2	Soil	9060A
VPB168-GW-110317-578-580	TK0428-4DL	Groundwater	8260C
VPB168-GW-110617-598-600	TK0428-6DL	Groundwater	8260C
VPB168-FD-110617	TK0428-7DL	Duplicate of VPB168-GW-110617-598-600	8260C
VPB168-GW-110617-618-620	TK0428-8DL	Groundwater	8260C
VPB168-GW-110717-658-660	TK0537-2DL	Groundwater	8260C
VPB168-GW-110817-698-700	TK0537-3DL	Groundwater	8260C
VPB168-GW-110817-683-685	TK0537-4	Groundwater	8260C
VPB168-GW-110917-723-725	TK0592-2DL	Groundwater	8260C
VPB168-GW-111317-743-745	TK0758-4DL	Groundwater	8260C
VPB168-GW-111417-763-765	TK0866-1	Groundwater	8260C
VPB168-GW-111417-778-780	TK0866-2DL	Groundwater	8260C
VPB168-GW-111517-818-820	TK0866-3DL	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), *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically Method 9060A, Total Organic Carbon* (U.S. EPA, 1996), *Method SM5310B, Total Organic Carbon by High-Temperature Combustion, 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):

- ✓ Holding times and sample preservation
- ✓ Gas chromatography/Mass spectrometer performance checks
- ✓ Initial calibration (ICAL) /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

Laboratory Blanks/Equipment Blanks/ Field Blanks/Trip Blanks

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

Blank Non-conformance Charts:

For common lab contaminants (methylene chloride, acetone, 2-butanone):			
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 and ≤ 4x the LOQ	Report the sample result with a U**
		≥ 4x the LOQ	No qualifications
	> 2x LOQ	< LOD	Report sample LOD value with a U**
		≥ LOD and < 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. **
****Based on Resolution Consultants professional judgment**			

For all other compounds:			
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
LOD = Limit of detection
U = Undetected
R = Rejected

Surrogate Spike Recovery

Surrogates provide information needed to assess the accuracy of analyses. Known amounts of surrogate compounds, which are not likely to be found in the actual samples, are added to each organic sample to check for accuracy. If surrogate percent recoveries (%Rs) are close to the known

concentrations, the reported target compound concentrations are assumed to be accurate. Data qualification on the basis of surrogate recovery was as follows:

Surrogate Spike Recovery Non-Conformance Chart:

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

Notes:
%R = Percent recovery
RPD = Relative percent differences
J = Estimated value
UJ = Undetected and estimated

Matrix Spike/Matrix Spike Duplicate Results

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

Matrix Spike/Matrix Spike Duplicate Non-Conformances Chart:

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

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

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

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 A and Attachment B. Attachment C provides final results after data review.

ATTACHMENTS

Attachment A: Qualifier Codes and Explanations

Attachment B: Reason Codes and Explanations

Attachment C: Final Results after Data Review

Attachment A
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 B
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 C
Final Results after Data Review

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0428			TK0428		
			Sample Identification	VPB168-SOIL-110317-563-565			VPB168-EB-110317-563-565		
			Sample Date	11/3/2017			11/3/2017		
			Sample Type	N			EB		
			Matrix	SO			WQ		
Method	Analyte	CAS No	Units	Result	Qual	RC	Result	Qual	RC
2540G	TOTAL SOLIDS	-29	PCT	81			NA		
9060A	TOTAL ORGANIC CARBON	-28	UG_G	430	J		NA		
9060A	TOTAL ORGANIC CARBON	-28	MG_L	NA			0.5	U	bl

Notes:

PCT = Percent
UG_G = Micrograms per gram
MG_L = Milligrams per liter
NA = Not analyzed
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		SK9810		
		Sample Identification		VPB168-GW-101817-58-60		
		Sample Date		10/18/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	U	
8260C	2-BUTANONE	78-93-3	UG_L	10	U	
8260C	2-HEXANONE	591-78-6	UG_L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	U	
8260C	ACETONE	67-64-1	UG_L	10	U	
8260C	BENZENE	71-43-2	UG_L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	U	
8260C	BROMOFORM	75-25-2	UG_L	2	U	
8260C	BROMOMETHANE	74-83-9	UG_L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	2	U	
8260C	CHLOROETHANE	75-00-3	UG_L	4	U	
8260C	CHLOROFORM	67-66-3	UG_L	2	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	U	
8260C	METHYL ACETATE	79-20-9	UG_L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	U	
8260C	O-XYLENE	95-47-6	UG_L	2	U	
8260C	STYRENE	100-42-5	UG_L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	U	
8260C	TOLUENE	108-88-3	UG_L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	2	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		SK9810		
		Sample Identification		VPB168-GW-101917-98-100		
		Sample Date		10/19/2017		
		Sample Type		N		
		Matrix		WG		
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	23		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	SK9920		
			Sample Identification	VPB168-GW-102317-138-140		
			Sample Date	10/23/2017		
			Sample Type	N		
			Matrix	WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	U	
8260C	2-BUTANONE	78-93-3	UG_L	5	U	
8260C	2-HEXANONE	591-78-6	UG_L	5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	U	
8260C	ACETONE	67-64-1	UG_L	8.7	J	
8260C	BENZENE	71-43-2	UG_L	1	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	U	
8260C	BROMOFORM	75-25-2	UG_L	1	U	
8260C	BROMOMETHANE	74-83-9	UG_L	2	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	1	U	
8260C	CHLOROETHANE	75-00-3	UG_L	2	U	
8260C	CHLOROFORM	67-66-3	UG_L	1	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	2	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	1	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	1	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	U	
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	U	
8260C	O-XYLENE	95-47-6	UG_L	1	U	
8260C	STYRENE	100-42-5	UG_L	1	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1	U	
8260C	TOLUENE	108-88-3	UG_L	1	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	1	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		SK9920		
		Sample Identification		VPB168-GW-102417-198-200		
		Sample Date		10/24/2017		
		Sample Type		N		
		Matrix		WG		
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	7.1		
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	0.37	J	
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	0.6	J	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		SK9920		
		Sample Identification		VPB168-GW-102417-218-220		
		Sample Date		10/24/2017		
		Sample Type		N		
		Matrix		WG		
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	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	0.37	J	
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	0.49	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	1.8		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0045		
		Sample Identification		VPB168-GW-102517-238-240		
		Sample Date		10/25/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	7.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	10	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	5	U	
8260C	2-BUTANONE	78-93-3	UG_L	25	U	
8260C	2-HEXANONE	591-78-6	UG_L	25	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	25	U	
8260C	ACETONE	67-64-1	UG_L	25	U	
8260C	BENZENE	71-43-2	UG_L	5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	5	U	
8260C	BROMOFORM	75-25-2	UG_L	5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	10	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	10	U	
8260C	CHLOROFORM	67-66-3	UG_L	5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	10	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	10	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	10	U	
8260C	METHYL ACETATE	79-20-9	UG_L	7.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	25	U	
8260C	O-XYLENE	95-47-6	UG_L	5	U	
8260C	STYRENE	100-42-5	UG_L	5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	5	U	
8260C	TOLUENE	108-88-3	UG_L	5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	10	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	10	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	15	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0045		
		Sample Identification		VPB168-GW-102517-258-260		
		Sample Date		10/25/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	U	
8260C	2-BUTANONE	78-93-3	UG_L	10	U	
8260C	2-HEXANONE	591-78-6	UG_L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	U	
8260C	ACETONE	67-64-1	UG_L	13	J	s
8260C	BENZENE	71-43-2	UG_L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	U	
8260C	BROMOFORM	75-25-2	UG_L	2	U	
8260C	BROMOMETHANE	74-83-9	UG_L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	2	U	
8260C	CHLOROETHANE	75-00-3	UG_L	4	U	
8260C	CHLOROFORM	67-66-3	UG_L	2	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	U	
8260C	METHYL ACETATE	79-20-9	UG_L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	U	
8260C	O-XYLENE	95-47-6	UG_L	2	U	
8260C	STYRENE	100-42-5	UG_L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	U	
8260C	TOLUENE	108-88-3	UG_L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	3.4	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0045		
			Sample Identification	VPB168-GW-102617-278-280		
			Sample Date	10/26/2017		
			Sample Type	N		
			Matrix	WG		
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	0.41	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	0.7	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	3.4	J	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.7	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	5.1		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	51		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0045		
			Sample Identification	VPB168-GW-102617-298-300		
			Sample Date	10/26/2017		
			Sample Type	N		
			Matrix	WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	2	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	2	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	2	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	2	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	2	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	2	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	3	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	2	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	2	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	2	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	2	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	2	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	2	U	
8260C	2-BUTANONE	78-93-3	UG_L	10	U	
8260C	2-HEXANONE	591-78-6	UG_L	10	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	10	U	
8260C	ACETONE	67-64-1	UG_L	11	J	
8260C	BENZENE	71-43-2	UG_L	2	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	2	U	
8260C	BROMOFORM	75-25-2	UG_L	2	U	
8260C	BROMOMETHANE	74-83-9	UG_L	4	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	2	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	2	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	2	U	
8260C	CHLOROETHANE	75-00-3	UG_L	4	U	
8260C	CHLOROFORM	67-66-3	UG_L	2	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	4	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	2	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	2	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	2	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	4	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	2	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	2	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	4	U	
8260C	METHYL ACETATE	79-20-9	UG_L	3	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	2	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	2	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	10	U	
8260C	O-XYLENE	95-47-6	UG_L	2	U	
8260C	STYRENE	100-42-5	UG_L	2	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	2	U	
8260C	TOLUENE	108-88-3	UG_L	2	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	2	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	2	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	1.2	J	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	4	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	4	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	6	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0045		
		Sample Identification		VPB168-GW-102617-323-325		
		Sample Date		10/26/2017		
		Sample Type		N		
		Matrix		WG		
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	28		
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	1.3		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	12		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0045		
		Sample Identification		VPB168-GW-D-102617		
		Sample Date		10/26/2017		
		Sample Type		FD		
		Matrix		WG		
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	0.39	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	0.77	J	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	3.8	J	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.77	J	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	4.8		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	50		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-GW-102717-338-340		
		Sample Date		10/27/2017		
		Sample Type		N		
		Matrix		WG		
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	0.58	J	s,l
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	4.4	J	s
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	0.58	J	s
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	5	J	s
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	42	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-GW-102717-358-360		
		Sample Date		10/27/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2	UJ	I
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	U	
8260C	2-BUTANONE	78-93-3	UG_L	5	U	
8260C	2-HEXANONE	591-78-6	UG_L	5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	U	
8260C	ACETONE	67-64-1	UG_L	5.7	J	
8260C	BENZENE	71-43-2	UG_L	1	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	U	
8260C	BROMOFORM	75-25-2	UG_L	1	U	
8260C	BROMOMETHANE	74-83-9	UG_L	2	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	1	U	
8260C	CHLOROETHANE	75-00-3	UG_L	2	U	
8260C	CHLOROFORM	67-66-3	UG_L	1	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	2	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	1	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	1	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	U	
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	U	
8260C	O-XYLENE	95-47-6	UG_L	1	U	
8260C	STYRENE	100-42-5	UG_L	1	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1	U	
8260C	TOLUENE	108-88-3	UG_L	1	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	1	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-GW-102717-378-380		
		Sample Date		10/27/2017		
		Sample Type		N		
		Matrix		WG		
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	0.86	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	1.3	J	I
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	5.8		
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	0.47	J	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.3		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	7.4		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	67		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-GW-103017-403-405		
		Sample Date		10/30/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	4.8		
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.46	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1.8	J	I
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	0.64	J	
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	3.3		
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1.8		
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	7.7		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	61		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0255		
		Sample Identification		VPB168-GW-103117-418-420		
		Sample Date		10/31/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.9	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	U	
8260C	2-BUTANONE	78-93-3	UG_L	5	U	
8260C	2-HEXANONE	591-78-6	UG_L	5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	U	
8260C	ACETONE	67-64-1	UG_L	5.8	J	
8260C	BENZENE	71-43-2	UG_L	1	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	U	
8260C	BROMOFORM	75-25-2	UG_L	1	U	
8260C	BROMOMETHANE	74-83-9	UG_L	2	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	1	U	
8260C	CHLOROETHANE	75-00-3	UG_L	2	U	
8260C	CHLOROFORM	67-66-3	UG_L	1	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	2	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	1	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	1	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	U	
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	U	
8260C	O-XYLENE	95-47-6	UG_L	1	U	
8260C	STYRENE	100-42-5	UG_L	1	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	3.3		
8260C	TOLUENE	108-88-3	UG_L	1	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	31		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0255		
		Sample Identification		VPB168-GW-103117-443-445		
		Sample Date		10/31/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	1.8		
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	10		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0255		
		Sample Identification		VPB168-GW-110117-458-460		
		Sample Date		11/1/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	1	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	1	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	1.4	J	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	1	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	1	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	1	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	1	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	1.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	1	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	1	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	1	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	1	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	1	U	
8260C	2-BUTANONE	78-93-3	UG_L	5	U	
8260C	2-HEXANONE	591-78-6	UG_L	5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	5	U	
8260C	ACETONE	67-64-1	UG_L	5	U	
8260C	BENZENE	71-43-2	UG_L	1	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	1	U	
8260C	BROMOFORM	75-25-2	UG_L	1	U	
8260C	BROMOMETHANE	74-83-9	UG_L	2	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	1	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	1	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	1	U	
8260C	CHLOROETHANE	75-00-3	UG_L	2	U	
8260C	CHLOROFORM	67-66-3	UG_L	1	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	2	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	1	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	1	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	1	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	1	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	2	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	1	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	1	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	2	U	
8260C	METHYL ACETATE	79-20-9	UG_L	1.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	1	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	1	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	5	U	
8260C	O-XYLENE	95-47-6	UG_L	1	U	
8260C	STYRENE	100-42-5	UG_L	1	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	4.5		
8260C	TOLUENE	108-88-3	UG_L	1	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	1	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	1	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	36		
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	2	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	2	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	3	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0255		
		Sample Identification		VPB168-GW-110117-478-480		
		Sample Date		11/1/2017		
		Sample Type		N		
		Matrix		WG		
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	0.49	J	s
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	0.49	J	s
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	3.2	J	s
8260C	TOLUENE	108-88-3	UG_L	14	J	s
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	35	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0255		
		Sample Identification		VPB168-GW-110117-498-500		
		Sample Date		11/1/2017		
		Sample Type		N		
		Matrix		WG		
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	56	J	s
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	0.97	J	s
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.8	J	s
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	s
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.8	J	s
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	9.4	J	s
8260C	TOLUENE	108-88-3	UG_L	2.7	J	s
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	100	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0383		
		Sample Identification		VPB168-GW-110217-518-520		
		Sample Date		11/2/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.37	J	s
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	150	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.43	J	s
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.1	J	s
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4.2	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	3.9	J	s,l
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	0.36	J	s
8260C	CHLOROMETHANE	74-87-3	UG_L	0.7	J	s
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4.2	J	s
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	190	J	s
8260C	TOLUENE	108-88-3	UG_L	15	J	s
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	160	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	0.31	J	s
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0383		
			Sample Identification	VPB168-GW-110217-538-540		
			Sample Date	11/2/2017		
			Sample Type	N		
			Matrix	WG		
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	170	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.2	J	s
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4.1	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	3.5	J	s,l
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	0.42	J	s
8260C	CHLOROMETHANE	74-87-3	UG_L	0.37	J	s
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4.1	J	s
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	23	J	s
8260C	TOLUENE	108-88-3	UG_L	14	J	s
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	110	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	0.25	J	s
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0428		
		Sample Identification		VPB168-FD-110617		
		Sample Date		11/6/2017		
		Sample Type		FD		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.39	J	s
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	740	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	3.5	J	s
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	0.56	J	s
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.7	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1.3	J	s
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	2.3	J	s
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	12	J	s,l
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	2.2	J	s
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.7	J	s
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.26	J	s
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	35	J	s
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	92	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	0.26	J	s
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0428		
		Sample Identification		VPB168-GW-110317-558-560		
		Sample Date		11/3/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	21	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.33	J	s
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.78	J	s
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	4.5	J	s
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	3	J	s
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	13	J	s,l
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	3	J	s
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	0.45	J	s
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	bf
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	4.5	J	s
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.26	J	s
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	11	J	s
8260C	TOLUENE	108-88-3	UG_L	3.7	J	s
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	110	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0428		
		Sample Identification		VPB168-GW-110317-578-580		
		Sample Date		11/3/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	10	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	10	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	10	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	10	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	10	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	10	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	10	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	15	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	10	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	10	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	10	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	20	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	10	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	10	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	10	U	
8260C	2-BUTANONE	78-93-3	UG_L	50	U	
8260C	2-HEXANONE	591-78-6	UG_L	50	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	50	U	
8260C	ACETONE	67-64-1	UG_L	50	U	
8260C	BENZENE	71-43-2	UG_L	10	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	10	U	
8260C	BROMOFORM	75-25-2	UG_L	10	U	
8260C	BROMOMETHANE	74-83-9	UG_L	60	J	s
8260C	CARBON DISULFIDE	75-15-0	UG_L	10	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	10	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	10	U	
8260C	CHLOROETHANE	75-00-3	UG_L	20	U	
8260C	CHLOROFORM	67-66-3	UG_L	10	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	20	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	10	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	10	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	10	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	10	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	20	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	10	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	10	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	20	U	
8260C	METHYL ACETATE	79-20-9	UG_L	15	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	10	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	10	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	50	U	
8260C	O-XYLENE	95-47-6	UG_L	10	U	
8260C	STYRENE	100-42-5	UG_L	10	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	10	U	
8260C	TOLUENE	108-88-3	UG_L	11	J	s
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	10	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	10	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	10	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	20	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	20	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	30	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0428		
		Sample Identification		VPB168-GW-110617-598-600		
		Sample Date		11/6/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.43	J	s
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	770	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.31	J	s
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	3.4	J	s
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	0.69	J	s
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	2.6	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	1.4	J	s
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	2.3	J	s
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	s,l
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	0.37	J	s
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	2.6	J	s
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	0.25	J	s
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	36	J	s
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	95	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	0.27	J	s
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0428		
		Sample Identification		VPB168-GW-110617-618-620		
		Sample Date		11/6/2017		
		Sample Type		N		
		Matrix		WG		
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	520	J	s
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	2.2	J	s
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	0.48	J	s
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1.8	J	s
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.84	J	s
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	7.2	J	s,l
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	3	J	s
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	1.8	J	s
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	20	J	s
8260C	TOLUENE	108-88-3	UG_L	1.1	J	s
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	53	J	s
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0537		
			Sample Identification	VPB168-GW-110717-658-660		
			Sample Date	11/7/2017		
			Sample Type	N		
			Matrix	WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	10	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	10	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	10	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	10	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	10	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	10	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	10	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	15	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	10	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	10	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	10	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	20	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	10	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	10	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	10	U	
8260C	2-BUTANONE	78-93-3	UG_L	50	U	
8260C	2-HEXANONE	591-78-6	UG_L	50	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	50	U	
8260C	ACETONE	67-64-1	UG_L	50	U	
8260C	BENZENE	71-43-2	UG_L	10	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	10	U	
8260C	BROMOFORM	75-25-2	UG_L	10	U	
8260C	BROMOMETHANE	74-83-9	UG_L	20	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	10	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	10	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	10	U	
8260C	CHLOROETHANE	75-00-3	UG_L	20	U	
8260C	CHLOROFORM	67-66-3	UG_L	10	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	20	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	10	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	10	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	10	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	10	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	20	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	10	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	10	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	20	U	
8260C	METHYL ACETATE	79-20-9	UG_L	15	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	10	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	10	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	50	U	
8260C	O-XYLENE	95-47-6	UG_L	10	U	
8260C	STYRENE	100-42-5	UG_L	10	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	10	U	
8260C	TOLUENE	108-88-3	UG_L	37		
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	10	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	10	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	10	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	20	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	20	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	30	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0537		
		Sample Identification		VPB168-GW-110817-683-685		
		Sample Date		11/8/2017		
		Sample Type		N		
		Matrix		WG		
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	110		
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	0.62	J	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	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		
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	0.79	J	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1.1	J	
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	0.39	J	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	9.5		
8260C	TOLUENE	108-88-3	UG_L	4.3		
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	9		
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	J	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0537		
		Sample Identification		VPB168-GW-110817-698-700		
		Sample Date		11/8/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	7.5	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	10	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	5	U	
8260C	2-BUTANONE	78-93-3	UG_L	25	U	
8260C	2-HEXANONE	591-78-6	UG_L	25	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	25	U	
8260C	ACETONE	67-64-1	UG_L	25	U	
8260C	BENZENE	71-43-2	UG_L	5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	5	U	
8260C	BROMOFORM	75-25-2	UG_L	5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	10	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	10	U	
8260C	CHLOROFORM	67-66-3	UG_L	5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	10	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	10	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	10	U	
8260C	METHYL ACETATE	79-20-9	UG_L	7.5	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	25	U	
8260C	O-XYLENE	95-47-6	UG_L	5	U	
8260C	STYRENE	100-42-5	UG_L	5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	5	U	
8260C	TOLUENE	108-88-3	UG_L	35		
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	10	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	10	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	15	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0592		
		Sample Identification		VPB168-GW-110917-723-725		
		Sample Date		11/9/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	10	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	10	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	10	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	10	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	10	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	10	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	10	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	15	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	10	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	10	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	10	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	20	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	10	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	10	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	10	U	
8260C	2-BUTANONE	78-93-3	UG_L	50	U	
8260C	2-HEXANONE	591-78-6	UG_L	50	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	50	U	
8260C	ACETONE	67-64-1	UG_L	50	U	
8260C	BENZENE	71-43-2	UG_L	10	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	10	U	
8260C	BROMOFORM	75-25-2	UG_L	10	U	
8260C	BROMOMETHANE	74-83-9	UG_L	20	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	10	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	10	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	10	U	
8260C	CHLOROETHANE	75-00-3	UG_L	20	U	
8260C	CHLOROFORM	67-66-3	UG_L	10	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	20	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	10	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	10	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	10	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	10	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	20	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	10	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	10	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	20	U	
8260C	METHYL ACETATE	79-20-9	UG_L	15	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	10	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	10	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	50	U	
8260C	O-XYLENE	95-47-6	UG_L	10	U	
8260C	STYRENE	100-42-5	UG_L	10	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	10	U	
8260C	TOLUENE	108-88-3	UG_L	11	J	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	10	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	10	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	10	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	20	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	20	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	30	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0758		
		Sample Identification		VPB168-GW-111317-743-745		
		Sample Date		11/13/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	10	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	10	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	10	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	10	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	10	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	10	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	10	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	15	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	10	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	10	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	10	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	20	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	10	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	10	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	10	U	
8260C	2-BUTANONE	78-93-3	UG_L	50	U	
8260C	2-HEXANONE	591-78-6	UG_L	50	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	50	U	
8260C	ACETONE	67-64-1	UG_L	50	U	
8260C	BENZENE	71-43-2	UG_L	10	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	10	U	
8260C	BROMOFORM	75-25-2	UG_L	10	U	
8260C	BROMOMETHANE	74-83-9	UG_L	20	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	10	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	10	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	10	U	
8260C	CHLOROETHANE	75-00-3	UG_L	20	U	
8260C	CHLOROFORM	67-66-3	UG_L	10	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	20	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	10	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	10	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	10	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	10	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	20	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	10	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	10	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	20	U	
8260C	METHYL ACETATE	79-20-9	UG_L	15	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	10	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	10	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	50	U	
8260C	O-XYLENE	95-47-6	UG_L	10	U	
8260C	STYRENE	100-42-5	UG_L	10	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	10	U	
8260C	TOLUENE	108-88-3	UG_L	21		
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	10	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	10	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	10	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	20	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	20	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	30	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0866		
		Sample Identification		VPB168-GW-111417-763-765		
		Sample Date		11/14/2017		
		Sample Type		N		
		Matrix		WG		
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	2.4	J	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.71	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	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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0866		
		Sample Identification		VPB168-GW-111417-778-780		
		Sample Date		11/14/2017		
		Sample Type		N		
		Matrix		WG		
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	5.1		
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	25		
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	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	0.32	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	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	180		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0866		
		Sample Identification		VPB168-GW-111517-818-820		
		Sample Date		11/15/2017		
		Sample Type		N		
		Matrix		WG		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	20	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	20	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	20	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	20	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	20	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	20	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	20	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	30	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	20	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	20	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	20	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	40	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	20	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	20	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	20	U	
8260C	2-BUTANONE	78-93-3	UG_L	100	U	
8260C	2-HEXANONE	591-78-6	UG_L	100	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	100	U	
8260C	ACETONE	67-64-1	UG_L	100	U	
8260C	BENZENE	71-43-2	UG_L	20	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	20	U	
8260C	BROMOFORM	75-25-2	UG_L	20	U	
8260C	BROMOMETHANE	74-83-9	UG_L	40	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	20	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	20	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	20	U	
8260C	CHLOROETHANE	75-00-3	UG_L	40	U	
8260C	CHLOROFORM	67-66-3	UG_L	20	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	40	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	20	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	20	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	20	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	20	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	40	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	20	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	20	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	40	U	
8260C	METHYL ACETATE	79-20-9	UG_L	30	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	20	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	20	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	100	U	
8260C	O-XYLENE	95-47-6	UG_L	20	U	
8260C	STYRENE	100-42-5	UG_L	20	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	20	U	
8260C	TOLUENE	108-88-3	UG_L	11	J	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	20	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	20	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	20	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	40	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	40	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	60	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	SK9810		
			Sample Identification	VPB168-TB-101817		
			Sample Date	10/18/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	SK9920		
			Sample Identification	VPB168-TB-102317		
			Sample Date	10/23/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0045		
			Sample Identification	VPB168-TB-102517		
			Sample Date	10/25/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-EB-103017-403-405		
		Sample Date		10/30/2017		
		Sample Type		EB		
		Matrix		WQ		
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	UJ	I
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

		Sample Delivery Group		TK0162		
		Sample Identification		VPB168-TB-102717		
		Sample Date		10/27/2017		
		Sample Type		TB		
		Matrix		WQ		
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	UJ	I
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0255		
			Sample Identification	VPB168-TB-103117		
			Sample Date	10/31/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0383		
			Sample Identification	VPB168-TB-110217		
			Sample Date	11/2/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0428		
			Sample Identification	VPB168-TB-110617		
			Sample Date	11/6/2017		
			Sample Type	TB		
			Matrix	WQ		
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	2.3	J	s
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	0.39	J	s
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0537		
			Sample Identification	VPB168-TB-110717		
			Sample Date	11/7/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0592		
			Sample Identification	VPB168-TB-110917		
			Sample Date	11/9/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0758		
			Sample Identification	VPB168-EB-111317-743-745		
			Sample Date	11/13/2017		
			Sample Type	EB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	3.9	J	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0758		
			Sample Identification	VPB168-FB-111317		
			Sample Date	11/13/2017		
			Sample Type	FB		
			Matrix	WQ		
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	0.76	J	
8260C	BROMOFORM	75-25-2	UG_L	1.2		
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	1.3		
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 A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0758		
			Sample Identification	VPB168-TB-111317		
			Sample Date	11/13/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

Final Results after Data Review
NWIRP Bethpage OU 2 Regional Groundwater Investigation

			Sample Delivery Group	TK0866		
			Sample Identification	VPB168-TB-111417		
			Sample Date	11/14/2017		
			Sample Type	TB		
			Matrix	WQ		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
8260C	1,1,1-TRICHLOROETHANE	71-55-6	UG_L	0.5	U	
8260C	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_L	0.5	U	
8260C	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_L	0.5	U	
8260C	1,1,2-TRICHLOROETHANE	79-00-5	UG_L	0.5	U	
8260C	1,1-DICHLOROETHANE	75-34-3	UG_L	0.5	U	
8260C	1,1-DICHLOROETHENE	75-35-4	UG_L	0.5	U	
8260C	1,2,4-TRICHLOROBENZENE	120-82-1	UG_L	0.5	U	
8260C	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	UG_L	0.75	U	
8260C	1,2-DIBROMOETHANE	106-93-4	UG_L	0.5	U	
8260C	1,2-DICHLOROBENZENE	95-50-1	UG_L	0.5	U	
8260C	1,2-DICHLOROETHANE	107-06-2	UG_L	0.5	U	
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0	UG_L	1	U	
8260C	1,2-DICHLOROPROPANE	78-87-5	UG_L	0.5	U	
8260C	1,3-DICHLOROBENZENE	541-73-1	UG_L	0.5	U	
8260C	1,4-DICHLOROBENZENE	106-46-7	UG_L	0.5	U	
8260C	2-BUTANONE	78-93-3	UG_L	2.5	U	
8260C	2-HEXANONE	591-78-6	UG_L	2.5	U	
8260C	4-METHYL-2-PENTANONE	108-10-1	UG_L	2.5	U	
8260C	ACETONE	67-64-1	UG_L	2.5	U	
8260C	BENZENE	71-43-2	UG_L	0.5	U	
8260C	BROMODICHLOROMETHANE	75-27-4	UG_L	0.5	U	
8260C	BROMOFORM	75-25-2	UG_L	0.5	U	
8260C	BROMOMETHANE	74-83-9	UG_L	1	U	
8260C	CARBON DISULFIDE	75-15-0	UG_L	0.5	U	
8260C	CARBON TETRACHLORIDE	56-23-5	UG_L	0.5	U	
8260C	CHLOROBENZENE	108-90-7	UG_L	0.5	U	
8260C	CHLOROETHANE	75-00-3	UG_L	1	U	
8260C	CHLOROFORM	67-66-3	UG_L	0.5	U	
8260C	CHLOROMETHANE	74-87-3	UG_L	1	U	
8260C	CIS-1,2-DICHLOROETHENE	156-59-2	UG_L	0.5	U	
8260C	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_L	0.5	U	
8260C	CYCLOHEXANE	110-82-7	UG_L	0.5	U	
8260C	DIBROMOCHLOROMETHANE	124-48-1	UG_L	0.5	U	
8260C	DICHLORODIFLUOROMETHANE	75-71-8	UG_L	1	U	
8260C	ETHYLBENZENE	100-41-4	UG_L	0.5	U	
8260C	ISOPROPYLBENZENE	98-82-8	UG_L	0.5	U	
8260C	M- AND P-XYLENE	108-38-3/106-42	UG_L	1	U	
8260C	METHYL ACETATE	79-20-9	UG_L	0.75	U	
8260C	METHYL CYCLOHEXANE	108-87-2	UG_L	0.5	U	
8260C	METHYL TERT-BUTYL ETHER	1634-04-4	UG_L	0.5	U	
8260C	METHYLENE CHLORIDE	75-09-2	UG_L	2.5	U	
8260C	O-XYLENE	95-47-6	UG_L	0.5	U	
8260C	STYRENE	100-42-5	UG_L	0.5	U	
8260C	TETRACHLOROETHENE	127-18-4	UG_L	0.5	U	
8260C	TOLUENE	108-88-3	UG_L	0.5	U	
8260C	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_L	0.5	U	
8260C	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_L	0.5	U	
8260C	TRICHLOROETHENE	79-01-6	UG_L	0.5	U	
8260C	TRICHLOROFLUOROMETHANE	75-69-4	UG_L	1	U	
8260C	VINYL CHLORIDE	75-01-4	UG_L	1	U	
8260C	XYLENES, TOTAL	1330-20-7	UG_L	1.5	U	

Notes:

UG_L = Micrograms per liter
Qual = Final qualifiers (See Attachment A)
RC = Reason codes (See Attachment B)

DATA VALIDATION REPORT

Project:	Regional Groundwater Investigation — NWIRP Bethpage
Laboratory:	Katahdin Analytical
Sample Delivery Group:	TK0598
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: 01/06/2018

SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 09 November 2017 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
VPB168-AIR-110917	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. 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.

Laboratory Blanks/Equipment Blanks/ Field Blanks/Trip Blanks

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

Blank Non-conformance Charts:

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

Blank type	Blank result	Sample result	Action for samples
Method, Storage, Trip,	Detects	Not detected	No qualification
			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
LOD	=	Limit of detection
U	=	Undetected
R	=	Rejected

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		TK0598		
		Lab Identification		TK0598-1		
		Sample Identification		VPB168-AIR-110917		
		Sample Date		11/9/2017		
		Sample Type		Air		
Method	**Analyte**	**CAS No**	**Units**	Result	Qual	RC
TO-15	1,1,1-TRICHLOROETHANE	71-55-6	UG_M3	0.27	U	
TO-15	1,1,2,2-TETRACHLOROETHANE	79-34-5	UG_M3	0.34	U	
TO-15	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76-13-1	UG_M3	0.73	J	
TO-15	1,1,2-TRICHLOROETHANE	79-00-5	UG_M3	0.27	U	
TO-15	1,1-DICHLOROETHANE	75-34-3	UG_M3	0.2	U	
TO-15	1,1-DICHLOROETHENE	75-35-4	UG_M3	0.2	U	
TO-15	1,2,4-TRICHLOROBENZENE	120-82-1	UG_M3	0.27	J	bl
TO-15	1,2-DIBROMOETHANE	106-93-4	UG_M3	0.38	U	
TO-15	1,2-DICHLOROBENZENE	95-50-1	UG_M3	0.3	U	
TO-15	1,2-DICHLOROETHANE	107-06-2	UG_M3	0.077	J	
TO-15	1,2-DICHLOROPROPANE	78-87-5	UG_M3	0.23	U	
TO-15	1,3-DICHLOROBENZENE	541-73-1	UG_M3	0.3	U	
TO-15	1,4-DICHLOROBENZENE	106-46-7	UG_M3	0.3	U	
TO-15	2-BUTANONE	78-93-3	UG_M3	0.38	J	
TO-15	2-HEXANONE	591-78-6	UG_M3	0.2	U	
TO-15	4-METHYL-2-PENTANONE	108-10-1	UG_M3	0.2	U	
TO-15	ACETONE	67-64-1	UG_M3	5.2		
TO-15	BENZENE	71-43-2	UG_M3	0.57		
TO-15	BROMODICHLOROMETHANE	75-27-4	UG_M3	0.33	U	
TO-15	BROMOFORM	75-25-2	UG_M3	0.52	U	
TO-15	BROMOMETHANE	74-83-9	UG_M3	0.19	U	
TO-15	CARBON DISULFIDE	75-15-0	UG_M3	0.12	J	bl
TO-15	CARBON TETRACHLORIDE	56-23-5	UG_M3	0.5	J	
TO-15	CHLOROBENZENE	108-90-7	UG_M3	0.23	U	
TO-15	CHLOROETHANE	75-00-3	UG_M3	0.13	U	
TO-15	CHLOROFORM	67-66-3	UG_M3	0.24	U	
TO-15	CHLOROMETHANE	74-87-3	UG_M3	0.89		
TO-15	CIS-1,2-DICHLOROETHENE	156-59-2	UG_M3	0.2	U	
TO-15	CIS-1,3-DICHLOROPROPENE	10061-01-5	UG_M3	0.23	U	
TO-15	CYCLOHEXANE	110-82-7	UG_M3	0.17	U	
TO-15	DIBROMOCHLOROMETHANE	124-48-1	UG_M3	0.42	U	
TO-15	DICHLORODIFLUOROMETHANE	75-71-8	UG_M3	2.9		
TO-15	ETHYLBENZENE	100-41-4	UG_M3	0.16	J	
TO-15	ISOPROPYLBENZENE	98-82-8	UG_M3	0.24	U	
TO-15	M- AND P-XYLENE	108-38-3/106-42	UG_M3	0.56	J	
TO-15	METHYL TERT-BUTYL ETHER	1634-04-4	UG_M3	0.18	U	
TO-15	METHYLENE CHLORIDE	75-09-2	UG_M3	1		
TO-15	O-XYLENE	95-47-6	UG_M3	0.19	J	
TO-15	STYRENE	100-42-5	UG_M3	0.21	U	
TO-15	TETRACHLOROETHENE	127-18-4	UG_M3	0.12	J	
TO-15	TOLUENE	108-88-3	UG_M3	1		
TO-15	TRANS-1,2-DICHLOROETHENE	156-60-5	UG_M3	0.2	U	
TO-15	TRANS-1,3-DICHLOROPROPENE	10061-02-6	UG_M3	0.23	U	
TO-15	TRICHLOROETHENE	79-01-6	UG_M3	0.27	U	
TO-15	TRICHLOROFLUOROMETHANE	75-69-4	UG_M3	1.8		
TO-15	VINYL CHLORIDE	75-01-4	UG_M3	0.13	U	
TO-15	XYLENES, TOTAL	1330-20-7	UG_M3	0.78	J	

Notes:
UG_M3 = Micrograms per cubic meter
Qual = Final qualifier
U = The analyte was analyzed for and not detected above the reported sample quantitation limit.
J = ***Estimated Value*** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.

Qualification Reason Codes:
bl = Lab blank contamination

Section 5

VPB168 Analytical Data Table

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		10/18/2017	10/19/2017	10/23/2017	10/24/2017
Sample ID		VPB168-GW-101817-58-60	VPB168-GW-101917-98-100	VPB168-GW-102317-138-140	VPB168-GW-102417-198-200
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,1,2-TRICHLOROETHANE	1	***<2 U***	<0.5 U	<1 U	<0.5 U
1,1-DICHLOROETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,1-DICHLOROETHENE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<3 U***	***<0.75 U***	***<1.5 U***	***<0.75 U***
1,2-DIBROMOETHANE	NL	<2 U	<0.5 U	<1 U	<0.5 U
1,2-DICHLOROBENZENE	3	<2 U	<0.5 U	<1 U	<0.5 U
1,2-DICHLOROETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	<4 U	<1 U	<2 U	<1 U
1,2-DICHLOROPROPANE	1	***<2 U***	<0.5 U	<1 U	<0.5 U
1,3-DICHLOROBENZENE	3	<2 U	<0.5 U	<1 U	<0.5 U
1,4-DICHLOROBENZENE	3	<2 U	<0.5 U	<1 U	<0.5 U
2-BUTANONE	50	<10 U	<2.5 U	<5 U	<2.5 U
2-HEXANONE	50	<10 U	<2.5 U	<5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<10 U	<2.5 U	<5 U	<2.5 U
ACETONE	50	<10 U	**23**	**8.7 J**	**7.1**
BENZENE	1	***<2 U***	<0.5 U	<1 U	<0.5 U
BROMODICHLOROMETHANE	50	<2 U	<0.5 U	<1 U	<0.5 U
BROMOFORM	50	<2 U	<0.5 U	<1 U	<0.5 U
BROMOMETHANE	5	<4 U	<1 U	<2 U	<1 U
CARBON DISULFIDE	60	<2 U	<0.5 U	<1 U	<0.5 U
CARBON TETRACHLORIDE	5	<2 U	<0.5 U	<1 U	<0.5 U
CHLOROBENZENE	5	<2 U	<0.5 U	<1 U	<0.5 U
CHLOROETHANE	5	<4 U	<1 U	<2 U	<1 U
CHLOROFORM	7	<2 U	<0.5 U	<1 U	**0.37 J**
CHLOROMETHANE	5	<4 U	<1 U	<2 U	<1 U
CIS-1,2-DICHLOROETHENE	5	<2 U	<0.5 U	<1 U	<0.5 U
CIS-1,3-DICHLOROPROPENE	0.4	***<2 U***	***<0.5 U***	***<1 U***	***<0.5 U***
CYCLOHEXANE	NL	<2 U	<0.5 U	<1 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<2 U	<0.5 U	<1 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<4 U	<1 U	<2 U	<1 U
ETHYLBENZENE	5	<2 U	<0.5 U	<1 U	<0.5 U
ISOPROPYLBENZENE	5	<2 U	<0.5 U	<1 U	<0.5 U
M- AND P-XYLENE	NL	<4 U	<1 U	<2 U	<1 U
METHYL ACETATE	NL	<3 U	<0.75 U	<1.5 U	<0.75 U
METHYL CYCLOHEXANE	NL	<2 U	<0.5 U	<1 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<2 U	<0.5 U	<1 U	<0.5 U
METHYLENE CHLORIDE	5	***<10 U***	<2.5 U	<5 U	<2.5 U
O-XYLENE	NL	<2 U	<0.5 U	<1 U	<0.5 U
STYRENE	5	<2 U	<0.5 U	<1 U	<0.5 U
TETRACHLOROETHENE	5	<2 U	<0.5 U	<1 U	<0.5 U
TOLUENE	5	<2 U	<0.5 U	<1 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<2 U	<0.5 U	<1 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	***<2 U***	***<0.5 U***	***<1 U***	***<0.5 U***
TRICHLOROETHENE	5	<2 U	<0.5 U	<1 U	**0.6 J**
TRICHLOROFLUOROMETHANE	5	<4 U	<1 U	<2 U	<1 U
VINYL CHLORIDE	2	***<4 U***	<1 U	<2 U	<1 U
XYLENES, TOTAL	5	***<6 U***	<1.5 U	<3 U	<1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		10/24/2017	10/25/2017	10/25/2017	10/26/2017
Sample ID		VPB168-GW-102417-218-220	VPB168-GW-102517-238-240	VPB168-GW-102517-258-260	VPB168-GW-D-102617
Sample type code		**N**	**N**	**N**	**FD**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,1,2-TRICHLOROETHANE	1	<0.5 U	***<5 U***	***<2 U***	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,1-DICHLOROETHENE	5	<0.5 U	<5 U	<2 U	**0.39 J**
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<7.5 U***	***<3 U***	***<0.75 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<5 U	<2 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	***<5 U***	<2 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	<1 U	***<10 U***	<4 U	**0.77 J**
1,2-DICHLOROPROPANE	1	<0.5 U	***<5 U***	***<2 U***	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	***<5 U***	<2 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	***<5 U***	<2 U	<0.5 U
2-BUTANONE	50	<2.5 U	<25 U	<10 U	<2.5 U
2-HEXANONE	50	<2.5 U	<25 U	<10 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<25 U	<10 U	<2.5 U
ACETONE	50	**2.8 J**	<25 U	**13 J**	**3.8 J**
BENZENE	1	<0.5 U	***<5 U***	***<2 U***	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<5 U	<2 U	<0.5 U
BROMOFORM	50	<0.5 U	<5 U	<2 U	<0.5 U
BROMOMETHANE	5	<1 U	***<10 U***	<4 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<5 U	<2 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	<5 U	<2 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<5 U	<2 U	<0.5 U
CHLOROETHANE	5	<1 U	***<10 U***	<4 U	<1 U
CHLOROFORM	7	**0.37 J**	<5 U	<2 U	<0.5 U
CHLOROMETHANE	5	<1 U	***<10 U***	<4 U	<1 U
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<5 U	<2 U	**0.77 J**
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<5 U***	***<2 U***	***<0.5 U***
CYCLOHEXANE	NL	<0.5 U	<5 U	<2 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<5 U	<2 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	***<10 U***	<4 U	<1 U
ETHYLBENZENE	5	<0.5 U	<5 U	<2 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<5 U	<2 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<10 U	<4 U	<1 U
METHYL ACETATE	NL	<0.75 U	<7.5 U	<3 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<5 U	<2 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<5 U	<2 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	***<25 U***	***<10 U***	<2.5 U
O-XYLENE	NL	<0.5 U	<5 U	<2 U	<0.5 U
STYRENE	5	<0.5 U	<5 U	<2 U	<0.5 U
TETRACHLOROETHENE	5	**0.49 J**	<5 U	<2 U	**4.8**
TOLUENE	5	<0.5 U	<5 U	<2 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<5 U	<2 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<5 U***	***<2 U***	***<0.5 U***
TRICHLOROETHENE	5	**1.8**	<5 U	**3.4 J**	**50**
TRICHLOROFLUOROMETHANE	5	<1 U	***<10 U***	<4 U	<1 U
VINYL CHLORIDE	2	<1 U	***<10 U***	***<4 U***	<1 U
XYLENES, TOTAL	5	<1.5 U	***<15 U***	***<6 U***	<1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		10/26/2017	10/26/2017	10/26/2017	10/27/2017
Sample ID		VPB168-GW-102617-278-280	VPB168-GW-102617-298-300	VPB168-GW-102617-323-325	VPB168-GW-102717-338-340
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1,2-TRICHLOROETHANE	1	<0.5 U	***<2 U***	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	**0.41 J**	<2 U	<0.5 U	<0.5 U
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<3 U***	***<0.75 U***	***<0.75 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	**0.7 J**	<4 U	<1 U	**0.58 J**
1,2-DICHLOROPROPANE	1	<0.5 U	***<2 U***	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<2 U	<0.5 U	<0.5 U
2-BUTANONE	50	<2.5 U	<10 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<10 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<10 U	<2.5 U	<2.5 U
ACETONE	50	**3.4 J**	**11 J**	**28**	**4.4 J**
BENZENE	1	<0.5 U	***<2 U***	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<2 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<2 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<4 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<2 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<4 U	<1 U	<1 U
CHLOROFORM	7	<0.5 U	<2 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	**0.7 J**	<2 U	<0.5 U	**0.58 J**
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<2 U***	***<0.5 U***	***<0.5 U***
CYCLOHEXANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<4 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<3 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<2 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	***<10 U***	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<2 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	**5.1**	<2 U	**1.3**	**5 J**
TOLUENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<2 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<2 U***	***<0.5 U***	***<0.5 U***
TRICHLOROETHENE	5	**51**	**1.2 J**	**12**	**42 J**
TRICHLOROFLUOROMETHANE	5	<1 U	<4 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	***<4 U***	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	***<6 U***	<1.5 U	<1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		10/27/2017	10/27/2017	10/30/2017	10/31/2017
Sample ID		VPB168-GW-102717-358-360	VPB168-GW-102717-378-380	VPB168-GW-103017-403-405	VPB168-GW-103117-418-420
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<1 U	<0.5 U	<0.5 U	<1 U
1,1,2,2-TETRACHLOROETHANE	5	<1 U	<0.5 U	<0.5 U	<1 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<1 U	**0.86 J**	**4.8**	**0.9 J**
1,1,2-TRICHLOROETHANE	1	<1 U	<0.5 U	<0.5 U	<1 U
1,1-DICHLOROETHANE	5	<1 U	<0.5 U	<0.5 U	<1 U
1,1-DICHLOROETHENE	5	<1 U	<0.5 U	**0.46 J**	<1 U
1,2,4-TRICHLOROBENZENE	5	<1 U	<0.5 U	<0.5 U	<1 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<1.5 U***	***<0.75 U***	***<0.75 U***	***<1.5 U***
1,2-DIBROMOETHANE	NL	<1 U	<0.5 U	<0.5 U	<1 U
1,2-DICHLOROBENZENE	3	<1 U	<0.5 U	<0.5 U	<1 U
1,2-DICHLOROETHANE	5	<1 U	<0.5 U	<0.5 U	<1 U
1,2-DICHLOROETHENE, TOTAL	5	<2 UJ	**1.3 J**	**1.8 J**	<2 U
1,2-DICHLOROPROPANE	1	<1 U	<0.5 U	<0.5 U	<1 U
1,3-DICHLOROBENZENE	3	<1 U	<0.5 U	<0.5 U	<1 U
1,4-DICHLOROBENZENE	3	<1 U	<0.5 U	<0.5 U	<1 U
2-BUTANONE	50	<5 U	<2.5 U	<2.5 U	<5 U
2-HEXANONE	50	<5 U	<2.5 U	<2.5 U	<5 U
4-METHYL-2-PENTANONE	NL	<5 U	<2.5 U	<2.5 U	<5 U
ACETONE	50	**5.7 J**	**5.8**	<2.5 U	**5.8 J**
BENZENE	1	<1 U	<0.5 U	<0.5 U	<1 U
BROMODICHLOROMETHANE	50	<1 U	<0.5 U	<0.5 U	<1 U
BROMOFORM	50	<1 U	<0.5 U	<0.5 U	<1 U
BROMOMETHANE	5	<2 U	<1 U	**0.64 J**	<2 U
CARBON DISULFIDE	60	<1 U	<0.5 U	<0.5 U	<1 U
CARBON TETRACHLORIDE	5	<1 U	<0.5 U	<0.5 U	<1 U
CHLOROBENZENE	5	<1 U	<0.5 U	<0.5 U	<1 U
CHLOROETHANE	5	<2 U	<1 U	<1 U	<2 U
CHLOROFORM	7	<1 U	**0.47 J**	**3.3**	<1 U
CHLOROMETHANE	5	<2 U	<1 U	<1 U	<2 U
CIS-1,2-DICHLOROETHENE	5	<1 U	**1.3**	**1.8**	<1 U
CIS-1,3-DICHLOROPROPENE	0.4	***<1 U***	***<0.5 U***	***<0.5 U***	***<1 U***
CYCLOHEXANE	NL	<1 U	<0.5 U	<0.5 U	<1 U
DIBROMOCHLOROMETHANE	5	<1 U	<0.5 U	<0.5 U	<1 U
DICHLORODIFLUOROMETHANE	5	<2 U	<1 U	<1 U	<2 U
ETHYLBENZENE	5	<1 U	<0.5 U	<0.5 U	<1 U
ISOPROPYLBENZENE	5	<1 U	<0.5 U	<0.5 U	<1 U
M- AND P-XYLENE	NL	<2 U	<1 U	<1 U	<2 U
METHYL ACETATE	NL	<1.5 U	<0.75 U	<0.75 U	<1.5 U
METHYL CYCLOHEXANE	NL	<1 U	<0.5 U	<0.5 U	<1 U
METHYL TERT-BUTYL ETHER	10	<1 U	<0.5 U	<0.5 U	<1 U
METHYLENE CHLORIDE	5	<5 U	<2.5 U	<2.5 U	<5 U
O-XYLENE	NL	<1 U	<0.5 U	<0.5 U	<1 U
STYRENE	5	<1 U	<0.5 U	<0.5 U	<1 U
TETRACHLOROETHENE	5	<1 U	**7.4**	**7.7**	**3.3**
TOLUENE	5	<1 U	<0.5 U	<0.5 U	<1 U
TRANS-1,2-DICHLOROETHENE	5	<1 U	<0.5 U	<0.5 U	<1 U
TRANS-1,3-DICHLOROPROPENE	0.4	***<1 U***	***<0.5 U***	***<0.5 U***	***<1 U***
TRICHLOROETHENE	5	<1 U	**67**	**61**	**31**
TRICHLOROFLUOROMETHANE	5	<2 U	<1 U	<1 U	<2 U
VINYL CHLORIDE	2	<2 U	<1 U	<1 U	<2 U
XYLENES, TOTAL	5	<3 U	<1.5 U	<1.5 U	<3 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		10/31/2017	11/1/2017	11/1/2017	11/1/2017
Sample ID		VPB168-GW-103117-443-445	VPB168-GW-110117-458-460	VPB168-GW-110117-478-480	VPB168-GW-110117-498-500
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	**1.4 J**	<0.5 U	**56 J**
1,1,2-TRICHLOROETHANE	1	<0.5 U	<1 U	<0.5 U	<0.5 U
1,1-DICHLOROETHANE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
1,1-DICHLOROETHENE	5	<0.5 U	<1 U	<0.5 U	**0.97 J**
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<1.5 U***	***<0.75 U***	***<0.75 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<1 U	<0.5 U	<0.5 U
1,2-DICHLOROBENZENE	3	<0.5 U	<1 U	<0.5 U	<0.5 U
1,2-DICHLOROETHANE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
1,2-DICHLOROETHENE, TOTAL	5	<1 U	<2 U	**0.49 J**	**2.8 J**
1,2-DICHLOROPROPANE	1	<0.5 U	<1 U	<0.5 U	<0.5 U
1,3-DICHLOROBENZENE	3	<0.5 U	<1 U	<0.5 U	<0.5 U
1,4-DICHLOROBENZENE	3	<0.5 U	<1 U	<0.5 U	<0.5 U
2-BUTANONE	50	<2.5 U	<5 U	<2.5 U	<2.5 U
2-HEXANONE	50	<2.5 U	<5 U	<2.5 U	<2.5 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<5 U	<2.5 U	<2.5 U
ACETONE	50	<2.5 U	<5 U	<2.5 U	**4.3 J**
BENZENE	1	<0.5 U	<1 U	<0.5 U	<0.5 U
BROMODICHLOROMETHANE	50	<0.5 U	<1 U	<0.5 U	<0.5 U
BROMOFORM	50	<0.5 U	<1 U	<0.5 U	<0.5 U
BROMOMETHANE	5	<1 U	<2 U	<1 U	<1 U
CARBON DISULFIDE	60	<0.5 U	<1 U	<0.5 U	<0.5 U
CARBON TETRACHLORIDE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
CHLOROBENZENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
CHLOROETHANE	5	<1 U	<2 U	<1 U	<1 U
CHLOROFORM	7	<0.5 U	<1 U	<0.5 U	<0.5 U
CHLOROMETHANE	5	<1 U	<2 U	<1 U	<1 U
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<1 U	**0.49 J**	**2.8 J**
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<1 U***	***<0.5 U***	***<0.5 U***
CYCLOHEXANE	NL	<0.5 U	<1 U	<0.5 U	<0.5 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
DICHLORODIFLUOROMETHANE	5	<1 U	<2 U	<1 U	<1 U
ETHYLBENZENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
ISOPROPYLBENZENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
M- AND P-XYLENE	NL	<1 U	<2 U	<1 U	<1 U
METHYL ACETATE	NL	<0.75 U	<1.5 U	<0.75 U	<0.75 U
METHYL CYCLOHEXANE	NL	<0.5 U	<1 U	<0.5 U	<0.5 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<1 U	<0.5 U	<0.5 U
METHYLENE CHLORIDE	5	<2.5 U	<5 U	<2.5 U	<2.5 U
O-XYLENE	NL	<0.5 U	<1 U	<0.5 U	<0.5 U
STYRENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
TETRACHLOROETHENE	5	**1.8**	**4.5**	**3.2 J**	**9.4 J**
TOLUENE	5	<0.5 U	<1 U	**14 J**	**2.7 J**
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<1 U	<0.5 U	<0.5 U
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<1 U***	***<0.5 U***	***<0.5 U***
TRICHLOROETHENE	5	**10**	**36**	**35 J**	**100 J**
TRICHLOROFLUOROMETHANE	5	<1 U	<2 U	<1 U	<1 U
VINYL CHLORIDE	2	<1 U	<2 U	<1 U	<1 U
XYLENES, TOTAL	5	<1.5 U	<3 U	<1.5 U	<1.5 U

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		11/2/2017	11/2/2017	11/3/2017	11/3/2017
Sample ID		VPB168-GW-110217-518-520	VPB168-GW-110217-538-540	VPB168-GW-110317-558-560	VPB168-GW-110317-578-580
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.37 J**	<0.5 U	<0.5 U	***<10 U***
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**150 J**	**170 J**	**21 J**	***<10 U***
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,1-DICHLOROETHANE	5	**0.43 J**	<0.5 U	**0.33 J**	***<10 U***
1,1-DICHLOROETHENE	5	**2.1 J**	**2.2 J**	**0.78 J**	***<10 U***
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<0.75 U***	***<0.75 U***	***<15 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,2-DICHLOROETHENE, TOTAL	5	**4.2 J**	**4.1 J**	**4.5 J**	***<20 U***
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
2-BUTANONE	50	<2.5 U	<2.5 U	**3 J**	<50 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<50 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<50 U
ACETONE	50	**3.9 J**	**3.5 J**	**13 J**	<50 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	***<10 U***
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<10 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<10 U
BROMOMETHANE	5	<1 U	<1 U	**3 J**	**60 J**
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<10 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
CHLOROETHANE	5	<1 U	<1 U	<1 U	***<20 U***
CHLOROFORM	7	**0.36 J**	**0.42 J**	**0.45 J**	***<10 U***
CHLOROMETHANE	5	**0.7 J**	**0.37 J**	<1 U	***<20 U***
CIS-1,2-DICHLOROETHENE	5	**4.2 J**	**4.1 J**	**4.5 J**	***<10 U***
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<0.5 U***	***<10 U***
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	**0.26 J**	***<20 U***
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<20 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<15 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<10 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	***<50 U***
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
TETRACHLOROETHENE	5	**190 J**	**23 J**	**11 J**	***<10 U***
TOLUENE	5	**15 J**	**14 J**	**3.7 J**	**11 J**
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<0.5 U***	***<10 U***
TRICHLOROETHENE	5	**160 J**	**110 J**	**110 J**	***<10 U***
TRICHLOROFLUOROMETHANE	5	**0.31 J**	**0.25 J**	<1 U	***<20 U***
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	***<20 U***
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	***<30 U***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		11/6/2017	11/6/2017	11/6/2017	11/7/2017
Sample ID		VPB168-GW-110617-598-600	VPB168-FD-110617	VPB168-GW-110617-618-620	VPB168-GW-110717-658-660
Sample type code		N	FD	N	N
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	**0.43 J**	**0.39 J**	<0.5 U	***<10 U***
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**770 J**	**740 J**	**520 J**	***<10 U***
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,1-DICHLOROETHANE	5	**0.31 J**	<0.5 U	<0.5 U	***<10 U***
1,1-DICHLOROETHENE	5	**3.4 J**	**3.5 J**	**2.2 J**	***<10 U***
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<0.75 U***	***<0.75 U***	***<15 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,2-DICHLOROETHANE	5	**0.69 J**	**0.56 J**	**0.48 J**	***<10 U***
1,2-DICHLOROETHENE, TOTAL	5	**2.6 J**	**2.7 J**	**1.8 J**	***<20 U***
1,2-DICHLOROPROPANE	1	**1.4 J**	**1.3 J**	**0.84 J**	***<10 U***
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	<0.5 U	***<10 U***
2-BUTANONE	50	**2.3 J**	**2.3 J**	<2.5 U	<50 U
2-HEXANONE	50	<2.5 U	<2.5 U	<2.5 U	<50 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<2.5 U	<50 U
ACETONE	50	**10 J**	**12 J**	**7.2 J**	<50 U
BENZENE	1	<0.5 U	<0.5 U	<0.5 U	***<10 U***
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<0.5 U	<10 U
BROMOFORM	50	<0.5 U	<0.5 U	<0.5 U	<10 U
BROMOMETHANE	5	<1 U	**2.2 J**	**3 J**	***<20 U***
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<0.5 U	<10 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
CHLOROBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
CHLOROETHANE	5	<1 U	<1 U	<1 U	***<20 U***
CHLOROFORM	7	**0.37 J**	<0.5 U	<0.5 U	***<10 U***
CHLOROMETHANE	5	<1 U	<1 U	<1 U	***<20 U***
CIS-1,2-DICHLOROETHENE	5	**2.6 J**	**2.7 J**	**1.8 J**	***<10 U***
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<0.5 U***	***<10 U***
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
DICHLORODIFLUOROMETHANE	5	**0.25 J**	**0.26 J**	<1 U	***<20 U***
ETHYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
M- AND P-XYLENE	NL	<1 U	<1 U	<1 U	<20 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<0.75 U	<15 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	<0.5 U	<10 U
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	<2.5 U	***<50 U***
O-XYLENE	NL	<0.5 U	<0.5 U	<0.5 U	<10 U
STYRENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
TETRACHLOROETHENE	5	**36 J**	**35 J**	**20 J**	***<10 U***
TOLUENE	5	<0.5 U	<0.5 U	**1.1 J**	**37**
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	<0.5 U	***<10 U***
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<0.5 U***	***<10 U***
TRICHLOROETHENE	5	**95 J**	**92 J**	**53 J**	***<10 U***
TRICHLOROFLUOROMETHANE	5	**0.27 J**	**0.26 J**	<1 U	***<20 U***
VINYL CHLORIDE	2	<1 U	<1 U	<1 U	***<20 U***
XYLENES, TOTAL	5	<1.5 U	<1.5 U	<1.5 U	***<30 U***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168	VPB168
Sample Date		11/8/2017	11/8/2017	11/9/2017	11/13/2017
Sample ID		VPB168-GW-110817-683-685	VPB168-GW-110817-698-700	VPB168-GW-110917-723-725	VPB168-GW-111317-743-745
Sample type code		**N**	**N**	**N**	**N**
VOC 8260C (ug/L)					
1,1,1-TRICHLOROETHANE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	**110**	<5 U	***<10 U***	***<10 U***
1,1,2-TRICHLOROETHANE	1	<0.5 U	***<5 U***	***<10 U***	***<10 U***
1,1-DICHLOROETHANE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
1,1-DICHLOROETHENE	5	**0.62 J**	<5 U	***<10 U***	***<10 U***
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<7.5 U***	***<15 U***	***<15 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<5 U	<10 U	<10 U
1,2-DICHLOROBENZENE	3	<0.5 U	***<5 U***	***<10 U***	***<10 U***
1,2-DICHLOROETHANE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
1,2-DICHLOROETHENE, TOTAL	5	<1 U	***<10 U***	***<20 U***	***<20 U***
1,2-DICHLOROPROPANE	1	<0.5 U	***<5 U***	***<10 U***	***<10 U***
1,3-DICHLOROBENZENE	3	<0.5 U	***<5 U***	***<10 U***	***<10 U***
1,4-DICHLOROBENZENE	3	<0.5 U	***<5 U***	***<10 U***	***<10 U***
2-BUTANONE	50	<2.5 U	<25 U	<50 U	<50 U
2-HEXANONE	50	<2.5 U	<25 U	<50 U	<50 U
4-METHYL-2-PENTANONE	NL	<2.5 U	<25 U	<50 U	<50 U
ACETONE	50	**9**	<25 U	<50 U	<50 U
BENZENE	1	<0.5 U	***<5 U***	***<10 U***	***<10 U***
BROMODICHLOROMETHANE	50	<0.5 U	<5 U	<10 U	<10 U
BROMOFORM	50	<0.5 U	<5 U	<10 U	<10 U
BROMOMETHANE	5	<1 U	***<10 U***	***<20 U***	***<20 U***
CARBON DISULFIDE	60	<0.5 U	<5 U	<10 U	<10 U
CARBON TETRACHLORIDE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
CHLOROBENZENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
CHLOROETHANE	5	<1 U	***<10 U***	***<20 U***	***<20 U***
CHLOROFORM	7	<0.5 U	<5 U	***<10 U***	***<10 U***
CHLOROMETHANE	5	<1 U	***<10 U***	***<20 U***	***<20 U***
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<5 U***	***<10 U***	***<10 U***
CYCLOHEXANE	NL	<0.5 U	<5 U	<10 U	<10 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
DICHLORODIFLUOROMETHANE	5	<1 U	***<10 U***	***<20 U***	***<20 U***
ETHYLBENZENE	5	**0.79 J**	<5 U	***<10 U***	***<10 U***
ISOPROPYLBENZENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
M- AND P-XYLENE	NL	**1.1 J**	<10 U	<20 U	<20 U
METHYL ACETATE	NL	<0.75 U	<7.5 U	<15 U	<15 U
METHYL CYCLOHEXANE	NL	<0.5 U	<5 U	<10 U	<10 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<5 U	<10 U	<10 U
METHYLENE CHLORIDE	5	<2.5 U	***<25 U***	***<50 U***	***<50 U***
O-XYLENE	NL	**0.39 J**	<5 U	<10 U	<10 U
STYRENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
TETRACHLOROETHENE	5	**9.5**	<5 U	***<10 U***	***<10 U***
TOLUENE	5	**4.3**	**35**	**11 J**	**21**
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<5 U	***<10 U***	***<10 U***
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<5 U***	***<10 U***	***<10 U***
TRICHLOROETHENE	5	**9**	<5 U	***<10 U***	***<10 U***
TRICHLOROFLUOROMETHANE	5	<1 U	***<10 U***	***<20 U***	***<20 U***
VINYL CHLORIDE	2	<1 U	***<10 U***	***<20 U***	***<20 U***
XYLENES, TOTAL	5	**1.5 J**	***<15 U***	***<30 U***	***<30 U***

Location	NYSDEC Groundwater Guidance or Standard Value (Note 1)	VPB168	VPB168	VPB168
Sample Date		11/14/2017	11/14/2017	11/15/2017
Sample ID		VPB168-GW-111417-763-765	VPB168-GW-111417-778-780	VPB168-GW-111517-818-820
Sample type code		**N**	**N**	**N**
VOC 8260C (ug/L)				
1,1,1-TRICHLOROETHANE	5	<0.5 U	<0.5 U	***<20 U***
1,1,2,2-TETRACHLOROETHANE	5	<0.5 U	<0.5 U	***<20 U***
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	<0.5 U	<0.5 U	***<20 U***
1,1,2-TRICHLOROETHANE	1	<0.5 U	<0.5 U	***<20 U***
1,1-DICHLOROETHANE	5	<0.5 U	<0.5 U	***<20 U***
1,1-DICHLOROETHENE	5	<0.5 U	<0.5 U	***<20 U***
1,2,4-TRICHLOROBENZENE	5	<0.5 U	<0.5 U	***<20 U***
1,2-DIBROMO-3-CHLOROPROPANE	0.04	***<0.75 U***	***<0.75 U***	***<30 U***
1,2-DIBROMOETHANE	NL	<0.5 U	<0.5 U	<20 U
1,2-DICHLOROBENZENE	3	<0.5 U	<0.5 U	***<20 U***
1,2-DICHLOROETHANE	5	<0.5 U	<0.5 U	***<20 U***
1,2-DICHLOROETHENE, TOTAL	5	<1 U	<1 U	***<40 U***
1,2-DICHLOROPROPANE	1	<0.5 U	<0.5 U	***<20 U***
1,3-DICHLOROBENZENE	3	<0.5 U	<0.5 U	***<20 U***
1,4-DICHLOROBENZENE	3	<0.5 U	<0.5 U	***<20 U***
2-BUTANONE	50	<2.5 U	**5.1**	***<100 U***
2-HEXANONE	50	<2.5 U	<2.5 U	***<100 U***
4-METHYL-2-PENTANONE	NL	<2.5 U	<2.5 U	<100 U
ACETONE	50	**2.4 J**	**25**	***<100 U***
BENZENE	1	<0.5 U	<0.5 U	***<20 U***
BROMODICHLOROMETHANE	50	<0.5 U	<0.5 U	<20 U
BROMOFORM	50	<0.5 U	<0.5 U	<20 U
BROMOMETHANE	5	<1 U	<1 U	***<40 U***
CARBON DISULFIDE	60	<0.5 U	<0.5 U	<20 U
CARBON TETRACHLORIDE	5	<0.5 U	<0.5 U	***<20 U***
CHLOROBENZENE	5	<0.5 U	<0.5 U	***<20 U***
CHLOROETHANE	5	<1 U	<1 U	***<40 U***
CHLOROFORM	7	<0.5 U	<0.5 U	***<20 U***
CHLOROMETHANE	5	<1 U	**1 J**	***<40 U***
CIS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	***<20 U***
CIS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<20 U***
CYCLOHEXANE	NL	<0.5 U	<0.5 U	<20 U
DIBROMOCHLOROMETHANE	5	<0.5 U	<0.5 U	***<20 U***
DICHLORODIFLUOROMETHANE	5	<1 U	<1 U	***<40 U***
ETHYLBENZENE	5	<0.5 U	**0.32 J**	***<20 U***
ISOPROPYLBENZENE	5	<0.5 U	<0.5 U	***<20 U***
M- AND P-XYLENE	NL	<1 U	<1 U	<40 U
METHYL ACETATE	NL	<0.75 U	<0.75 U	<30 U
METHYL CYCLOHEXANE	NL	<0.5 U	<0.5 U	<20 U
METHYL TERT-BUTYL ETHER	10	<0.5 U	<0.5 U	***<20 U***
METHYLENE CHLORIDE	5	<2.5 U	<2.5 U	***<100 U***
O-XYLENE	NL	<0.5 U	<0.5 U	<20 U
STYRENE	5	<0.5 U	<0.5 U	***<20 U***
TETRACHLOROETHENE	5	<0.5 U	<0.5 U	***<20 U***
TOLUENE	5	**0.71 J**	**180**	**11 J**
TRANS-1,2-DICHLOROETHENE	5	<0.5 U	<0.5 U	***<20 U***
TRANS-1,3-DICHLOROPROPENE	0.4	***<0.5 U***	***<0.5 U***	***<20 U***
TRICHLOROETHENE	5	<0.5 U	<0.5 U	***<20 U***
TRICHLOROFLUOROMETHANE	5	<1 U	<1 U	***<40 U***
VINYL CHLORIDE	2	<1 U	<1 U	***<40 U***
XYLENES, TOTAL	5	<1.5 U	<1.5 U	***<60 U***

Notes:

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

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

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

U = 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 quantitation limit necessary to accurately and precisely measure the analyte in the sample.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Section 6

VPB168 Survey

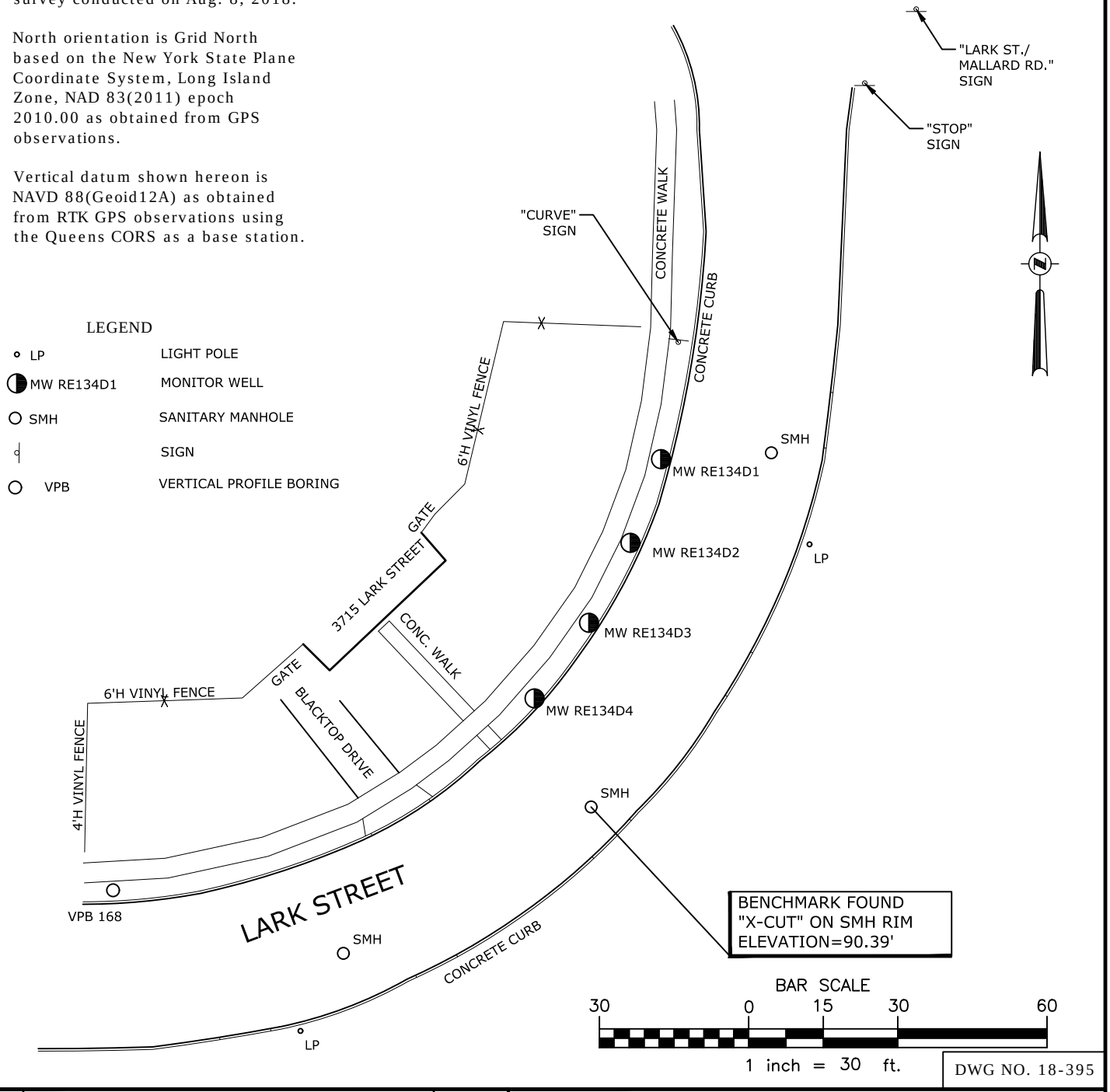
NONE :XREFS

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

Description	Northing	Easting	Latitude	Longitude	Ground	Top of Casing	Top of PVC
MW RE134D1	206205.65	1123308.13	N40-43-53.65	W73-29-53.71	90.32	90.44	89.88
MW RE134D2	206188.83	1123301.98	N40-43-53.49	W73-29-53.79	90.40	90.51	89.93
MW RE134D3	206172.76	1123293.65	N40-43-53.33	W73-29-53.90	90.40	90.50	89.97
MW RE134D4	206157.56	1123282.69	N40-43-53.18	W73-29-54.05	90.43	N/A	90.05
VPB168	206118.97	1123197.99	N40-43-52.80	W73-29-55.15	90.74	N/A	N/A

Map Notes

1. Information shown hereon was compiled from an actual field survey conducted on Aug. 8, 2018.
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. 18-395

Date	RECORD OF WORK	Appr.
8/17/18	ADD VPB DESIGNATION	

Drafter: MDD | Checker:

Appr. by: WJN | Proj. No. 14.4121

MONITOR WELL SURVEY LOCATION
RE134D1, RE143D2, RE134D3 AND RE134D4
AND VERTICAL PROFILE BORING 168
3715 LARK STREET

TOWN OF LEVITTOWN | NASSAU COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SCALE: 1"=30' | DATE:AUGUST 8, 2018

CAD DWG. FILE NAME: K:\Projects\144121\Survey\Drawings and Maps\2018 DRAWINGS\2018 MW RE134D LARK STREET.dwg

Appendix B

Environmental Sequence Stratigraphy (ESS)

Analysis

RESOLUTION CONSULTANTS

To: Lora Fly and Brian Murray, DON, NAVFAC MIDLANT

From: Brian Caldwell, P.G., Resolution Consultants

Subject: Environmental Sequence Stratigraphy Analysis
Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage

Date: May 18, 2018

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1. INTRODUCTION

Previous sequence stratigraphic studies of the New Jersey Coastal Plain (Kulpecz et al., 2008; Miller et al., 1998; and Sugarman et al., 2005) have demonstrated that repetitive and predictable facies successions in the region can largely be explained by cyclic sea level changes. In this Environmental Sequence Stratigraphic (ESS) analysis, we combine results from regional studies (Lanci et al., 2002; Kulpecz et al., 2008; Miller et al., 1998, 1999, 2004, 2006; and Sugarman et al., 2005) with sub-regional continuous geophysical logs (acquired during environmental investigations at NWIRP) to develop a high resolution sequence stratigraphic framework for the Late Cretaceous Turonian age (approximately 94 million years ago) Magothy Formation underlying NWIRP Bethpage. ESS is a method of utilizing available data, coupled with an interpretation of the geologic facies, or depositional environments of the geologic material, to develop and refine Conceptual Site Models (CSM's). The refined CSM is then used in the environmental perspective to optimize contaminated site investigation and remediation. A glossary of terms used in the ESS evaluation is presented in Appendix A.

2. DATA AND METHODS

Geophysical logs have been used to interpret paleoenvironments and correlate depositional facies since Serra and Sulpice (1975) used spontaneous potential (SP) and resistivity logs to determine the depositional history of strata in the Gulf of Mexico. Gamma logs, a measure of naturally occurring radiation in aquifer material, have become a useful tool for log-based facies interpretation, particularly in siliclastic fluvio-deltaic environments coupled with lithologic control from cores. Fine-grained sediments, clays, glauconite sands, and phosphorites, which are common elements in siliciclastic fluvio-deltaic facies, retain relatively high levels of radiogenic elements. Therefore, relative gamma log counts can be considered a good indicator of lithology and, in the case of the Magothy, a discriminator between gravels, sands, silts, and clays.

Six detailed cross sections of the Magothy Formation were generated using 29 gamma logs: one north-south trending dip section (B-B') and five east-west trending strike sections (1-1', 2-2', 3-3', 4-4', and 5-5') (Figure 1). Gamma logs were selected for inclusion on the basis of geographic location (i.e., satisfying areas of poor coverage), depth (substantial penetration through the Magothy Formation), and adequate quality. Although this study relied heavily on gamma log data as a method of correlation, lithologic logs were also used to calibrate the correlation and account for sub-regional facies changes.

2.1 Stratigraphic Framework

Based on the gamma log signatures, the stratigraphic units beneath the Site were divided into two major packages of depositions (sequences). Each sequence is bounded by conspicuous subaerial erosion or exposure surfaces (i.e., sequence boundary - red markers in the cross sections) that are the product of relative sea level changes. Each sequence was further divided into "parasequences", or building-blocks of the sequences, marked by flooding surfaces (shale/clay signatures). They are denoted by gray markers in the depositional facies interpretations cross sections representing thin tidal mud deposits.

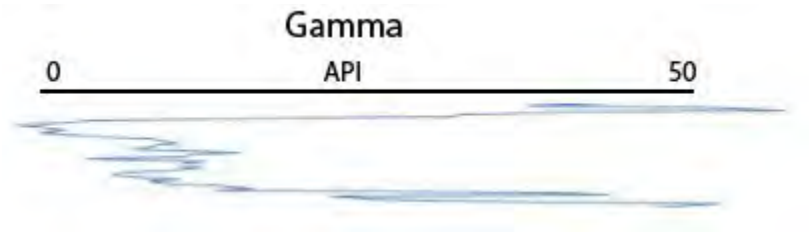
2.2 Facies Architecture

Parasequences were subdivided into marginal marine (delta front, wave-dominated shoreline, estuarine) and nonmarine (upper and lower delta plain/fluvial, glacial) depositional facies within the context of a wave-dominated deltaic depositional model (Sugarman et al., 2005). The individual depositional facies were identified on the basis of gamma log motifs and calibrated with modern

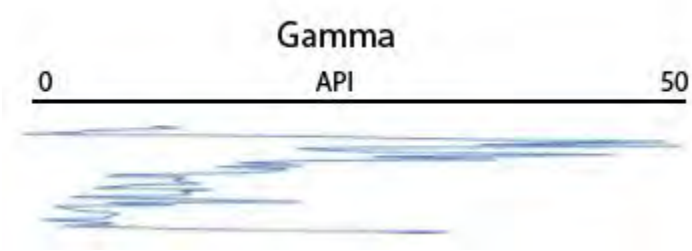
wave-dominated deltaic analogs derived from Google Earth imagery (Figure 2). The analogs allowed prediction of the dimensions (i.e., approximate width and depth) of depositional elements for the Site area, but also leverage horizontal facies relationships based on vertical facies successions in logs (applying Walther's Law - a vertical sequence of facies will be the product of a series of depositional environments which occurred laterally adjacent to each other).

The following is a brief description of the recognition criteria for identifying depositional facies at NWIRP Bethpage using gamma logs.

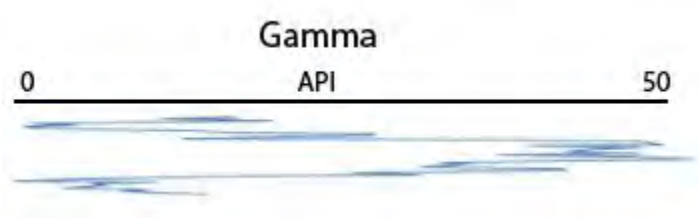
Delta Mouth Bars:
The gamma signature of a deltaic mouth bar is typically spiky and low, with sharp top and basal contacts. These deposits are very coarse.



Fluvial:
The gamma signature of a fluvial channel typically exhibits a sharp negative shift overlain by a gradual positive reflection (a "bell" shape) - indicative of a fining upward package.

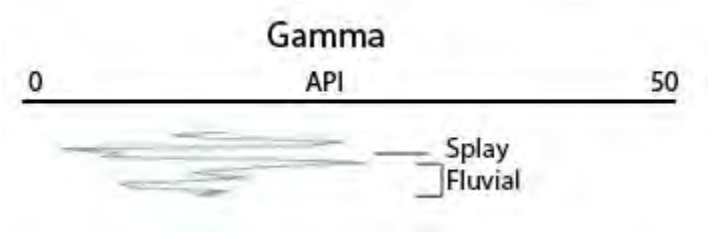


Overbank/Lagoonal:
The gamma signature of an overbank/Lagoonal deposit typically exhibits a high blocky reflection with a "cylindrical" shape. The top and basal contacts are sharp.



Splay:

The gamma signature of a splay deposit typically exhibits a sharp low reflection, however this spike tends to increase laterally. Splay deposits are most easily identified by their proximity to fluvial deposits.



3. RESULTS

Correlation of existing gamma logs beneath the Site reveals that the Magothy Formation consists of several phases of seaward progradation and landward retrogradation that are represented by two major depositional sequences (Figures 3 through 8). The culmination of the 2nd sequence is marked by a probable progradation of continental (glacial) deposits over coastal and deltaic deposits. The facies architecture of the Magothy Formation, resulting from these progradational and retrogradational patterns, provides important insights into the distribution of transmissive and storage zones at the Site over time. The sequences and facies of the Magothy Formation are described in more detail below.

3.1 Sequence 1

Sequence 1 separates the Magothy Formation from the underlying Raritan Formation by a Sequence Boundary (SB 1) which is represented by a basin-wide unconformity (manifested in the log signature as a distinctively low Gamma spike at approximately -800 feet [ft] above mean

sea level [amsl]). According to core studies and field investigations by Sugarman et al. (2005), mottled clays and paleosols (after) locally demarcate the SB 1, indicating local subaerial exposure during relative sea level fall. Elsewhere, the sequence boundary may be represented by fluvial incisions.

SB 1 is juxtaposed by a Transgressive Surface (TS 1, light blue marker), indicating a rapid drowning of the coastline caused by a significant sea level rise. As the sea level began to rise during the Transgressive Systems Tract (TST) (between the blue and green markers), distributary channels and low accommodation deltas of the lowstand were subject to reworking into a predominantly estuarine condition. Backstepping delta mouth bars and muddy fluvial channels are the predominant depositional facies of this interval (resulting in 50-75 ft thick muddy units). Sandy lignite deposits and pyrite concretions observed in cores suggest that these thick, muddy deposits are representative of such estuarine/lagoonal deposits (Sugarman et al., 2005). Channels of the TST also gradually become interspersed and poorly connected. As a result, this unit indicates a high variability of transmissive units interspersed by units of storage.

The TST is bounded on top by two Maximum Flooding Surfaces (green marker, MFS1 and purple marker, MFS2) that represent progressive maximum landward incursions of the shoreline in two phases. As the muddiest intervals of the system, these maximum flooding surfaces seem to act as storage for contamination and show conspicuous spikes of contamination data. MFS1 heralds the first phase of highstand, with aggradational to progradational successions. MFS2 represents the second maximum flooding before the complete turnaround to highstand delta progradation. This highstand phase shows a facies architecture predominated by seaward (southerly) dipping delta mouth bars, with distributary channels locally incising into them. The greater continuity of these sand bodies indicates a higher transmissivity of these units for groundwater flow, and hence contaminant transport.

3.2 Sequence 2

Sequence 2 is separated from Sequence 1 by an erosional unconformity (SB 2, red marker) overlying the highstand delta deposits of the previous sequence. In contrast to Sequence 1, the lowstand deposits are locally preserved (between red and light blue markers) as predominantly channelized units and their associated overbank sediment, with a minor component of southerly prograding mouth bars. A Transgressive Surface (TS 2, light blue marker) above the sequence boundary indicates the renewed initiation of a flooding event. The TST (between blue and green

markers) is marked by laterally continuous, backstepping deltaic deposits and thick lagoonal/estuarine deposits similar to the facies of TST in Sequence 1. However, the TST in this sequence shows a relatively thinner interval than in Sequence 1.

Sequence 2 represents a similar scenario as in Sequence 1 in relation to the culmination of the TST in two phases of maximum landward incursions of the shoreline (denoted by green marker, MFS1 and purple marker, MFS2). Observation of contamination data in relation to the maximum flooding surfaces show significant spikes as similarly observed in Sequence 1. The MFS1 is followed by the first phase of highstand aggradation and progradation of delta mouth bars, and the MFS2 is followed by a more pronounced turnaround to delta progradation. During the culmination of this highstand, a thick unit of continental deposits (possibly composed of coarse-grained glacial outwash) moves farther seaward, over-riding the highstand deltas and coastal deposits. While the grain size of these glacial deposits would be the coarsest, they may have poor transmissivity because of significant glacial mud in the matrices.

4. DISCUSSION

Because thermoflexural subsidence is the dominant tectonic component of evolution of passive margins (Watts and Steckler, 1979), the Turonian sequences and deltaic facies systems of the New Jersey and New York Coastal Plains primarily reflect the interplay of global sea level oscillations and sediment supply.

4.1 Sea Level Oscillations

Third order (1-10 million years) sea level changes (Figure 9) are well documented during the Turonian stage (Miller et al., 2005). Previous estimates from New Jersey Plain coreholes identified 4 sea level cycles in the Turonian with amplitudes as great as approximately 15 meters (Miller et al., 2005). These sea level changes primarily reflect a gradual sea level fall (Figure 9) and are the principal driver behind base-level changes, unconformities, and the development and preservation of the studied sequences on the New Jersey Coastal Plain.

Periods of elevated or low sea level have a distinct effect on shoreline position and the types of deltaic facies that are recorded on the coastal plain. During high sea level, marine to distal deltaic

This analysis from the Turonian Magothy Formation indicates that although global sea level oscillations provide the template for sequences and sequence preservation, changes in sediment supply also largely influence depositional environments in the region.

4.2 Sediment Supply

Peak rates of Late Cretaceous sediment accumulation on the mid-Atlantic Margin occurred during the Albian stage (100 million years ago), representing a phase of tectonic uplift and intense weathering of the ancestral Appalachians (Poag and Sevon, 1989). This large influx of sediments is reflected by the rapid seaward progradation of the shoreline and preservation of extensive delta plain deposits (Magothy Formation) on the New Jersey Coastal Plain (Sugarman et al., 2005; Kulpecz et al., 2008). These observations are consistent with offshore data that shows large amounts of coarse, deltaic material deposited across the New Jersey and New York shelves, a function of high sediment rates "flooding" the system (Poag and Sevon, 1989).

Despite the rapid weathering rates and an overall sea level fall, the Late Turonian also exhibits a rapid sea level transgression upwards of approximately 50 million years (Figure 9) (Miller et al., 2005). During such events, sedimentation is no longer able to keep up with the pace of sea level rise, resulting in shoreline retrogradation, facies backstepping, and lagoonal deposits overlying progradational deltaic facies.

4.3 Stratigraphic Impact on Hydrogeology

This analysis indicates that considerable heterogeneity exists in the subsurface due to an interplay of progradation and transgression. The thick channelized sand bodies at the Site are inferred to represent high permeability units and conduits for groundwater flow/contaminant transport. However, the continuity of those units is variable. Furthermore, while fluvial channels are cut into the underlying deltaic deposits of each sequence, those incisions are not necessarily infilled by channel bars. Lack of space (accommodation) in the coastal realm during each sea level fall forces sediments to deposit farther seaward as delta front (mouth bar) deposits. Parts of the channelized incisions are later infilled by bay-fills and lagoonal mud during the ensuing transgression. As a result, mouth bars show more continuity than their channelized counterparts (and associated splay deposits), which are much more heterogeneous.

5. CONCLUSIONS

- The Turonian Magothy Formation primarily reflects the interplay of global sea level oscillations and sediment supply.
- Correlation of existing gamma logs beneath the Site indicates that the Magothy Formation consists of two high frequency, depositional sequences. Each sequence boundary is either marked by subaerial exposure (paleosol) or fluvial incision.
- Previous CSMs for the Site have interpreted the depositional setting of the Magothy Formation to have been a glacially-derived delta such as the Mackenzie River Delta. This analysis indicates a better analog for the Magothy Formation is the wave-dominated Sao Francisco River delta, Brazil (Figure 2). The Mackenzie River Delta is more appropriate for the overtopping glacial sediments.
- Each sequence with the Magothy shows considerable intra-parasequence heterogeneity. This heterogeneity needs to be addressed in detail in order to understand the pathway of the contamination of the plume. Groundwater preferentially flows through laterally continuous fluvial sands and distributary mouth bars. The distributary mouth bars show more continuity than their channelized counterparts. Mud-plugged channels and bay/lagoonal deposits constitute the lower transmissive units of the Magothy.
- Contamination appears to be primarily traveling through laterally continuous fluvial and mouth bar sands, however, in some locations, such as VPB160 and VPB142 on section B-B', major stratigraphic markers, (such as the maximum flooding surface in Sequence 1) appear to exhibit stratigraphic control on trichloroethene (TCE) and tetrachloroethene (PCE) concentrations.
- The Magothy Formation is topped by 200 to 300 feet of glacially-derived sediment, which in this analysis is considerably thicker than previous interpretations.
- The maximum flooding surfaces identified in this interpretation are strongly related to contamination data peaks. This may be explained by the fact that the maximum flooding surfaces are the muddiest intervals of the Site, rendering them potentially as storage units of contamination (adsorption by fine-grained aquifer material). Moreover, since the overlying deltaic sands lap against these surfaces, over time, groundwater contamination flowing

through those continuous sands could end up in storage within the maximum flooding surfaces. Conversely, desorption of contamination from the maximum flooding surface material could result in higher contamination migration rates in the deltaic sands if the concentration gradient is conducive for transfer (desorption).

Sequence stratigraphy and facies models provide a predictive framework for hydrostratigraphic units, but regional and local differences in sediment supply, depositional environment, and sea level affect the development of the hydrogeologic framework. Sequence stratigraphy allows packages of coarser sediments to be bracketed in a predictable manner by confining units. Facies analysis, coupled with depositional models, allows for the prediction of the potential scale and connectivity of coarser aquifer material. Sequence stratigraphy and facies analysis provides a means of roughly predicting permeability, porosity, and conductivity from aquifers, though exact estimates can only be achieved through hydraulic testing. However, understanding the sequence stratigraphy and depositional facies are critical for understanding scale and connectivity of aquifers and their confining units and predicting their local distributions.

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FIGURE LIST

ATTACHMENT LIST

FIGURES

Figure 1. Map of ESS Cross Sections

2018 ESS Cross Sections

North-South

East-West

N

PWD-7438

BWD-9591

B

5

5'

4

4'

3

3'

2

2'

1

1'

B

Legend

- Monitoring Well
- Vertical Profile Boring
- Vertical Profile Boring - Proposed
- Water Supply Well
- Extraction Well
- Extraction Well - Proposed

0 750 1,500 3,000 Feet

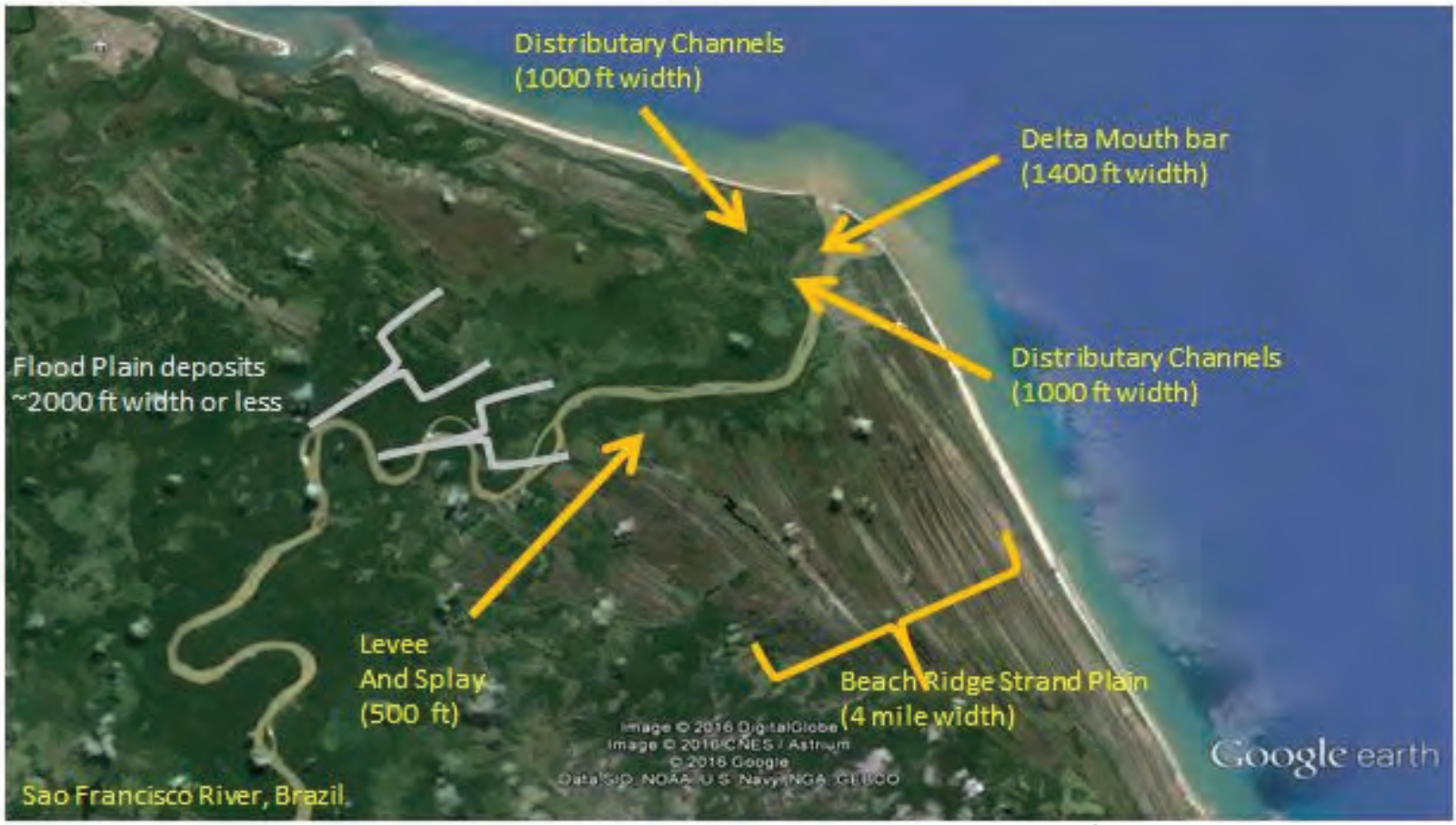


Figure 2a. Modern Analog

Source: Image ©2016 DigitalGlobe; Image ©2016 CNES/ Astrium; ©2016 Google Data SIO, NOAA, U.S. Navy, NGA, GEBCO

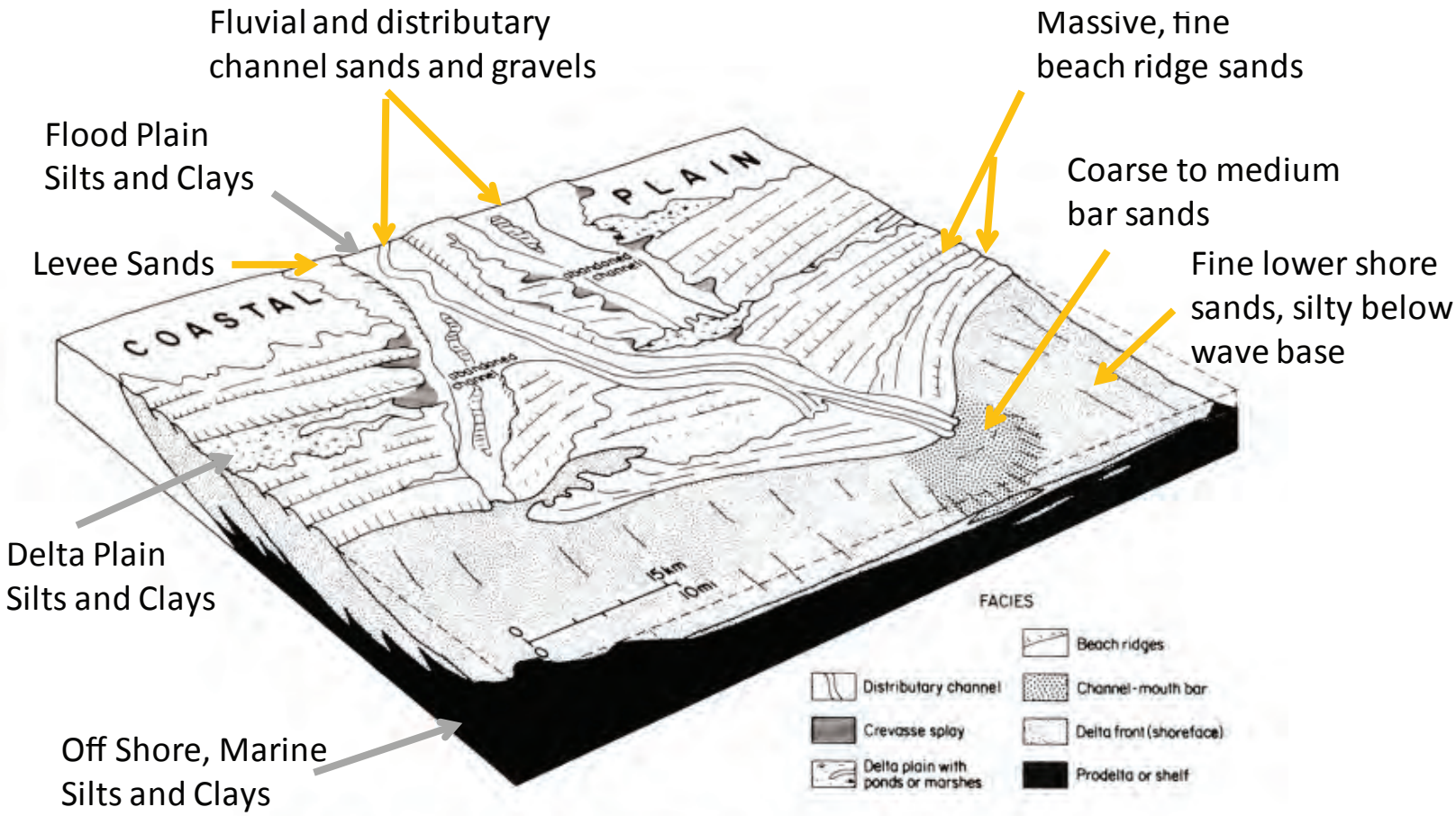


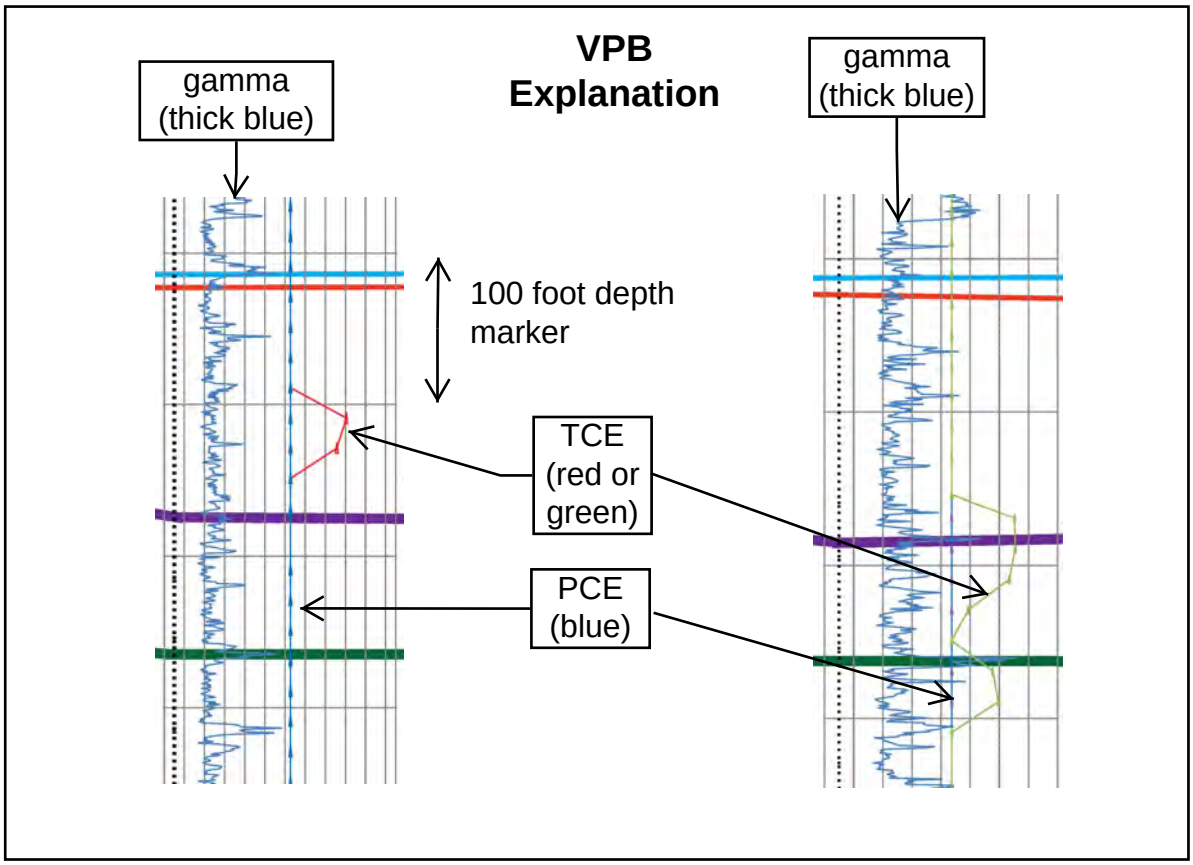
Figure 2b. Three-Dimensional Model of Wave-Dominated Delta System (source Weise, 1980)

Notes for Figures 3 through 8:

1. Approximate cross section dimensions:

Figure 3a & 3b (Section B-B') length is 19,690 feet, sequence 1+2 thickness is 1,000 feet.
Figure 4a & 4b (Section 1-1') length is 2,810 feet, sequence 1+2 thickness is 980 feet.
Figure 5a & 5b (Section 2-2') length is 6,340 feet, sequence 1+2 thickness is 970 feet.
Figure 6a & 6b (Section 3-3') length is 6,660 feet, sequence 1+2 thickness is 950 feet.
Figure 7a & 7b (Section 4-4') length is 9,280 feet, sequence 1+2 thickness is 930 feet.
Figure 8a & 8b (Section 5-5') length is 7,330 feet, sequence 1+2 thickness is 915 feet.

2. Vertical Profile Borings (VPBs) depicted along cross sections are explained below.



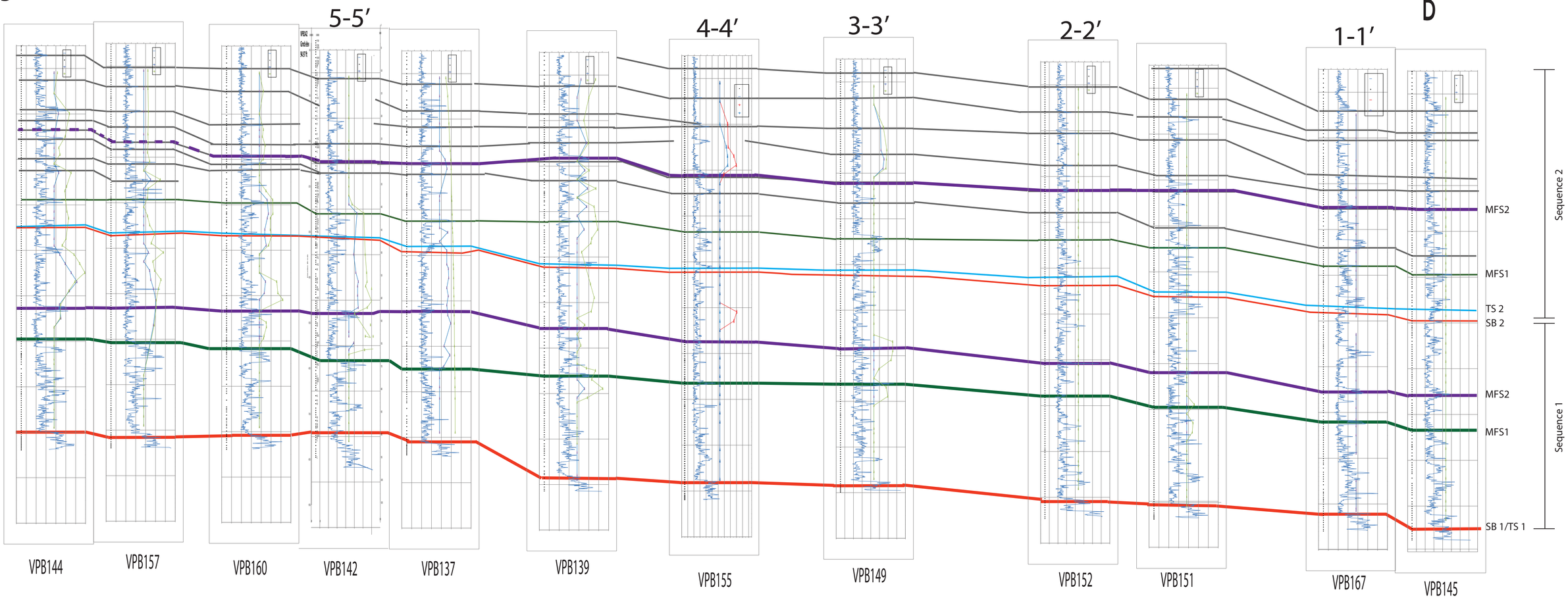
North

B

Figure 3a. Cross Section B-B' Showing Stratigraphic Framework

South

B′



Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

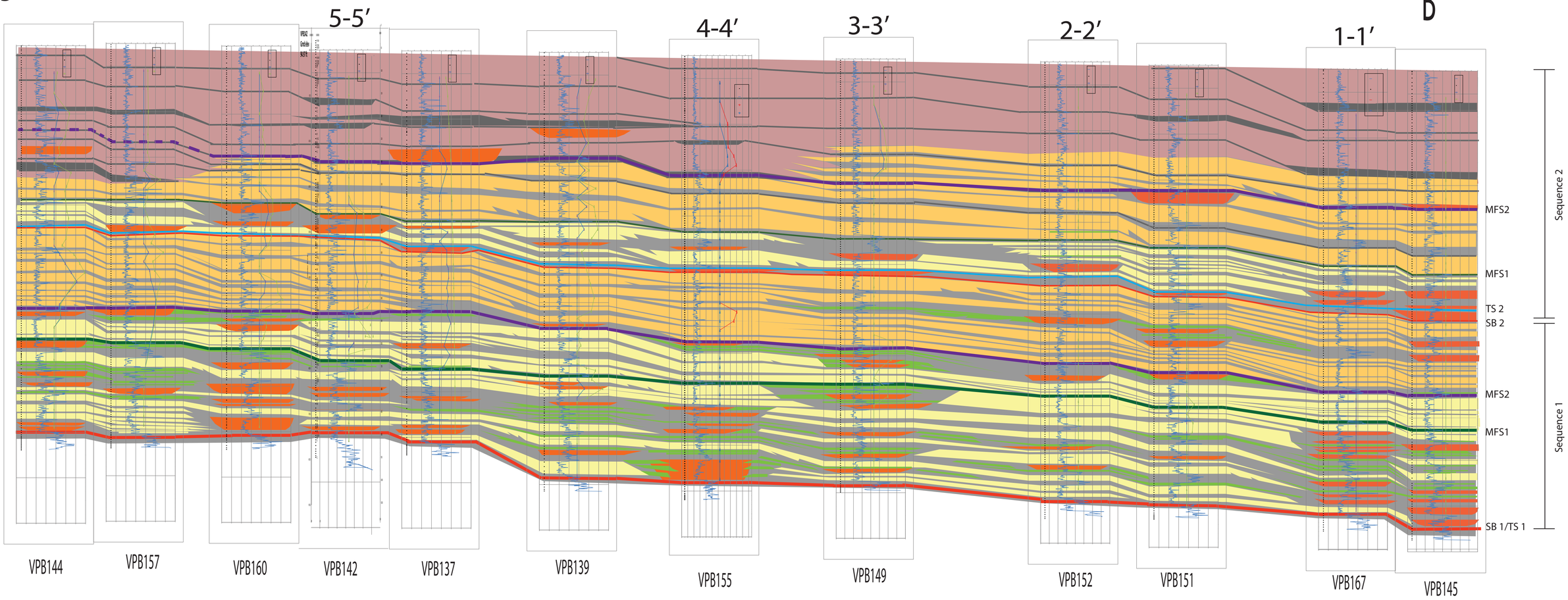
North

B

Figure 3b. Cross Section B-B' Showing Depositional Facies Interpretation

South

B′



- Deltaic (Transgressive Systems Tract)
- Deltaic (Highstand Systems Tract)
- Channel Bar
- Glacial
- Splay/Overbank fines
- Swamp and Tidal mud
- Sequence Boundary
- Maximum Flooding Surface 1
- Maximum Flooding Surface 2
- Transgressive Surface

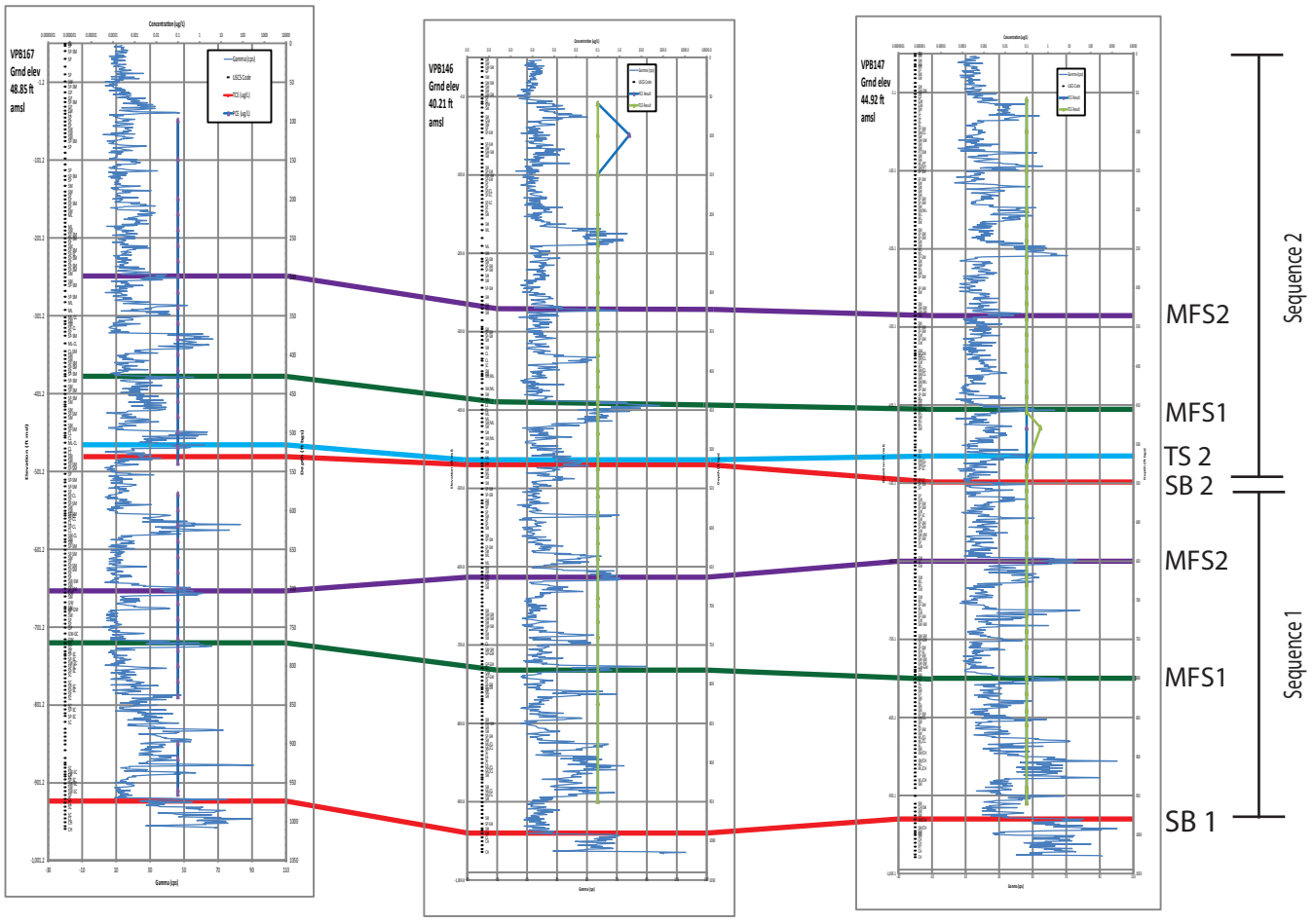
Figure 4a. Cross Section 1-1' Showing Stratigraphic Framework

West

1

East

1’



VPB167 VPB146 VPB147

Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

Figure 4b. Cross Section 1-1′ Showing Depositional Facies Interpretation

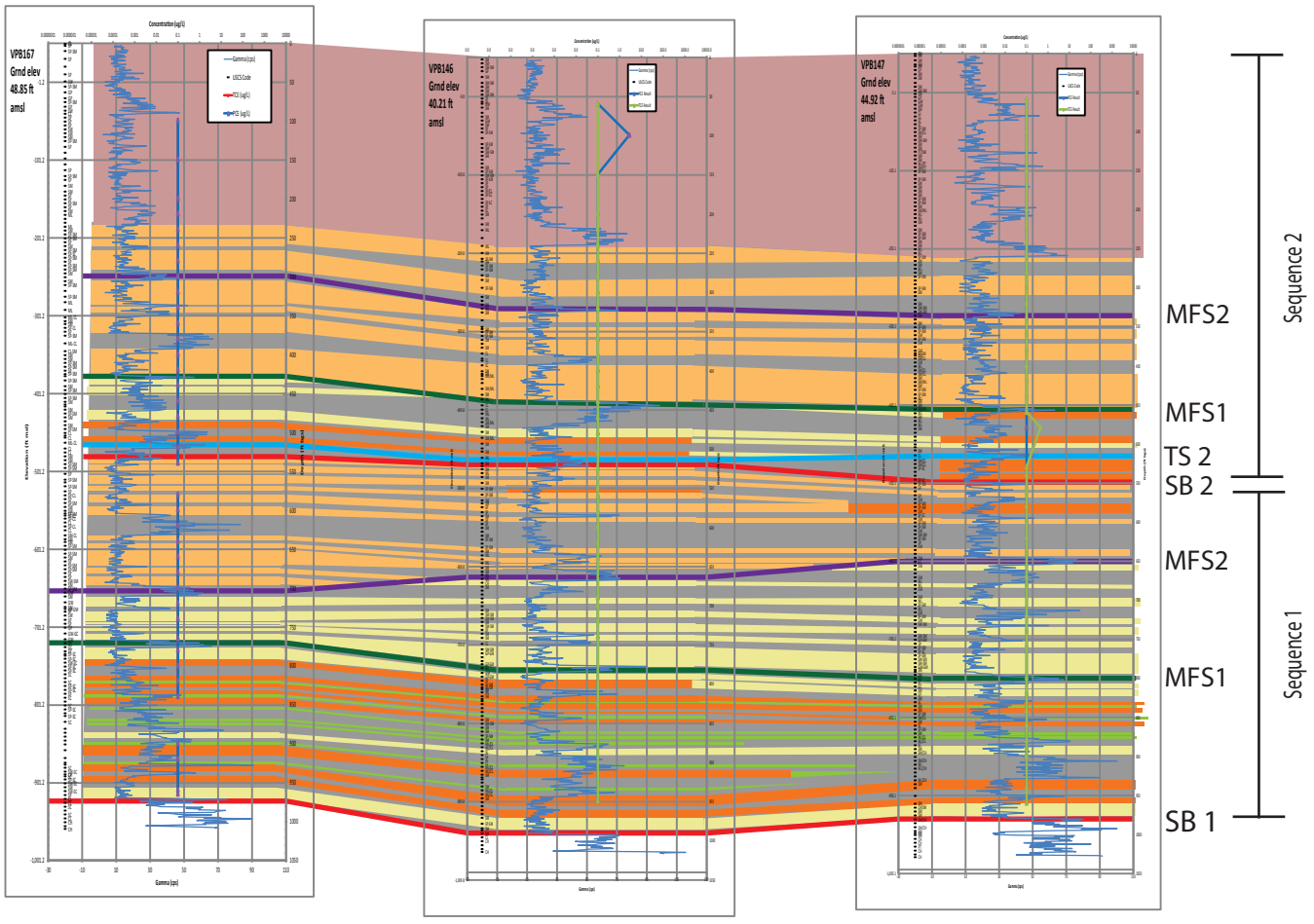
West

1

East

1′

B-B′



VPB167 VPB146 VPB147

Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

Figure 5a. Cross Section 2-2' Showing Stratigraphic Framework

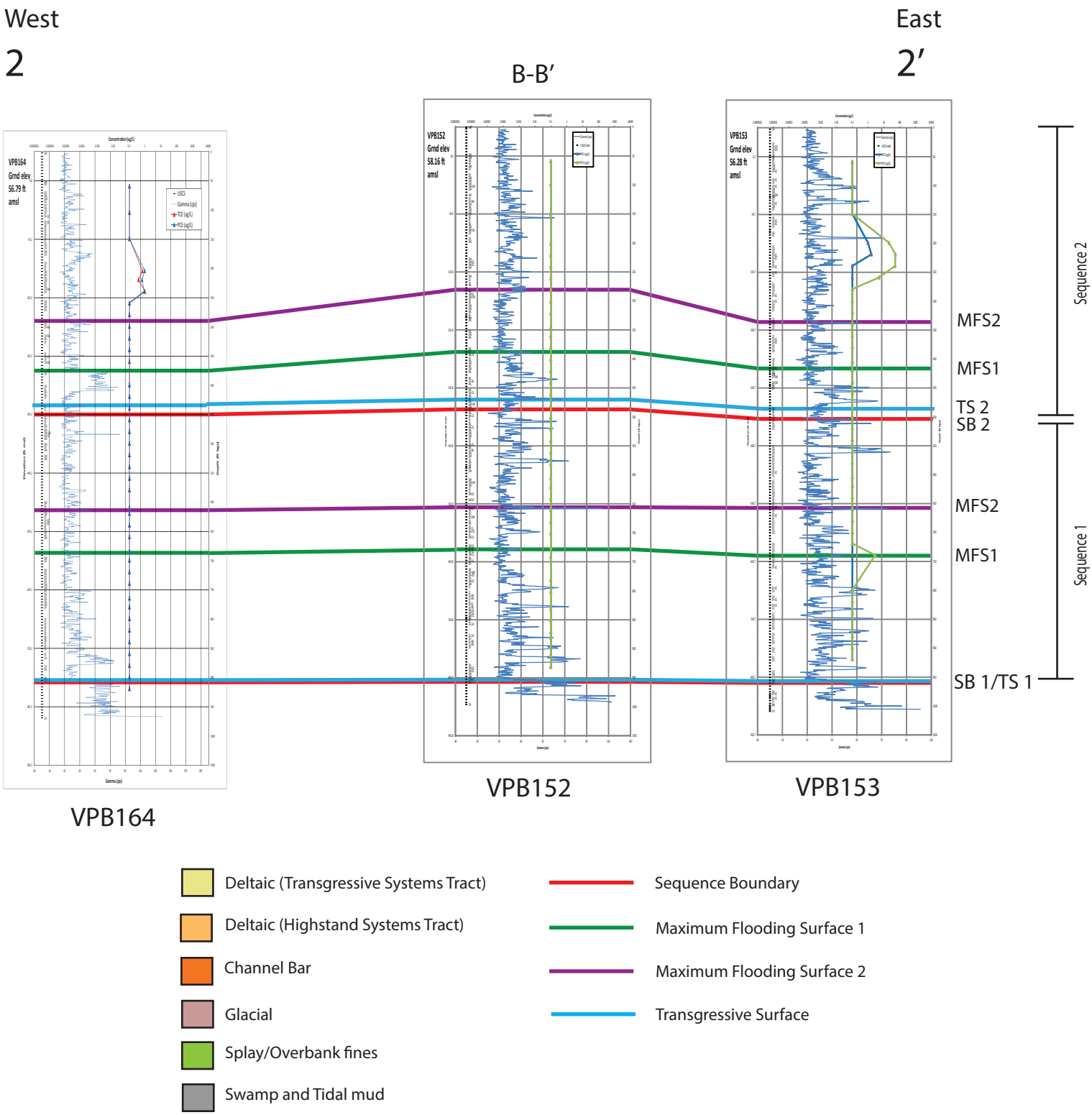


Figure 5b. Cross Section 2-2′ Showing Depositional Facies Interpretation

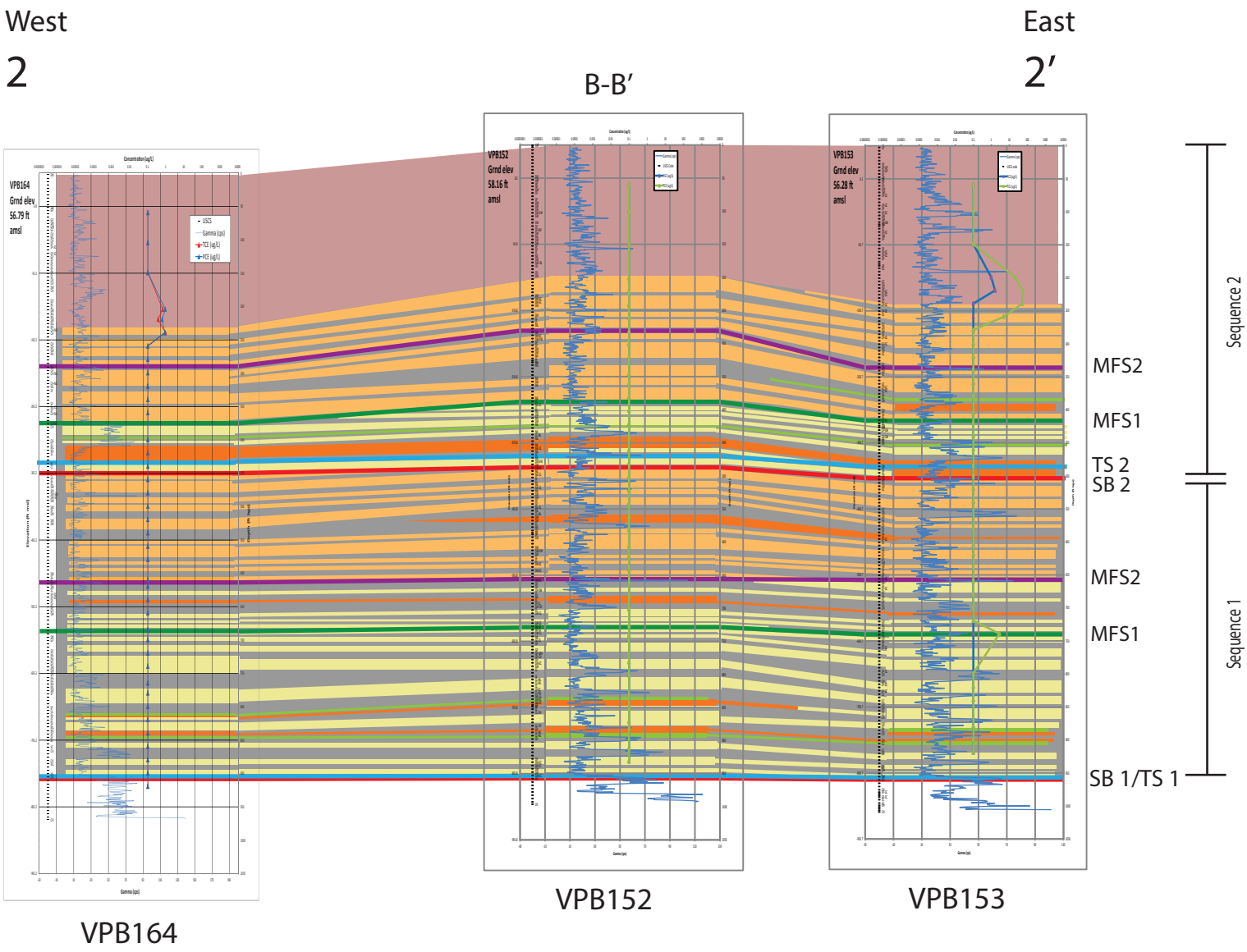


Figure 6a. Cross Section 3-3' Showing Stratigraphic Framework

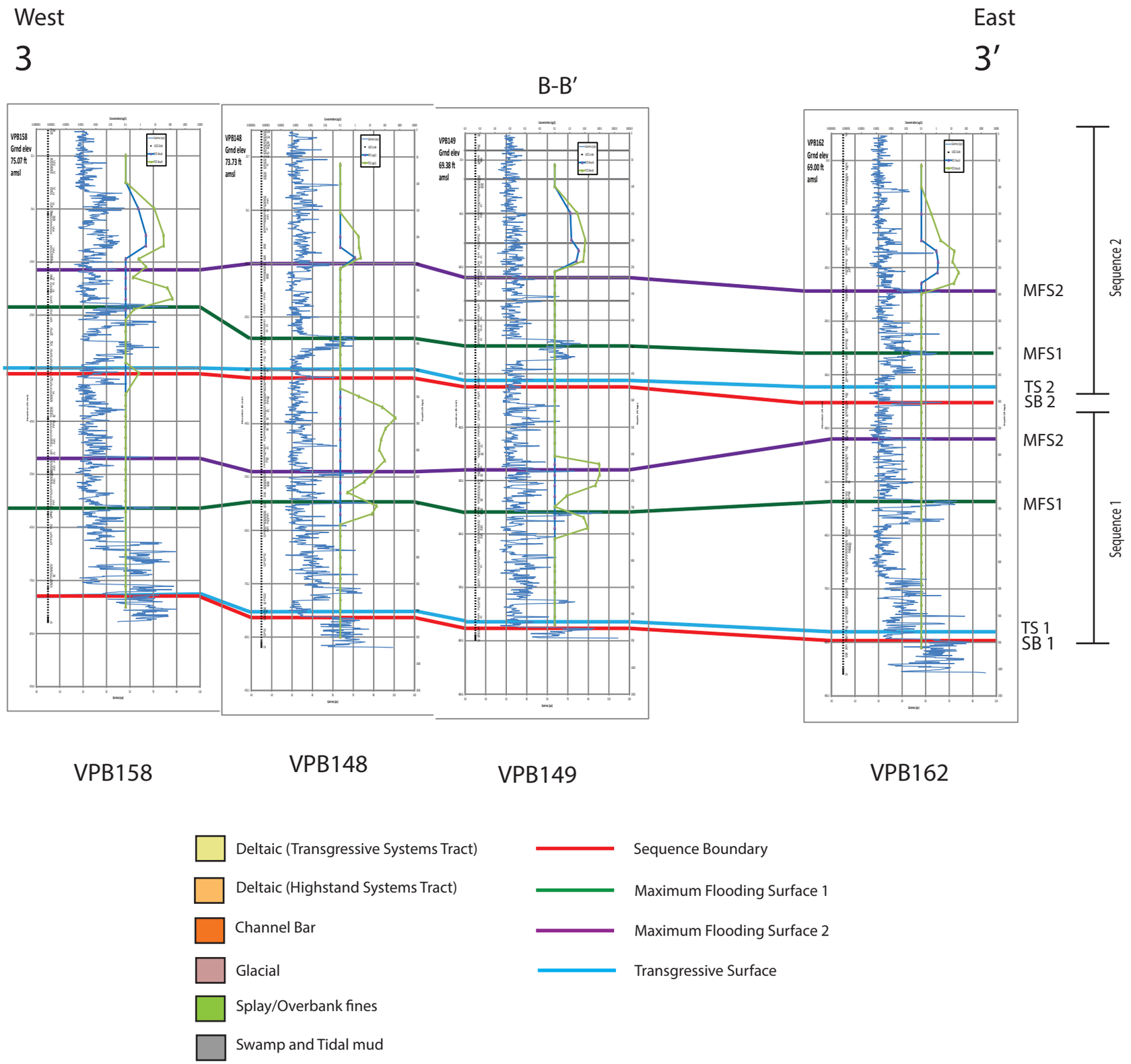


Figure 6b. Cross Section 3-3′ Showing Depositional Facies Interpretation

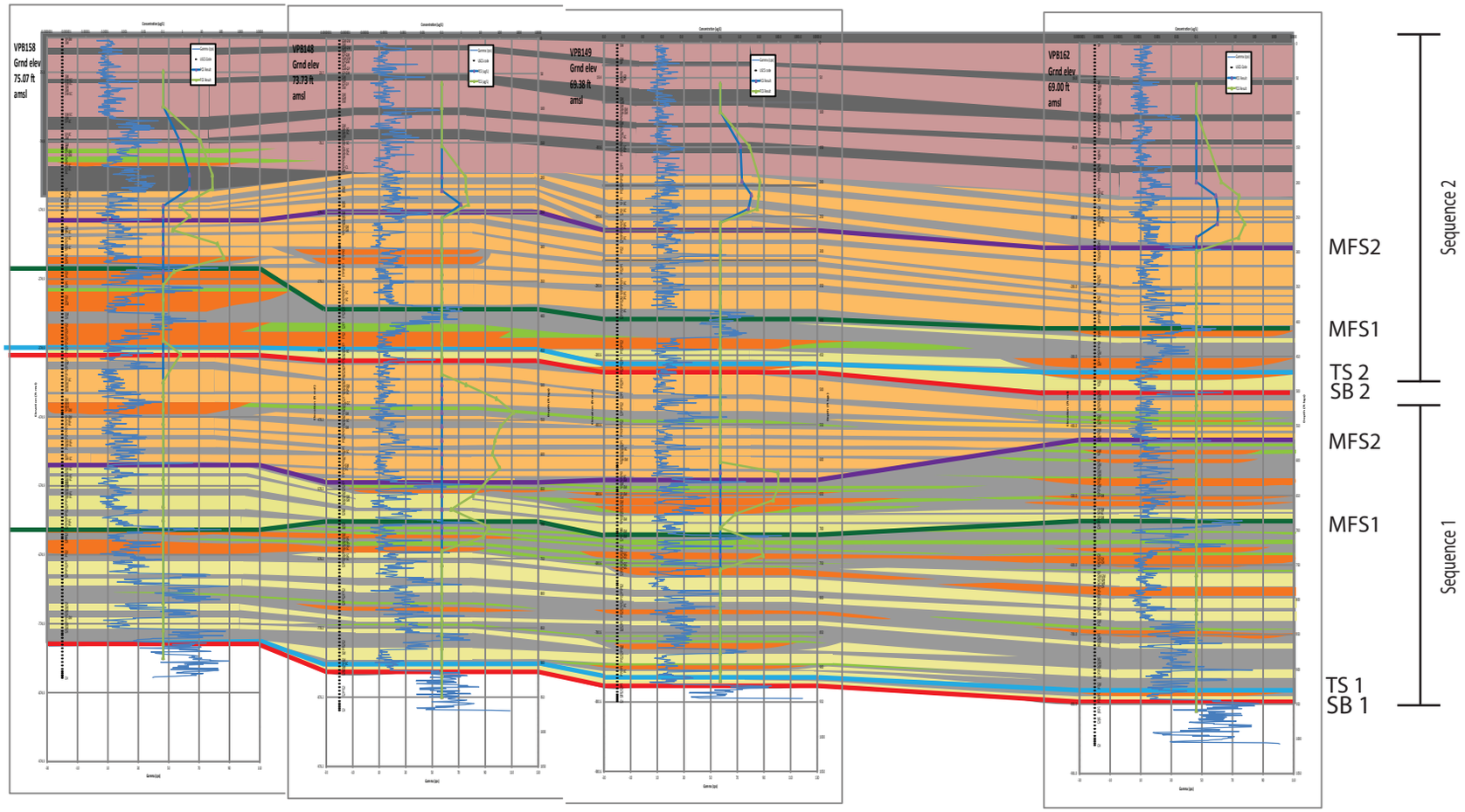
West

3

East

3′

B-B′



VPB158 VPB148 VPB149 VPB162

Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

Figure 7a. Cross Section 4-4' Showing Stratigraphic Framework

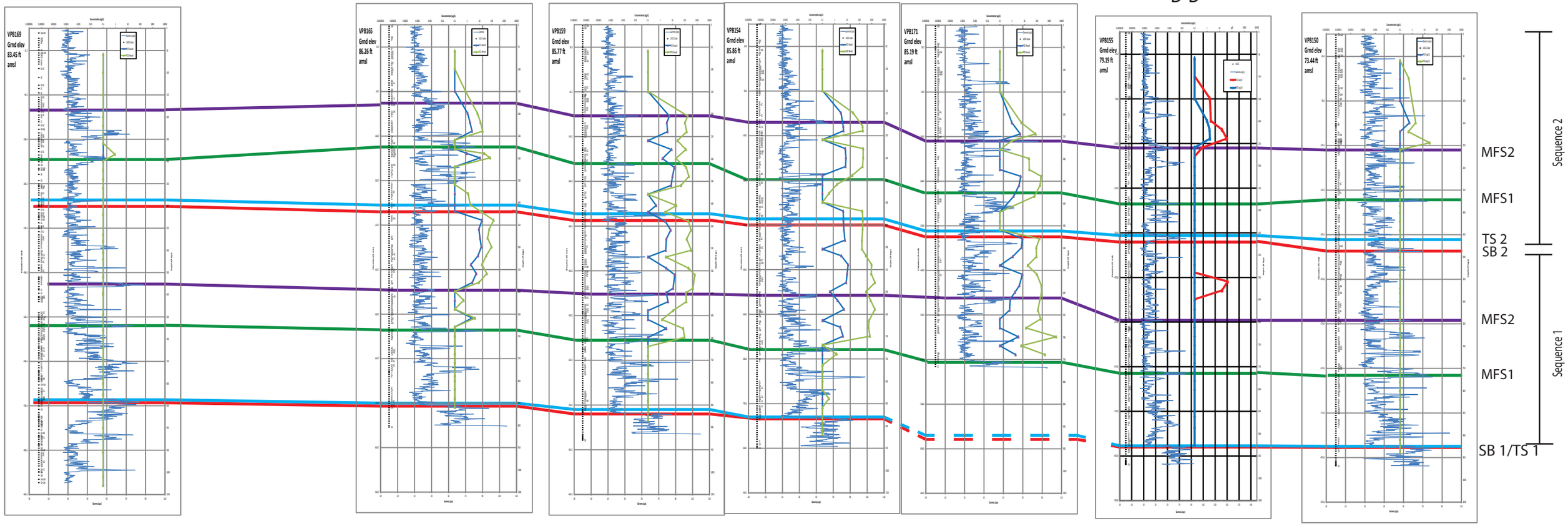
West

4

East

4′

B-B′



VPB169 VPB165 VPB159 VPB154 VPB171 VPB155 VPB150

- Deltaic (Transgressive Systems Tract)
- Deltaic (Highstand Systems Tract)
- Channel Bar
- Glacial
- Splay/Overbank fines
- Swamp and Tidal mud

- Sequence Boundary
- Maximum Flooding Surface 1
- Maximum Flooding Surface 2
- Transgressive Surface

Figure 7b. Cross Section 4-4′ Showing Depositional Facies Interpretation

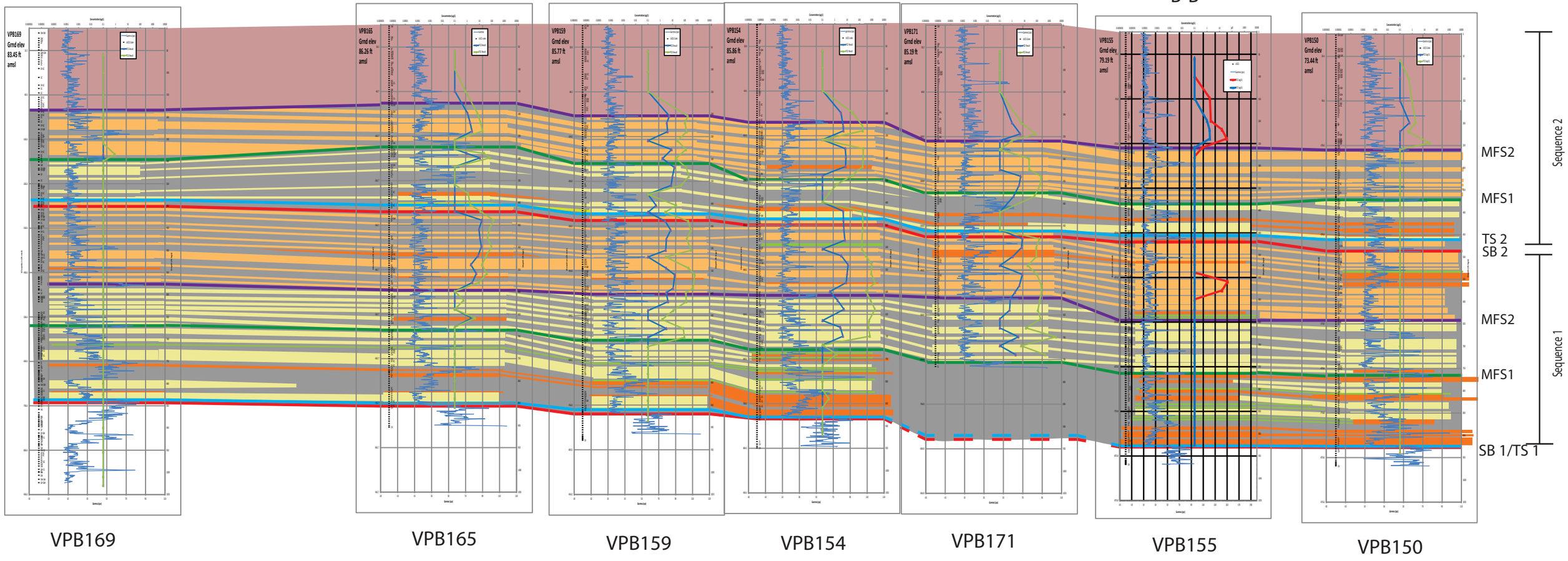
West

4

East

4′

B-B′



VPB169 VPB165 VPB159 VPB154 VPB171 VPB155 VPB150

- Deltaic (Transgressive Systems Tract)
- Deltaic (Highstand Systems Tract)
- Channel Bar
- Glacial
- Splay/Overbank fines
- Swamp and Tidal mud

- Sequence Boundary
- Maximum Flooding Surface 1
- Maximum Flooding Surface 2
- Transgressive Surface

Figure 8a. Cross Section 5-5' Showing Stratigraphic Framework

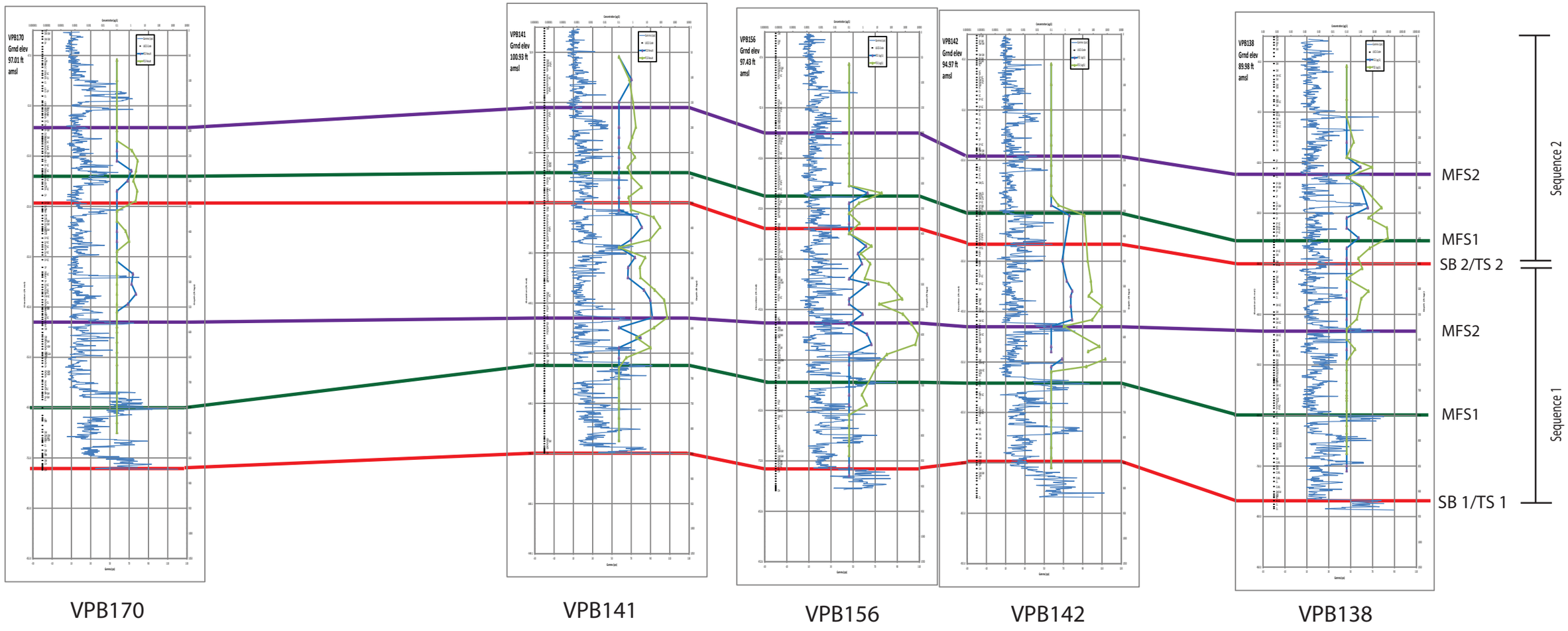
West

5

East

5′

B-B′



VPB170 VPB141 VPB156 VPB142 VPB138

Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

Figure 8b. Cross Section 5-5′ Showing Depositional Facies Interpretation

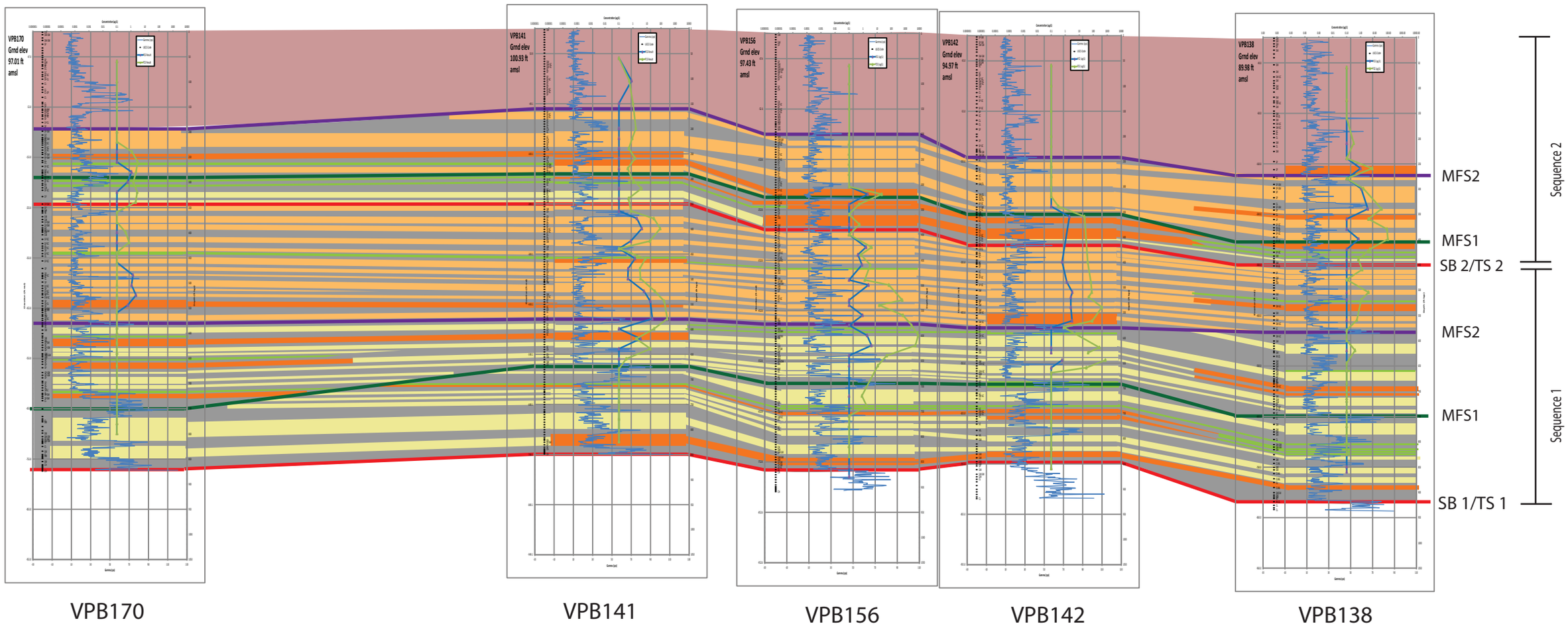
West

5

East

5′

B-B′



Deltaic (Transgressive Systems Tract)

Deltaic (Highstand Systems Tract)

Channel Bar

Glacial

Splay/Overbank fines

Swamp and Tidal mud

Sequence Boundary

Maximum Flooding Surface 1

Maximum Flooding Surface 2

Transgressive Surface

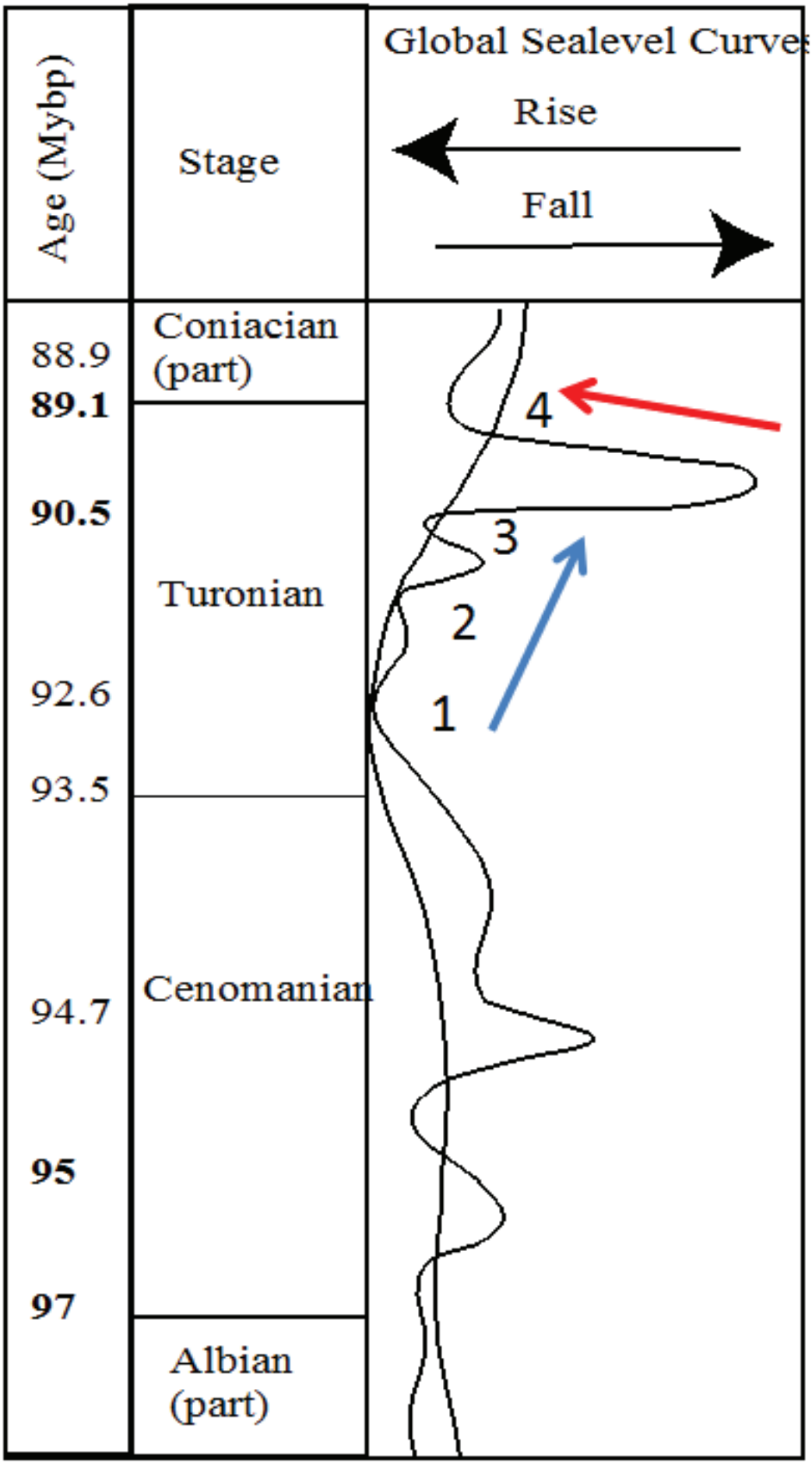


Figure 9. Historic Sea Level Curve (Miller, et al., 2005)

RESOLUTION CONSULTANTS

ATTACHMENT A

Glossary of Basic Terms

Glossary of Basic Terms

Accommodation: The space available for potential sediment accumulation. This space is the combined product of movement of:

1. The sea surface (global sea level measured from a datum, such as the center of earth)
2. The sea floor (tectonics)
3. Changes in rates of sediment accumulation.

Base level: a global reference surface to which continental erosion and marine deposition tend to proceed. It is effectively sea level, although rivers erode slightly below it.

Stratigraphy: The study of succession of the layered rocks (strata) and the lateral/vertical variations on a regional basis.

Facies: The sum total of physical and biological characteristics of a rock.

Depositional Environment: Geomorphological setting of a group of linked facies (depositional facies).

Sequence Stratigraphy: Stratigraphy in relation to accommodation within a framework of time-significant surfaces.

Relative sea level: Position of sea surface relative to a fixed datum near the sea floor determined by global sea level change (eustacy) and vertical movement of the sea floor (tectonism and/or sediment compaction).

Progradation: Sea-ward movement of the shoreline (sometimes called “regression”).

Retrogradation: Land-ward movement of the shoreline (sometimes called “transgression”).

Aggradation: No net land-ward or sea-ward movement of the shoreline.

Sequence: A relatively conformable successions of genetically-related strata bounded by subaerial unconformities and their correlative surfaces.

Sequence Boundary (SB): Surface of erosion or non-deposition (unconformity), separating one sequence from another.

Parasequence: Building block of a sequence. Bounded by Marine Flooding Surfaces.

Marine Flooding Surface (FS): Shale markers that record a rapid relative rise in sea level without deposition of sediment.

Transgressive Surface (TS): A prominent flooding surface that represents the first major flooding surface to follow the sequence boundary.

Maximum Flooding Surface (MFS): The last of the significant flooding surfaces and the widest landward extent of the marine incursion. It represents a turnaround from retrogradation to progradation.

Systems Tract: a three- dimensional group of depositional facies, genetically linked by active (modern) or inferred (ancient) processes and environments. We use the term, systems tract, to designate four subdivisions within each sequence of sea-level cycle: Lowstand, Transgressive, Highstand, and Falling-Stage systems tracts

Lowstand Systems Tract (LST): Systems tract bounded by the Sequence Boundary at the base and Transgressive Surface (TS) on top.

Transgressive Systems Tract (LST): Systems tract bounded by the Transgressive Surface (TS) at the base and Maximum Flooding Surface (MFS) on top.

Highstand Systems Tract (HST): Systems Tract bounded by the Maximum Flooding Surface (MFS) at the base and Basal Surface of Forced Regression (BS) on top.

Falling-Stage Systems Tract (FSST): The earliest portion of the Lowstand Systems Tract. Bounded by a Sequence Boundary (SB).

NEW YORK PROFESSIONAL GEOLOGIST SEAL

As a New York-licensed Professional Geologist, I have reviewed and approve this Vertical Profile Boring Data Summary Report for Vertical Profile Boring 168 - Groundwater Investigation at Naval Industrial Reserve Plant Bethpage Operable Unit 2, Site 1, and seal it in accordance with Article 145 Section 7209 of the New York State Education Laws. In sealing this document, I certify it was prepared under my direction, the geological information contained in it is true to the best of my knowledge and the geological methods and procedures included herein are consistent with currently accepted geological practices.

It is a violation of this law for any person to alter the contained drawings or the report in any way, unless he or she is acting under the direction of a NY-licensed Professional Geologist.

Name:	Brian E. Caldwell
NY PG License Number:	000511
State:	New York

Signature: B Caldwell

Date: 12/20/18