# 2016 OU2 GROUNDWATER INVESTIGATION DATA SUMMARY REPORT VPB161

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

**Prepared for:**


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

**May 2017**

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# DATA SUMMARY REPORT
# VPB161

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**BETHPAGE, NY**

**Prepared for:**

**Department of the Navy**
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**9324 Virginia Avenue**
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**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**
**CTO WE15**

**May 2017**

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 VPB161 location) in 2016 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 VPB161. The purpose of the VPB161 investigation was to ascertain subsurface conditions and contaminant levels and the southeastern extent of the offsite plume south of Hempstead Turnpike and east of Route 135. VPB locations within the general vicinity of VPB161 are shown in Figure 2. VPB161 was completed to 1010 feet (ft) below ground surface (bgs).

Field tasks were conducted in 2016 in accordance with the *United Federal Programs Sampling and Analysis Plan (UFP SAP)*, Bethpage, New York (Resolution Consultants, 2013a) and the *UFP SAP Addendum Installation of Vertical Profile Borings and Monitoring Wells* (Resolution Consultants, 2013b). The field investigation included completing one vertical profile boring, groundwater grab samples, geophysical logging, and surveying.

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

## 1.2 Site History

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

The Navy's property originally totaled 109.5 acres and was formerly a Government-Owned Contractor-Operated (GOCO) facility that was operated by Northrop Grumman (NG) until September 1998. Prior to 2002, the NWIRP property was bordered on the north, west, and south by current or former NG facilities, and on the east by a residential neighborhood. By March 2008,

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

## 1.3 Geology and Hydrogeology

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

The upper Pleistocene ranges in thickness from approximately 50 to 100 ft and consists of till and outwash deposits of medium to coarse sand and gravel with lenses of fine sand, silt and clay (Smolensky and Feldman, 1988); these deposits form the Upper Glacial Aquifer. 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 VPB161, the bottom of the Magothy (top of the Raritan Clay) is encountered at approximately 988 feet bgs. The Magothy is characterized by fine to medium sands and silts interbedded with zones of clays, silty sands and sandy clays. Sand and gravel lenses are found in some areas between depths of 600 and 880 ft bgs; these deposits form the main producing zones of the Magothy Aquifer

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

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

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

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

Resolution Consultants reviewed the geologic data and regional literature and developed four representative base-wide cross sections to support development of a Conceptual Site Model (CSM). A description of the application of Environmental Sequence Stratigraphy (ESS) and the results are provided in Appendix B.

## 2.0 FIELD PROGRAM

Field investigation activities at VPB161 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 (VPB161) was completed during this field effort between April 11, 2016 and June 9, 2016. The total depth of VPB161 was 1010 ft. The location is shown in Figure 2 and details are summarized in Table 1.

#### 2.1.1 Drilling

VPB161 was installed by setting a 10-inch diameter surface casing to 53 feet bgs and then setting an 8-inch diameter casing inside the 10-inch casing to a depth of 121 feet bgs using mud rotary drilling techniques. Drilling mud consisted of potable water and polymer-free sodium bentonite or equivalent material. Drilling mud was contained and re-circulated in baffled, high capacity mud tubs. A sand separator was used intermittently to remove fines from circulation.

#### 2.1.2 Sampling

A total of six (6) 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 988 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 VPB161 is included in Appendix A.

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

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

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

### 2.1.3 Geophysics

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

## 2.2 Decontamination and Investigation Derived Waste (IDW)

Resolution Consultants utilized dedicated and disposable sampling equipment when possible to avoid the potential for cross-contamination of samples. The sampling equipment included dedicated plastic scoops, disposable Teflon or polyethylene tubing, disposable gloves, and laboratory supplied sample bottles. Hand held equipment, split spoons, and the hydropunch were decontaminated using 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 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 OU-2 Offsite TCE Groundwater Plume Investigation,* NWIRP, Bethpage, New York. April.

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

Smolensky, D., and Feldman, S., 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**
**2016 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)[1] | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VPB161 | 4/11/2016 | 6/9/2016 | 62.00 | 1010 | 53 | 6 | 1008 | 43/2/2 | 138-140 | 5/10/2016 | RE127D1, RE127D2 |

MSL - mean sea level
ft bgs - feet below ground surface
GW - Groundwater
TOC - Total Organic Carbon

[1] 8-inch casing installed to 121 feet inside 10-inch casing.

# Figures

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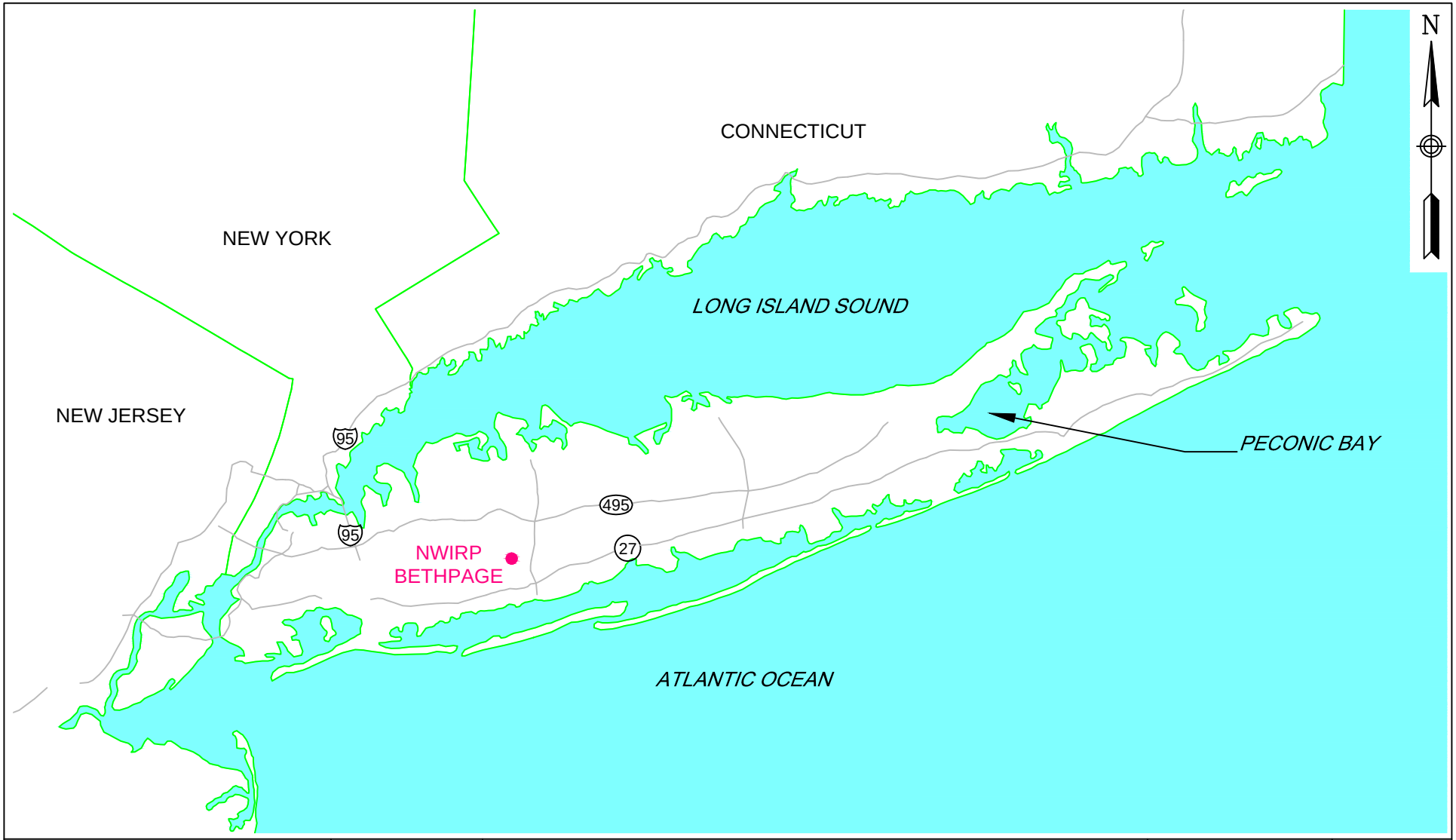



0 15 30

SCALE IN MILES

NAVFAC

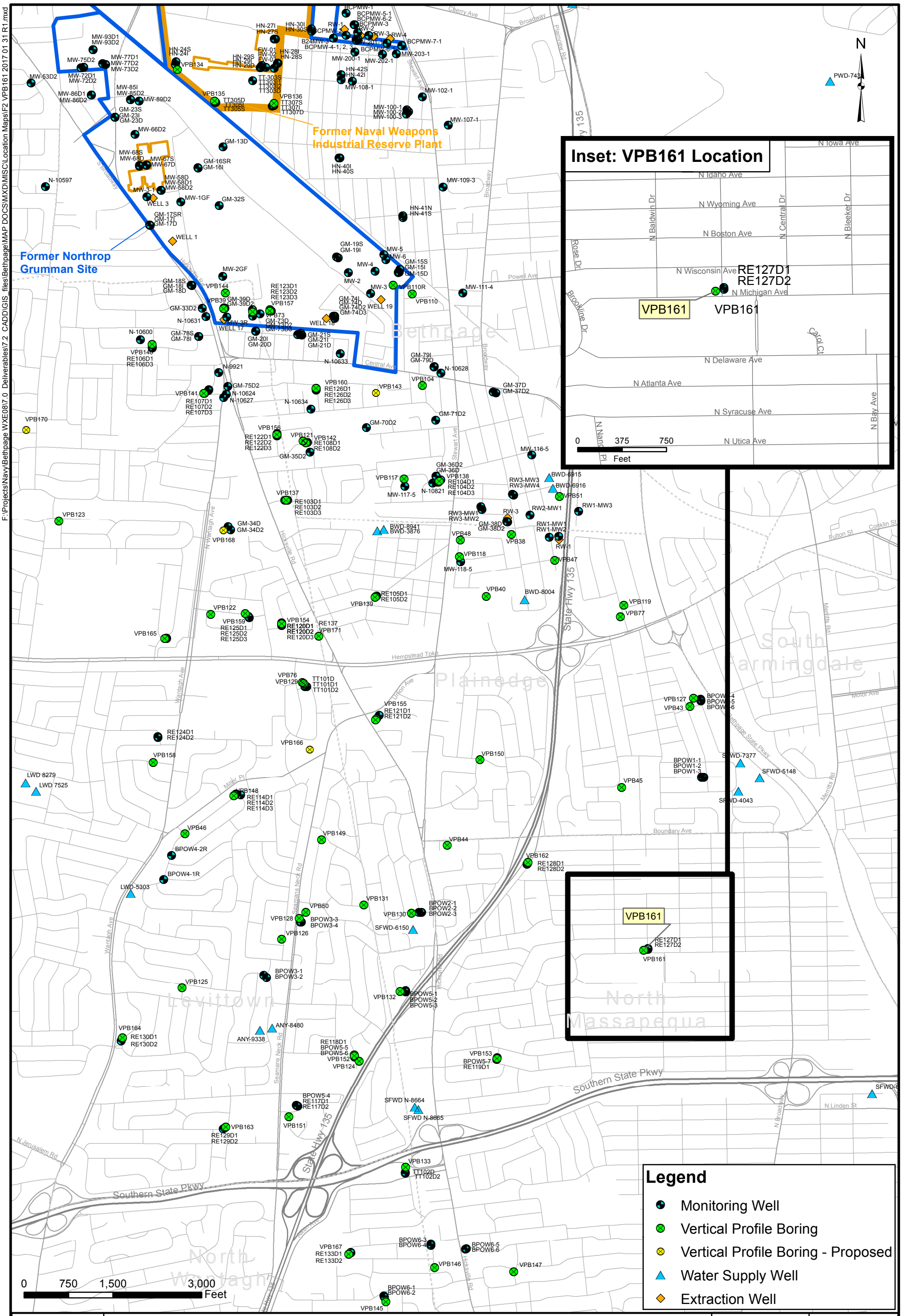
GENERAL LOCATION MAP
NWIRP BETHPAGE
BETHPAGE, NEW YORK

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

F:\Projects\Navy\Bethpage WXE0817.0 Deliverables\7.2 CADD\GIS_files\Bethpage\MAP DOCS\MXD\MISC\Location Maps\F2 VPB161 2017 01 31 R1.mxd

# Inset: VPB161 Location




VPB161 LOCATION MAP
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

| CONTRACT NUMBER | CTO NUMBER |
|---|---|
| N62470-11-D8013 | WE15 |
| APPROVED BY | DATE |
| PS | 1/31/2017 |
| APPROVED BY | DATE |
| — | — |
| FIGURE NO. | REV |
| 2 | 0 |

# Appendix A

# VPB161

# Section 1

## VPB161 Boring and Gamma Logs

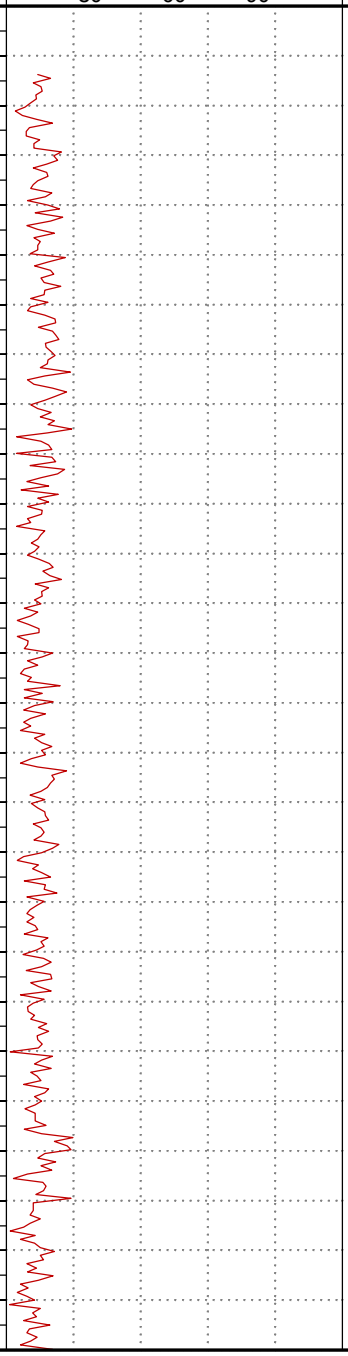
# Resolution Consultants

# Boring Log

BORING #: **VPB161**
Sheet 1 of 17

| | | |
|---|---|---|
| **Client:** Department of the Navy, Naval Facilities Engineering Command, Mid-Atlantic | | **Logged By:** G. Hicks |
| **Location:** N. Woodward Dr & N. Michigan Ave, Massapequa, NY | **Northing:** 199091.46 **Easting:** 1131174.08 | **Drilling Company:** Delta Well & Pump |
| **Project #:** 60266526 | **Ground Elevation (ft amsl):** 62.00 | **Well Screen Interval (ft):** NA |
| **Start Date:** 4/11/2016 | **Drilling Method:** Auger (0-50' bgs) Mud Rotary (>50' bgs) | **Water Level (ft):** NA |
| **Finish Date:** 6/9/2016 | | **Total Depth (ft):** 1010.0 |

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.

| DEPTH (ft) | Gamma Ray (0 / 30 / 60 / 90) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0–2 |  | | | | Upper Glacial | SP | | Yellowish brown (10YR 5/4) poorly graded medium subrounded SAND |
| 2–6 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 6–10 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 10–14 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 14–18 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 18–22 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 22–26 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 26–30 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 30–36 | | | | | | SP | | Brown (10YR 4/3) poorly graded medium subrounded SAND, few fine subrounded Gravel |
| 36–42 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium to coarse subrounded SAND, trace fine subrounded Gravel |
| 42–46 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium to coarse subrounded SAND, trace fine subrounded Gravel |
| 46–50 | | | | | | SP | | Yellowish brown (10YR 5/6) poorly graded medium to coarse subrounded SAND, trace fine subrounded Gravel |
| 50–54 | | | | | | SP | | |

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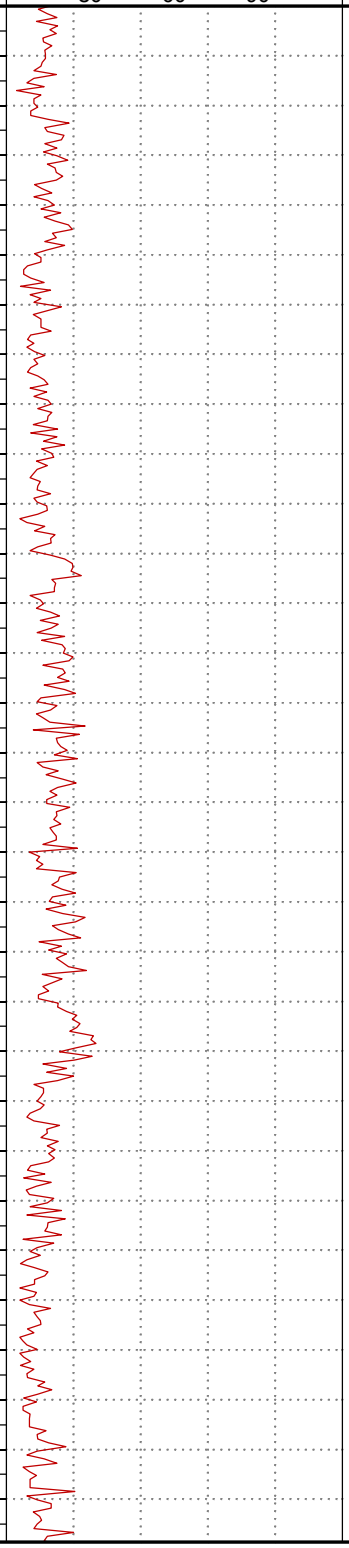
# Boring Log

BORING #: **VPB161**
Sheet 2 of 17




| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 54 | | | | Upper Glacial | SP | | Yellowish brown (10YR 5/6) poorly graded medium to coarse subrounded SAND, trace fine subrounded Gravel *(continued)* |
| 56 | | | | | | | |
| 58 | | | | | | | |
| 60 | | <0.50 | <0.50 | | GM | | Yellowish brown (10YR 5/6) Silty fine to medium subrounded GRAVEL, few fine sand, trace muscovite, trace iron nodules |
| 62 | | | | | | | |
| 64 | | | | | GP | | Yellowish brown (10YR 5/6) poorly graded fine subrounded GRAVEL, little medium to coarse subrounded Sand, trace iron nodules |
| 66 | | | | | | | |
| 68 | | | | | | | |
| 70 | | | | | SW | | Yellowish brown (10YR 5/6) well graded fine to coarse subrounded SAND, little fine subrounded Gravel, trace iron nodules |
| 72 | | | | | | | |
| 74 | | | | | GC | | Yellowish brown (10YR 5/6) soft fat Clayey fine subrounded GRAVEL, little subrounded medium sand, trace iron nodules |
| 76 | | | | | | | |
| 78 | | | | | | | |
| 80 | | | | | SW | | Light yellowish brown (10YR 6/4) well graded fine to coarse subrounded SAND, trace Silt |
| 82 | | | | | | | |
| 84 | | | | | GP | | Pale brown (10YR 6/3) poorly graded fine subrounded GRAVEL, few coarse Sand |
| 86 | | | | | | | |
| 88 | | | | | | | |
| 90 | | | | | SP | | Light brownish gray (10YR 6/2) poorly graded medium subrounded SAND, few fine subrounded Gravel, trace muscovite |
| 92 | | | | | | | |
| 94 | | | | | CH | | Black (5YR 2.5/1) fine Sandy soft fat CLAY, few lignite |
| 96 | | | | | | | |
| 98 | | | | | | | |
| 100 | | <0.50 | <0.50 | | SC | | Pale brown /(10YR 6/3) soft fat Clayey fine to coarse SAND, trace lignite |
| 102 | | | | Magothy | | | |
| 104 | | | | | SC | | Pale brown /(10YR 6/3) soft fat Clayey fine to coarse SAND, trace lignite |
| 106 | | | | | | | |
| 108 | | | | | | | |
| 110 | | | | | SC | | Yellowish brown (10YR 5/6) soft fat Clayey medium subangular SAND, little iron, trace pyrite, |
| 112 | | | | | | | |
| 114 | | | | | SC | | Yellowish brown (10YR 5/6) soft fat Clayey medium subangular SAND, little iron, trace pyrite, |

*(Continued Next Page)*

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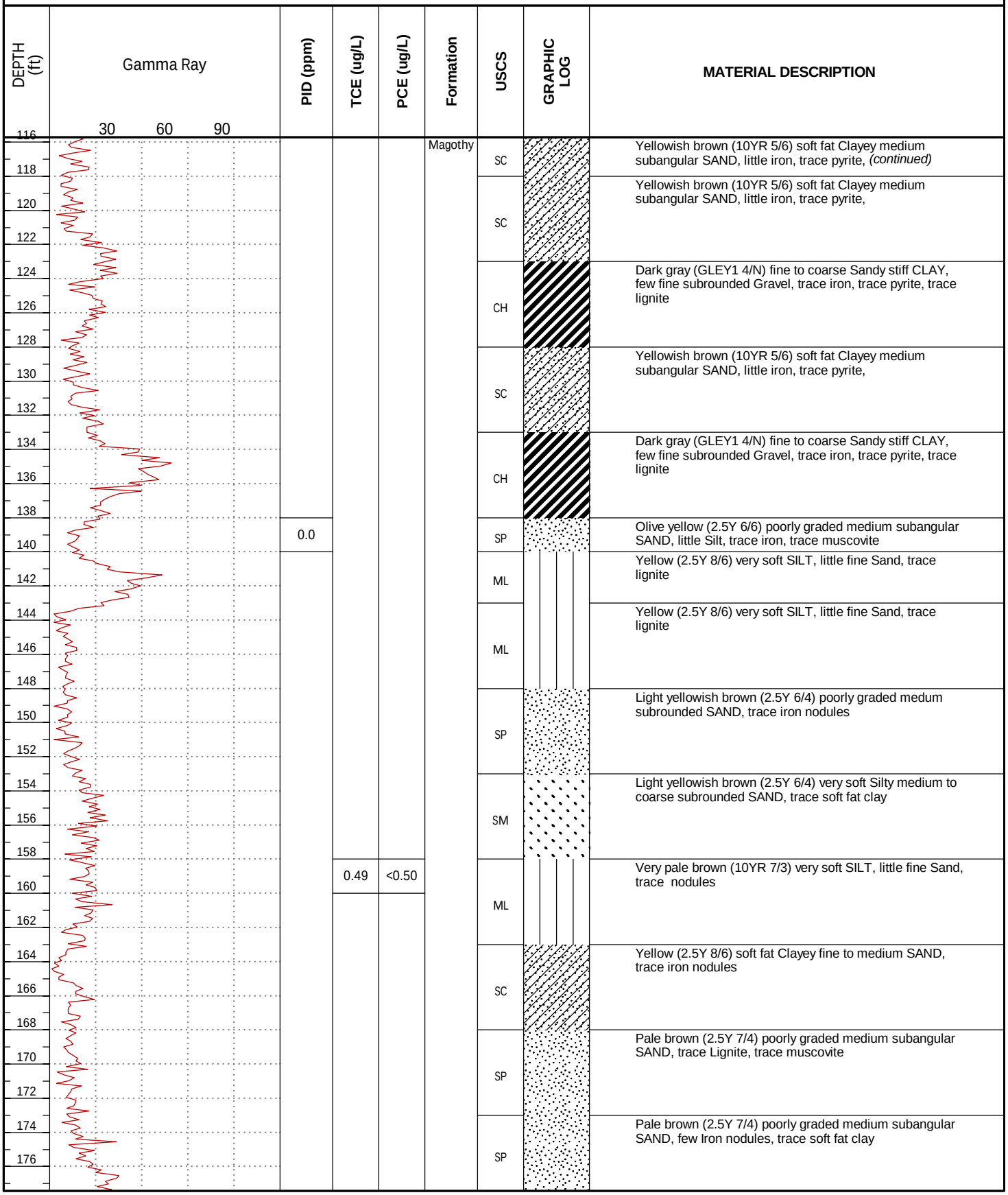
# Boring Log

BORING #: **VPB161**
Sheet 3 of 17

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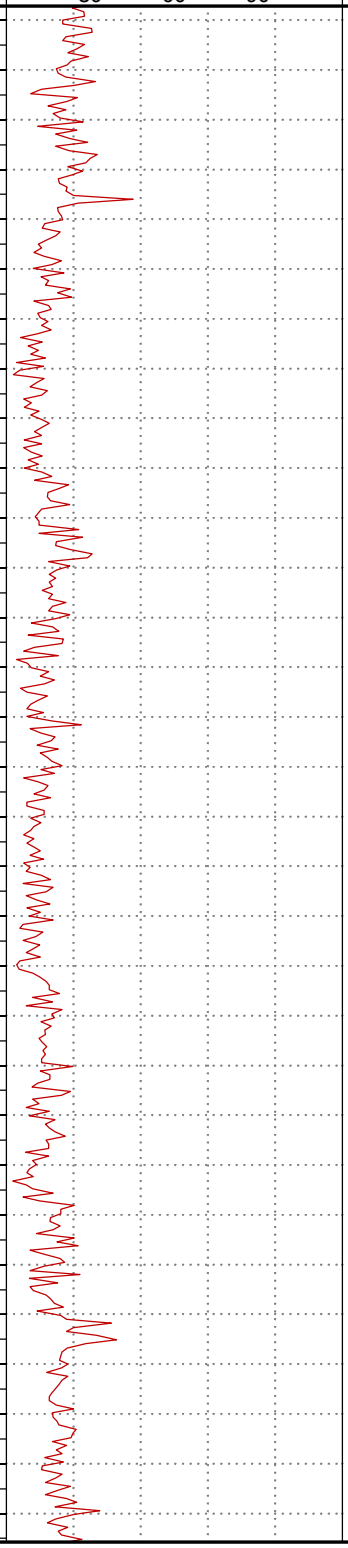
# Resolution Consultants

# Boring Log

BORING #: **VPB161**
Sheet 4 of 17




| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 178 | | | | Magothy | | | |
| 180 | | | | | SC | | Yellow (2.5Y 8/6) soft fat Clayey fine to medium SAND, trace iron nodules |
| 184 | | | | | SP | | Pale brown (2.5Y 7/3) poorly graded medium subangular SAND, trace soft fat clay |
| 190 | | | | | SC | | Pale yellow (5Y 8/3) soft fat Clayey poorly graded medium subangular SAND, trace iron |
| 194 | | | | | SP | | Light gray (5Y 7/1) poorly graded medium subangular SAND, trace Lignite, trace muscovite |
| 200 | | 0.64 | <0.50 | | SP | | Light gray (2.5Y 7/2) poorly graded fine SAND, few Silt |
| 204 | | | | | SP-SC | | Pale brown (2.5Y 8/3) poorly graded fine SAND with soft fat Clay, trace Silt, trace muscovite |
| 210 | | | | | SP-SC | | Pale brown (2.5Y 8/3) poorly graded fine SAND with soft fat Clay, trace Silt, trace iron |
| 214 | | | | | SP | | Pale brown (2.5Y 7/4) poorly graded fine to medium SAND, trace Lignite |
| 220 | | 1.5 | 0.76 | | SC | | Light gray (10YR 7/1) soft fat Clayey fine SAND, trace muscovite |
| 224 | | | | | SP | | Light gray (10YR 7/1) poorly graded medium subangular SAND, trace soft fat Clay, trace lignite, trace iron |
| 230 | | | | | SP-SC | | Yellow (10YR 8/8) poorly graded fine SAND with soft fat Clay, trace iron |
| 236 | | | | | SP-SC | | Very pale brown (10YR 7/3) poorly graded fine SAND with soft fat Clay, trace lignite, trace iron |
| 238 | | <0.50 | <0.50 | | CL | | Black (GLEY1 2.5/N) fine Sandy lean CLAY, few lignite |

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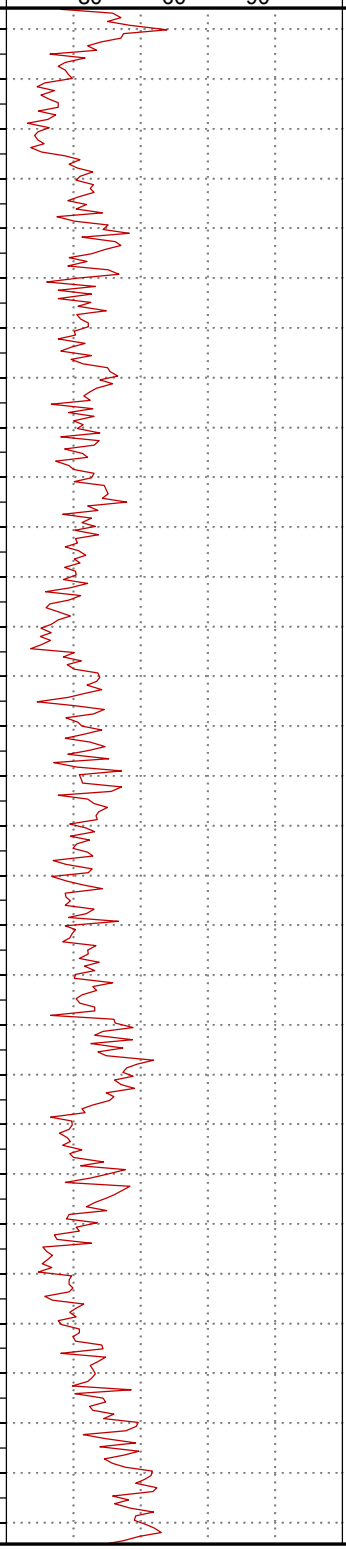
# Resolution Consultants

# Boring Log

BORING #: **VPB161**
Sheet 5 of 17




| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 240 | | <0.50 | <0.50 | Magothy | CL | | Black (GLEY1 2.5/N) fine Sandy lean CLAY, few lignite *(continued)* |
| 242 | | | | | | | |
| 244 | | | | | CH | | Black (GLEY1 2.5/N) stiff fat CLAY, few Lignite, trace silt |
| 246 | | | | | | | |
| 248 | | | | | | | |
| 250 | | | | | CH | | Black (GLEY1 2.5/N) stiff fat CLAY, few Lignite, trace silt, trace muscovite |
| 252 | | | | | | | |
| 254 | | | | | CH | | Black (GLEY1 2.5/N) fine to medium Sandy stiff fat CLAY, few Lignite, trace silt |
| 256 | | | | | | | |
| 258 | | | | | | | |
| 260 | | <0.50 | <0.50 | | SC | | Dark gray (7.5YR 4/1) soft fat Clayey fine SAND, trace lignite |
| 262 | | | | | | | |
| 264 | | | | | SC | | Dark gray (7.5YR 4/1) soft fat Clayey fine SAND, few silt, trace fine subrounded gravel |
| 266 | | | | | | | |
| 268 | | | | | | | |
| 270 | | | | | SC | | Dark gray (7.5YR 4/1) soft fat Clayey fine SAND, trace lignite |
| 272 | | | | | | | |
| 274 | | | | | SC | | Dark gray (7.5YR 4/1) soft fat Clayey fine SAND, trace lignite |
| 276 | | | | | | | |
| 278 | | | | | | | |
| 280 | | <0.50 | <0.50 | | CH | | Very dark gray (7.5YR 3/1) fine Sandy soft fat CLAY, few silt, trace lignite |
| 282 | | | | | | | |
| 284 | | | | | CH | | Very dark gray (7.5YR 3/1) fine Sandy soft fat CLAY, few silt, trace lignite |
| 286 | | | | | | | |
| 288 | | | | | | | |
| 290 | | | | | SC | | Dark gray (GLEY1 4/N) soft fat Clayey fine to medium SAND, few lignite |
| 292 | | | | | | | |
| 294 | | | | | CH | | Very dark gray (7.5YR 3/1) fine Sandy soft fat CLAY, few silt, trace lignite |
| 296 | | | | | | | |
| 298 | | | | | | | |
| 300 | | <0.50 | <0.50 | | CH | | Very dark gray (GLEY1 3/N) stiff fat CLAY, few fine Sand, trace silt |

*(Continued Next Page)*

# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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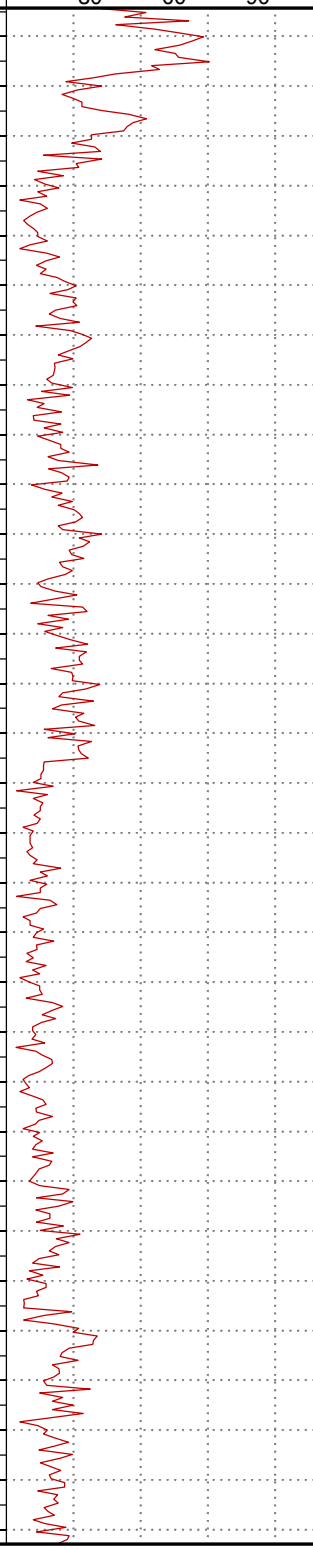


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 302 | | | | Magothy | CH | | Very dark gray (GLEY1 3/N) stiff fat CLAY, few fine Sand, trace silt *(continued)* |
| 304 | | | | | | | |
| 306 | | | | | CH | | Very dark gray (GLEY1 3/N) stiff fat CLAY, few fine Sand, trace silt |
| 308 | | | | | | | |
| 310 | | | | | SP | | Dark gray (GLEY1 4/N) poorly graded fine SAND, trace soft fat Clay |
| 312 | | | | | | | |
| 314 | | | | | SP | | Dark gray (GLEY1 4/N) poorly graded fine SAND, trace soft fat Clay |
| 316 | | | | | | | |
| 318 | | | | | | | |
| 320 | | <0.50 | <0.50 | | SC | | Dark gray (GLEY1 4/N) soft fat Clayey fine to coarse subangular SAND, trace lignite |
| 322 | | | | | | | |
| 324 | | | | | SP-SC | | Dark gray (GLEY1 4/N) poorly graded fine SAND with soft fat Clay, trace Silt, trace pyrite |
| 326 | | | | | | | |
| 328 | | | | | | | |
| 330 | | | | | SP-SC | | Dark gray (GLEY1 4/N) poorly graded fine SAND with soft fat Clay, trace Silt, trace pyrite, trace muscovite |
| 332 | | | | | | | |
| 334 | | | | | SP | | Dark gray (GLEY1 4/N) poorly graded fine to medium subangular SAND, trace soft fat Clay, trace muscovite, trace pyrite |
| 336 | | | | | | | |
| 338 | | | | | | | |
| 340 | | <0.50 | <0.50 | | SP | | Gray (GLEY1 6/N) poorly graded fine to medium SAND |
| 342 | | | | | | | |
| 344 | | | | | SP | | Gray (GLEY1 6/N) poorly graded fine SAND |
| 346 | | | | | | | |
| 348 | | | | | | | |
| 350 | | | | | SP | | Gray (GLEY1 6/N) poorly graded fine to medium SAND, trace Lignite |
| 352 | | | | | | | |
| 354 | | | | | SP-SC | | Gray (Gley 1 5/N) poorly graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 356 | | | | | | | |
| 358 | | | | | | | |
| 360 | | <0.50 | <0.50 | | SP-SC | | Gray (GLEY1 5/N) poorly graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 362 | | | | | | | |

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# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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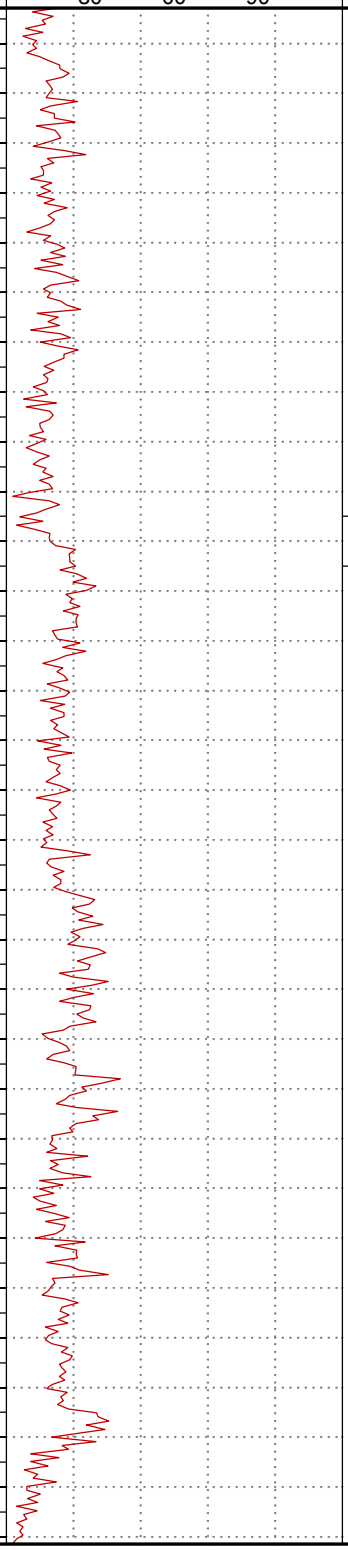


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 364 | | | | Magothy | SP-SC | | Gray (GLEY1 5/N) poorly graded fine to coarse subangular SAND with stiff fat Clay, trace lignite, trace iron |
| 366 | | | | | | | |
| 368 | | | | | | | |
| 370 | | | | | SP | | Gray (GLEY1 5/N) poorly graded fine to medium SAND, trace soft fat Clay, trace iron, trace muscovite |
| 372 | | | | | | | |
| 374 | | | | | SP | | Gray (GLEY1 5/N) poorly graded fine to medium SAND, trace Silt, trace iron, trace muscovite |
| 376 | | | | | | | |
| 378 | | | | | | | |
| 380 | | <1.0 | <1.0 | | SP | | Gray (GLEY1 5/N) poorly graded fine to medium SAND, trace Silt, trace iron, trace muscovite |
| 382 | | | | | | | |
| 384 | 0.0 | | | | SP | | Gray (GLEY1 5/N) poorly graded fine to medium SAND, trace Silt, trace iron, trace muscovite |
| 386 | | | | | SP | | Gray (GLEY1 5/N) poorly graded fine SAND, trace soft fat Clay |
| 388 | | | | | | | |
| 390 | | | | | SP | | Dark gray (10YR 4/1) poorly graded fine SAND, trace pyrite |
| 392 | | | | | | | |
| 394 | | | | | SC | | Very dark gray (10YR 3/1) stiff Clayey poorly graded fine SAND, trace pyrite |
| 396 | | | | | | | |
| 398 | | | | | | | |
| 400 | | <0.50 | <0.50 | | CH | | Dark gray (10YR 4/1) stiff fat CLAY, few fine Sand, trace pyrite |
| 402 | | | | | | | |
| 404 | | | | | CL | | Dark gray (10YR 4/1) fine Sandy lean CLAY, few silt, trace pyrite |
| 406 | | | | | | | |
| 408 | | | | | | | |
| 410 | | | | | CL | | Dark gray (10YR 4/1) fine Sandy lean CLAY, few silt, trace pyrite |
| 412 | | | | | | | |
| 414 | | | | | CL | | Dark gray (10YR 4/1) fine Sandy lean CLAY, few silt, trace pyrite |
| 416 | | | | | | | |
| 418 | | | | | | | |
| 420 | | <0.50 | <0.50 | | SC | | Gray (10YR 5/1) soft fat Clayey poorly graded fine SAND, trace muscovite |
| 422 | | | | | | | |
| 424 | | | | | SC | | |

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# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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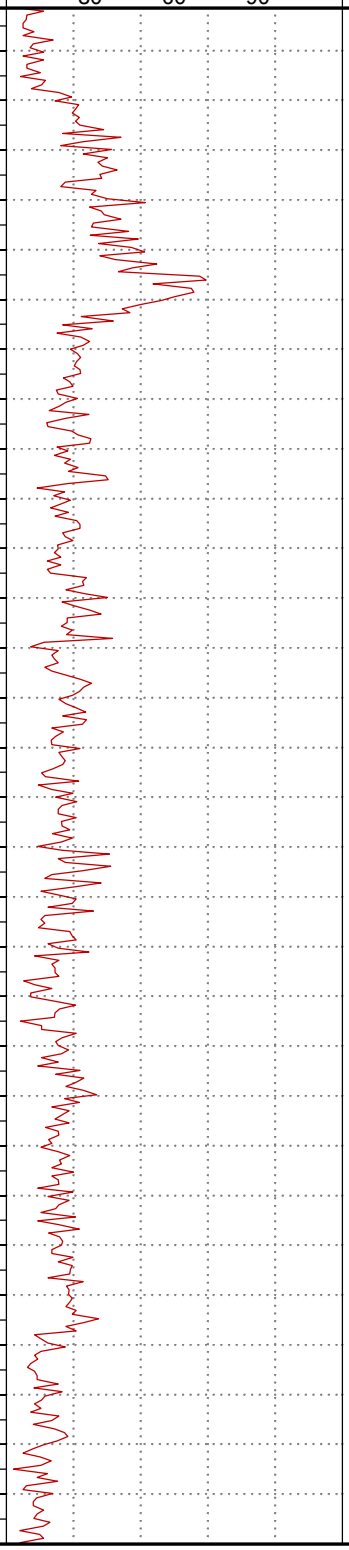


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 426 | | | | Magothy | SC | | Gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, trace muscovite, trace lignite *(continued)* |
| 428 | | | | | | | |
| 430 | | | | | CH | | Dark gray (10YR) medium subangular Sandy stiff lean CLAY, few lignite, trace pyrite |
| 432 | | | | | | | |
| 434 | | | | | SC | | Dark gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, few lignite, trace muscovite, trace pyrite |
| 436 | | | | | | | |
| 438 | | | | | | | |
| 440 | | <0.50 | <0.50 | | CL | | Gray (10YR 5/1) soft lean CLAY, little fine Sand, trace pyrite, trace muscovite |
| 442 | | | | | | | |
| 444 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite |
| 446 | | | | | | | |
| 448 | | | | | | | |
| 450 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite |
| 452 | | | | | | | |
| 454 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite |
| 456 | | | | | | | |
| 458 | | | | | | | |
| 460 | | <0.50 | <0.50 | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite |
| 462 | | | | | | | |
| 464 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite, trace muscovite |
| 466 | | | | | | | |
| 468 | | | | | | | |
| 470 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite, trace muscovite |
| 472 | | | | | | | |
| 474 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few lignite, trace muscovite |
| 476 | | | | | | | |
| 478 | | | | | | | |
| 480 | | <0.50 | <0.50 | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, few soft fat Clay, trace muscovite, trace pyrite |
| 482 | | | | | | | |
| 484 | | | | | SW | | Gray (7.5YR 6/1) well graded fine to coarse subrounded SAND, few Silt, trace muscovite, trace pyrite |
| 486 | | | | | | | |

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# Resolution Consultants

# Boring Log

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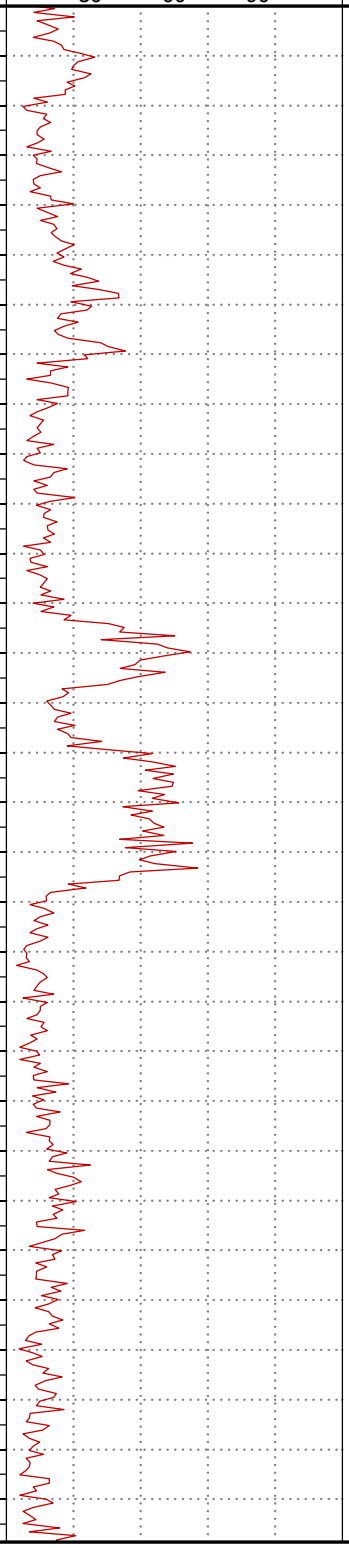


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 486 | | | | Magothy | SW | | Gray (7.5YR 6/1) well graded fine to coarse subrounded SAND, few Silt, trace muscovite, trace pyrite *(continued)* |
| 488 | | | | | | | |
| 490 | | | | | SW | | Gray (7.5YR 6/1) well graded fine to coarse subrounded SAND, few Silt, trace muscovite, trace pyrite |
| 492 | | | | | | | |
| 494 | | | | | SW-SM | | Gray (7.5YR 6/1) well graded fine to medium subrounded SAND with Silt, trace muscovite |
| 496 | | | | | | | |
| 498 | | | | | | | |
| 500 | | <0.50 | <0.50 | | SW-SM | | Gray (7.5YR 6/1) well graded fine to medium subrounded SAND with Silt, trace muscovite |
| 502 | | | | | | | |
| 504 | | | | | SW-SM | | Gray (7.5YR 6/1) well graded fine to medium subrounded SAND with Silt, trace muscovite |
| 506 | | | | | | | |
| 508 | | | | | | | |
| 510 | | | | | SM | | Dark gray (7.5YR 4/1) very soft Silty fine SAND, trace soft fat clay |
| 512 | | | | | | | |
| 514 | | | | | CH | | Gray (10YR 5/1) fine Sandy stiff fat CLAY, trace pyrite |
| 516 | | | | | | | |
| 518 | | | | | | | |
| 520 | | <1.1 | <1.1 | | CH | | Gray (10YR 5/1) fine Sandy stiff fat CLAY, trace pyrite |
| 522 | | | | | | | |
| 524 | | | | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with stiff fat Clay, trace muscovite, trace pyrite |
| 526 | | | | | | | |
| 528 | | | | | | | |
| 530 | | | | | SW | | Gray (10YR 5/1) well graded fine to coarse subangular SAND, trace soft fat Clay, trace pyrite, trace iron, trace muscovite |
| 532 | | | | | | | |
| 534 | | | | | SW | | Gray (10YR 5/1) well graded fine to coarse subangular SAND, trace soft fat Clay, trace pyrite, trace iron, trace muscovite, trace lignite |
| 536 | | | | | | | |
| 538 | | | | | | | |
| 540 | | <0.50 | <0.50 | | SW | | Gray (10YR 5/1) well graded fine to coarse subangular SAND, trace fine subrounded Gravel, trace pyrite, trace iron, trace muscovite |
| 542 | | | | | | | |
| 544 | | | | | SW | | Gray (10YR 5/1) well graded fine to coarse subrounded SAND, little fine subrounded Gravel, trace pyrite, trace muscovite |
| 546 | | | | | | | |

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# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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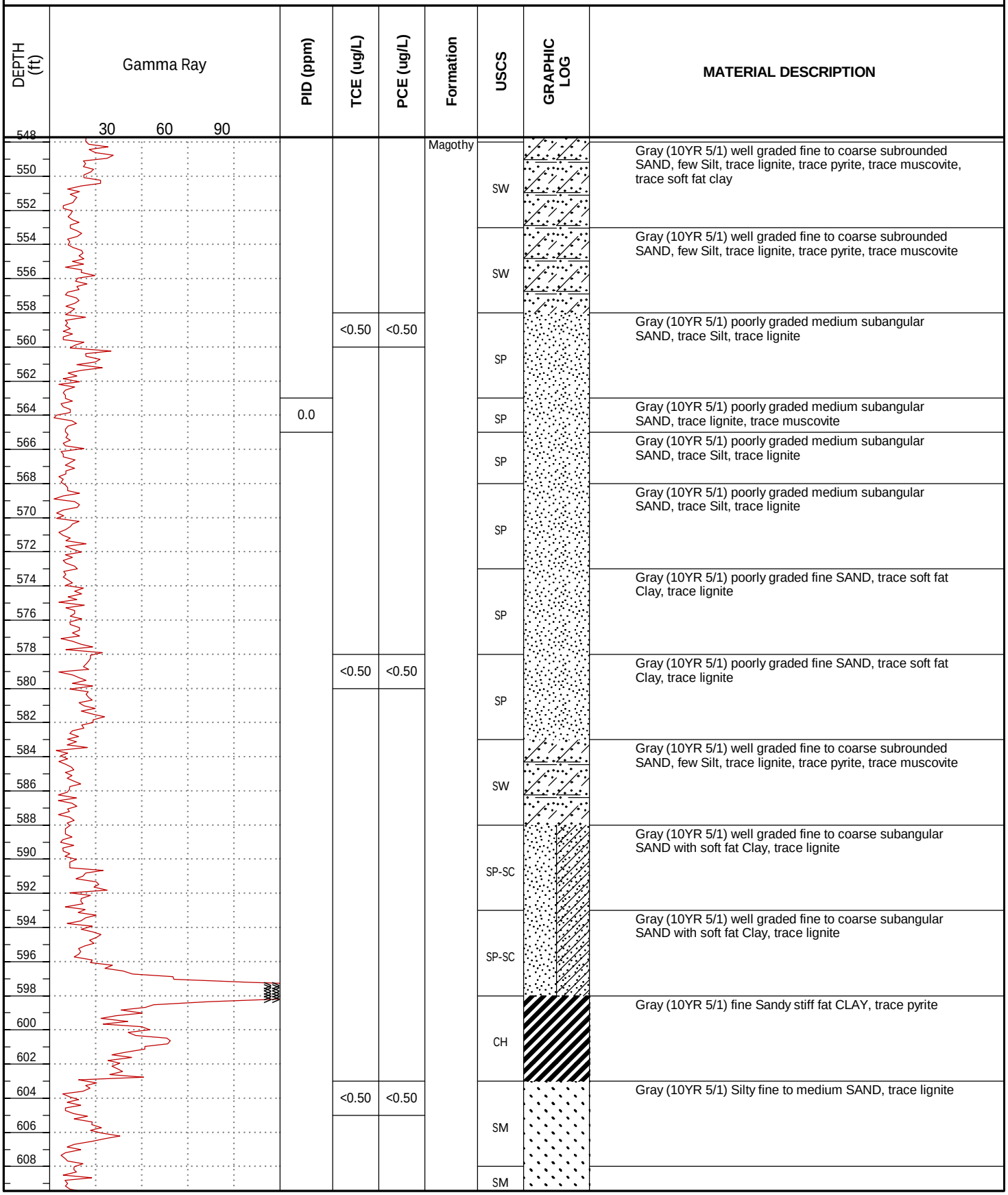


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# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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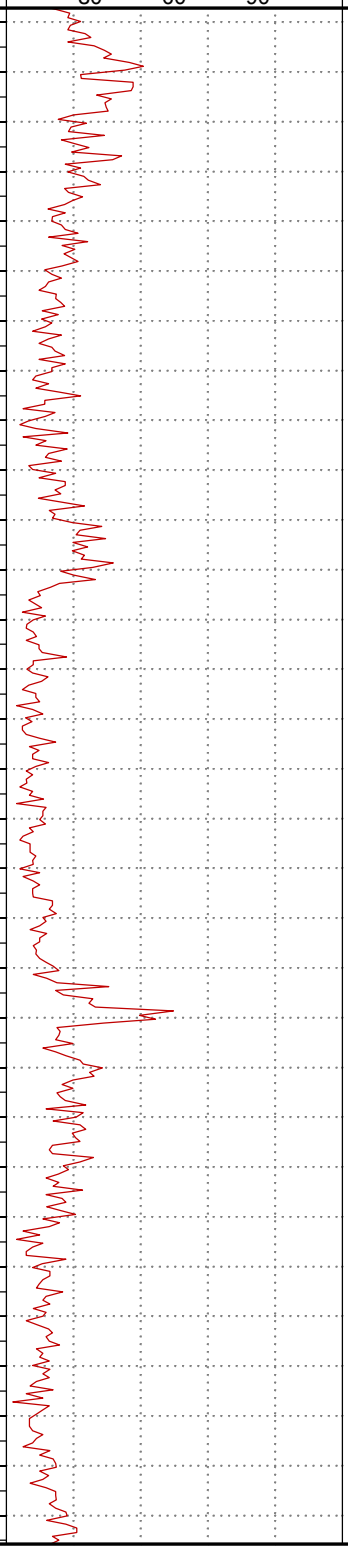


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 610 | | | | Magothy | | | |
| 612 | | | | | SM | | Gray (10YR 5/1) Silty fine to medium SAND, trace lignite, trace soft fat clay *(continued)* |
| 614 | | | | | SM | | Gray (10YR 5/1) Silty fine to medium SAND, trace lignite, trace soft fat clay |
| 616 | | | | | | | |
| 618 | | | | | SM | | Gray (10YR 5/1) Silty fine to medium SAND, trace lignite |
| 620 | | | | | | | |
| 622 | | | | | | | |
| 624 | | <0.50 | <0.50 | | SM | | Gray (10YR 5/1) Silty fine to medium SAND, trace lignite |
| 626 | | | | | | | |
| 628 | | | | | | | |
| 630 | | | | | CH | | Gray (10YR 5/1) fine Sandy soft fat CLAY, trace pyrite |
| 632 | | | | | | | |
| 634 | | | | | SM | | Gray (10YR 5/1) Silty fine to medium SAND, trace lignite |
| 636 | | | | | | | |
| 638 | | | | | | | |
| 640 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 642 | | | | | | | |
| 644 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 646 | | | | | | | |
| 648 | | | | | | | |
| 650 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 652 | | | | | | | |
| 654 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 656 | | | | | | | |
| 658 | | | | | | | |
| 660 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 662 | | | | | | | |
| 664 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt |
| 666 | | | | | | | |
| 668 | | | | | | | |
| 670 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |

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# Resolution Consultants

# Boring Log

BORING #: **VPB161**
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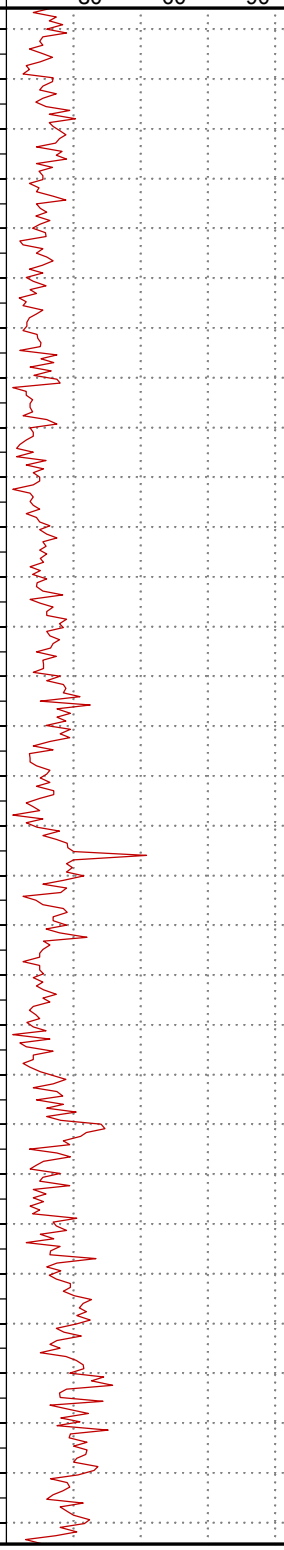


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 672 | | | | Magothy | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite *(continued)* |
| 674 | | | | | | | |
| 676 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 678 | | | | | | | |
| 680 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 682 | | | | | | | |
| 684 | | <0.50 | <0.50 | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 686 | | | | | | | |
| 688 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 690 | | | | | | | |
| 692 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 694 | | | | | | | |
| 696 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 698 | | | | | | | |
| 700 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 702 | | | | | | | |
| 704 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 706 | | | | | | | |
| 708 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 710 | | | | | | | |
| 712 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 714 | | | | | | | |
| 716 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 718 | | | | | | | |
| 720 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 722 | | | | | | | |
| 724 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 726 | | | | | | | |
| 728 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 730 | | | | | | | |
| 732 | | | | | | | |

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# Boring Log

BORING #: **VPB161**
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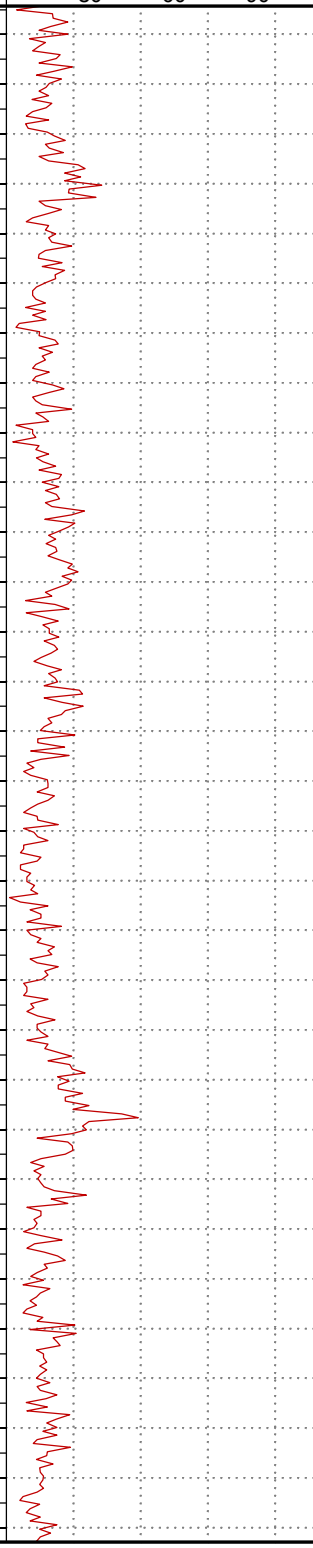


| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 734–738 | | | | Magothy | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 740–742 | | <1.5 | <1.5 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace lignite |
| 744–748 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt, trace fine gravel |
| 750–752 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 754–758 | | | | | SW-SM | | Gray (10YR 5/1) well graded fine to coarse SAND with Silt, trace fine gravel |
| 760–762 | | <0.72 | <0.72 | | SW-SM | | Gray (10YR 5/1) well graded fine to coarse SAND with Silt, trace fine gravel |
| 764–768 | | | | | SW-SM | | Gray (10YR 5/1) well graded fine to coarse SAND with Silt, trace fine gravel |
| 770–772 | | | | | GP-GM | | Gray (10YR 5/1) poorly graded fine subrounded GRAVEL with Silt and fine to coarse subrounded sand |
| 774–778 | | | | | GP-GM | | Gray (10YR 5/1) poorly graded fine subrounded GRAVEL with Silt and fine to coarse subrounded sand |
| 780–782 | | <0.50 | <0.50 | | GP-GM | | Gray (10YR 5/1) poorly graded fine subrounded GRAVEL with Silt and fine to coarse subrounded sand |
| 784–788 | | | | | GW-GC | | Gray (10YR 5/1) poorly graded fine subrounded GRAVEL with soft fat Clay |
| 790–794 | | | | | GP-GM | | Gray (10YR 5/1) poorly graded fine subrounded GRAVEL with Silt and fine to coarse subrounded sand |
| | | | | | SP-SM | | |

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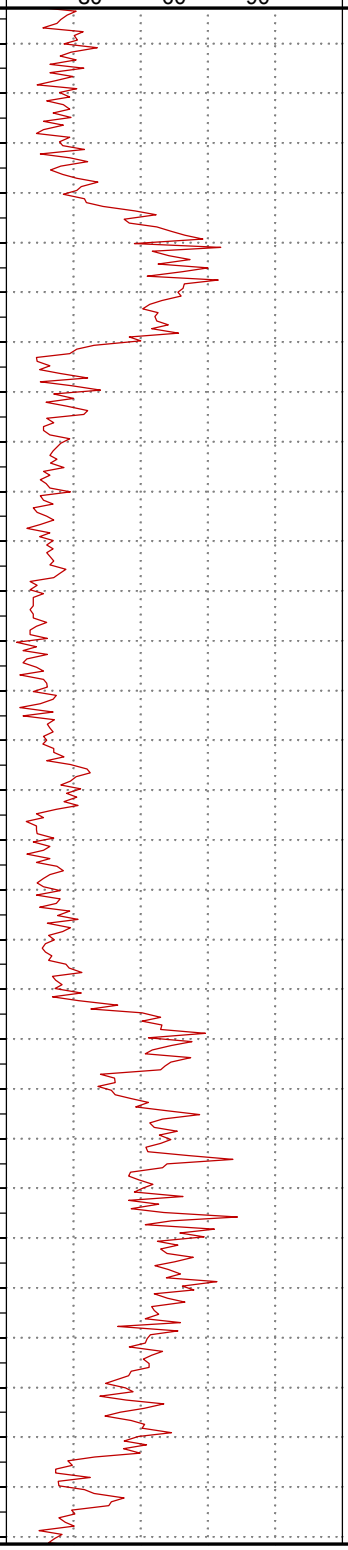



| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 796 | | | | Magothy | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel *(continued)* |
| 798 | | | | | | | |
| 800 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 802 | | | | | | | |
| 804 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 806 | | | | | | | |
| 808 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine SAND, trace lignite |
| 810 | | | | | | | |
| 812 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 814 | | | | | | | |
| 816 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 818 | | | | | | | |
| 820 | | <0.50 | <0.50 | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 822 | | | | | | | |
| 824 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 826 | | | | | | | |
| 828 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 830 | | | | | | | |
| 832 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 834 | | | | | | | |
| 836 | | | | | SP-SM | | Gray (10YR 5/1) poorly graded fine SAND with Silt and fine subrounded gravel |
| 838 | | | | | | | |
| 840 | | <1.3 | <1.3 | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 842 | | | | | | | |
| 844 | | | | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 846 | | | | | | | |
| 848 | | | | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 850 | | | | | | | |
| 852 | | | | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 854 | | | | | | | |
| 856 | | | | | | | |

*(Continued Next Page)*

# Resolution Consultants

# Boring Log

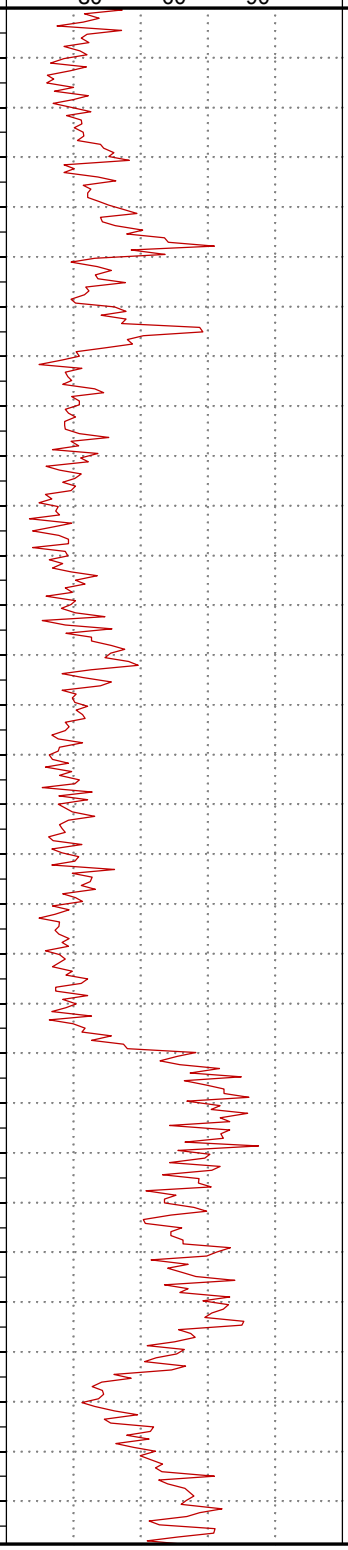
BORING #: **VPB161**
Sheet 15 of 17


*(Continued Next Page)*

# Resolution Consultants

# Boring Log

BORING #: **VPB161**
Sheet 16 of 17



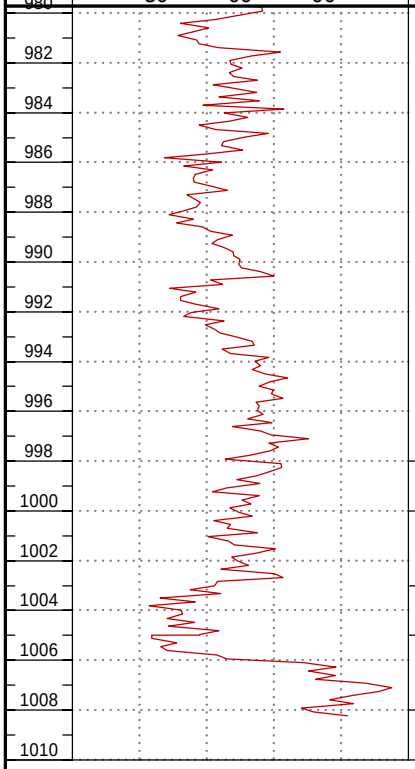

| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 918 | | | | Magothy | SC | | Gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, trace Silt |
| 920 | | | | | | | |
| 922 | | | | | | | |
| 924 | | <0.50 | <0.50 | | SC | | Gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, trace Silt |
| 926 | | | | | | | |
| 928 | | | | | | | |
| 930 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, trace Silt |
| 932 | | | | | | | |
| 934 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine to medium subangular SAND, trace Silt |
| 936 | | | | | | | |
| 938 | | | | | | | |
| 940 | | <0.50 | <0.50 | | SC | | Gray (10YR 5/1) soft fat Clayey fine to coarse subangular SAND, trace Silt |
| 942 | | | | | | | |
| 944 | | | | | SC | | Gray (10YR 5/1) soft fat Clayey fine to coarse subangular SAND, trace Silt |
| 946 | | | | | | | |
| 948 | | | | | | | |
| 950 | | | | | SW-SC | | Gray (10YR 5/1) well graded fine to coarse subangular SAND with soft fat Clay, trace lignite |
| 952 | | | | | | | |
| 954 | | | | | SP-SC | | Gray (10YR 5/1) poorly graded fine SAND with soft fat Clay, trace silt, trace pyrite |
| 956 | | | | | | | |
| 958 | | | | | | | |
| 960 | | <20 | <20 | | SP-SC | | Gray (10YR 5/1) poorly graded fine SAND with soft fat Clay, trace silt, trace lignite |
| 962 | | | | | | | |
| 964 | | | | | ML | | Gray (10YR 5/1) very soft SILT, few find Sand |
| 966 | | | | | | | |
| 968 | | | | | | | |
| 970 | | | | | ML | | Gray (10YR 5/1) very soft SILT, few find Sand |
| 972 | | | | | | | |
| 974 | | | | | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Silt |
| 976 | | | | | | | |
| 978 | | | | | | | |
| | | <10 | <10 | | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Silt |

*(Continued Next Page)*

# Resolution Consultants

# Boring Log

BORING #: **VPB161**
Sheet 17 of 17

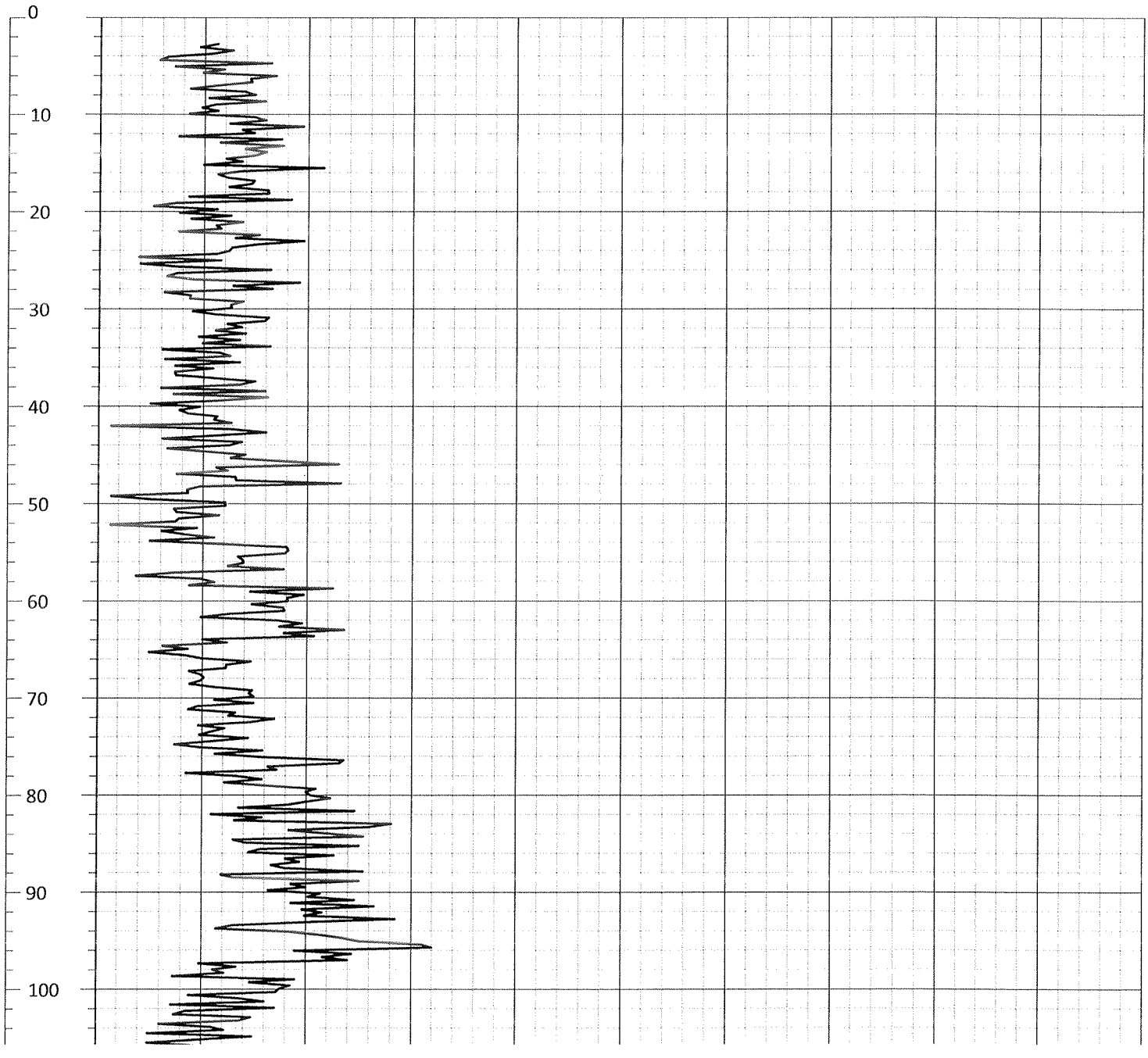


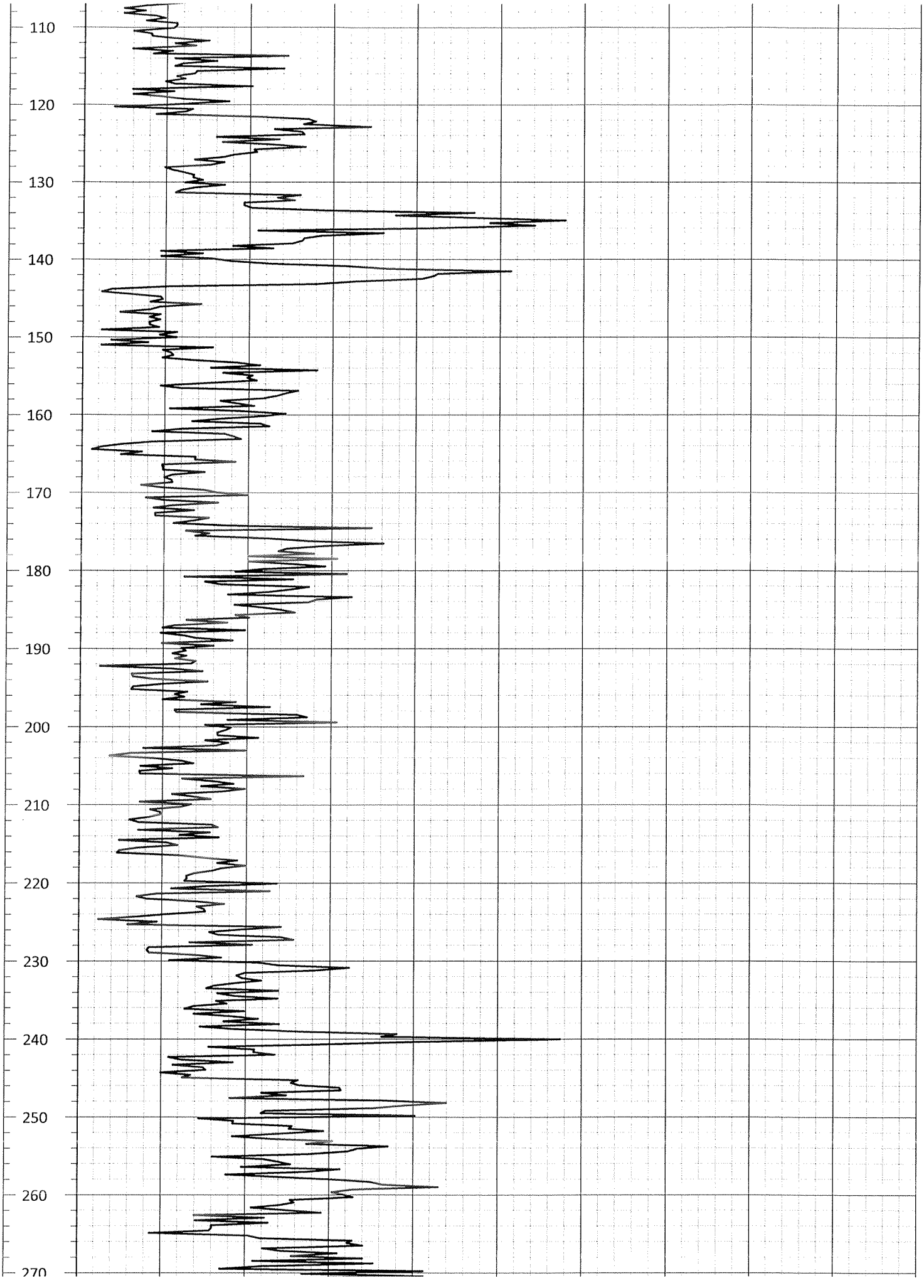

| DEPTH (ft) | PID (ppm) | TCE (ug/L) | PCE (ug/L) | Formation | USCS | GRAPHIC LOG | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 980 | | | | Magothy | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Silt *(continued)* |
| 982 | | | | | | | |
| 984 | | | | | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Lignite |
| 986 | | | | | | | |
| 988 | | | | | | | |
| 990 | | | | Raritan | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Silt |
| 992 | | | | | | | |
| 994 | | | | | CH | | Gray (10YR 5/1) stiff fat CLAY, trace Silt |
| 996 | | | | | | | |
| 998 | | | | | | | |
| 1000 | 0.0 | | | | CH | | Gray (10YR 5/1) hard fat CLAY |
| 1002 | | | | | CH | | Gray (10YR 5/1) stiff fat CLAY, trace lignite |
| 1004 | 0.0 | | | | CH | | Gray (10YR 5/1) hard fat CLAY |
| 1006 | | | | | CH | | Pale red (10R 6/2) stiff fat CLAY |
| 1008 | | | | | | | |
| 1010 | 0.0 | | | | CH | | Gray (Gley1 6/N) and pale red (10R 6/2) mottled hard fat CLAY |

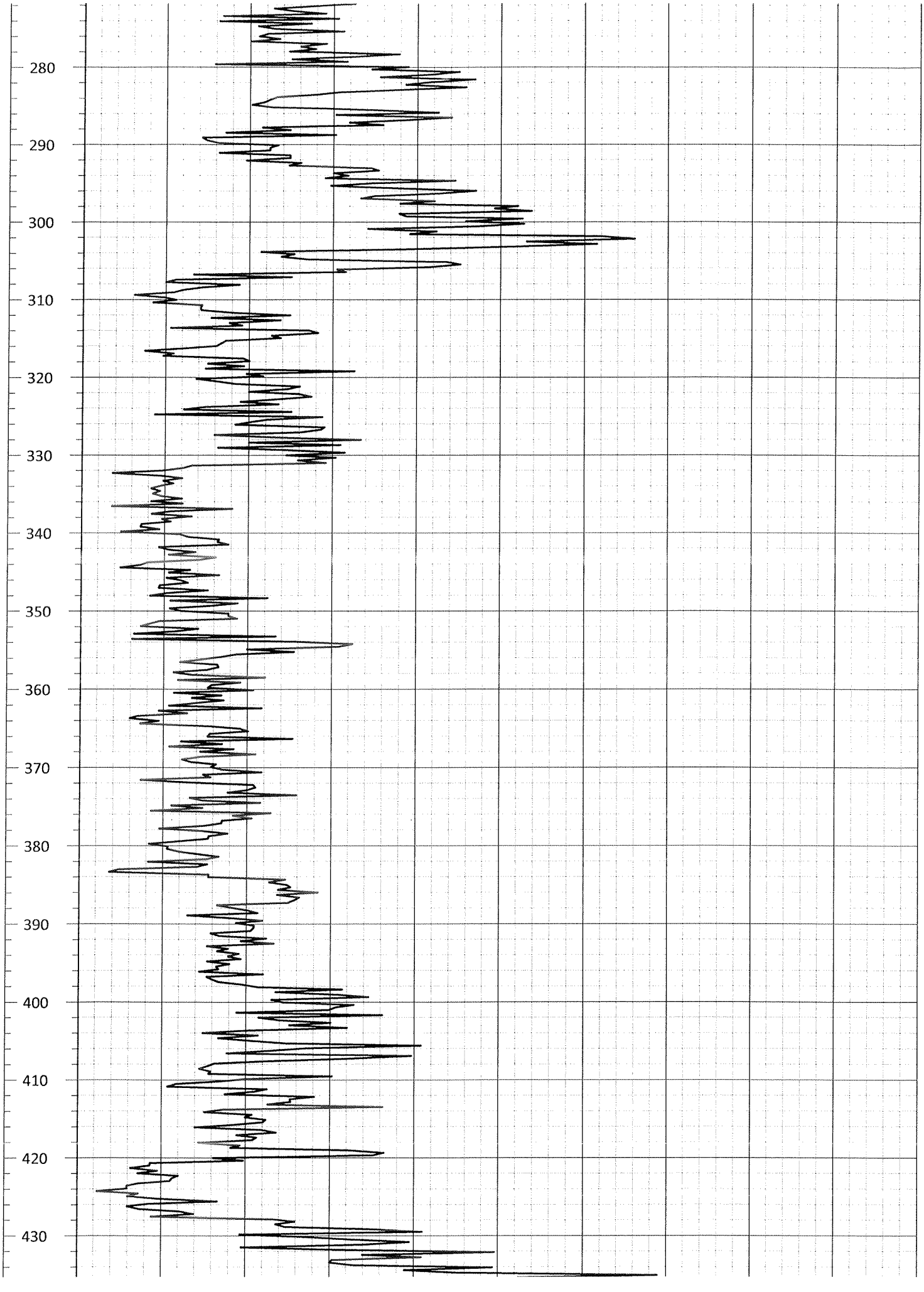
End of boring at 1010.0 ft. bgs.

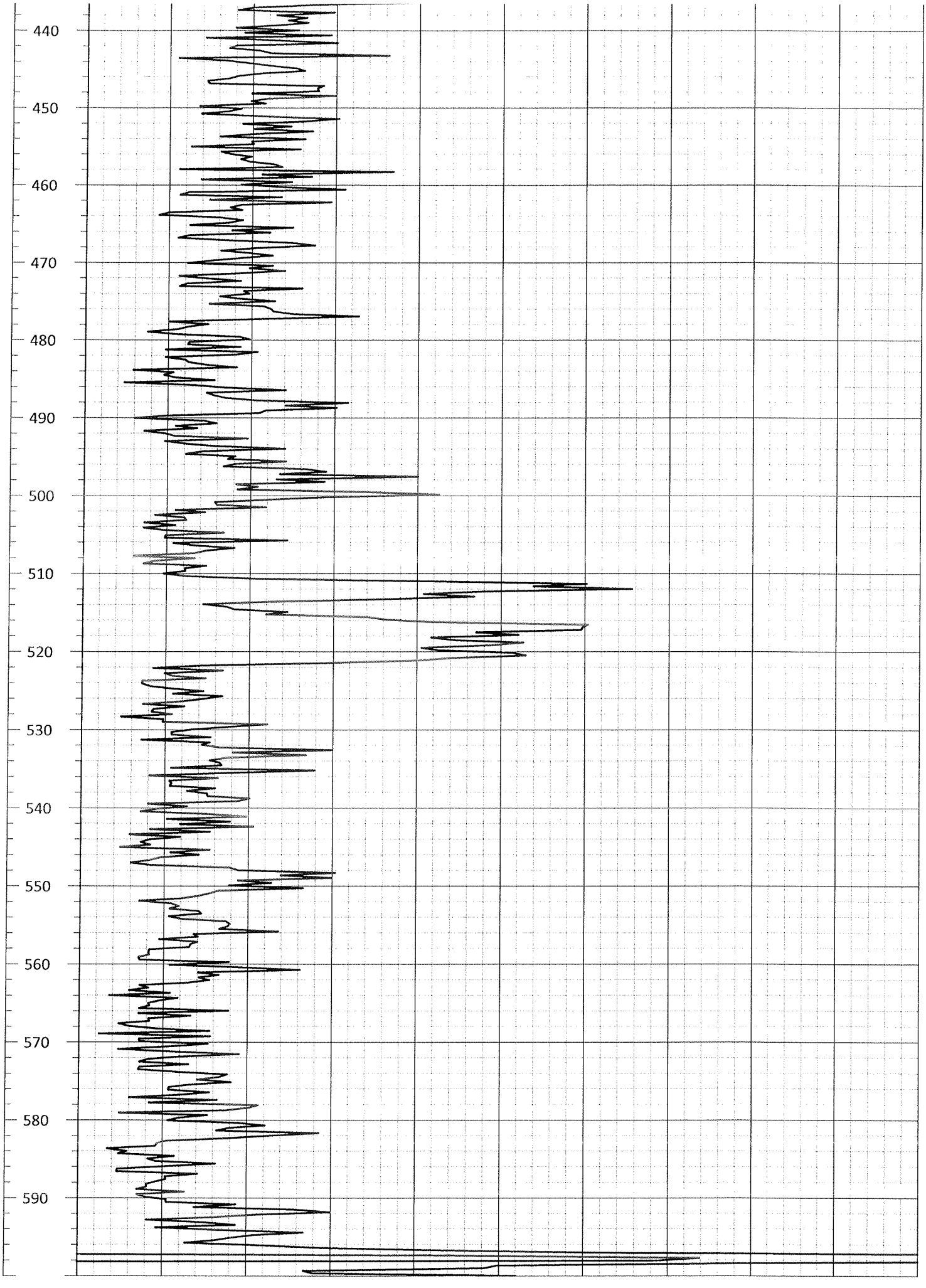
DOWN

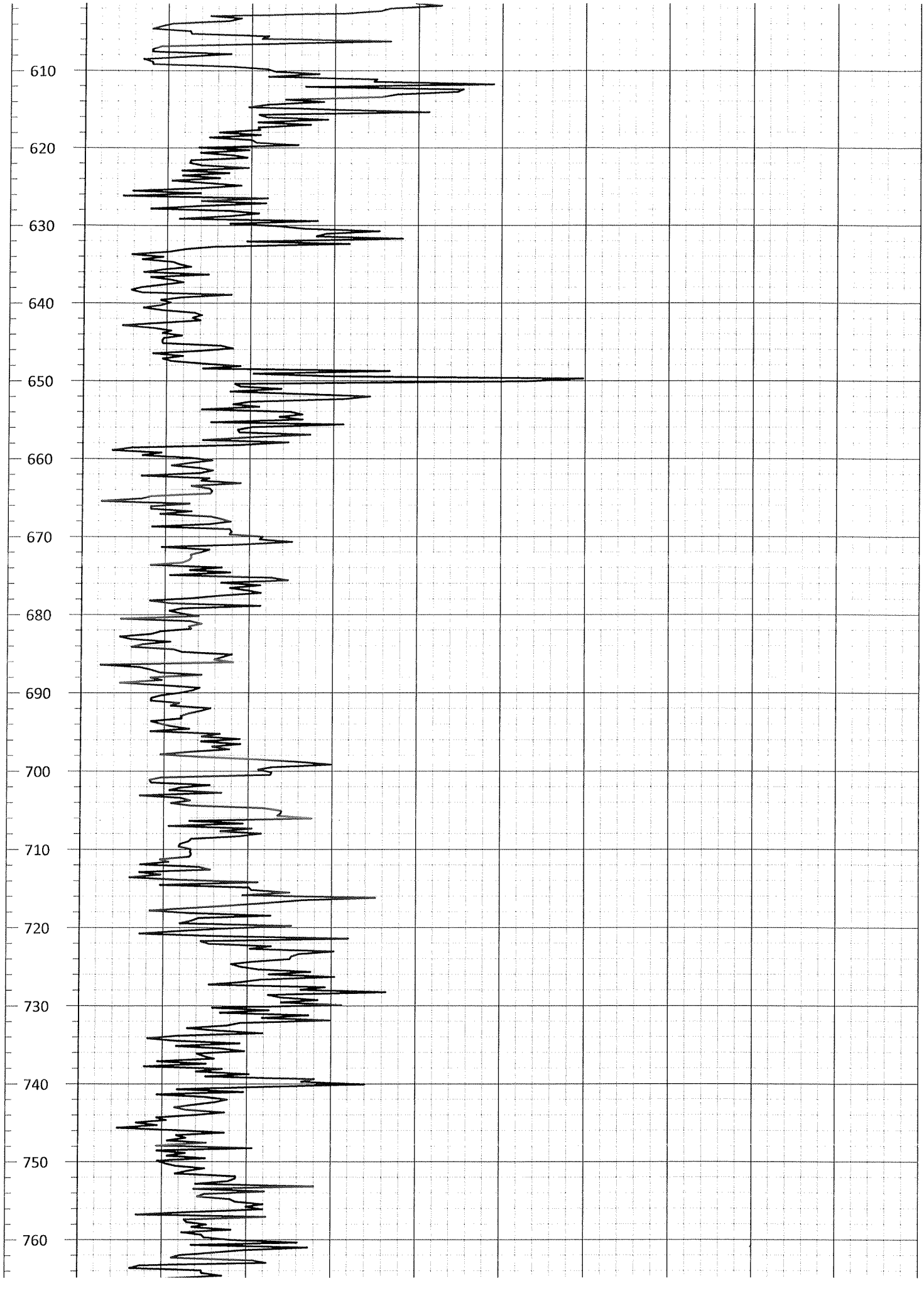
| | |
|---|---|
| COMPANY: DELTA WELL & PUMP CO., INC. | |
| LOCATION: NWIRP TOB BASIN NO. 20 | |
| Well: VPB-161 | Depth Driller: |
| | Depth Logger: |
| Date: 06/03/2016 Time: | Logged by: CMO |
| File Name: 739 | Witness: GORDON |

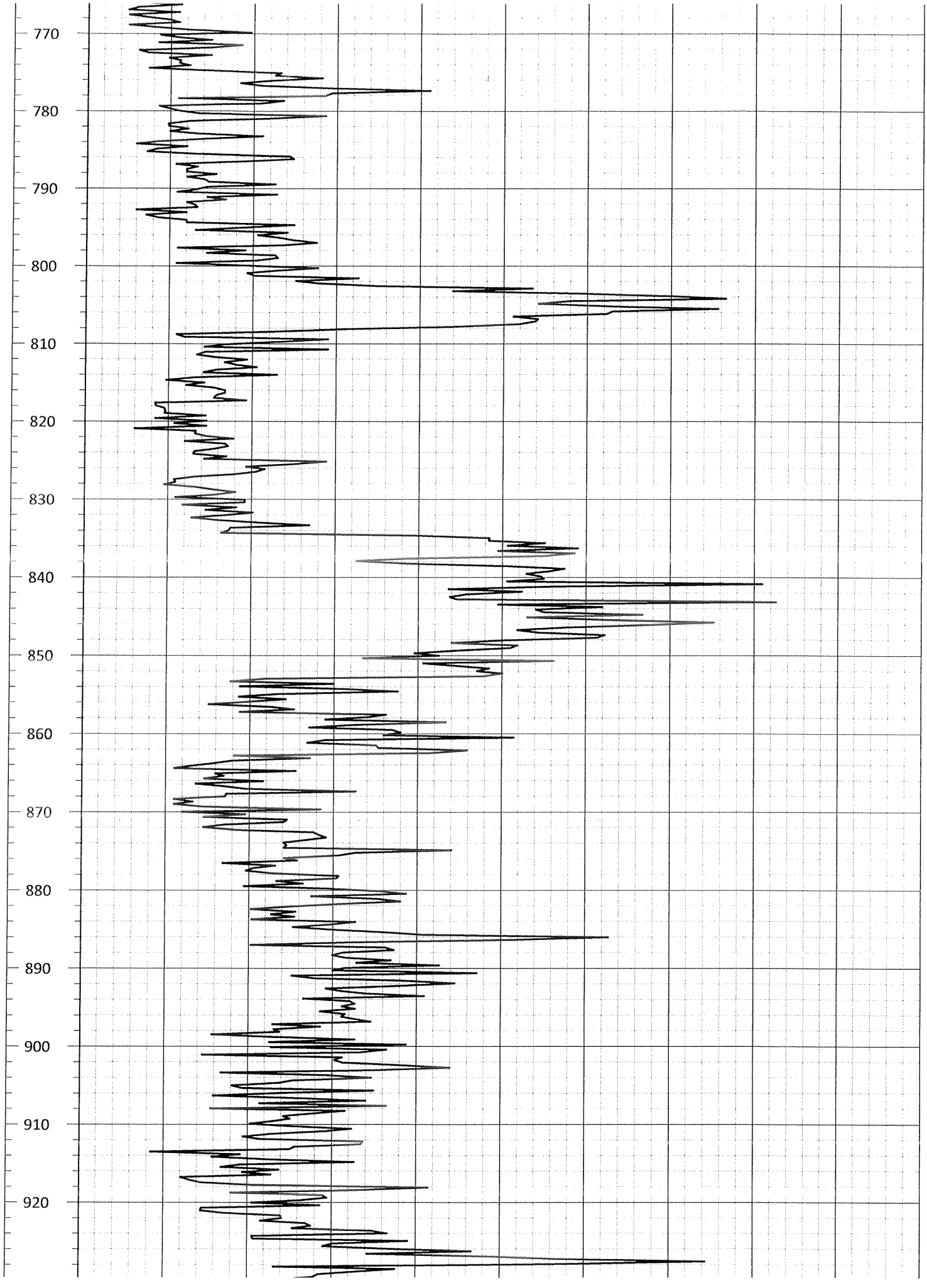


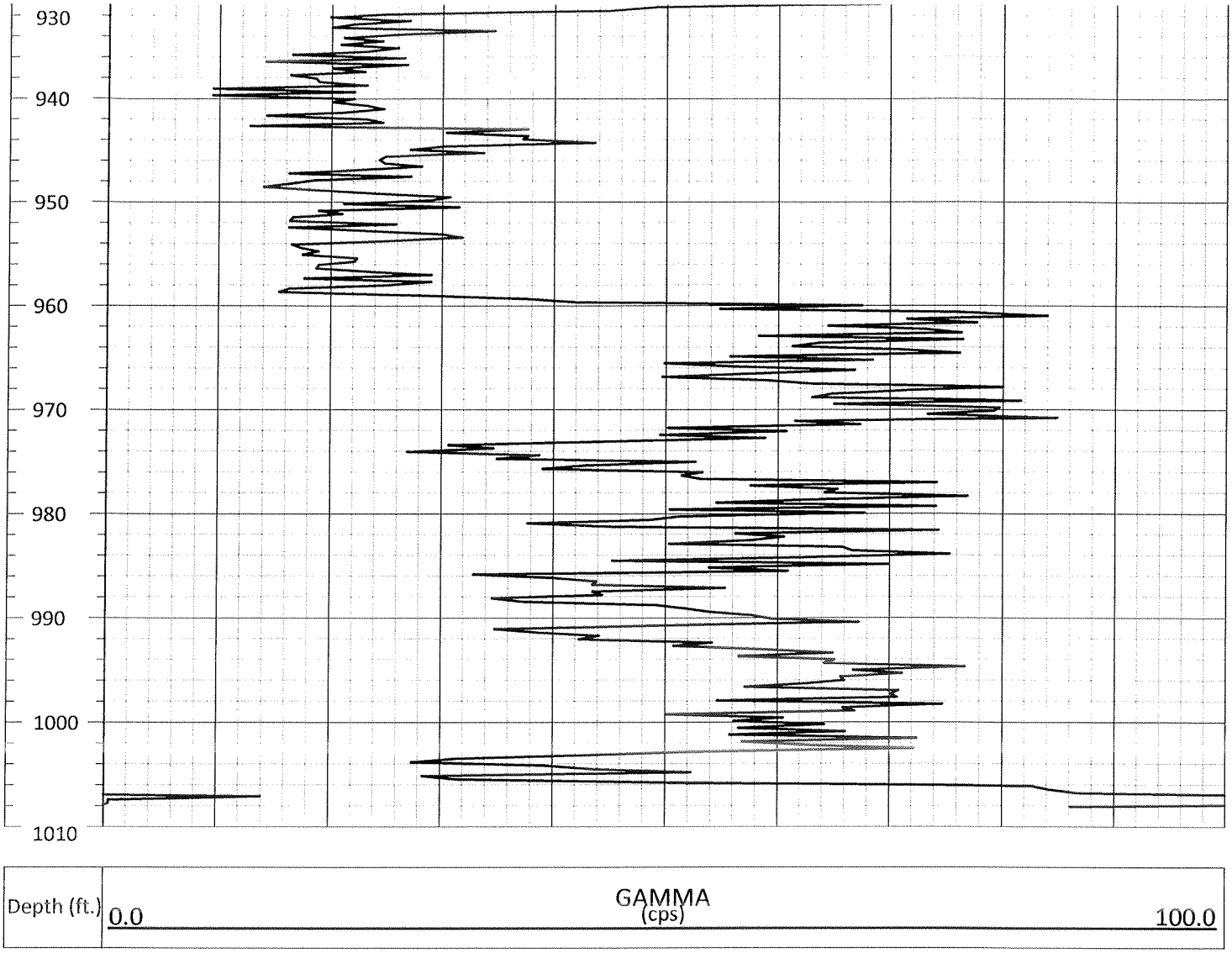

110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270


280
290
300
310
320
330
340
350
360
370
380
390
400
410
420
430


440
450
460
470
480
490
500
510
520
530
540
550
560
570
580
590


610
620
630
640
650
660
670
680
690
700
710
720
730
740
750
760

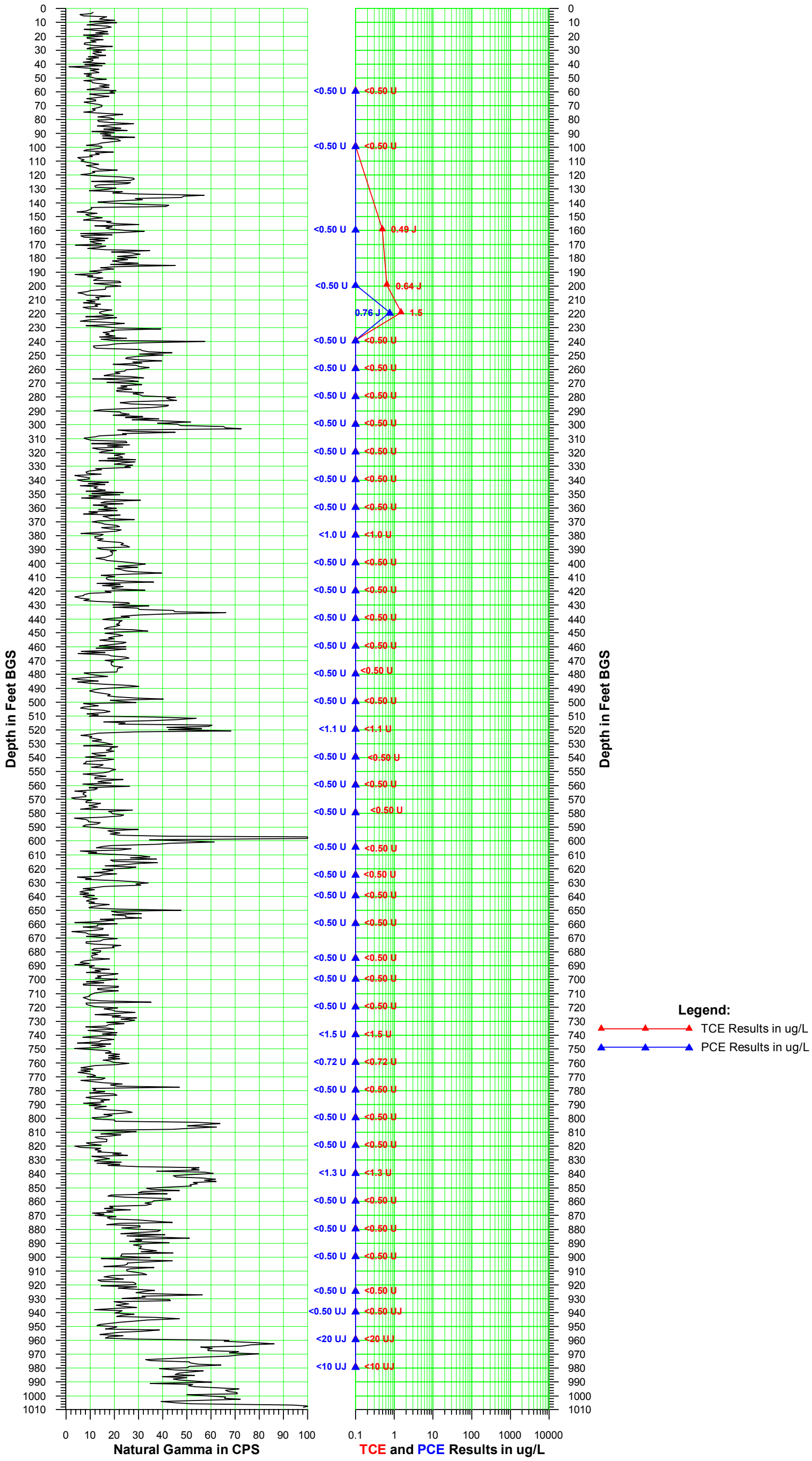

770
780
790
800
810
820
830
840
850
860
870
880
890
900
910
920


930
940
950
960
970
980
990
1000
1010
Depth (ft.)
0.0
GAMMA
(cps)
100.0

## Section 2

## VPB161 Gamma and PCE/TCE Plot

# Vertical Profile Boring VPB-161
## Downward Run - June 3, 2016
### Validated Analytical Data



## Section 3

## VPB161 Groundwater Sample Log Sheets

| | VPB161 | Project #60266526 | | FI.WI3 | Collector: G. Hicks | | | | | 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 |
| 1 | 4/27/2016 | 12:30:00 | 14.1 | 5.92 | 415.2 | 3.75 | 37.4 | 313.9 | 58 | 60 | Light brown | Duplicate sample collected |
| 2 | 4/28/2016 | 10:45:00 | 12.6 | 6.75 | 282.2 | 0.44 | 11.1 | 616.8 | 98 | 100 | Light gray | MS-MSD and EB samples collected |
| 3 | 5/2/2016 | 13:13:00 | 13.2 | 5.91 | 370.7 | 3.54 | 24.7 | 379.3 | 158 | 160 | Light gray | |
| 4 | 5/3/2016 | 10:45:00 | 12.1 | 6.53 | 581.3 | 2.62 | -32.6 | 792.1 | 198 | 200 | Light gray | |
| 5 | 5/3/2016 | 12:15:00 | 12.6 | 6.15 | 324.5 | 3.05 | -118.9 | >1,100 | 218 | 220 | Dark gray | |
| 6 | 5/3/2016 | 14:15:00 | 12.8 | 5.64 | 301.2 | 1.11 | -396.5 | >1,100 | 238 | 240 | Dark gray | |
| 7 | 5/4/2016 | 10:00:00 | 10.6 | 5.64 | 342.6 | 2.39 | -156.3 | 225.7 | 258 | 260 | Light gray | |
| 8 | 5/4/2016 | 12:15:00 | 10.8 | 5.74 | 271.8 | 2.39 | -158.1 | 442.5 | 278 | 280 | Light gray | |
| 9 | 5/4/2016 | 14:14:00 | 10.1 | 5.85 | 88.6 | 4.15 | 10.9 | 178.3 | 298 | 300 | Light gray | |
| 10 | 5/5/2016 | 10:30:00 | 10.2 | 5.41 | 272.8 | 3.71 | -140.3 | 288.5 | 318 | 320 | Light gray | |
| 11 | 5/5/2016 | 12:30:00 | 11.2 | 5.55 | 323.3 | 2.86 | -112.7 | 244.3 | 338 | 340 | Light gray | |
| 12 | 5/6/2016 | 10:30:00 | 11.0 | 5.76 | 324.9 | 3.84 | 68.2 | 314.4 | 358 | 360 | Light gray | |
| 13 | 5/9/2016 | 10:15:00 | 12.1 | 7.41 | 306.7 | 1.26 | -320.5 | >1,100 | 378 | 380 | Dark gray | |
| 14 | 5/9/2016 | 13:45:00 | 13.2 | 5.47 | 176.3 | 1.25 | -65.6 | 172.6 | 398 | 400 | Light gray | |
| 15 | 5/10/2016 | 10:00:00 | 13.7 | 5.69 | 184.9 | 1.36 | -257.5 | 53.1 | 418 | 420 | Very light gray | MS-MSD, Duplicate, and EB samples collected |
| 16 | 5/10/2016 | 12:15:00 | 16.2 | 6.11 | 311.8 | 1.44 | -90.6 | 192.5 | 438 | 440 | Light gray | |
| 17 | 5/10/2016 | 14:30:00 | 15.1 | 6.06 | 360.9 | 0.77 | -84.9 | 357.4 | 458 | 460 | Light gray | |
| 18 | 5/11/2016 | 10:30:00 | 15.0 | 6.11 | 312.9 | 0.61 | -111.3 | 267.8 | 478 | 480 | Light gray | |
| 19 | 5/11/2016 | 13:15:00 | 14.9 | 6.39 | 298.8 | 0.91 | -101.2 | 241.1 | 498 | 500 | L:ight gray | |
| 20 | 5/12/2016 | 9:30:00 | 13.9 | 6.51 | 833.9 | 1.23 | -29.4 | >1,100 | 518 | 520 | Dark gray | |
| 21 | 5/12/2016 | 11:30:00 | 14.1 | 6.62 | 563.1 | 0.93 | -37.1 | 295.1 | 538 | 540 | Light gray | |
| 22 | 5/12/2016 | 15:00:00 | 16.1 | 6.45 | 645.1 | 1.08 | -99.1 | 265.4 | 558 | 560 | Light gray | |
| 23 | 5/13/2016 | 11:30:00 | 14.7 | 6.31 | 164.5 | 0.98 | -67.1 | >1,100 | 578 | 580 | Cloudy white | |
| 24 | 5/16/2016 | 11:10:00 | 11.3 | 6.96 | 437.6 | 3.12 | 134.1 | 382.9 | 603 | 605 | Gray | |
| 25 | 5/16/2016 | 15:15:00 | 14.6 | 5.67 | 66.4 | 3.98 | 99.3 | >1,100 | 623 | 625 | Very dark gray | |
| 26 | 5/17/2016 | 10:40:00 | 13.4 | 4.92 | 209.5 | 3.21 | 95.1 | >1,100 | 638 | 640 | Very dark gray | |
| 27 | 5/17/2016 | 13:00:00 | 14.0 | 5.24 | 48.9 | 5.81 | 135.9 | 227.1 | 658 | 660 | Light gray | |
| 28 | 5/18/2016 | 12:30:00 | 15.0 | 7.24 | 659 | 2.67 | 61.9 | >1,100 | 683 | 685 | Very dark gray | |
| 29 | 5/18/2016 | 14:50:00 | 14.7 | 7.45 | 62.1 | 9.35 | 85.2 | 217.2 | 698 | 800 | Light gray | |
| 30 | 5/19/2016 | 13:30:00 | 15.2 | 6.88 | 168.5 | 5.12 | 0.8 | >1,100 | 718 | 720 | Very dark gray | |
| 31 | 5/20/2016 | 10:10:00 | 12.8 | 7.03 | 362.7 | 3.5 | 90.1 | >1,100 | 738 | 740 | Very dark gray | |
| 32 | 5/20/2016 | 12:40:00 | 14.1 | 7.93 | 652 | 0.78 | 74.7 | >1,100 | 758 | 760 | Very dark gray | |
| 33 | 5/23/2016 | 10:50:00 | 15.5 | 7.86 | 76.2 | 4.91 | 102.7 | 770.0 | 778 | 780 | Yellow gray | |
| 34 | 5/23/2016 | 14:20:00 | 17.1 | 7.74 | 188.6 | 4.18 | 31.0 | >1,100 | 798 | 800 | White | |
| 35 | 5/24/2016 | 11:10:00 | 13.9 | 7.24 | 101.8 | 6.08 | 68.3 | >1,100 | 818 | 820 | Very dark gray | |
| 36 | 5/24/2016 | 13:40:00 | 17.4 | 7.18 | 328.6 | 5.14 | 89.3 | >1,100 | 838 | 840 | Very dark gray | |
| 37 | 5/25/2016 | 10:40:00 | 15.2 | 8.24 | 72.7 | 6.16 | 101.6 | 823.5 | 858 | 860 | Brown yellow | |
| 38 | 5/25/2016 | 13:40:00 | 19.1 | 6.83 | 113.8 | 4.79 | 117.8 | 625.5 | 878 | 880 | Brown yellow | |
| 39 | 5/26/2016 | 10:45:00 | 16.3 | 7.76 | 71.5 | 4.45 | 88.8 | 834.5 | 898 | 900 | Light yellow gray | |
| 40 | 5/27/2016 | 13:15:00 | 17.5 | 7.82 | 43.7 | 2.12 | 46.4 | 299.4 | 923 | 925 | Light gray | |
| 41 | 5/31/2016 | 12:15:00 | 16.6 | 7.96 | 192.2 | 0.56 | -5.7 | 532.8 | 938 | 940 | Light yellow | |
| 42 | 5/31/2016 | 15:15:00 | 15.6 | 7.88 | 671.0 | 0.31 | 13.7 | >1,100 | 958 | 960 | Very dark gray | |
| 43 | 6/1/2016 | 11:30:00 | 16.9 | 8.11 | 566.0 | 0.34 | 32.8 | >1,100 | 978 | 980 | Very dark gray | |

## Section 4

## VPB161 Analytical Data Validation

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

# DATA VALIDATION REPORT

| | | |
|---|---|---|
| **Project:** | Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant Bethpage | |
| **Laboratory:** | Katahdin Analytical | |
| **Sample Delivery Group:** | BETHPAGE VPB161 | |
| **Analyses/Method:** | Volatile Organic Compounds (VOCs) by U.S. EPA SW-846 Method 8260C, Total Organic Carbon (TOC) by U.S. EPA SW-846 Method 9060A, and Standard Method 5310B for Total Organic Carbon by High-Temperature Combustion | |
| **Validation Level:** | 3 | |
| **Project Number:** | 0888812477.SA.DV | |
| **Prepared by:** | Dana Miller/Resolution Consultants | Completed on: 02/08/2017 |
| **Reviewed by:** | Tina Cantwell/Resolution Consultants | File Name: BETHPAGE VPB161_8260C_9060A_5310B |

## SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Site on 27 May to 1 June 2016 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 |
|---|---|---|
| VPB161-TB-042716 | Trip Blank | 8260C |
| VPB161-GW-042716-58-60 | Groundwater | 8260C |
| VPB161-GWD-042716 | Duplicate of VPB161-GW-042716-58-60 | 8260C |
| VPB161-GW-042816-98-100 | Groundwater | 8260C |
| VPB161-EB-042816 | Equipment Blank | 8260C |
| VPB161-TB-050216 | Trip Blank | 8260C |
| VPB161-SOIL-050216-138-140 | Soil | 9060A |
| VPB161-SOIL-D-050216 | Duplicate of VPB161-SOIL-050216-138- | 9060A |

| Sample ID | Matrix/Sample Type | Analysis |
|---|---|---|
| VPB161-EB-050216 | Equipment Blank | 5310B |
| VPB161-GW-050216-158-160 | Groundwater | 8260C |
| VPB161-TB-050316 | Trip Blank | 8260C |
| VPB161-GW-050316-198-200 | Groundwater | 8260C |
| VPB161-GW-050316-218-220 | Groundwater | 8260C |
| VPB161-GW-050316-238-240 | Groundwater | 8260C |
| VPB161-GW-050416-258-260 | Groundwater | 8260C |
| VPB161-GW-050416-278-280 | Groundwater | 8260C |
| VPB161-GW-050416-298-300 | Groundwater | 8260C |
| VPB161-GW-050516-318-320 | Groundwater | 8260C |
| VPB161-GW-050516-338-340 | Groundwater | 8260C |
| VPB161-TB-050616 | Trip Blank | 8260C |
| VPB161-GW-050616-358-360 | Groundwater | 8260C |
| VPB161-FB-050616 | Field Blank | 5310B |
| VPB161-FB-050616 | Field Blank | 8260C |
| VPB161-GW-050916-378-380 | Groundwater | 8260C |
| VPB161-GW-050916-398-400 | Groundwater | 8260C |
| VPB161-TB-051016 | Trip Blank | 8260C |
| VPB161-GW-051216-538-540 | Groundwater | 8260C |
| VPB161-GW-051216-558-560 | Groundwater | 8260C |
| VPB161-GW-051016-418-420 | Groundwater | 8260C |
| VPB161-GWD-051016 | Duplicate of VPB161-GW-051016-418-420 | 8260C |
| VPB161-EB-051016 | Equipment Blank | 8260C |
| VPB161-GW-051016-438-440 | Groundwater | 8260C |
| VPB161-GW-051016-458-460 | Groundwater | 8260C |
| VPB161-GW-051116-478-480 | Groundwater | 8260C |
| VPB161-GW-051116-498-500 | Groundwater | 8260C |
| VPB161-GW-051216-518-520 | Groundwater | 8260C |
| VPB161-GW-051316-578-580 | Groundwater | 8260C |
| VPB161-TB-051316 | Trip Blank | 8260C |
| VPB161-GW-051616-603-605 | Groundwater | 8260C |
| VPB161-GW-051616-623-625 | Groundwater | 8260C |
| VPB161-GW-051716-638-640 | Groundwater | 8260C |
| VPB161-GW-051716-658-660 | Groundwater | 8260C |
| VPB161-GW-051816-683-685 | Groundwater | 8260C |
| VPB161-GW-051816-698-700 | Groundwater | 8260C |
| VPB161-GW-051916-718-720 | Groundwater | 8260C |
| VPB161-TB-051916 | Trip Blank | 8260C |

| Sample ID | Matrix/Sample Type | Analysis |
|---|---|---|
| VPB161-GW-052016-738-740 | Groundwater | 8260C |
| VPB161-GW-052016-758-760 | Groundwater | 8260C |
| VPB161-GW-052316-778-780 | Groundwater | 8260C |
| VPB161-GW-052316-798-800 | Groundwater | 8260C |
| VPB161-GW-052416-818-820 | Groundwater | 8260C |
| VPB161-GW-052416-838-840 | Groundwater | 8260C |
| VPB161-GW-052516-858-860 | Groundwater | 8260C |
| VPB161-GW-052516-878-880 | Groundwater | 8260C |
| VPB161-GW-052616-898-900 | Groundwater | 8260C |
| VPB161-GW-TB-052416 | Trip Blank | 8260C |
| VPB161-TB-052716 | Trip Blank | 8260C |
| VPB161-GW-052716-923-925 | Groundwater | 8260C |
| VPB161-GW-053116-938-940 | Groundwater | 8260C |
| VPB161-GW-053116-958-960 | Groundwater | 8260C |
| VPB161-TB-060116 | Trip Blank | 8260C |
| VPB161-GW-060116-978-980 | 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* (United States Environmental Protection Agency [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, National Functional Guidelines for Superfund Organic Methods Data Review* (U.S. EPA September 2016), and *Department of Defense Quality Systems Manual for Environmental Laboratories*, Version 4.2 (October 2010). In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements, and/or professional judgment were used as appropriate.

## REVIEW ELEMENTS

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

- ✗ Data completeness (chain-of-custody)/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas chromatography/Mass spectrometer performance checks

| | |
|---|---|
| ✗ | Initial calibration (ICAL)/initial calibration verification (ICV)/continuing calibration verification (CCV) |
| ✗ | Laboratory blanks/field blanks/trip blanks/equipment blanks |
| ✗ | Surrogate spike recovery |
| ✓ | Matrix spike (MS) and/or matrix spike duplicate (MSD) 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, no qualification was performed, and/or non-conformance or other issues that were noted during validation, but did not result in qualification of data are not discussed further. The symbol (✗) indicates that a QC non-conformance resulted in the qualification of data. Any QC non-conformance that resulted in the qualification of data is discussed below.

## RESULTS

### Data Completeness/Sample Integrity

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

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

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

- Sample SJ3858-3 contained soil at the bottom of the vials. The vials were decanted and analyzed. Sample SJ3858-4 contained mostly soil in all three vials for each sample. The vials were decanted and compounded into one vial and analyzed at a dilution of 1:40. All detects were qualified estimated "J" and non-detects were qualified estimated "UJ" for loss of sample integrity during the decanting process.

- Sample SJ4015-2 contained soil at the bottom of the vials. One vial for the sample was decanted and analyzed at a dilution of 1:20. All detects were qualified estimated "J" and non-detects were qualified estimated "UJ" for loss of sample integrity during the decanting process.

**Initial Calibration / Initial Calibration Verification / Continuing Calibration Verification**

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

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

**Initial Calibration Linearity Non-Conformance:**

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

***Notes:***

RSD = Relative standard deviation
J = Estimated
UJ = Undetected and estimated

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

**Initial Calibration Verification Recovery Non-Conformance:**

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

***Notes:***

J = Estimated value
UJ = Undetected and estimated

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

**Continuing Calibration Verification Linearity Non-Conformance:**

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

***Notes:***
J = Estimated value
UJ = Undetected and estimated

**Laboratory Blanks/Field Blanks/Trip Blanks/Equipment Blanks**

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

**Blank Non-Conformance Chart:**

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

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

**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

**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

**Field Duplicate**

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

**Field Duplicate Non-conformances Chart:**

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

***Notes:***

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

**Qualification Actions**

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

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

## ATTACHMENTS

Attachment A:  Qualified Results Summary

**Attachment A**
**Qualified Results Summary**

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CHLOROFORM | 0.49 | UG_L | J | | J | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-042716-58-60 | 4/27/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | METHYL CYCLOHEXANE | 6.4 | UG_L | | | | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CYCLOHEXANE | 3.7 | UG_L | | | | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-042816-98-100 | 4/28/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CHLOROFORM | 0.47 | UG_L | J | | J | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GWD-042716 | 4/27/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | UL | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | UL | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | ACETONE | 14 | UG_L | L | J | J | I |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | UL | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | TRICHLOROETHENE | 0.49 | UG_L | J | | J | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050216-158-160 | 5/2/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | TRICHLOROETHENE | 0.64 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-198-200 | 5/3/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TETRACHLOROETHENE | 0.76 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.55 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 0.55 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CHLOROFORM | 0.82 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.9 | UG_L | J | | J | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1-DICHLOROETHANE | 7.3 | UG_L | | | | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1-DICHLOROETHENE | 1.8 | UG_L | | | | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | TRICHLOROETHENE | 1.5 | UG_L | | | | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-218-220 | 5/3/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | ACETONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1-DICHLOROETHANE | 1.7 | UG_L | | | | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050316-238-240 | 5/3/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-258-260 | 5/4/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-278-280 | 5/4/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050416-298-300 | 5/4/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-318-320 | 5/5/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050516-338-340 | 5/5/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | ACETONE | 2.5 | UG_L | J | U | U | bf,bt |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050616-358-360 | 5/6/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | ETHYLBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | STYRENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CIS-1,3-DICHLOROPROPENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TRANS-1,3-DICHLOROPROPENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,4-DICHLOROBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DIBROMOETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DICHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 4-METHYL-2-PENTANONE | 5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | M- AND P-XYLENE | 2 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | METHYL CYCLOHEXANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TOLUENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CHLOROBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CYCLOHEXANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2,4-TRICHLOROBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | DIBROMOCHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TETRACHLOROETHENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | XYLENES, TOTAL | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CIS-1,2-DICHLOROETHENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TRANS-1,2-DICHLOROETHENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | METHYL TERT-BUTYL ETHER | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DICHLOROETHENE, TOTAL | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,3-DICHLOROBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CARBON TETRACHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 2-HEXANONE | 5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | ACETONE | 5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CHLOROFORM | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | BENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1,1-TRICHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | BROMOMETHANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CHLOROMETHANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CHLOROETHANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | VINYL CHLORIDE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | METHYLENE CHLORIDE | 5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | CARBON DISULFIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | BROMOFORM | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | BROMODICHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1-DICHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1-DICHLOROETHENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TRICHLOROFLUOROMETHANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | DICHLORODIFLUOROMETHANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DICHLOROPROPANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 2-BUTANONE | 5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1,2-TRICHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | TRICHLOROETHENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | METHYL ACETATE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,1,2,2-TETRACHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | O-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DICHLOROBENZENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | 1,2-DIBROMO-3-CHLOROPROPANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-378-380 | 5/9/2016 | 2 | ISOPROPYLBENZENE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-050916-398-400 | 5/9/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | UM | J | UJ | c |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TOLUENE | 0.5 | UG_L | UMM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | UMM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | UM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | ACETONE | 2.5 | UG_L | JM | UJ | UJ | bt,be,fd |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | BENZENE | 0.5 | UG_L | UM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | UM | J | UJ | c |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | UMM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | O-XYLENE | 0.5 | UG_L | UMM | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-418-420 | 5/10/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-438-440 | 5/10/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051016-458-460 | 5/10/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-478-480 | 5/11/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051116-498-500 | 5/11/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | ETHYLBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | STYRENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CIS-1,3-DICHLOROPROPENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TRANS-1,3-DICHLOROPROPENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,4-DICHLOROBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DIBROMOETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DICHLOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 4-METHYL-2-PENTANONE | 5.7 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | M- AND P-XYLENE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | METHYL CYCLOHEXANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TOLUENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CHLOROBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CYCLOHEXANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2,4-TRICHLOROBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | DIBROMOCHLOROMETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TETRACHLOROETHENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | XYLENES, TOTAL | 3.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CIS-1,2-DICHLOROETHENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TRANS-1,2-DICHLOROETHENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | METHYL TERT-BUTYL ETHER | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DICHLOROETHENE, TOTAL | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,3-DICHLOROBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CARBON TETRACHLORIDE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 2-HEXANONE | 5.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | ACETONE | 5.7 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CHLOROFORM | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | BENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1,1-TRICHLOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | BROMOMETHANE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CHLOROMETHANE | 2.3 | UG_L | U | J | UJ | c |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CHLOROETHANE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | VINYL CHLORIDE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | METHYLENE CHLORIDE | 5.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | CARBON DISULFIDE | 1.1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | BROMOFORM | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | BROMODICHLOROMETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1-DICHLOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1-DICHLOROETHENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TRICHLOROFLUOROMETHANE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | DICHLORODIFLUOROMETHANE | 2.3 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DICHLOROPROPANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 2-BUTANONE | 5.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1,2-TRICHLOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | TRICHLOROETHENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | METHYL ACETATE | 1.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,1,2,2-TETRACHLOROETHANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | O-XYLENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DICHLOROBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | 1,2-DIBROMO-3-CHLOROPROPANE | 1.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-518-520 | 5/12/2016 | 2.3 | ISOPROPYLBENZENE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-538-540 | 5/12/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt,be |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051216-558-560 | 5/12/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,be,fd |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GWD-051016 | 5/10/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051316-578-580 | 5/13/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-603-605 | 5/16/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051616-623-625 | 5/16/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | CARBON DISULFIDE | 0.75 | UG_L | J | J | J | s |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | UL | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-638-640 | 5/17/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | UL | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051716-658-660 | 5/17/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | UL | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-683-685 | 5/18/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051816-698-700 | 5/18/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | ACETONE | 2.5 | UG_L | | U | U | bt |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | UL | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-051916-718-720 | 5/19/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | ETHYLBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | STYRENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CIS-1,3-DICHLOROPROPENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TRANS-1,3-DICHLOROPROPENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,4-DICHLOROBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DIBROMOETHANE | 1.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DICHLOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 4-METHYL-2-PENTANONE | 7.6 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | M- AND P-XYLENE | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | METHYL CYCLOHEXANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TOLUENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CHLOROBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CYCLOHEXANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2,4-TRICHLOROBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | DIBROMOCHLOROMETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TETRACHLOROETHENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | XYLENES, TOTAL | 4.6 | UG_L | UL | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CIS-1,2-DICHLOROETHENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TRANS-1,2-DICHLOROETHENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | METHYL TERT-BUTYL ETHER | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DICHLOROETHENE, TOTAL | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,3-DICHLOROBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CARBON TETRACHLORIDE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 2-HEXANONE | 7.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | ACETONE | 17 | UG_L | L | J | J | l |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CHLOROFORM | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | BENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1,1-TRICHLOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | BROMOMETHANE | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CHLOROMETHANE | 3 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CHLOROETHANE | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | VINYL CHLORIDE | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | METHYLENE CHLORIDE | 7.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | CARBON DISULFIDE | 1.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | BROMOFORM | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | BROMODICHLOROMETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1-DICHLOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1-DICHLOROETHENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TRICHLOROFLUOROMETHANE | 3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | DICHLORODIFLUOROMETHANE | 3 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DICHLOROPROPANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 2-BUTANONE | 7.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1,2-TRICHLOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | TRICHLOROETHENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | METHYL ACETATE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,1,2,2-TETRACHLOROETHANE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | O-XYLENE | 1.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DICHLOROBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | 1,2-DIBROMO-3-CHLOROPROPANE | 2.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-738-740 | 5/20/2016 | 3.1 | ISOPROPYLBENZENE | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | ETHYLBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | STYRENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CIS-1,3-DICHLOROPROPENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TRANS-1,3-DICHLOROPROPENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,4-DICHLOROBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DIBROMOETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DICHLOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 4-METHYL-2-PENTANONE | 3.6 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | M- AND P-XYLENE | 1.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | METHYL CYCLOHEXANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TOLUENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CHLOROBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CYCLOHEXANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2,4-TRICHLOROBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | DIBROMOCHLOROMETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TETRACHLOROETHENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | XYLENES, TOTAL | 2.2 | UG_L | UL | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CIS-1,2-DICHLOROETHENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TRANS-1,2-DICHLOROETHENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | METHYL TERT-BUTYL ETHER | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DICHLOROETHENE, TOTAL | 1.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,3-DICHLOROBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CARBON TETRACHLORIDE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 2-HEXANONE | 3.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | ACETONE | 14 | UG_L | L | J | J | l |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CHLOROFORM | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | BENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1,1-TRICHLOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | BROMOMETHANE | 1.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CHLOROMETHANE | 1.4 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CHLOROETHANE | 1.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | VINYL CHLORIDE | 1.4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | METHYLENE CHLORIDE | 3.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | CARBON DISULFIDE | 0.55 | UG_L | J | J | J | c |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | BROMOFORM | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | BROMODICHLOROMETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1-DICHLOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1-DICHLOROETHENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TRICHLOROFLUOROMETHANE | 1.4 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | DICHLORODIFLUOROMETHANE | 1.4 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DICHLOROPROPANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 2-BUTANONE | 3.6 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1,2-TRICHLOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | TRICHLOROETHENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | METHYL ACETATE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,1,2,2-TETRACHLOROETHANE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | O-XYLENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DICHLOROBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052016-758-760 | 5/20/2016 | 1.4 | ISOPROPYLBENZENE | 0.72 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | UL | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | ACETONE | 9.5 | UG_L | L | J | J | l |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-778-780 | 5/23/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | UL | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | ACETONE | 8 | UG_L | L | J | J | l |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052316-798-800 | 5/23/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | UL | J | UJ | c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-818-820 | 5/24/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | ETHYLBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | STYRENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CIS-1,3-DICHLOROPROPENE | 1.3 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TRANS-1,3-DICHLOROPROPENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,4-DICHLOROBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DIBROMOETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DICHLOROETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 4-METHYL-2-PENTANONE | 6.7 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | M- AND P-XYLENE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | METHYL CYCLOHEXANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TOLUENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CHLOROBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CYCLOHEXANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2,4-TRICHLOROBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | DIBROMOCHLOROMETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TETRACHLOROETHENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | XYLENES, TOTAL | 4 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CIS-1,2-DICHLOROETHENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TRANS-1,2-DICHLOROETHENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | METHYL TERT-BUTYL ETHER | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DICHLOROETHENE, TOTAL | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,3-DICHLOROBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CARBON TETRACHLORIDE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 2-HEXANONE | 6.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | ACETONE | 6.7 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CHLOROFORM | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | BENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1,1-TRICHLOROETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | BROMOMETHANE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CHLOROMETHANE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CHLOROETHANE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | VINYL CHLORIDE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | METHYLENE CHLORIDE | 6.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | CARBON DISULFIDE | 1.3 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | BROMOFORM | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | BROMODICHLOROMETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1-DICHLOROETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1-DICHLOROETHENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TRICHLOROFLUOROMETHANE | 2.7 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | DICHLORODIFLUOROMETHANE | 2.7 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 1.3 | UG_L | UL | J | UJ | c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DICHLOROPROPANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 2-BUTANONE | 6.7 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1,2-TRICHLOROETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | TRICHLOROETHENE | 1.3 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | METHYL ACETATE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,1,2,2-TETRACHLOROETHANE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | O-XYLENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DICHLOROBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | 1,2-DIBROMO-3-CHLOROPROPANE | 2 | UG_L | U | | U | |
| 8260C | VPB161-GW-052416-838-840 | 5/24/2016 | 2.7 | ISOPROPYLBENZENE | 1.3 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | UL | J | UJ | c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-858-860 | 5/25/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | UL | J | UJ | c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052516-878-880 | 5/25/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | ACETONE | 2.5 | UG_L | J | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | UL | J | UJ | c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | J | UJ | c |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052616-898-900 | 5/26/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | STYRENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TOLUENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | BENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 2-BUTANONE | 2.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | | U | |
| 8260C | VPB161-GW-052716-923-925 | 5/27/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | ETHYLBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | STYRENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,4-DICHLOROBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DIBROMOETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DICHLOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 4-METHYL-2-PENTANONE | 2.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | M- AND P-XYLENE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | METHYL CYCLOHEXANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TOLUENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CHLOROBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CYCLOHEXANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | DIBROMOCHLOROMETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TETRACHLOROETHENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | XYLENES, TOTAL | 1.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DICHLOROETHENE, TOTAL | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,3-DICHLOROBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CARBON TETRACHLORIDE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 2-HEXANONE | 2.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | ACETONE | 2.5 | UG_L | | UJ | UJ | bt,c,mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CHLOROFORM | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | BENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | BROMOMETHANE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CHLOROMETHANE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CHLOROETHANE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | VINYL CHLORIDE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | METHYLENE CHLORIDE | 2.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | CARBON DISULFIDE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | BROMOFORM | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | BROMODICHLOROMETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1-DICHLOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1-DICHLOROETHENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TRICHLOROFLUOROMETHANE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | DICHLORODIFLUOROMETHANE | 1 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DICHLOROPROPANE | 0.5 | UG_L | U | J | UJ | mc |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 2-BUTANONE | 1.4 | UG_L | J | J | J | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | TRICHLOROETHENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | METHYL ACETATE | 0.75 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | O-XYLENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DICHLOROBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | 1,2-DIBROMO-3-CHLOROPROPANE | 0.75 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-938-940 | 5/31/2016 | 1 | ISOPROPYLBENZENE | 0.5 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | ETHYLBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | STYRENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CIS-1,3-DICHLOROPROPENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TRANS-1,3-DICHLOROPROPENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,4-DICHLOROBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DIBROMOETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DICHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 4-METHYL-2-PENTANONE | 100 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | M- AND P-XYLENE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | METHYL CYCLOHEXANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TOLUENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CHLOROBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CYCLOHEXANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2,4-TRICHLOROBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | DIBROMOCHLOROMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TETRACHLOROETHENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | XYLENES, TOTAL | 60 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CIS-1,2-DICHLOROETHENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TRANS-1,2-DICHLOROETHENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | METHYL TERT-BUTYL ETHER | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DICHLOROETHENE, TOTAL | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,3-DICHLOROBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CARBON TETRACHLORIDE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 2-HEXANONE | 100 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | ACETONE | 100 | UG_L | U | J | UJ | c,mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CHLOROFORM | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | BENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1,1-TRICHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | BROMOMETHANE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CHLOROMETHANE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CHLOROETHANE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | VINYL CHLORIDE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | METHYLENE CHLORIDE | 100 | UG_L | U | J | UJ | mc |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | CARBON DISULFIDE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | BROMOFORM | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | BROMODICHLOROMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1-DICHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1-DICHLOROETHENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TRICHLOROFLUOROMETHANE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | DICHLORODIFLUOROMETHANE | 40 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DICHLOROPROPANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 2-BUTANONE | 100 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1,2-TRICHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | TRICHLOROETHENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | METHYL ACETATE | 30 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,1,2,2-TETRACHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | O-XYLENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DICHLOROBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | 1,2-DIBROMO-3-CHLOROPROPANE | 30 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-053116-958-960 | 5/31/2016 | 40 | ISOPROPYLBENZENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | ETHYLBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | STYRENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CIS-1,3-DICHLOROPROPENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TRANS-1,3-DICHLOROPROPENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,4-DICHLOROBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DIBROMOETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DICHLOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 4-METHYL-2-PENTANONE | 50 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | M- AND P-XYLENE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | METHYL CYCLOHEXANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TOLUENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CHLOROBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CYCLOHEXANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2,4-TRICHLOROBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | DIBROMOCHLOROMETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TETRACHLOROETHENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | XYLENES, TOTAL | 30 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CIS-1,2-DICHLOROETHENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TRANS-1,2-DICHLOROETHENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | METHYL TERT-BUTYL ETHER | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DICHLOROETHENE, TOTAL | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,3-DICHLOROBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CARBON TETRACHLORIDE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 2-HEXANONE | 50 | UG_L | U | J | UJ | mc |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | ACETONE | 50 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CHLOROFORM | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | BENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1,1-TRICHLOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | BROMOMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CHLOROMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CHLOROETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | VINYL CHLORIDE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | METHYLENE CHLORIDE | 50 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | CARBON DISULFIDE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | BROMOFORM | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | BROMODICHLOROMETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1-DICHLOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1-DICHLOROETHENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TRICHLOROFLUOROMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | DICHLORODIFLUOROMETHANE | 20 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DICHLOROPROPANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 2-BUTANONE | 50 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1,2-TRICHLOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | TRICHLOROETHENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | METHYL ACETATE | 15 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,1,2,2-TETRACHLOROETHANE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | O-XYLENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DICHLOROBENZENE | 10 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | 1,2-DIBROMO-3-CHLOROPROPANE | 15 | UG_L | U | J | UJ | mc |
| 8260C | VPB161-GW-060116-978-980 | 6/1/2016 | 20 | ISOPROPYLBENZENE | 10 | UG_L | U | J | UJ | mc |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| 9060A | VPB161-SOIL-050216-138-140 | 5/2/2016 | 1 | TOTAL ORGANIC CARBON | 3600 | UG_G | | | | |
| 9060A | VPB161-SOIL-D-050216 | 5/2/2016 | 1 | TOTAL ORGANIC CARBON | 3600 | UG_G | | | | |

***Notes:***

| | | |
|---|---|---|
| ID | = | Identification |
| DF | = | Dilution factor |
| RC | = | Reason code |
| UG_L | = | Micrograms per liter |
| UG_G | = | Micrograms per gram |
| U | = | ***Undetected*** — The parameter was analyzed but undetected or was qualified as undetected during data review due to blank artifacts. |
| J | = | ***Estimated Value*** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation. |
| UJ | = | ***Undetected and Estimated*** — The parameter was analyzed but undetected and was estimated because of a quality control outlier. |
| M | = | Indicates that the analyte was outside of the control limits in the matrix spike/matrix spike duplicate prepared and/or analyzed concurrently with the native sample (laboratory qualifier.) |
| L | = | Indicated that the analyte was outside the control limits for the laboratory control sample and/or the laboratory control sample duplicate (laboratory qualifier). |

**Qualification Reason Codes (multiple reason codes may be applied):**

| | | |
|---|---|---|
| bf | = | Field blank contamination |
| bt | = | Trip blank contamination |
| be | = | Equipment blank contamination |
| fd | = | Field duplicate relative percent difference |
| c | = | Calibration issue |
| mc | = | Deviation from the method |
| l | = | Laboratory control sample recovery |
| s | = | Surrogate spike percent recovery |

## DATA VALIDATION REPORT

| | | |
|---|---|---|
| Project: | Regional Groundwater Investigation — NWIRP Bethpage | |
| Laboratory: | Katahdin Analytical | |
| Sample Delivery Group: | SJ3257 | |
| 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: 05/26/2016 |
| Reviewed by: | Tina Clemmey/Resolution Consultants | File Name: SJ3257_TO15 |

## SUMMARY

This report summarizes data review findings for samples listed below, collected by Resolution Consultants from the Regional Groundwater Investigation — NWIRP Bethpage site on 10 May 2016 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 |
|---|---|---|
| VPB161-AIR-051016 | Air | TO-15 |

Data validation activities were conducted using the following guidance documents: *Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)* (*U.S. EPA*, Method TO-15), *U.S. Environmental Protection Agency (U.S. EPA) Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (NFG, June 2008), and Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 4.2 (October 2010). In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements and/or professional judgment were used as appropriate.

## REVIEW ELEMENTS

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

| | |
|---|---|
| ✓ | Data completeness (chain-of-custody (COC)/sample integrity |
| ✓ | Holding times and sample preservation |
| ✓ | GC/MS performance checks |
| ✓ | Initial calibration/continuing calibration verification |
| ✗ | Laboratory blanks/trip blanks |
| NA | Matrix duplicate (MD) results |
| ✓ | Laboratory control sample (LCS) results |
| NA | Field duplicates |
| ✓ | Internal standards |
| ✓ | Sample results/reporting issues |

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. Acceptable data parameters for which all criteria were met and no qualification was performed and non-conformance or other issues that were noted during validation, but did not result in qualification of data are not discussed further. 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.<br>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 |

**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. Attachment A provides a summary of all qualified results.

**ATTACHMENTS**

Attachment A: Qualified Results Summary

**Attachment A**
**Qualified Results Summary**

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | ETHYLBENZENE | 0.078 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | STYRENE | 0.21 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CIS-1,3-DICHLOROPROPENE | 0.23 | UG_M3 | UL | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TRANS-1,3-DICHLOROPROPENE | 0.23 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,4-DICHLOROBENZENE | 0.3 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,2-DIBROMOETHANE | 0.38 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,2-DICHLOROETHANE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 4-METHYL-2-PENTANONE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | M- AND P-XYLENE | 0.45 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TOLUENE | 0.45 | UG_M3 | | | | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CHLOROBENZENE | 0.23 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CYCLOHEXANE | 0.17 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,2,4-TRICHLOROBENZENE | 0.37 | UG_M3 | J | U | U | bl |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | DIBROMOCHLOROMETHANE | 0.42 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TETRACHLOROETHENE | 0.088 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | XYLENES, TOTAL | 0.96 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CIS-1,2-DICHLOROETHENE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TRANS-1,2-DICHLOROETHENE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | METHYL TERT-BUTYL ETHER | 0.18 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,3-DICHLOROBENZENE | 0.3 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CARBON TETRACHLORIDE | 0.51 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 2-HEXANONE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | ACETONE | 4.7 | UG_M3 | | | | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CHLOROFORM | 0.098 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | BENZENE | 0.19 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1,1-TRICHLOROETHANE | 0.27 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | BROMOMETHANE | 0.19 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CHLOROMETHANE | 1.1 | UG_M3 | | | | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CHLOROETHANE | 0.13 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | VINYL CHLORIDE | 0.13 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | METHYLENE CHLORIDE | 0.49 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | CARBON DISULFIDE | 0.16 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | BROMOFORM | 0.52 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | BROMODICHLOROMETHANE | 0.33 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1-DICHLOROETHANE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1-DICHLOROETHENE | 0.2 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TRICHLOROFLUOROMETHANE | 1.5 | UG_M3 | | | | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | DICHLORODIFLUOROMETHANE | 2.6 | UG_M3 | | | | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 0.59 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,2-DICHLOROPROPANE | 0.23 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 2-BUTANONE | 0.28 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1,2-TRICHLOROETHANE | 0.27 | UG_M3 | U | | U | |

**Table A-1**
**Qualified Results Summary**

| Method | Sample ID | Sample Date | DF | Analyte | Result | Units | Laboratory Qualifier | Validator Qualifier | Final Qualifier | RC |
|---|---|---|---|---|---|---|---|---|---|---|
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | TRICHLOROETHENE | 0.27 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,1,2,2-TETRACHLOROETHANE | 0.34 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | O-XYLENE | 0.095 | UG_M3 | J | | J | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | 1,2-DICHLOROBENZENE | 0.3 | UG_M3 | U | | U | |
| TO-15 | VPB161-AIR-051016 | 5/10/2016 | 1 | ISOPROPYLBENZENE | 0.24 | UG_M3 | U | | U | |

***Notes:***

| | | |
|---|---|---|
| ID | = | Identification |
| DF | = | Dilution factor |
| RC | = | Reason code |
| UG_M3 | = | Micrograms per cubic meter of air |
| U | = | ***Undetected*** — The parameter was analyzed but undetected or was qualified as undetected during data review due to blank artifacts. |
| J | = | ***Estimated Value*** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation. |
| L | = | Indicated that the analyte was outside the control limits for the laboratory control sample and/or the laboratory control sample duplicate (laboratory qualifier). |

**Qualification Reason Codes (multiple reason codes may be applied):**

| | | |
|---|---|---|
| bl | **=** | Laboratory blank contamination |

## Section 5

## VPB161 Analytical Data Table

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 4/27/2016 | 4/27/2016 | 4/28/2016 | 5/2/2016 |
| **Sample ID** | | VPB161-GW-042716-58-60 | VPB161-GWD-042716 | VPB161-GW-042816-98-100 | VPB161-GW-050216-158-160 |
| **Sample Interval (ft bgs)** | | 58-60 | 58-60 | 98-100 | 58-160 |
| **Sample type code** | | N | FD | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 U |
| 2-HEXANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| ACETONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | **14 J** |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | **0.49 J** | **0.47 J** | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | **3.7** | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 U |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | **6.4** | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | **0.49 J** |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/3/2016 | 5/3/2016 | 5/3/2016 | 5/4/2016 |
| **Sample ID** | | VPB161-GW-050316-198-200 | VPB161-GW-050316-218-220 | VPB161-GW-050316-238-240 | VPB161-GW-050416-258-260 |
| **Sample Interval (ft bgs)** | | 198-200 | 218-220 | 238-240 | 258-260 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | 0.90 J | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | **7.3** | **1.7** | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | **1.8** | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | 0.55 J | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| 2-HEXANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| 4-METHYL-2-PENTANONE | NL | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| ACETONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | **0.82 J** | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | **0.55 J** | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | **0.76 J** | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | **0.64 J** | **1.5** | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/4/2016 | 5/4/2016 | 5/5/2016 | 5/5/2016 |
| **Sample ID** | | VPB161-GW-050416-278-280 | VPB161-GW-050416-298-300 | VPB161-GW-050516-318-320 | VPB161-GW-050516-338-340 |
| **Sample Interval (ft bgs)** | | 278-280 | 298-300 | 318-320 | 338-340 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| 2-HEXANONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| 4-METHYL-2-PENTANONE | NL | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| ACETONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/6/2016 | 5/9/2016 | 5/9/2016 | 5/10/2016 |
| **Sample ID** | | VPB161-GW-050616-358-360 | VPB161-GW-050916-378-380 | VPB161-GW-050916-398-400 | VPB161-GW-051016-418-420 |
| **Sample Interval (ft bgs)** | | 358-360 | 378-380 | 398-400 | 418-420 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<1.5 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 U | <5.0 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <2.5 U | <5.0 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 U | <5.0 U | <2.5 U | <2.5 UJ |
| ACETONE | 50 | <2.5 U | <5.0 U | <2.5 U | <2.5 UJ |
| BENZENE | 1 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <1.0 U | <0.50 U | <0.50 UJ |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 UJ |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.0 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <1.5 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <5.0 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.0 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <1.0 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <2.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <3.0 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/10/2016 | 5/10/2016 | 5/10/2016 | 5/11/2016 |
| **Sample ID** | | VPB161-GWD-051016 | VPB161-GW-051016-438-440 | VPB161-GW-051016-458-460 | VPB161-GW-051116-478-480 |
| **Sample Interval (ft bgs)** | | 418-420 | 438-440 | 458-460 | 478-480 |
| **Sample type code** | | FD | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 UJ |
| ACETONE | 50 | <2.5 UJ | <2.5 U | <2.5 U | <2.5 U |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 UJ | <0.50 UJ | <0.50 UJ | <0.50 UJ |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 UJ |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/11/2016 | 5/12/2016 | 5/12/2016 | 5/12/2016 |
| **Sample ID** | | VPB161-GW-051116-498-500 | VPB161-GW-051216-518-520 | VPB161-GW-051216-538-540 | VPB161-GW-051216-558-560 |
| **Sample Interval (ft bgs)** | | 498-500 | 518-520 | 38-540 | 558-560 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | ***<1.1 U*** | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<1.7 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <2.3 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | ***<1.1 U*** | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 U | <5.7 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <2.5 U | <5.7 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 UJ | <5.7 UJ | <2.5 UJ | <2.5 UJ |
| ACETONE | 50 | <2.5 U | <5.7 U | <2.5 U | <2.5 U |
| BENZENE | 1 | <0.50 U | ***<1.1 U*** | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <2.3 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 UJ | <1.1 UJ | <0.50 UJ | <0.50 UJ |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <2.3 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 UJ | <2.3 UJ | <1.0 UJ | <1.0 UJ |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.1 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <2.3 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <2.3 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <1.7 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | ***<5.7 U*** | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.1 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <1.1 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <2.3 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | ***<2.3 U*** | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <3.4 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/13/2016 | 5/16/2016 | 5/16/2016 | 5/17/2016 |
| **Sample ID** | | VPB161-GW-051316-578-580 | VPB161-GW-051616-603-605 | VPB161-GW-051616-623-625 | VPB161-GW-051716-638-640 |
| **Sample Interval (ft bgs)** | | 578-580 | 603-605 | 623-625 | 638-640 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 UJ | <2.5 UJ | <2.5 UJ | <2.5 U |
| ACETONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <0.50 U | <0.50 U | **0.75 J** |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 UJ | <1.0 UJ | <1.0 U |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/17/2016 | 5/18/2016 | 5/18/2016 | 5/19/2016 |
| **Sample ID** | | VPB161-GW-051716-658-660 | VPB161-GW-051816-683-685 | VPB161-GW-051816-698-700 | VPB161-GW-051916-718-720 |
| **Sample Interval (ft bgs)** | | 658-660 | 683-685 | 698-700 | 718-720 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| ACETONE | 50 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/20/2016 | 5/20/2016 | 5/23/2016 | 5/23/2016 |
| **Sample ID** | | VPB161-GW-052016-738-740 | VPB161-GW-052016-758-760 | VPB161-GW-052316-778-780 | VPB161-GW-052316-798-800 |
| **Sample Interval (ft bgs)** | | 738-740 | 758-760 | 778-780 | 798-800 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLOROETHANE | 1 | ***<1.5 U*** | <0.72 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<2.3 U*** | ***<1.1 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | ***<1.5 U*** | <0.72 U | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <7.6 U | <3.6 U | <2.5 U | <2.5 U |
| 2-HEXANONE | 50 | <7.6 U | <3.6 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <7.6 UJ | <3.6 UJ | <2.5 UJ | <2.5 UJ |
| ACETONE | 50 | **17 J** | **14 J** | **9.5 J** | **8.0 J** |
| BENZENE | 1 | ***<1.5 U*** | <0.72 U | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <1.5 UJ | 0.55 J | <0.50 UJ | <0.50 UJ |
| CARBON TETRACHLORIDE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <3.0 UJ | <1.4 UJ | <1.0 UJ | <1.0 UJ |
| CIS-1,2-DICHLOROETHENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<1.5 U*** | ***<0.72 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <3.0 UJ | <1.4 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <2.3 U | <1.1 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <7.6 U | <3.6 U | <2.5 U | <2.5 U |
| O-XYLENE | NL | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<1.5 U*** | ***<0.72 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <1.5 U | <0.72 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <3.0 U | <1.4 U | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <4.6 U | <2.2 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/24/2016 | 5/24/2016 | 5/25/2016 | 5/25/2016 |
| **Sample ID** | | VPB161-GW-052416-818-820 | VPB161-GW-052416-838-840 | VPB161-GW-052516-858-860 | VPB161-GW-052516-878-880 |
| **Sample Interval (ft bgs)** | | 818-820 | 838-840 | 858-860 | 878-880 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 UJ | <1.3 UJ | <0.50 UJ | <0.50 UJ |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | ***<1.3 U*** | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<2.0 U*** | ***<0.75 U*** | ***<0.75 U*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | ***<1.3 U*** | <0.50 U | <0.50 U |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| 2-BUTANONE | 50 | <2.5 UJ | <6.7 UJ | <2.5 UJ | <2.5 UJ |
| 2-HEXANONE | 50 | <2.5 U | <6.7 U | <2.5 U | <2.5 U |
| 4-METHYL-2-PENTANONE | NL | <2.5 UJ | <6.7 UJ | <2.5 UJ | <2.5 UJ |
| ACETONE | 50 | <2.5 UJ | <6.7 UJ | <2.5 UJ | <2.5 UJ |
| BENZENE | 1 | <0.50 U | ***<1.3 U*** | <0.50 U | <0.50 U |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| BROMOFORM | 50 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| BROMOMETHANE | 5 | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| CARBON DISULFIDE | 60 | <0.50 UJ | <1.3 UJ | <0.50 UJ | <0.50 UJ |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| CHLOROBENZENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| CHLOROETHANE | 5 | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| CHLOROFORM | 7 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| CHLOROMETHANE | 5 | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.3 U*** | ***<0.50 U*** | ***<0.50 U*** |
| CYCLOHEXANE | NL | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <2.7 UJ | <1.0 UJ | <1.0 UJ |
| ETHYLBENZENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| ISOPROPYLBENZENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| M- AND P-XYLENE | NL | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| METHYL ACETATE | NL | <0.75 U | <2.0 U | <0.75 U | <0.75 U |
| METHYL CYCLOHEXANE | NL | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| METHYLENE CHLORIDE | 5 | <2.5 U | ***<6.7 U*** | <2.5 U | <2.5 U |
| O-XYLENE | NL | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| STYRENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| TETRACHLOROETHENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| TOLUENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<1.3 U*** | ***<0.50 U*** | ***<0.50 U*** |
| TRICHLOROETHENE | 5 | <0.50 U | <1.3 U | <0.50 U | <0.50 U |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <2.7 U | <1.0 U | <1.0 U |
| VINYL CHLORIDE | 2 | <1.0 U | ***<2.7 U*** | <1.0 U | <1.0 U |
| XYLENES, TOTAL | 5 | <1.5 U | <4.0 U | <1.5 U | <1.5 U |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 | VPB161 | VPB161 | VPB161 |
|---|---|---|---|---|---|
| **Sample Date** | | 5/26/2016 | 5/27/2016 | 5/31/2016 | 5/31/2016 |
| **Sample ID** | | VPB161-GW-052616-898-900 | VPB161-GW-052716-923-925 | VPB161-GW-053116-938-940 | VPB161-GW-053116-958-960 |
| **Sample Interval (ft bgs)** | | 898-900 | 923-925 | 938-940 | 958-960 |
| **Sample type code** | | N | N | N | N |
| **VOC 8260C (ug/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,1,2,2-TETRACHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | <0.50 UJ | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,1,2-TRICHLOROETHANE | 1 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,1-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,1-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,2,4-TRICHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<0.75 U*** | ***<0.75 U*** | ***<0.75 UJ*** | ***<30 UJ*** |
| 1,2-DIBROMOETHANE | NL | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| 1,2-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,2-DICHLOROETHANE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,2-DICHLOROETHENE, TOTAL | 5 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| 1,2-DICHLOROPROPANE | 1 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,3-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 1,4-DICHLOROBENZENE | 3 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| 2-BUTANONE | 50 | <2.5 UJ | <2.5 U | **1.4 J** | ***<100 UJ*** |
| 2-HEXANONE | 50 | <2.5 U | <2.5 U | <2.5 UJ | ***<100 UJ*** |
| 4-METHYL-2-PENTANONE | NL | <2.5 UJ | <2.5 U | <2.5 UJ | <100 UJ |
| ACETONE | 50 | <2.5 UJ | <2.5 UJ | <2.5 UJ | ***<100 UJ*** |
| BENZENE | 1 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| BROMODICHLOROMETHANE | 50 | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| BROMOFORM | 50 | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| BROMOMETHANE | 5 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| CARBON DISULFIDE | 60 | <0.50 UJ | <0.50 U | <0.50 UJ | <20 UJ |
| CARBON TETRACHLORIDE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| CHLOROBENZENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| CHLOROETHANE | 5 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| CHLOROFORM | 7 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| CHLOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| CIS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 UJ*** | ***<20 UJ*** |
| CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| DIBROMOCHLOROMETHANE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| DICHLORODIFLUOROMETHANE | 5 | <1.0 UJ | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| ETHYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| ISOPROPYLBENZENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| M- AND P-XYLENE | NL | <1.0 U | <1.0 U | <1.0 UJ | <40 UJ |
| METHYL ACETATE | NL | <0.75 U | <0.75 U | <0.75 UJ | <30 UJ |
| METHYL CYCLOHEXANE | NL | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| METHYL TERT-BUTYL ETHER | 10 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| METHYLENE CHLORIDE | 5 | <2.5 U | <2.5 U | <2.5 UJ | ***<100 UJ*** |
| O-XYLENE | NL | <0.50 U | <0.50 U | <0.50 UJ | <20 UJ |
| STYRENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| TETRACHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| TOLUENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| TRANS-1,2-DICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<0.50 U*** | ***<0.50 U*** | ***<0.50 UJ*** | ***<20 UJ*** |
| TRICHLOROETHENE | 5 | <0.50 U | <0.50 U | <0.50 UJ | ***<20 UJ*** |
| TRICHLOROFLUOROMETHANE | 5 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| VINYL CHLORIDE | 2 | <1.0 U | <1.0 U | <1.0 UJ | ***<40 UJ*** |
| XYLENES, TOTAL | 5 | <1.5 U | <1.5 U | <1.5 UJ | ***<60 UJ*** |

| **Location** | NYSDEC Groundwater Guidance or Standard Value (Note 1) | VPB161 |
|---|---|---|
| **Sample Date** | | 6/1/2016 |
| **Sample ID** | | VPB161-GW-060116-978-980 |
| **Sample Interval (ft bgs)** | | 978-980 |
| **Sample type code** | | N |
| **VOC 8260C (ug/L)** | | |
| 1,1,1-TRICHLOROETHANE | 5 | ***<10 UJ*** |
| 1,1,2,2-TETRACHLOROETHANE | 5 | ***<10 UJ*** |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 5 | ***<10 UJ*** |
| 1,1,2-TRICHLOROETHANE | 1 | ***<10 UJ*** |
| 1,1-DICHLOROETHANE | 5 | ***<10 UJ*** |
| 1,1-DICHLOROETHENE | 5 | ***<10 UJ*** |
| 1,2,4-TRICHLOROBENZENE | 5 | ***<10 UJ*** |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.04 | ***<15 UJ*** |
| 1,2-DIBROMOETHANE | NL | <10 UJ |
| 1,2-DICHLOROBENZENE | 3 | ***<10 UJ*** |
| 1,2-DICHLOROETHANE | 5 | ***<10 UJ*** |
| 1,2-DICHLOROETHENE, TOTAL | 5 | ***<20 UJ*** |
| 1,2-DICHLOROPROPANE | 1 | ***<10 UJ*** |
| 1,3-DICHLOROBENZENE | 3 | ***<10 UJ*** |
| 1,4-DICHLOROBENZENE | 3 | ***<10 UJ*** |
| 2-BUTANONE | 50 | <50 UJ |
| 2-HEXANONE | 50 | <50 UJ |
| 4-METHYL-2-PENTANONE | NL | <50 UJ |
| ACETONE | 50 | <50 UJ |
| BENZENE | 1 | ***<10 UJ*** |
| BROMODICHLOROMETHANE | 50 | <10 UJ |
| BROMOFORM | 50 | <10 UJ |
| BROMOMETHANE | 5 | ***<20 UJ*** |
| CARBON DISULFIDE | 60 | <10 UJ |
| CARBON TETRACHLORIDE | 5 | ***<10 UJ*** |
| CHLOROBENZENE | 5 | ***<10 UJ*** |
| CHLOROETHANE | 5 | ***<20 UJ*** |
| CHLOROFORM | 7 | ***<10 UJ*** |
| CHLOROMETHANE | 5 | ***<20 UJ*** |
| CIS-1,2-DICHLOROETHENE | 5 | ***<10 UJ*** |
| CIS-1,3-DICHLOROPROPENE | 0.4 | ***<10 UJ*** |
| CYCLOHEXANE | NL | <10 UJ |
| DIBROMOCHLOROMETHANE | 5 | ***<10 UJ*** |
| DICHLORODIFLUOROMETHANE | 5 | ***<20 UJ*** |
| ETHYLBENZENE | 5 | ***<10 UJ*** |
| ISOPROPYLBENZENE | 5 | ***<10 UJ*** |
| M- AND P-XYLENE | NL | <20 UJ |
| METHYL ACETATE | NL | <15 UJ |
| METHYL CYCLOHEXANE | NL | <10 UJ |
| METHYL TERT-BUTYL ETHER | 10 | ***<10 UJ*** |
| METHYLENE CHLORIDE | 5 | ***<50 UJ*** |
| O-XYLENE | NL | <10 UJ |
| STYRENE | 5 | ***<10 UJ*** |
| TETRACHLOROETHENE | 5 | ***<10 UJ*** |
| TOLUENE | 5 | ***<10 UJ*** |
| TRANS-1,2-DICHLOROETHENE | 5 | ***<10 UJ*** |
| TRANS-1,3-DICHLOROPROPENE | 0.4 | ***<10 UJ*** |
| TRICHLOROETHENE | 5 | ***<10 UJ*** |
| TRICHLOROFLUOROMETHANE | 5 | ***<20 UJ*** |
| VINYL CHLORIDE | 2 | ***<20 UJ*** |
| XYLENES, TOTAL | 5 | ***<30 UJ*** |

**Notes:**

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

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

Yellow highlighted values exceed Groundwater Standards or guidance value

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

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

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

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

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

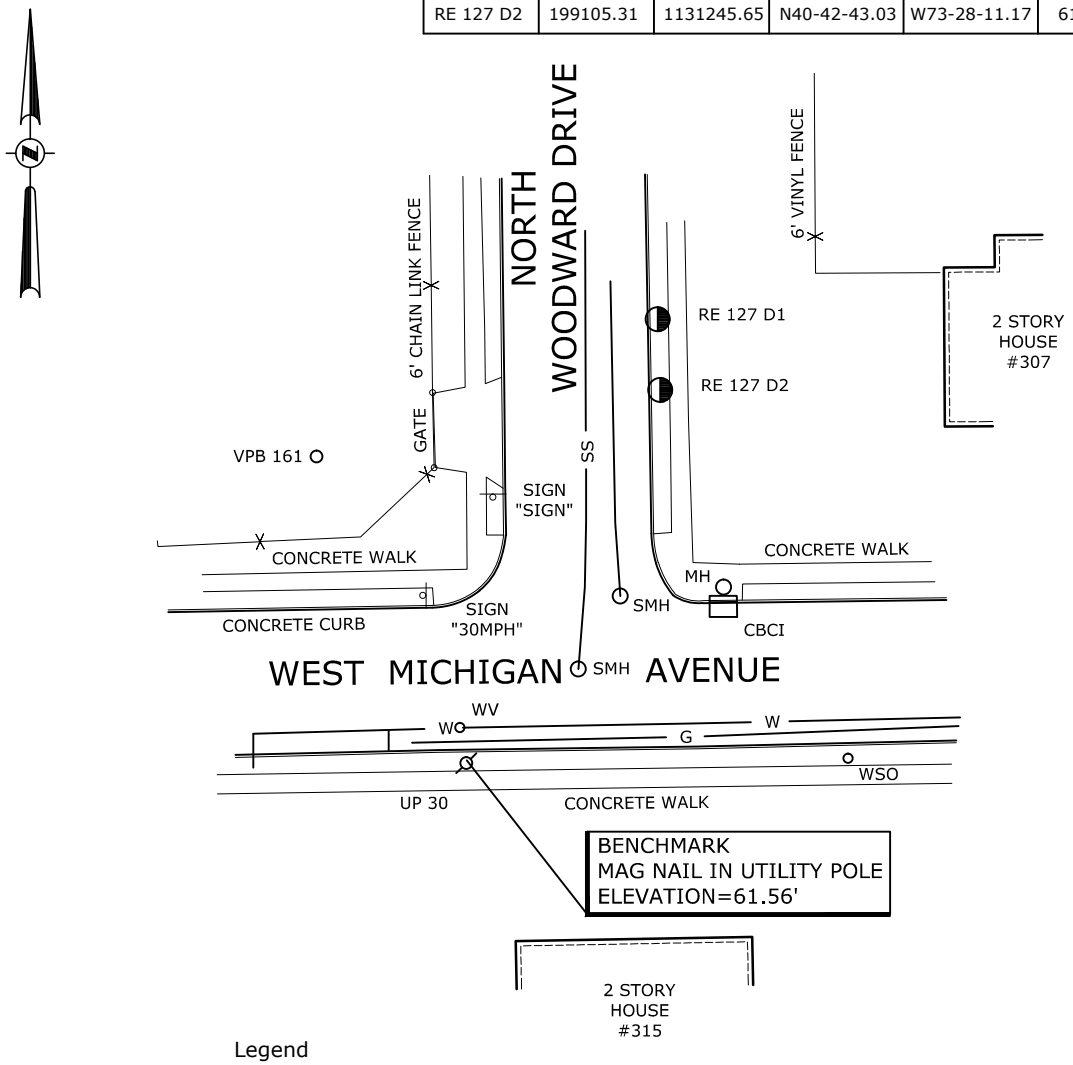
# Section 6

# VPB161 Survey

NONE :XREFS



| Description | Northing | Easting | Latitude | Longitude | Ground | Rim | PVC |
|---|---|---|---|---|---|---|---|
| VPB 161 | 199091.46 | 1131174.08 | N40-42-42.90 | W73-28-12.10 | 62.00 | NA | NA |
| RE 127 D1 | 199120.06 | 1131245.10 | N40-42-43.18 | W73-28-11.17 | 61.58 | 61.57 | 61.13 |
| RE 127 D2 | 199105.31 | 1131245.65 | N40-42-43.03 | W73-28-11.17 | 61.48 | 61.49 | 60.96 |




Legend

| | |
|---|---|
| CBCI | Catch Basin Curb Inlet |
| MW | Monitoring Well |
| MH | Manhole |
| SMH | Sanitary Manhole |
| UP | Utility Pole |
| VPB 161 | Vertical Profile Boring |
| WSO | Water Shut-off |
| WV | Water Valve |
| G | Gas Line Markout |
| W | Water Line Markout |
| SS | Sanitary Sewer Markout |

Map Notes

1. Information shown hereon was compiled from an actual field survey conducted on October 11, 2016.
2. North orientation is Grid North based on the New York State Plane Coordinate System, Long Island Zone, NAD 83 as obtained from GPS observations.
3. Vertical datum shown hereon is NAVD 88 as obtained from GPS observations.

BAR SCALE

40 0 20 40 80

1 inch = 40 ft.

DWG NO. 16-579

| Date | RECORD OF WORK | Appr. |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

Drafter: GLB | Checker: JFC

Appr. by: JFC | Proj. No. 14.4121

# VERTICAL PROFILE BORING 161 SURVEY LOCATION
# WEST MICHIGAN AVENUE/NORTH WOODWARD DRIVE

TOWN OF BETHPAGE | 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"=40' | DATE:OCT. 11, 2016

CAD DWG. FILE NAME: K:\Projects\144121\Survey\Drawings and Maps\VPB 161.dwg

# Appendix B

## Geologic Cross sections derived from

## Environmental Sequence Stratigraphy (ESS)

## Appendix B. Geologic Cross Sections derived from Environmental Sequence Stratigraphy

Resolution Consultants reviewed the geologic data and regional literature at the Naval Weapons Industrial Reserve Plant at Bethpage, New York and developed four representative base-wide cross sections to support development of a CSM. The cross sections are presented in Figure 1 - Figure 4. The cross sections provide geologic context for groundwater and analytical data and can be used as the framework upon which new and existing datasets (groundwater, analytical chemistry, geophysical data, etc.) can be analyzed to better understand groundwater flow-paths and contaminant transport and storage zones. As such, these sections are an integral component of an effective CSM.

The cross sections were developed using ESS. The ESS approach examines subsurface data in the context of the depositional environments and petroleum industry best practices of sequence stratigraphy and facies models. Shown for each boring included in the stratigraphic analysis are a vertical series of colored blocks which correspond to boring log lithology and a continuous data curve (in red or as a scan of a paper document, which corresponds to the gamma log). These colored blocks represent vertical grain size distribution and are the basis for the correlations between the data points.

The color coded blocks correspond to the graphic grainsize scale as shown in the cross-sections' keys. The width of the block increases with relative grainsize. Block color indicates the textural classification of the sediment (e.g., yellow for sand, green for silt, blue for clay) as written in the field notes of the core logging geologist (see the cross section keys for further definition).

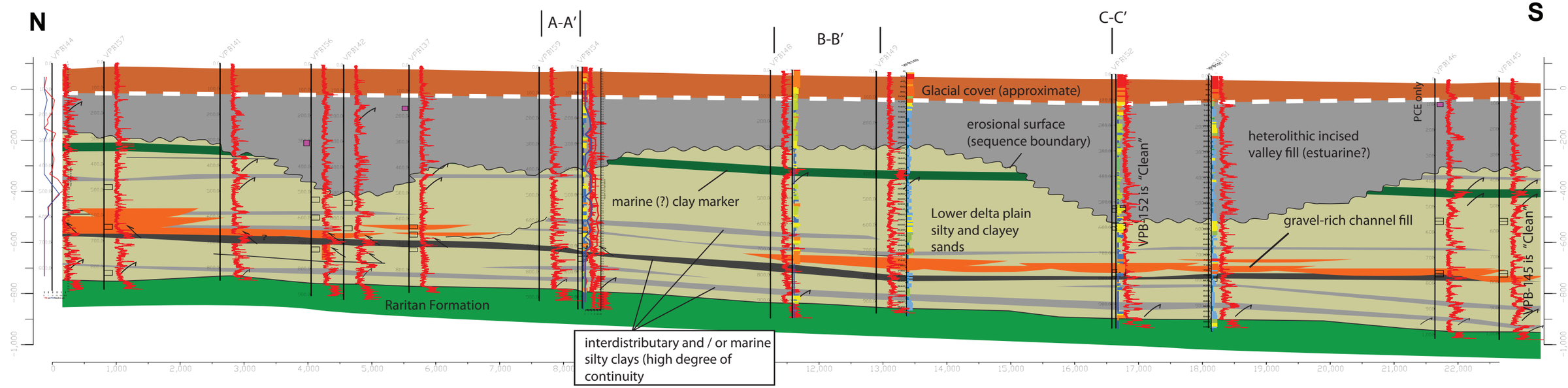
Logs of natural gamma emissions are a common proxy for grainsize. They typically are used as a correlation aide because repetitive spatially extensive trends in grainsize are easily identified visually when curves are examined along a given section. In non-granitic aquifer material, the chemistry of minerals found in clays result in higher concentrations of gamma emitting anions as opposed to the quartz, heavy minerals, and lithic fragments that generally predominate the coarser size fractions. Thus, peaks in the gamma logs can be indicative of clay layers and in general as gamma count per second increases, the grainsize decreases. Gamma logs should always be "calibrated" by comparing side by side with a lithologic log at representative locations. Good agreement between gamma logs and lithology logs were noted in the data points used for the ESS sections at Bethpage.

The previously established general hydrostratigraphy at Bethpage consists of the basal Raritan confining unit, the Magothy aquifer, and the shallow glacial aquifer. The stratigraphy shown in the sections presented in this technical memo is consistent with this general model but additionally shows the Magothy to consist of basal zone gravel-rich channel fills (orange in sections); extensive, planar marine clays (thin units shown in grey and dark green); and silty sands of inter-distributary and delta front origins (shown in tan). Additionally, an erosional incision into the lower delta plain sediments is observed throughout the site (portrayed in sections as a wavy solid black line). Above this, the Magothy sediments are more likely estuarine "incised valley fill" as indicated by the more heterogeneous gamma ray character. In some locations, such as VPB139 on section A-A', there appears to be clear lithologic control on contaminant distribution within the estuarine facies where the higher TCE and PCE concentrations occur in the coarser lithologic zones.

The depositional axis of the incised valley fill likely trends north-south/southeast. The incision is clearly indicated on all sections via the correlation of a prominent clay layer shown in sections in dark green. Where this clay is missing in the gamma logs, it is likely that it was eroded during a lowstand of sea level. Additionally, while relatively planar in their geometry, the major units dip gently south-south east. This is an important geologic characteristic to consider when comparing analytical results because hydrologic zones separated by thin confining layers within the Magothy may be accessed by screens of similar depth.

One of the most important benefits of the ESS approach is to develop and refine the CSM. ESS facilitates an understanding of the geology governing groundwater occurrence and movement, and provides an element for refining the approaches for assessment and remediation. The ESS results from this effort suggest that a modern analog (a modern geological setting that allows an understanding of the ancient environment) for the Magothy depositional environments is the Mackenzie River Delta, shown in Figure 5. Basal gravel zones are represented by the braided river deposits of the Toklat River, Alaska, in Figure 6.

# Environmental Sequence Stratigraphy Cross Section




## GRAIN SIZE LOG INDEX*

* not all grainsize categories shown in the comprehensive key are present at the site.
Site sediments are predominatly fine (clays, sandy clays, silts,and fine to medium sand)

- Clay
- Clay with 10% Sand
- Clay with 20% Sand
- Clay with 30% Sand
- Clay with 40% Sand
- Clay with Fine Gravel
- Clay with Medium Gravel
- Clay with Coarse Gravel
- Silt
- Silt with 10% Sand
- Silt with 20% Sand
- Sandy Silt
- Silty Sand
- Clayey Sand
- Silty Sand (Fine Sand with 40% Fines)
- Clayey Sand (Fine Sand with 40% Fines)
- Silty Sand (Fine Sand with 30% Fines)
- Clayey Sand (Fine Sand with 30% Fines)
- Silty Sand (Fine Sand with 10-20% Fines)
- Clayey Sand (Fine Sand with 10-20% Fines)
- Gravelly Silt (Silt with Fine Gravel)
- Gravelly Silt (Silt with Medium Gravel)
- Gravelly Silt (Silt with Coarse Gravel)
- Fine Sand
- Silty Sand (Medium Sand with 50% Fines)
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- Coarse Sand
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- Coarse Sand with Medium Gravel
- Coarse Sand with Coarse Gravel
- Clayey/Silty Gravel (Fine gravel with clay/silt)
- Clayey/Silty Gravel (Medium gravel with clay/silt)
- Clayey/Silty Gravel (Coarse gravel with clay/silt)
- Sandy Gravel (Fine Gravel with Sand)
- Sandy Gravel (Medium Gravel with Sand)
- Sandy Gravel (Coarse Gravel with Sand)
- Fine Gravel
- Medium Gravel
- Coarse Gravel

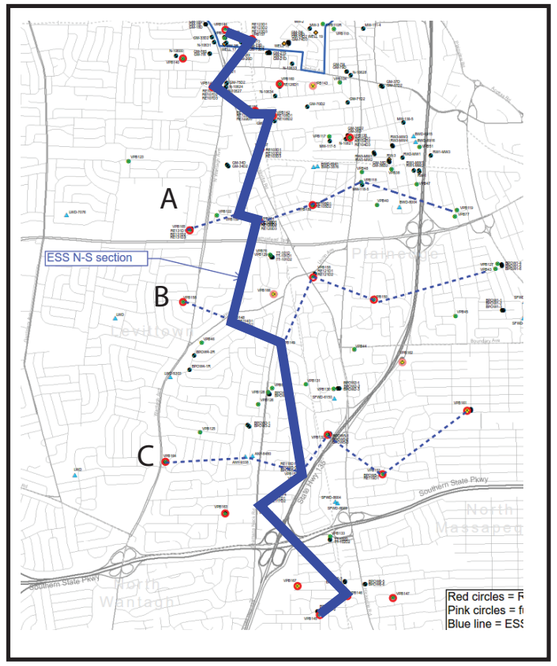



Figure 1. Cross Section N-S

A – A′

West

A

intersection with N-S

VPB-165 VPB-159 VPB-154 VPB-139 BWD 6-1 BWD 6-2 VPB-118 VPB-46 VPB-40 VPB-77 VPB-119

A′

East

Elevation (Ft.)

100 0 -100 -200 -300 -400 -500 -600 -700 -800

Apparent lithologic control on TCE and PCE concentrations

Potentially leaky zone in basal clay here

Raritan Formation

Natural Gamma in CPS

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000 12,000 13,000 14,000 15,000

Distance

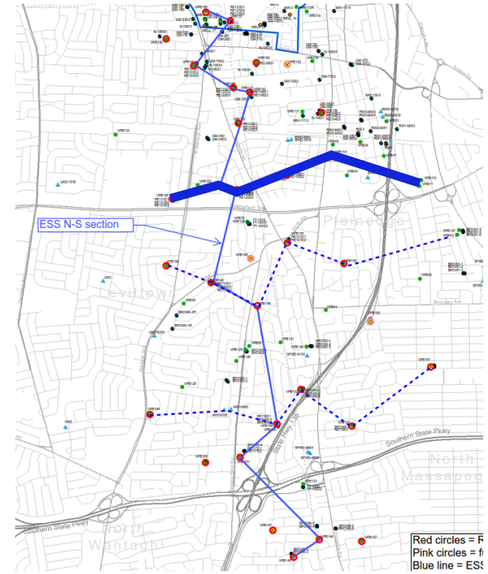
Glacial cover (approximate)

heterolithic incised valley fill (estuarine?)

marine (?) clay marker

interdistributary and / or marine silty clays (high degree of continuity (darkest grey clay may serve as base to contaminant)

gravel-rich channel fill

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- Clay with 30% Sand
- Clay with 40% Sand
- Clay with Fine Gravel
- Clay with Medium Gravel
- Clay with Coarse Gravel
- Silt
- Silt with 10% Sand
- Silt with 20% Sand
- Sandy Silt
- Silty Sand
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- Silty Sand (Fine Sand with 40% Fines)
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- Sandy Gravel (Fine Gravel with Sand)
- Sandy Gravel (Medium Gravel with Sand)
- Sandy Gravel (Coarse Gravel with Sand)
- Fine Gravel
- Medium Gravel
- Coarse Gravel

Figure 2. Cross Section A-A’

B

B–B′

B′

West

East

VPB-156

VPB-148

VPB-149

VPB-155

VPB-150

VPB-45

VPB-43

VPB-127

intersection with N-S

Glacial cover (approximate)

heterolithic incised valley fill (estuarine?)

marine (?) clay marker

Lower delta plain silty and clayey sands

gravel-rich channel fill

interdistributary and / or marine silty clays (high degree of continuity (darkest grey clay may serve as base to contaminant)

?

Raritan Formation

100

0

-100

-200

-300

-400

-500

-600

-700

-800

0

1,000

2,000

3,000

4,000

5,000

6,000

7,000

8,000

9,000

10,000

11,000

12,000

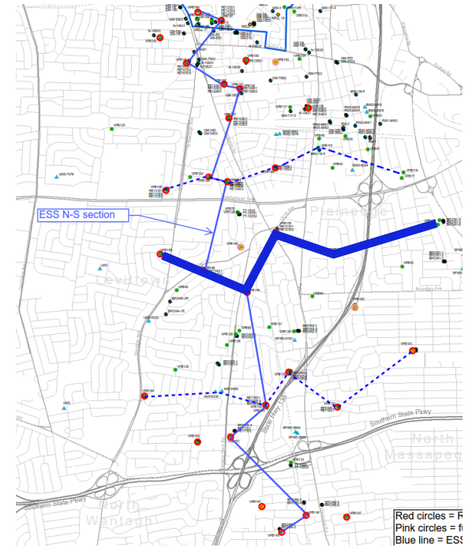


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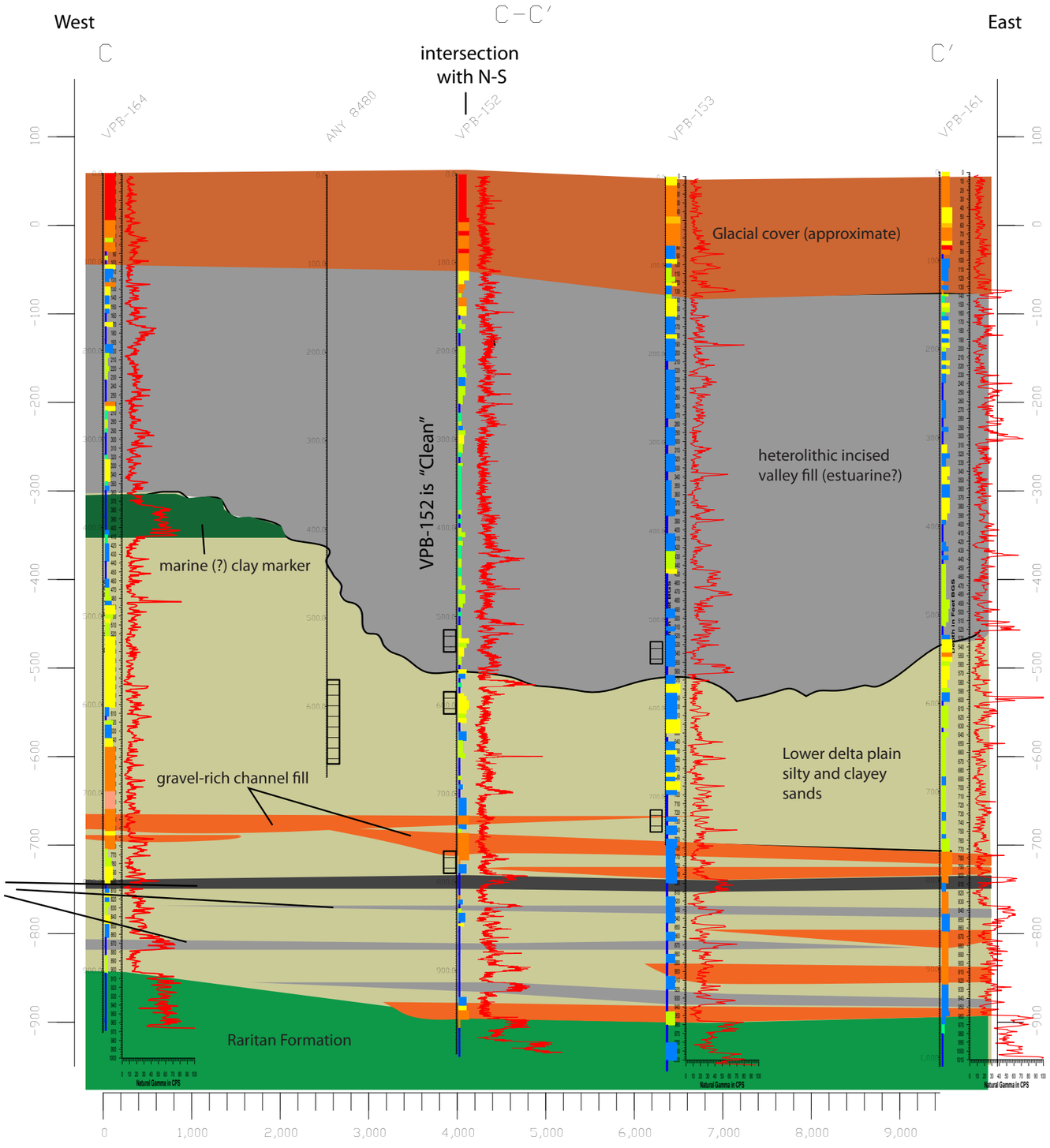
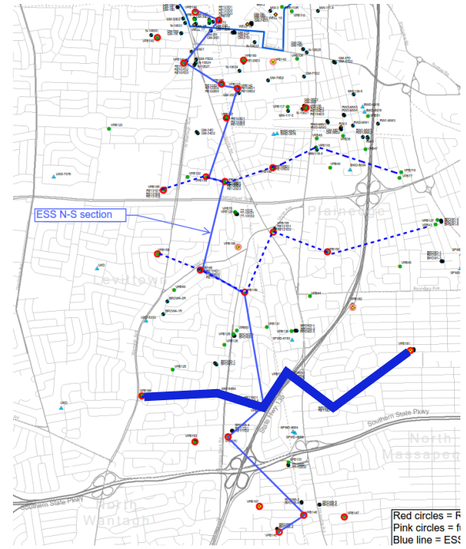
Figure 3. Cross Section B-B’

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- Coarse Gravel

Figure 4. Cross Section C-C’

## Figure 5. Mackenzie River Delta Depositional Environment

Source: Thermal Emission and Reflection Radiometer image from NASA's TERRA satellite, August 4, 2005, Mackenzie River, Canada. Image from GSFC/METI/ERSDAC/JAROS and the US/Japan ASTER Science Team. http://earthobservatory.nasa.gov/IOTD/view.php?id=8320

**Figure 6. Braided River Depositional Environment**

Source: East Fork Toklat River, Alaska Range, Denali National Park https://pubs.usgs.gov/of/2004/1216/b/b.html