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INTERIM DATA SUMMARY REPORT GROUNDWATER POLYCHLORINATED BIPHENYLS AT SITE 1 NWIRP BETHPAGE NY

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TETRA TECH

INTERIM
DATA SUMMARY REPORT
GROUNDWATER

PCB INVESTIGATION AT SITE 1 - FORMER DRUM MARSHALLING AREA

Naval Weapons Industrial Reserve Plant
Bethpage, New York

Naval Facilities Engineering Command
Mid-Atlantic

CONTRACT NUMBER N62470-08-D-1001
Contract Task Order WE44

September 2012

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DATA SUMMARY REPORT
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PCB INVESTIGATION AT SITE 1 - FORMER DRUM MARSHALLING AREA

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

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ACRONYMS

AOC	Area of Concern
AST	Aboveground Storage Tank
bgs	below ground surface
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
ER	Environmental Restoration
FS	Feasibility Study
ft/day	feet per day
GOCO	Government-Owned Contractor-Operated
gpm	gallons per minute
HNUS	Halliburton NUS
HSA	Hollow Stem Auger
IDW	Investigation-Derived Waste
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
NAVFAC	Naval Facilities Engineering Command Mid-Atlantic
NGC	Northrop Grumman Corporation
NTU	Nephelometric Turbidity Unit
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxygen Reduction Potential
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene
PVC	Polyvinyl chloride
QA	Quality Assurance
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
TOC	Total Organic Carbon
TCE	Trichloroethene
UFP	Uniform Federal Policy
VOC	Volatile organic compound
µg/L	microgram per liter

1.0 INTRODUCTION

This Data Summary Report was prepared by Tetra Tech, Inc. for the Naval Facilities Engineering Command (NAVFAC) - Mid-Atlantic under the U.S. Navy's Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract number N62470-08-D-1001, Contract Task Order (CTO) WE44. The Data Summary Report presents the field activities at Site 1 – Former Drum Marshalling Area conducted from April 2011 through January 2012 at the Naval Weapons Industrial Reserve Plant (NWIRP) located in Bethpage, New York (Figures 1-1 and 1-2). The field activities consisted of the following: surface water sampling, soil borings, down hole geophysical logging, monitoring well installation and development, and groundwater sampling. Procedures, methods, and rational were presented in the Uniform Federal Policy (UFP) Sampling and Analysis Plan (SAP) (Tetra Tech, 2010a) and the subsequent SAP Addendum (Tetra Tech, 2011). Groundwater investigation activities were conducted in accordance with the Navy Environmental Restoration (ER) Program and New York State Department of Environmental Conservation (NYSDEC) Resource Conservation and Recovery Act (RCRA) permit number NYD003995198.

1.1 SCOPE AND OBJECTIVES

This document summarizes the groundwater investigation activities conducted at the NWIRP Bethpage Site 1 – Former Drum Marshalling Area between April 2011 and January 2012. The primary objectives of the investigation were to further define the extent of polychlorinated biphenyls (PCBs) and hexavalent chromium detected in groundwater and investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins).

Before this investigation, the existing groundwater monitoring well network at Site 1 consisted of twenty monitoring wells extending from 20 feet north to 250 feet south of the Site 1 boundaries. Groundwater flow is generally to the south across the Site. Sampling of these monitoring wells in November 2010 and March 2011 indicated concentrations of PCBs near or above New York State Department of Health (NYSDOH) maximum contaminant levels (MCLs) and hexavalent chromium detections were reported in some monitoring wells. Additional shallow, intermediate, and deep monitoring wells were installed from October through December 2011 upgradient and downgradient of Site 1 to better define the extent of PCB impacted groundwater. Total chromium and hexavalent chromium sampling was also added to the analytical suite for all monitoring wells after some detections were observed in select monitoring wells during the March 2011 groundwater sampling event.

A description of the field activities is presented in Section 3.0 of this report. The field work conducted from April 2011 to January 2012 is summarized as follows:

- Collected surface water samples from two former NWIRP recharge basins
- Advanced five deep soil borings with split spoons collected at select intervals
- Gamma logging from the deep borings for lithology
- Installed and developed fifteen new monitoring wells
- Sampled thirty-four monitoring wells for VOCs, in January 2012
- Surveyed the fifteen newly installed monitoring wells

1.2 REPORT ORGANIZATION

This Data Summary Report provides general implementation information and the approach used in conducting the groundwater investigation activities from April 2011 to January 2012 at Site 1. The report consists of five sections. Section 1.0 provides an introduction. Section 2.0 provides the facility background and environmental setting. Section 3.0 provides a summary of the field activities. Section 4.0 presents the findings and analytical results, and Section 5.0 presents the conclusion and recommendations.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The Navy's Bethpage facility is located in east-central Nassau County, Long Island, New York, approximately 30 miles east of New York City (Figure 1-1). Established in 1943, the property known as NWIRP Bethpage was originally situated on 109 acres entirely within the Northrop Grumman Aerospace complex. NWIRP Bethpage was a Government-Owned Contractor Operated (GOCO) facility that was operated by the Northrop Grumman Corporation (NGC) until September 1998. Since 1998, the Navy transferred 100 acres to Nassau County. The remaining 9-acre parcel is being retained by the Navy for environmental investigations and remediation. Other than environmental investigation and cleanup work, there are no operations conducted on the Navy's property that generate hazardous waste.

Site 1 - Former Drum Marshalling Area is located in the eastern portion of the Navy's 9-acre parcel. Site 1 is mostly an open area, which in the past included above ground storage tanks (Areas of Concern [AOC] 23), a sanitary settling tank, and sludge drying beds (AOC 35). All these structures were located in the northern portion of the site, as well as a few scattered metal storage buildings. In general this area is relatively flat except for a 4-foot vegetated windrow located along the eastern end of the site, and a mounded area which partially buries the abandoned sanitary settling tank. The site is enclosed by a site perimeter fence along the north, west and south, with an eastern facility perimeter fence bounding the site from a residential neighborhood to the east. Figure 2-1 provides a site layout and aerial view of Site 1.

Site 1 originally consisted of two former drum marshalling pads located in the center of the site that were used to store drums containing waste materials from operations at Plant No. 3 and potentially other wastes from operations at the facility. Transformers and a PCB-filled autoclave were also stored at the site. Underlying most of Site 1 is approximately 120 abandoned cesspools that were designed to discharge sanitary waste waters from Plant No. 3. These cesspools were approximately 10 feet in diameter and 16 feet deep. Based on field observations, the cesspools are currently filled with soil. It is possible that non-sanitary wastes may have been discharged into this system. The drum marshalling areas and extent of the leach field were the original extent of Site 1.

In addition to the original extent of Site 1, due to proximity, similar contamination, and potential need for remedial actions, AOC 23, AOC 35, and dry-wells 20-08 and 34-07 were subsequently included as a part of Site 1.

2.2 ENVIRONMENTAL SETTING

2.2.1 Topography and Drainage

NWIRP Bethpage is located in an area underlain by permeable glacial deposits and characterized by limited surface water drainage features. Normal precipitation at the facility is expected to infiltrate rapidly into the soil. NWIRP recharge basins, which receive storm water runoff, are located in the northeastern portion of the facility north of Site 1. NWIRP Bethpage occupies a relatively flat, intermorainal area, and has very little topographic relief.

2.2.2 Geology and Soils

NWIRP Bethpage is underlain by approximately 1,100 feet of unconsolidated sediments that overlie crystalline bedrock (Isbister, 1966). The unconsolidated sediments consist of four distinct geologic units: (in descending order) Upper Glacial Formation, Magothy Formation, Raritan Clay, and Lloyd Sand Formation. The 30- to 45-foot-thick Upper Glacial Formation consists chiefly of coarse sands and gravels. The Upper Magothy Formation consists primarily of coarse sands to a depth of approximately 100 feet, below which finer sands and silts predominate along with some clay layers. These clay layers are common but laterally discontinuous; no individual clay horizon of regional extent has been observed in the Upper Magothy Formation. The 100- to 150-foot-thick Raritan Clay underlies the Magothy Formation at a depth of approximately 700 to 800 feet below ground surface (bgs). The underlying Lloyd Sand Formation is approximately 300 feet thick.

2.2.3 Hydrogeology

Most of Long Island is bisected by an east-west-trending regional groundwater divide. NWIRP Bethpage occupies an area of recharge, lying to the south of the divide. Groundwater is in contact with the Upper Glacial and Upper Magothy Formations beneath the facility, and may be considered a common unconfined aquifer. The glacial deposits are characterized by a high primary porosity (exceeding 30 percent) and high permeability. The high permeability of the glacial deposits allows for the rapid recharge of precipitation to the underlying Magothy (Isbister, 1966; McClymonds and Franke, 1972). The number and thickness of clay lenses increase with depth in the Magothy Formation; however, the horizontally discontinuous nature of these units prevents any one of them from functioning as a competent aquitard or confining unit.

Groundwater beneath the Site flows in a general southerly direction toward the Atlantic Ocean. Across the facility, the horizontal hydraulic gradient and groundwater velocity in the unconfined common aquifer

averages 5.3 feet per mile and 0.3 foot per day (ft/day), respectively [Halliburton NUS (HNUS), 1993]. Subtle vertical hydraulic gradients occur in a downward direction. Groundwater in the deeper portion of the Magothy is the primary source of potable water in Nassau County. Groundwater is encountered at a depth of approximately 50 feet bgs at the facility. Historically, because of pumping and recharge at the facility, groundwater has been measured from depths ranging from 40 to 60 feet bgs.

Prior to 1998, the groundwater flow dynamics beneath the NWIRP and Grumman were complex. A total of 16 deep production wells (7 on the NWIRP and 9 on Grumman property) existed which were set in the Magothy and each yielded approximately 1,200 gallons per minute (gpm). All of the production wells on the Navy's property have been abandoned. The extracted water was mostly used for non-contact single pass cooling and then discharged into recharge basins located on Navy and Northrop Grumman property. Based on extraction and recharge rates and well locations, groundwater on the Navy property flowed predominately west and southwest. In addition, the production wells extracted groundwater from depths of approximately 500 feet bgs and the water was recharged in the basins near grade. The extraction from the production wells and near surface recharge resulted in vertical gradients at the Site. Grumman continues to operate production wells (as well as a groundwater containment system) south of NWIRP Bethpage. The production wells and groundwater containment system operates with a combined flow rate of approximately 3,800 gpm.

The Magothy aquifer is highly conductive. For example, in the 1995 Feasibility Study (FS) investigation's pumping test no. 2, the pumping of production well PW-11 located on the Navy's property at nearly 1,000 gpm for 72 hours produced little or no measurable drawdown in the nearby observation wells or other production wells.

3.0 FIELD INVESTIGATION

3.1 FIELD AND SAMPLING ACTIVITIES

This additional PCB field investigation was conducted to address the following objectives (Interim Data Summary Report and SAP Addendum, Tetra Tech, 2011):

- Further delineate the extent of PCB and hexavalent chromium contamination in groundwater
- Investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins)

The field sampling activities included the sampling of surface water, advancement of soil borings, permanent monitoring well installation, monitoring well development, sampling of new and existing monitoring wells, and surveying. These activities were conducted to meet the project objectives presented above and determine a path forward for further investigation and support future remedial evaluations.

The following subsections summarize the field investigation activities and identify the sampling locations and type of samples that were collected during the investigation.

3.1.1 Surface Water Sampling

On October 19, 2011 two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins. Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The outfall into the southwestern basin mainly receives storm water runoff from Plant #3 and the northeast basin receives storm water runoff from Aerospace Boulevard and northern portions of the former NWIRP property. The northeast basin also receives discharge water from the Northrup Grumman IRM system which is located just east of this basin. The surface water samples were analyzed for volatile organic compounds (VOCs), PCBs, total chromium, and hexavalent chromium. Figure 3-1 depicts the location of the two surface water samples. The samples were collected at the concrete outfalls and filled directly with storm water runoff.

3.1.2 Soil Borings

In October and November 2011, five deep soil borings were advanced using mud rotary and hollow stem auger (HSA) drilling methods at each monitoring well cluster location. The soil boring locations (BPS1-TT-MW305, -MW306, -MW307, - MW307, -MW308, and -MW309) are presented on Figure 3-1 and the

boring logs and gamma logs are presented in Appendix A. At each location an 8-inch surface casing was installed to approximately 25 feet bgs. Soil cuttings generated during drilling were screened with a photoionization detector and lithologically logged. Split spoon samples were collected at select intervals to confirm lithology. Gamma logging was conducted at each soil boring and was interpreted to confirm the presence of fine grained lithology (i.e., clay) down to 300 feet bgs. BPS1-TT-MW307 was the only location which did not exhibit a substantial gamma ray spike around 300 feet bgs which is indicative of a silt or clay unit and the boring was advanced to a total depth of 435 feet bgs. Only a varying predominate sandy lithology was encountered at depth. The soil boring at BPS1-TT-MW307 was thus discontinued.

All soil cuttings were containerized and treated as Investigation Derived Waste (IDW). After waste characterization was complete, the soils were transported and disposed of off-site at an approved disposal facility by the IDW subcontractor.

3.1.3 Monitoring Well Installation

Five monitoring well clusters, consisting of three monitoring wells, were installed via mud rotary and/or HSA drilling methods from October through December 2011. Each monitoring well cluster consisted of a shallow water table well, an intermediate well, and a deep well. Shallow monitoring well screen intervals ranged from 40 to 65 feet bgs in depth, intermediate wells from 150 to 200 feet, and deeper wells from 250 to 300 feet. Two monitoring well clusters (BPS1-TT-MW308 and –MW309) were installed in the hydraulically upgradient (north) of Site 1 and three monitoring well clusters (BPS1-TT-MW305, -MW306, and -MW307) were installed hydraulically downgradient (south) of Site 1. The upgradient clusters were installed to investigate the potential upgradient sources of the former sludge beds and NWIRP recharge basins to the north. The former sludge drying beds are hydraulically upgradient of Site 1 and are located approximately 550 feet north of the BPS1-TT-MW301 cluster. The three downgradient well clusters were installed approximately 400 feet south of three existing downgradient monitoring well clusters (BPS1-TT-MW302, -MW303, and -MW304). The monitoring well locations are presented on Figure 3-1 and the construction details are provided in Table 3-1.

At each monitoring well cluster, the deep monitoring wells were installed in the deep soil borings using mud rotary drilling methods, while the shallow and intermediate monitoring wells were installed via HSA drilling. Before the deep monitoring wells were installed the drilling mud within the soil boring was thinned and if the soil boring was deeper than needed, it was backfilled with #1 silica sand to the appropriate depth for well installation. For the shallow and intermediate monitoring wells the augers were advanced to the target depths (determined from gamma logs and split spoon sampling) and filled with potable water to limit flowing sands. Each monitoring well was constructed with a 2-inch diameter, 10-foot, 0.010-inch slot, schedule 40 polyvinyl chloride (PVC) screen and riser pipe. A #1 silica sand pack was installed from

1 foot below to a minimum of 3 feet above the screened interval, except for the deep wells where the sand pack extended approximately 10 feet above the screen. The deep wells were constructed without a bentonite seal and with a thicker sand pack due to the difficulty of setting a bentonite seal through the drilling mud. For the shallow and intermediate monitoring wells a 3- to 5-foot bentonite seal consisting of coated bentonite pellets was placed above the sand pack and allowed to hydrate prior to grouting. High solids bentonite-cement grout slurry was then pumped via tremie pipe up to the ground surface. Protective steel stick-up casings were installed at the BPS1-TT-MW306, -MW308, and -MW309 monitoring well clusters. Flush mount well covers were installed at the BPS1-TT-MW305 and -MW307 monitoring well clusters, while the wells at BPS1-TT-MW301 were converted from stick-ups to flush mounts due to potential high traffic in this area from commercial redevelopment activities.

Well development was conducted using both airlifting and submersible pump development methods. The well development of the intermediate and deep monitoring wells consisted of airlifting followed by surging/purging with a submersible pump (Grundfos). Development of the shallow monitoring wells was only possible by surging/purging with a submersible pump (Grundfos). During well development, groundwater parameters were measured every 5 minutes and included: pH, specific conductivity, temperature, turbidity, and oxygen reduction potential (ORP). Development was concluded after parameter stabilization was achieved and approximately 400 gallons of water was purged from each shallow monitoring well and a minimum of 550 gallons was purged at each intermediate/deep monitoring well. Monitoring well construction and development records are presented in Appendix A. Development water was containerized and treated as IDW.

3.1.4 Groundwater Flow and Sampling

Groundwater sampling was conducted from January 10 through January 23, 2012 using low flow sampling techniques. A Grundfos Rediflo pump was used for groundwater purging and sample collection activities. Groundwater parameters and turbidity measurements were collected at each monitoring well during purging and allowed to stabilize before sampling. Each monitoring well was field tested for hexavalent chromium and groundwater samples were also collected for VOC, PCB, and metal analysis by a fixed based lab. At well locations were test kit results indicated a positive detection of hexavalent chromium greater than 0.01 milligrams per liter (mg/L) a sample was collected for analysis by fixed based lab to confirm the result. Groundwater sample log sheets and low flow purge data sheets are presented in Appendix A.

The hexavalent chromium field test kit followed HACH Method 8023 (1,5-Diphenylcarbohydrazide Method) using a HACH DR/890 colorimeter and associated ChromaVer 3 Chromium Reagent Powder Pillows. At the start of each day a 0.5 mg/L Hexavalent Chromium standard solution was prepared to

check and confirm calibration of the colorimeter. During testing two vials were filled with groundwater, one of which was the blank and the other was the sample in which the ChromaVer 3 Chromium Reagent Powder Pillow was added. If the groundwater was turbid (>50 Nephelometric Turbidity Units [NTUs]) an Acid Reagent Powder Pillow was added to the blank sample. After 5 minutes the blank sample vial was then run to zero out the colorimeter which was followed by the sample vial with the reagent, to provide the final result.

Quality Assurance (QA) samples were taken during groundwater sampling and included rinsate blanks, source water blanks, field duplicates, matrix spike matrix duplicated (MSMSD), and trip blanks. QA sample log sheets are presented in Appendix A.

Purge water generated during monitoring well sampling was containerized and treated as IDW.

On January 24, 2012 a round of synoptic groundwater measurements were collected. These measurements were used to generate groundwater elevation contour maps and provide information on groundwater flow patterns and gradients (see Appendix A for Groundwater Level Measurement Sheets). Figure 3-2, 3-3, and 3-4 present the January 2012 potentiometic surface for shallow, intermediate, and deep monitoring wells, respectively. Based on the groundwater levels, a slight downward vertical gradient is observed between shallow and deeper monitoring wells and a south to southeast groundwater flow is apparent at Site 1. Table 3-2 provides a summary of the groundwater elevations at Site 1.

3.1.5 Surveying

The newly installed monitoring wells and area surveys around the monitoring wells were surveyed by BANC3, a New York State licensed surveyor, on January 26, 2012. Each location was surveyed for horizontal position and vertical components including both ground surface and top of casing elevations for each monitoring well location. Horizontal measurements were accurate to 0.1 foot while vertical elevation measurements were accurate to 0.01 foot at each location. The area surveys consisted of four horizontal survey points bounding the monitoring wells not on Navy property for future easement agreements. A summary of the survey results can be found in Appendix B.

4.0 FINDINGS AND ANALYTICAL RESULTS

4.1 INTRODUCTION

Results from this additional PCB field investigation consisted of geologic observations, hydrogeological findings, and field test kit and fixed-based laboratory analytical results of groundwater and surface water samples. The following subsections describe the findings and analytical results.

4.2 GEOLOGY AND HYDROGEOLOGY

The geology encountered in the study area was variable both horizontally and vertically. Medium to course sand and gravel was consistently observed in the upper 30 feet of each boring. Below 30 feet, fine grained silty sands predominate along with some clay and potential lignite layers that range in thickness from a few inches to approximately 10 feet thick.

A cross section location map (Figure 4-1) presents the cross sections generated to present the lithological interpretations across the study area. Figure 4-2 presents Cross Section A-A' which runs north to south through the study area. Figures 4-3 and 4-4 present Cross Sections B-B' and C-C' which run east to west, approximately 400 feet apart, with each cross section interpreted through three downgradient soil borings/monitoring well locations.

Lithologic data collected from soil cores, split spoon samples, and gamma logs were used to interpret the subsurface lithology presented on the cross sections. By comparing the lithologic data and gamma ray signatures from adjacent soil borings, most of the silt and clay layers above 150 feet bgs appear to be discontinuous. Below 150 feet bgs the gamma ray signatures of the clay and silt layers have enough similarities to connect some of these fine-grained units. Notable semi-confining units, approximately 10 feet thick, appear to be present from BPS1-TT-MW309D to BPS1-TT-SB3002 between 250 and 300 feet bgs and from BPS1-SB3007 and BPS1-TT-MW306D between 200 and 250 feet bgs, see Figures 4-2 and 4-3. Figure 4-4 presents the geology encountered at the southernmost extent of the study area. Between 150 and 200 feet bgs there appears to be a series of semi-confining units, below which the clay layers become more discontinuous and much thinner. These semi-confining units appear to impede PCB-contaminated groundwater from migrating deeper, but do not completely prevent PCB-contaminated groundwater from reaching depths deeper than 250 feet bgs.

The soil boring at BPS1-TT-MW307D was advanced to a depth of 435 feet bgs. Below 300 feet bgs no fine-grained layers were encountered and the predominant sandy formation coarsened with depth.

Based on the lithology observed in the new soil borings and the borings advanced in 2009 and 2010, monitoring wells were installed at depths just above potential semi-confining units observed in the soil borings and/or at depths where contamination was observed in upgradient wells. Table 3-1 presents the construction details for each on the monitoring wells installed during this investigation.

4.3 SURFACE WATER SAMPLE RESULTS

Two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins (Figure 3-1). Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The samples were collected at the concrete outfalls and filled directly with storm water runoff and sampled for VOCs, PCBs, total chromium, and hexavalent chromium. Table 4-1 provides a summary of the analytical results. Aroclor-1248 was detected at BPS1-SW3001 at 0.35 micrograms per liter (µg/L) and PCBs were not detected at BPS1-SW3002. Total chromium (2.4 and 0.84 µg/L) and hexavalent chromium (0.4 and 0.4 µg/L) were detected at BPS1-SW3001 and BPS1-SW3002 respectively. VOCs were not detected in either of the two surface water samples.

4.4 GROUNDWATER SAMPLING RESULTS

4.4.1 Groundwater Test Kit Results

Hexavalent chromium field test kits were used at each monitoring well during the January 2012 sampling event. Table 4-2 provides a summary of the field test kit results at each well location along with the corresponding fixed-based laboratory results for chromium and hexavalent chromium. The hexavalent chromium test kit results ranged from non-detect to 180 µg/L. Concentrations (>10 µg/L) of hexavalent chromium were observed at BPS1-TT-MW301D (90 µg/L), -MW304I1 (40 µg/L), -MW304I2 (180 µg/L), and –MW309I (60 µg/L). Further discussion on these results is provided in the following section.

4.4.2 Monitoring Well Sampling Results

During the January 2012 sampling event thirty-four monitoring wells were sampled and analyzed for VOCs, PCBs, and total chromium and iron by TriMatrix Laboratories of Grand Rapids, Michigan. Select monitoring wells were also sampled for TOC, hexavalent chromium, filtered chromium and iron, and total calcium and sodium. Table 4-3 provides a summary of the analytical results with the associated Federal and NYSDOH MCLs for each detected compound for comparison. Figures 4-5, 4-6, and 4-7 provide a summary of the distribution and concentrations of the detected compounds in the shallow, intermediate, and deep monitoring wells respectively.

Aroclor-1242 or Aroclor-1248 was detected by the laboratory in 30 of the 34 groundwater samples. The laboratory indicated that a conclusive PCB Aroclor identification was not possible due to the signature interference and/or weathering of the PCBs. Validation of the laboratory results indicated that both Aroclor-1242 and Aroclor-1248 have several common peaks and similar patterns in their standard chromatograms. Because of these similarities, it was difficult to determine the predominant Aroclor or how to precisely quantify each Aroclor separately. Therefore the laboratory reported a single Aroclor mixture, either Aroclor-1242 or Aroclor-1248. A "weathering effect" or degradation of compounds within the specific mixtures is also a likely factor in precisely identifying the Aroclor mixture present. Despite these complexities, validation concluded that an Aroclor mixture is present in the affected samples. Due to the uncertainties speciating Aroclor-1242 and Aroclor-1248, detected Aroclors will be treated as a single Aroclor and referenced in the following text as PCBs.

PCBs were detected in 30 of the 34 groundwater samples collected, with 22 of the samples indicating concentrations of PCBs exceeding the Federal and NYSDOH MCL of 0.5 µg/L during the January 2012 sampling event. Of the nine monitoring wells located upgradient of Site 1, PCBs were not detected in only one monitoring well (BPS1-TT-MW309D). Concentrations in five of these upgradient wells were above the MCL including the highest observed PCB detection of 10 µg/L at BPS1-TT-MW301S. All three monitoring wells on the downgradient edge of Site 1 (BPS1-FW01, FW02, FW03, and HN29I) showed detections of PCBs, but only one monitoring well (BPS1-FW-MW03 at 1.9 µg/L) exceeded the MCL. Of the 22 downgradient monitoring wells, 19 wells had detections of PCBs with 17 of these monitoring wells having concentrations exceeding the MCL. Four out of the twelve shallow monitoring wells across the study area indicated concentrations of PCBs exceeding the MCL. Sampling results from the intermediate and deep monitoring wells showed MCL exceedences of PCBs in 19 out of 22 samples.

A total of fourteen VOCs were detected in groundwater, with four VOCs (1,1,1-trichloroethane, cis-1,2-dichloroethene, tetrachloroethene [PCE], and trichloroethene [TCE]) exceeding the corresponding NYSDOH and/or Federal MCLs. 1,1,1-trichloroethane exceeded NYSDOH MCL of 5 µg/L at BPS1-FW-MW01 with a concentration of 8.3 µg/L. Cis-1,2-dichloroethene exceeded the NYSDOH MCL of 5 µg/L at two monitoring wells with concentrations ranging from 6 µg/L at BPS1-TT-MW304I1 to 70 µg/L at BPS1-FW-MW01. Six of the monitoring well samples indicated concentrations of PCE above the MCLs with detections ranging from 5.5 to 200 µg/L. The highest detection of PCE was observed at BPS1-FW-MW01. TCE exceeded the MCL of 5 µg/L at 4 monitoring wells (BPS1-FW-MW01, BPS1-TT-MW303I1, -MW305I, and –MW305D with concentrations ranging from 18 to 3900 µg/L. The highest concentrations of TCE were observed at BPS1-TT-MW305I (3900 µg/L) and BPS1-TT-MW305D (140 µg/L).

Twelve groundwater samples were collected and analyzed for hexavalent chromium by the fixed-based laboratory. Hexavalent chromium was detected in six of the twelve groundwater samples and used to correlate and confirm detections observed in the field test kit sampling. Laboratory detections of hexavalent chromium were observed in monitoring wells BPS1-TT-MW301I (5.3 µg/L), BPS1-TT-MW301D (86 µg/L), BPS1-TT-MW304I1 (35.5 µg/L), BPS1-TT-MW304I2 (181 µg/L), BPS1-TT-MW309S (8.9 µg/L), and BPS1-TT-MW309I (47.7 µg/L). Total chromium was detected in all 34 groundwater samples and only exceeded the MCL of 100 µg/L at BPS1-TT-MW304I2 (200 µg/L).

Table 4-2 provides a comparison of the hexavalent chromium field test kits and laboratory results for hexavalent chromium and total chromium samples. Hexavalent chromium field test kit results showed good correlation with the fixed-based laboratory results for concentrations that exceeded the detection limit of 10 µg/L for the field test kits. This correlation is seen in the following detections of hexavalent chromium from the monitoring well samples as presented in Table 4-2: 90 µg/L and 86 µg/L at BPS1-TT-MW301D, 40 µg/L and 35.5 µg/L at BPS1-TT-MW304I1, 180 µg/L and 181 µg/L at BPS1-TT-MW304I2, and 60 µg/L and 47.7 µg/L at BPS1-TT-MW309I. When also comparing the total chromium results above 25 µg/L to the hexavalent chromium results (field test kit and fixed-based laboratory) at each well location, the concentrations also correlated well, indicating that if elevated concentrations of total chromium is detected in groundwater, most of it is likely in the hexavalent form.

Appendix C and D provide the chain of custody forms, analytical results, and validation summaries of the groundwater samples sent for fixed based lab analysis.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions based on the PCB investigation activities are as follows:

1. Under current conditions, potentiometric surface mapping of groundwater indicates groundwater flow is south to southeast across Site 1.

2. Detections of PCBs and Hexavalent Chromium in groundwater at upgradient monitoring well clusters BPS1-TT-MW301, -MW308, and -MW309 indicate a potential upgradient source that has contributed to PCB-contaminated groundwater north of Site 1.

3. TCE was detected at 3,900 µg/L in monitoring well BPS1-TT-MW305I (southwestern most well cluster along the southern fenceline).

4. Hexavalent chromium was detected at concentrations of 86 µg/L at BPS1-TT-MW301D, 35.5 µg/L at MW304I1, 181 µg/L at MW304I2, and 47.7 µg/L at MW309I.

5. A good correlation was observed between the hexavalent chromium field test kit results and the fixed-based laboratory for results above the test kit detection limit of 10 µg/L.

Recommendations are as follows:

1. Investigate potential upgradient sources of PCB- and hexavalent chromium- contaminated groundwater north of the NWIRP recharge basins and former sludge drying beds.

2. Further monitor the occurrence of PCBs, chromium and hexavalent chromium in groundwater to support future remedy evaluations to determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

Based on the results of the groundwater monitoring through January 2012, additional monitoring wells will be installed upgradient of Site 1 to evaluate potential upgradient sources of contamination. A SAP Addendum is presented in Appendix E and details the additional upgradient well installation and groundwater sampling to be conducted in 2012.

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TABLES

TABLE 3-1
MONITORING WELL CONSTRUCTION DETAILS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Installation Date	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Reference Elevation TOC (feet MSL)	Ground Surface Elevation (feet MSL)
BPS1-FW-MW01	NA	63.5[1]	48.5-63.5[1]	126.10	123.57
BPS1-FW-MW02	NA	64[1]	49-64[1]	126.85	124.23
BPS1-FW-MW03	NA	67[1]	52-67[1]	125.46	122.86
BPS1-HN-MW29I	11/26/1991	130.5	120-130	115.37	116.06
BPS1-TT-MW301S	11/10/2010	61	51-61	126	126.38
BPS1-TT-MW301I	11/12/2010	140	130-140	125.56	126.04
BPS1-TT-MW301D	10/29/2010	220	210-220	125.93	126.32
BPS1-TT-MW302S	10/30/2010	51	41-51	116.01	116.32
BPS1-TT-MW302I1	10/26/2010	120	110-120	115.91	116.32
BPS1-TT-MW302I2	10/18/2010	150	140-150	115.91	116.33
BPS1-TT-MW302D	10/16/2010	213	203-213	116.08	116.35
BPS1-TT-MW303S	8/18/2010	56	46-56	115.65	116.06
BPS1-TT-MW303I1	10/19/2010	105	95-105	115.83	116.08
BPS1-TT-MW303I2	10/17/2010	156	146-156	115.89	116.15
BPS1-TT-MW303D	10/14/2010	218	208-218	115.94	116.2
BPS1-TT-MW304S	11/13/2010	53	43-53	119.13	116.49
BPS1-TT-MW304I1	11/11/2010	112	102-112	119.27	116.77
BPS1-TT-MW304I2	11/1/2010	150	140-150	119.18	116.7
BPS1-TT-MW304D	10/27/2010	190	180-190	119.19	116.67
BPS1-TT-MW305S	11/22/2011	50	40-50	116.04	116.52
BPS1-TT-MW305I	11/29/2011	200	190-200	116.16	116.38
BPS1-TT-MW305D	11/21/2011	296	286-296	115.94	116.25
BPS1-TT-MW306S	12/8/2011	60	50-60	117.82	115.33
BPS1-TT-MW306I	12/6/2011	199	189-199	117.76	115.45
BPS1-TT-MW306D	11/28/2011	294	284-294	118.06	115.59
BPS1-TT-MW307S	11/11/2011	50.5	40.5-50.5	114.39	114.59
BPS1-TT-MW307I	11/18/2011	198	188-198	114.16	114.67
BPS1-TT-MW307D	11/11/2011	286	276-286	114.42	114.85
BPS1-TT-MW308S	11/14/2011	64	54-64	131.05	128.586
BPS1-TT-MW308I	11/15/2011	166	156-166	130.73	128.58
BPS1-TT-MW308D	10/31/2011	260	250-260	130.98	128.78
BPS1-TT-MW309S	11/9/2011	63	53-63	131.77	129.41
BPS1-TT-MW309I	11/8/2011	170	160-170	131.83	129.44
BPS1-TT-MW309D	10/20/2011	262	252-262	131.52	129.42
BPS1-RA-MW02	NA	68	58-68	122.15	122.51
BPS1-RA-MW04	NA	68	58-68	NA	NA

NOTES:
bgs = below ground surface
MW = Monitoring Well
MSL = Mean Sea Level
NA = Not Available
TOC = Top of Casing
[1] = Top of Casing Measurement

TABLE 3-2
GROUNDWATER ELEVATION SUMMARY
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

Well	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Ground Surface Elevation (feet MSL)	TOC Elevation (feet MSL)	Jan. 2012 Water Level (feet BTOC)	Jan. 2012 Water Level (feet MSL)
BPS1-FW-MW01	*63.5*	48.5-63.5[1]	123.57	126.1	52.25	73.85
BPS1-FW-MW02	*64*	49-64[1]	124.23	126.85	52.89	73.96
BPS1-FW-MW03	*67*	52-67[1]	122.86	125.46	51.39	74.07
BPS1-HN-MW29I	*130.5*	120-130[2]	116.06	115.37	42.15	73.22
BPS1-HN-MW29D	220	210-220	116.07	115.5	42.33	73.17
BPS1-TT-MW301S	*62*	51-61	126.38	126.00	51.24	74.76
BPS1-TT-MW301I	*140*	130-140	126.04	125.56	51.08	74.48
BPS1-TT-MW301D	*220*	210-220	126.32	125.93	51.81	74.12
BPS1-TT-MW302S	*51*	41-51	116.32	116.01	42.38	73.63
BPS1-TT-MW302I1	*120*	110-120	116.32	115.91	42.43	73.48
BPS1-TT-MW302I2	*150*	140-150	116.33	115.91	42.69	73.22
BPS1-TT-MW302D	*213*	203-213	116.35	116.08	42.96	73.12
BPS1-TT-MW303S	*58*	46-56	116.06	115.65	42.13	73.52
BPS1-TT-MW303I1	*105*	95-105	116.08	115.83	42.5	73.33
BPS1-TT-MW303I2	*156*	146-156	116.15	115.89	42.84	73.05
BPS1-TT-MW303D	*218*	208-218	116.2	115.94	43.01	72.93
BPS1-TT-MW304S	*53*	43-53	116.49	119.13	46.03	73.10
BPS1-TT-MW304I1	*112*	102-112	116.77	119.27	46.26	73.01
BPS1-TT-MW304I2	*150*	140-150	116.7	119.18	46.45	72.73
BPS1-TT-MW304D	*190*	180-190	116.67	119.19	46.6	72.59
BPS1-TT-MW305S	*50*	40-50	116.52	116.04	42.96	73.08
BPS1-TT-MW305I	*200*	190-200	116.38	116.16	43.55	72.61
BPS1-TT-MW305D	*296*	286-296	116.25	115.94	43.78	72.16
BPS1-TT-MW306S	*60*	50-60	115.33	117.82	44.9	72.92
BPS1-TT-MW306I	*199*	189-199	115.45	117.76	45.34	72.42
BPS1-TT-MW306D	*294*	284-294	115.59	118.06	46.04	72.02
BPS1-TT-MW307S	*50.5*	40.5-50.5	114.59	114.39	41.81	72.58
BPS1-TT-MW307I	*198*	188-198	114.67	114.16	42.21	71.95
BPS1-TT-MW307D	*286*	276-286	114.85	114.42	42.66	71.76
BPS1-TT-MW308S	*64*	54-64	128.586	131.05	55.54	75.51
BPS1-TT-MW308I	*166*	156-166	128.58	130.73	55.7	75.03
BPS1-TT-MW308D	*260*	250-260	128.78	130.98	56.27	74.71
BPS1-TT-MW309S	*63*	53-63	129.41	131.77	55.82	75.95
BPS1-TT-MW309I	*170*	160-170	129.44	131.83	56.45	75.38
BPS1-TT-MW309D	*262*	252-262	129.42	131.52	56.39	75.13
BPS1-RA-MW02	*68*	58-68	--	122.47	47.79	74.68
BPS1-RA-MW04	*68*	58-68	--	--	--	--

Notes:
bgs : below ground surface
BTOC : Below top of casing
MSL : Mean sea level
Italics : Estimated value

TABLE 4-1
ANALYTICAL DETECTIONS - SURFACE WATER
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-SW3001	BPS1-SW3002
Sample Date				**10/19/2011**	**10/19/2011**
Polychlorinated Biphenyls (µg/L)					
AROCLOR-1248	12672-29-6	0.5	0.5	0.35 J	0.1 U
Metals (µg/L)					
CHROMIUM	7440-47-3	100	100	2.4	0.84 J
IRON	7439-89-6	NE	300	240	150
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]	0.4 J	0.4 J

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
NE = Not Established
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-2
FIELD TEST KIT AND LABORATORY CHROMIUM RESULTS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Screened Interval Depth (feet bgs)	Hexavelent Chromium Test Kit[1] Result (µg/L)	Hexavalent Chromium Lab Analytical Result (µg/L)	Total Chromium Lab Analytical Result (µg/L)
BPS1-FW-MW01	48.5-63.5	10	-	4.4
BPS1-FW-MW02	49-64	10	-	8.5
BPS1-FW-MW03	52-67	10	-	4.6
BPS1-HN-MW29I	120-130	10	-	5.5
BPS1-TT-MW301S	51-61	10	-	2.5
BPS1-TT-MW301I	130-140	10	5.3	7.0
BPS1-TT-MW301D	210-220	90	86	92
BPS1-TT-MW302S	41-51	10	-	0.63 J
BPS1-TT-MW302I1	110-120	ND	-	1.4
BPS1-TT-MW302I2	140-150	10	-	5.1
BPS1-TT-MW302D	203-213	ND	-	2.3
BPS1-TT-MW303S	46-56	10	-	2.7
BPS1-TT-MW303I1	95-105	ND[2]	-	5.8
BPS1-TT-MW303I2	146-156	10	ND	2.4
BPS1-TT-MW303D	208-218	ND	-	5.3
BPS1-TT-MW304S	43-53	ND	-	1.4
BPS1-TT-MW304I1	102-112	40	35.5	38
BPS1-TT-MW304I2	140-150	180	181	200
BPS1-TT-MW304D	180-190	ND	-	4.5
BPS1-TT-MW305S	40-50	ND	-	2.4
BPS1-TT-MW305I	190-200	ND	-	3.5
BPS1-TT-MW305D	286-296	ND	ND	22
BPS1-TT-MW306S	50-60	10	ND	1.3
BPS1-TT-MW306I	189-199	ND	ND	2.3
BPS1-TT-MW306D	284-294	10	-	1.2
BPS1-TT-MW307S	40.5-50.5	ND	-	4.0
BPS1-TT-MW307I	188-198	ND	ND	12
BPS1-TT-MW307D	276-286	ND	-	13
BPS1-TT-MW308S	54-64	ND	-	10
BPS1-TT-MW308I	156-166	ND	-	10
BPS1-TT-MW308D	250-260	10	-	17
BPS1-TT-MW309S	53-63	10[3]	8.9 J	18
BPS1-TT-MW309I	160-170	60[2,3]	47.7	49
BPS1-TT-MW309D	252-262	ND[3]	ND	7.5

Notes:
µg/L = micrograms per liter
bgs = below ground surface
ND = Non Detect
J = Estimated Value
[1] Field test kits followed Hach Method 8023
[2] Acid pillow added to blank sample before running sample due to elevated turbidity
[3] Test kit performed two weeks after lab sample collected

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-FW-MW01-01192012	BPS1-FW-MW02-01172012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012	BPS1-HN-MW29I-01192012 DUPLICATE	BPS1-TT-MW301S-01172012	BPS1-TT-MW301I-01172012	BPS1-TT-MW301D-01172012	BPS1-TT-MW301D-01232012
Sample Date				**1/19/2012**	**1/17/2012**	**1/19/2012**	**1/19/2012**	**1/19/2012**	**1/17/2012**	**1/17/2012**	**1/17/2012**	**1/23/2012**
Sample Interval (feet bgs)				**48.5-63.5**	**49-64**	**52-67**	**120-130**	**120-130**	**51-61**	**130-140**	**210-220**	**210-220**
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	**8.3**	0.39 J	0.25 J	0.5 U	0.5 U	0.5 U	0.5 U	0.53 J	
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	1.2	0.36 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
1,1-DICHLOROETHANE	75-34-3	NE	5	3.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.22 J	
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	**70**	0.5 U	0.49 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.35 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TETRACHLOROETHENE	127-18-4	5	5	**200**	**21**	**68**	0.49 J	0.46 J	0.5 U	0.5 U	0.26 J	
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TRICHLOROETHENE	79-01-6	5	5	**21**	2.7	3.7	0.5 U	0.5 U	0.5 U	0.5 U	2.6	
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.79**	**0.75 J**	
AROCLOR-1248	12672-29-6	0.5	0.5	0.46	0.3	**1.9**	**0.63**	**0.66**	**10**	0.08 U	0.08 U	
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				24000					
CHROMIUM	7440-47-3	100	100	4.4	8.5	4.6	5.5	5.2	2.5	7	92	
IRON	7439-89-6	NE	300	**860**	**330**	110	83	93	56	17 J	14 J	
SODIUM	82115-62-6	NE	NE				7800					
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]							5.3		86
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-TT-MW302S-01202012	BPS1-TT-MW302I1-01202012	BPS1-TT-MW302I2-01202012	BPS1-TT-MW302D-01202012	BPS1-TT-MW303S-01232012	BPS1-TT-MW303S-01232012 DUPLICATE	BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303D-01192012
Sample Date				**1/20/2012**	**1/20/2012**	**1/20/2012**	**1/20/2012**	**1/23/2012**	**1/23/2012**	**1/19/2012**	**1/19/2012**	**1/19/2012**
Sample Interval (feet bgs)				**41-51**	**110-120**	**140-150**	**203-213**	**46-56**	**46-56**	**95-105**	**146-156**	**208-218**
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.35 J	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.62 J	0.5 U	0.5 U	1.6	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.29 J	0.5 U	0.33 J	1.9	1.8	**83**	0.94 J	0.5 U
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	1.7	1.8	3.9	2.7	2.7	**18**	1.6	0.51 J
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**3.9**	0.08 U	**1.6**
AROCLOR-1248	12672-29-6	0.5	0.5	0.43	**1.2**	**1.9**	**0.85**	0.21	0.2	0.08 U	**2.4**	0.085 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				8000					
CHROMIUM	7440-47-3	100	100	0.63 J	1.4	5.1	2.3	2.7	4.2	5.8	2.4	5.3
IRON	7439-89-6	NE	300	22	34	59	75	66 J	210 J	**6000**	69	**520**
SODIUM	82115-62-6	NE	NE				24000					
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]								1 U	
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100							0.23 J		
IRON	7439-89-6	NE	300							70		
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-TT-MW304S-01182012	BPS1-TT-MW304I1-01182012	BPS1-TT-MW304I2-01182012	BPS1-TT-MW304I2-01182012 DUPLICATE	BPS1-TT-MW304D-01192012	BPS1-TT-MW305S-01172012	BPS1-TT-MW305S-01172012 DUPLICATE	BPS1-TT-MW305I-01172012	BPS1-TT-MW305D-01172012
Sample Date				**1/18/2012**	**1/18/2012**	**1/18/2012**	**1/18/2012**	**1/19/2012**	**1/17/2012**	**1/17/2012**	**1/17/2012**	**1/17/2012**
Sample Interval (feet bgs)				**43-53**	**102-112**	**140-150**	**140-150**	**180-190**	**40-50**	**40-50**	**190-200**	**286-296**
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	1.7	0.26 J	0.23 J	0.5 U	0.5 U	0.5 U	0.28 J	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.33 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	0.57 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.73 J
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.27 J	0.19 J
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	**6**	2.7	2.8	0.5 U	0.5 U	0.5 U	4.7	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	**25**	**5.5**	**5.5**	0.5 U	0.5 U	0.5 U	3.3	1.9
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	4.1	1.7	1.8	0.5 U	0.5 U	0.5 U	**3900**	**140**
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91 J	0.94 J
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 J
AROCLOR-1248	12672-29-6	0.5	0.5	0.08 U	**0.97**	**1.5**	**1.6**	**4.2**	0.08 U	0.08 U	**1.3**	0.08 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.4	38	**200**	**170**	4.5	2.4	2.6	3.5	22
IRON	7439-89-6	NE	300	58	**400**	16 J	10 J	160	**560**	**650**	**1100**	**1100**
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]		35.5	**181**	**182**					1 U
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-TT-MW306S-01232012	BPS1-TT-MW306I-01232012	BPS1-TT-MW306D-01232012	BPS1-TT-MW307S-01182012	BPS1-TT-MW307I-01182012	BPS1-TT-MW307D-01182012	BPS1-TT-MW308S-01162012	BPS1-TT-MW308I-01162012	BPS1-TT-MW308D-01162012
Sample Date				**1/23/2012**	**1/23/2012**	**1/23/2012**	**1/18/2012**	**1/18/2012**	**1/18/2012**	**1/16/2012**	**1/16/2012**	**1/16/2012**
Sample Interval (feet bgs)				**50-60**	**189-199**	**284-294**	**40.5-50.5**	**188-198**	**276-286**	**54-64**	**156-166**	**250-260**
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.5 U	0.24 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.4 J	0.5 U	0.44 J	1.3	1.1	0.5 U	0.5 U	0.5 U	0.7 J
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	0.54 J	2.4	0.57 J	1.8	0.5 U	0.71 J	0.5 U	1.6
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	**0.61 J**	0.08 U	0.08 U	**0.56**	0.08 U	**0.52**	0.073 J
AROCLOR-1248	12672-29-6	0.5	0.5	**0.54**	**1.8**	0.08 U	0.08 U	**0.84**	0.08 U	0.2	0.08 U	0.08 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.3	2.3	1.2	4	12	13	10	10	17
IRON	7439-89-6	NE	300	**310**	93	77	**530**	**460**	**460**	150	240	240
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]	1 U	1 U			1 U				
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE	710 J	3300	1100						

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

	CAS No.	Federal MCLs [1]	NYSDOH MCLs [2]	BPS1-TT-MW309S-01102012	BPS1-TT-MW309I-01112012	BPS1-TT-MW309D-01112012
Sample Date				**1/10/2012**	**1/11/2012**	**1/11/2012**
Sample Interval (feet bgs)				**53-63**	**160-170**	**252-262**
Volatile Organic Compounds(µg/L)						
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.45 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.27 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.5 U	1.1
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.61 J	0.5 U	1.8
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)						
AROCLOR-1242	53469-21-9	0.5	0.5	0.086 U	0.43	0.085 U
AROCLOR-1248	12672-29-6	0.5	0.5	**1**	0.08 U	0.085 U
Metals (µg/L)						
CALCIUM	7440-70 -2	NE	NE			
CHROMIUM	7440-47-3	100	100	18	49	7.5
IRON	7439-89-6	NE	300	**2100**	130	**2400**
SODIUM	82115-62-6	NE	NE			
HEXAVALENT CHROMIUM	18540-29-9	100[3]	100[3]	8.9 J	47.7	1 U
Filtered Metals (µg/L)						
CHROMIUM	7440-47-3	100	100	13		0.56 J
IRON	7439-89-6	NE	300	92		31
Miscellaneous (µg/L)						
TOTAL ORGANIC CARBON		NE	NE			

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
[1] (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at http://www.epa.gov/safewater/contaminants/index.html#primary
[2] (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm
[3] There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

FIGURES

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TETRA TECH

SITE 1
FORMER DRUM MARSHALLING AREA
LAYOUT MAP
NWIRP BETHPAGE
BETHPAGE, NEW YORK

FILE 112G02230	SCALE AS NOTED
FIGURE NO. 2-1	REV DATE 8/2/12

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TETRA TECH

Sample Location Map
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage,New York

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 3-1	REV	DATE 8/2/12

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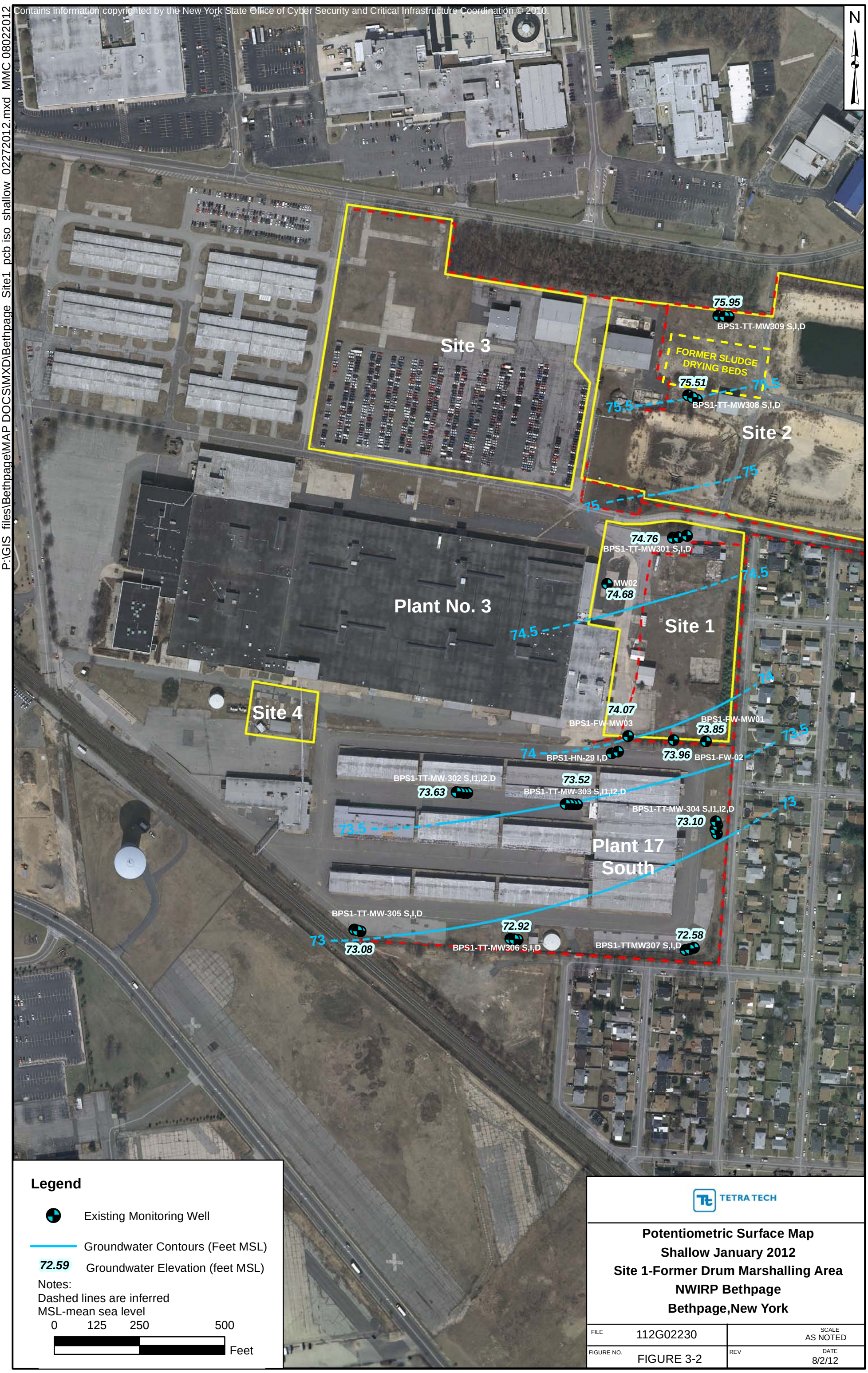

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Legend

Existing Monitoring Well

Groundwater Contours (Feet MSL)

72.59 Groundwater Elevation (feet MSL)

Notes:
Dashed lines are inferred
MSL-mean sea level

0 125 250 500 Feet

TETRA TECH

Potentiometric Surface Map
Intermediate January 2012
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage,New York

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 3-3	REV	DATE 8/2/12

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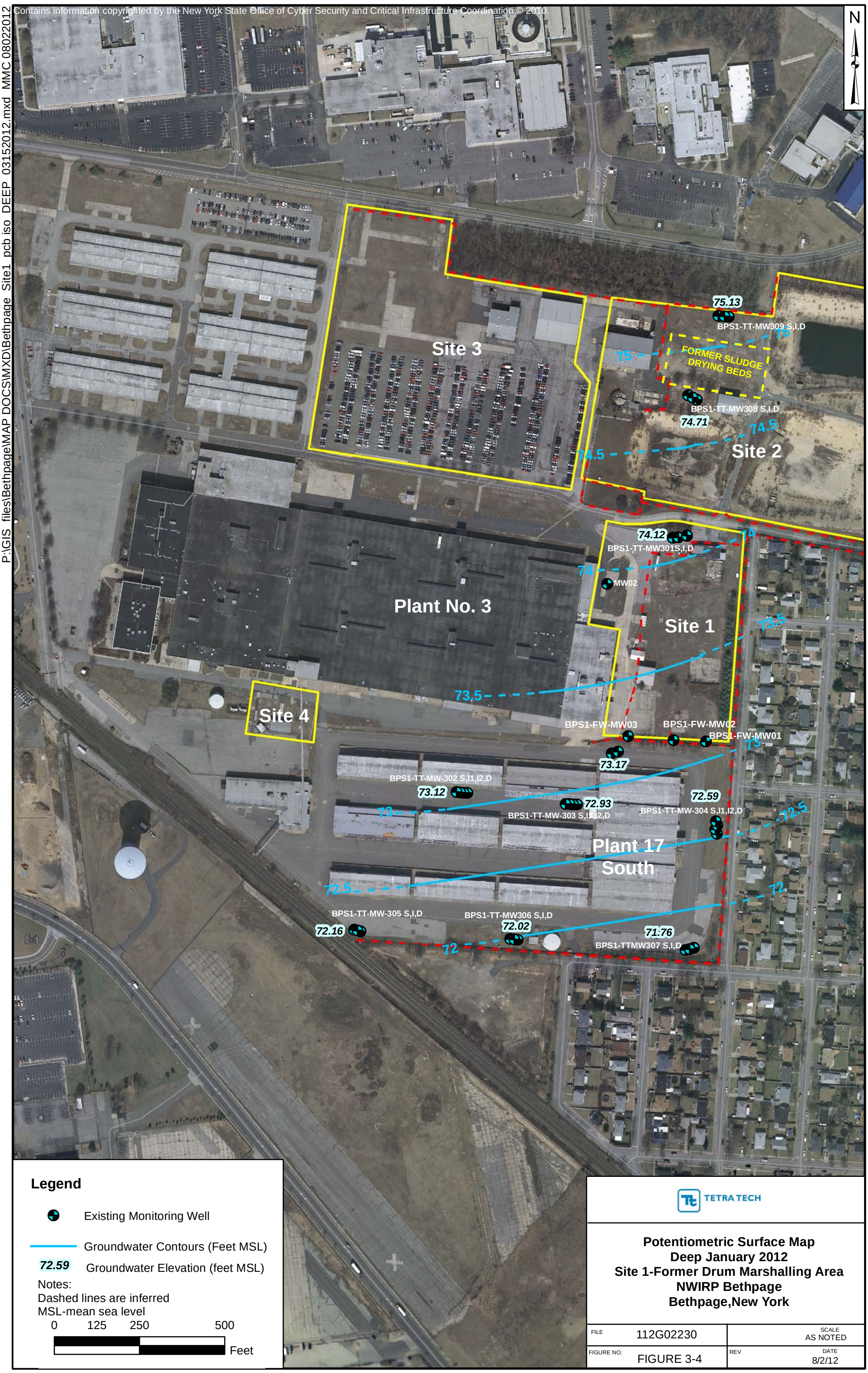

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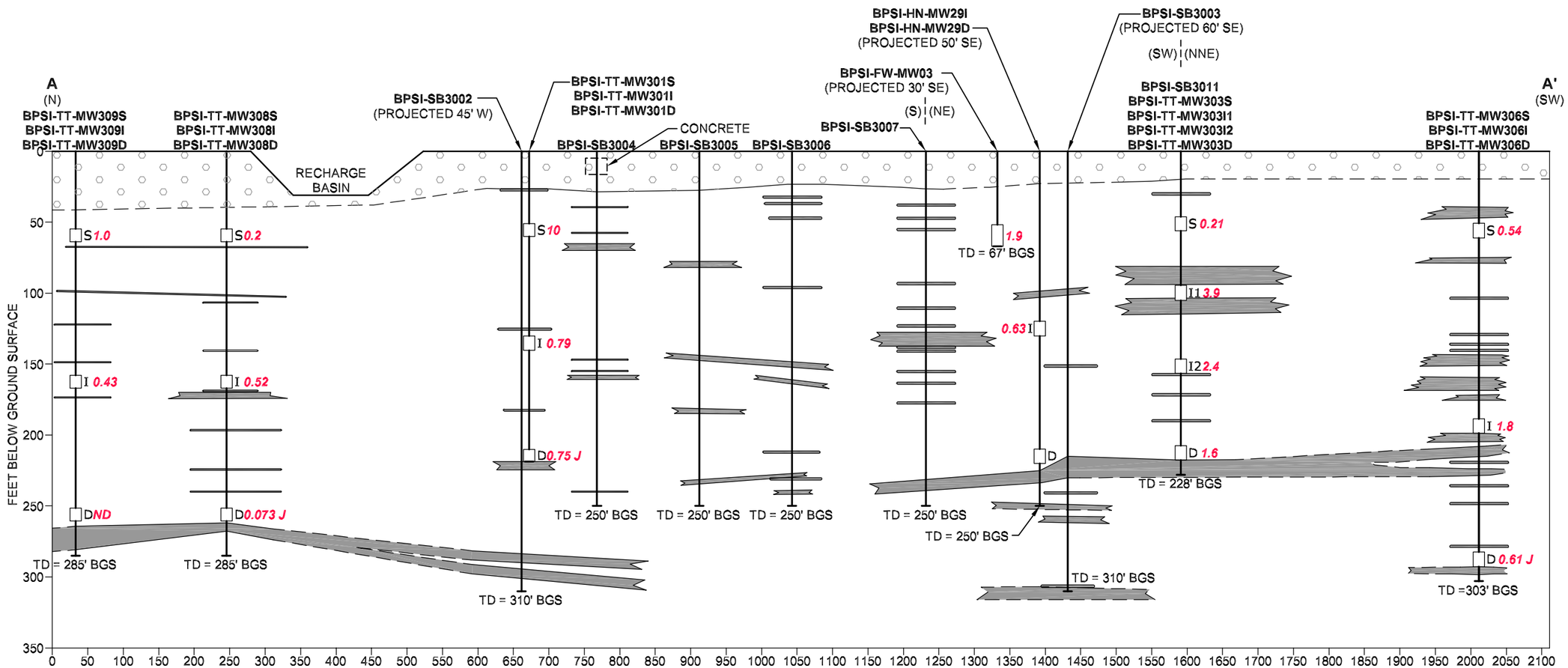
TETRA TECH

Cross Section Location Map
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage,New York

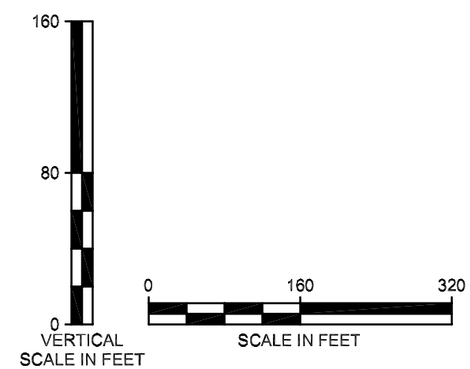
FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 4-1	REV	DATE 8/2/12

112G01041/0275/112G01041GS46.DWG 06/06/12 MKB



LEGEND

	SAND AND GRAVEL
	SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL
	CLAY, CLAYEY SILT, OR SILT
BPSI-SB3011	SOIL BORING
BPSI-TT-MW303S	MONITORING WELL
(PROJECTED 50' NW)	PROJECTED DISTANCE AND DIRECTION TO CROSS SECTION LINE
	GROUND SURFACE (APPROXIMATED TO BE FLAT)
	SILT OR CLAY LAYER (DASHED WHERE INFERRED)
	SILT OR CLAY LENS (FEW INCHES THICK)
S 0.21	MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)
TD = 250' BGS	TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)
ND	NON-DETECT

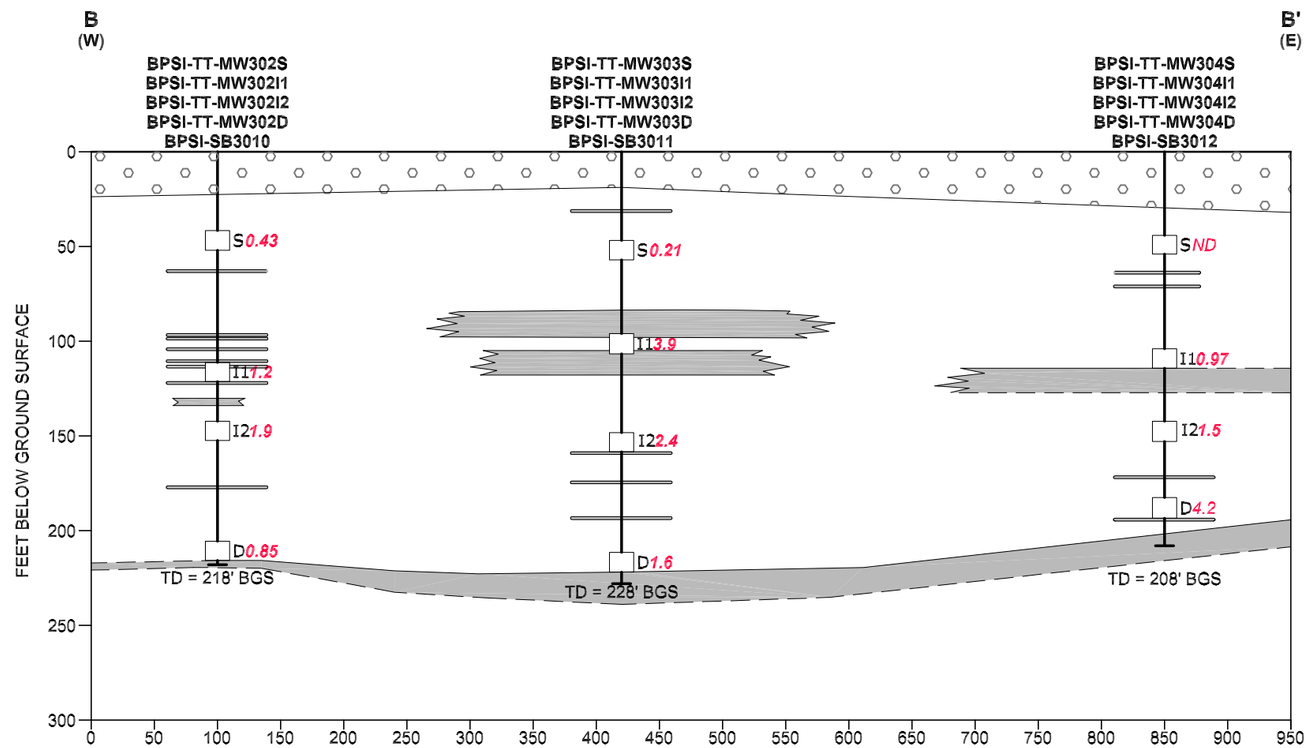


TETRA TECH

GEOLOGIC CROSS SECTION A – A'
SITE 1 – FORMER DRUM MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

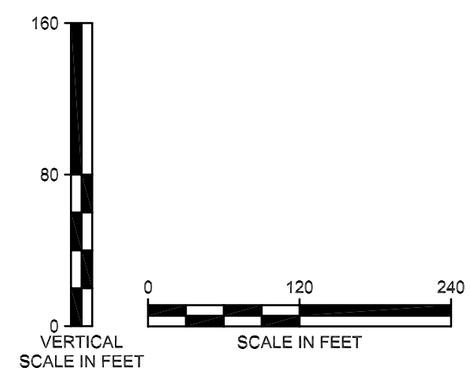
FILE	SCALE
112G01041GS46	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 4–2	0 / 06/06/12

112G01041/0275/112G01041GS44.DWG 04/03/12 MKB



LEGEND

	SAND AND GRAVEL
	SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL
	CLAY, CLAYEY SILT, OR SILT
BPSI-SB3011	SOIL BORING
BPSI-TT-MW303S	MONITORING WELL
(PROJECTED 50' NW)	PROJECTED DISTANCE AND DIRECTION TO CROSS SECTION LINE
	GROUND SURFACE (APPROXIMATED TO BE FLAT)
	SILT OR CLAY LAYER (DASHED WHERE INFERRED)
	SILT OR CLAY LENS (FEW INCHES THICK)
S *0.21*	MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)
TD = 250' BGS	TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)
ND	NON-DETECT

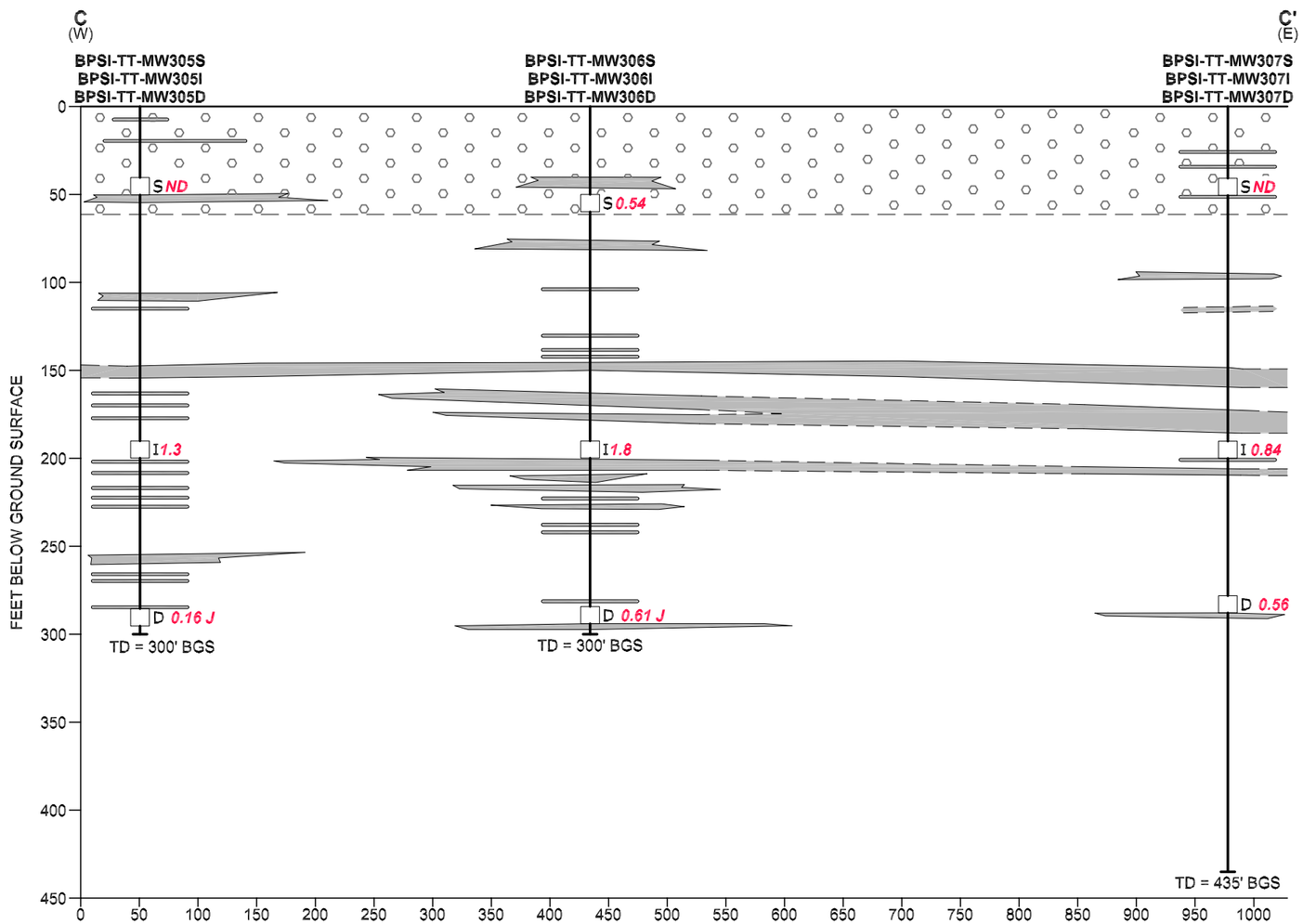


TETRA TECH

GEOLOGIC CROSS SECTION B – B'
SITE 1 – FORMER DRUM
MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT
BETHPAGE, NEW YORK

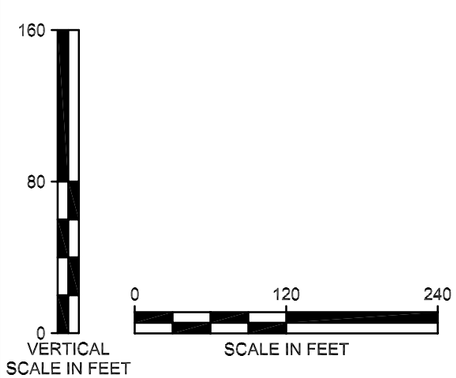
FILE	SCALE
112G01041GS44	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 4–3	0 / 04/03/12

112G01041/0275/112G01041GS45.DWG 04/03/12 MKB



LEGEND

	SAND AND GRAVEL
	SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL
	CLAY, CLAYEY SILT, OR SANDY CLAY
BPSI-TT-MW305S	MONITORING WELL
	GROUND SURFACE (APPROXIMATED TO BE FLAT)
	SILT OR CLAY LAYER (DASHED WHERE INFERRED)
	SILT OR CLAY LENS (FEW INCHES THICK)
S 0.54	MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)
TD = 250' BGS	TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)
ND	NON-DETECT
J	ESTIMATED VALUE



TETRA TECH

GEOLOGIC CROSS SECTION C – C'
SITE 1 – FORMER DRUM MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK

FILE	SCALE
112G01041GS45	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 4–4	0 / 04/03/12

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Notes:
Results in micrograms per liter
*-Field test kit result
≤10-Method detection limit of field test kits (10 µg/L); result indicates ≤10 µg/L or non-detect
NA-Not Analyzed
ND-Non Detect
J-estimated value
VOC-volatile organic compound
PCE-tetrachloroethene
TCA-1,1,1-trichloroethane
TCE-trichloroethene
PCB-polychlorinated biphenyl
CIS-1,2-DCE-CIS-1,2-dichloroethene
Trans-1,2-DCE-Trans-1,2-dichloroethene
DCA-1,1-dichloroethane
DCE-1,1-dichloroethene
Hex Chrom-hexavalent chromium
BOLD-exceedance of NYSDOH MCLs

Legend

Existing Monitoring Well

N

Site 3

Site 2

Site 1

Plant No. 3

Plant 17 South

BPS1-TT-MW309I
BPS1-TT-MW309D
BPS1-TT-MW308I
BPS1-TT-MW308D
BPS1-TT-MW301D
BPS1-TT-MW301I
BPS1-HN-MW29I
BPS1-HN-MW29D
BPS1-TT-MW302I2
BPS1-TT-MW302S
BPS1-TT-MW303D
BPS1-TT-MW302D
BPS1-TT-MW302I1
BPS1-TT-MW303I1
BPS1-TT-MW303I2
BPS1-TT-MW304I1
BPS1-TT-MW304I2
BPS1-TT-MW304D
BPS1-TT-MW305I
BPS1-TT-MW305D
BPS1-TT-MW306D
BPS1-TT-MW306I
BPS1-TT-MW307D
BPS1-TT-MW307I

BPS1-TT-MW309S (53 - 63 FT)

	Jan 2012
VOCs	
TCE	0.61 J
PCBs	
Aroclor-1248	**1**
Metals	
Hex Chrom	8.9 J
Chromium	18
Metals Filtered	
Chromium	13

BPS1-TT-MW308S (54 - 64 FT)

	Jan 2012
VOCs	
TCE	0.71 J
PCBs	
Aroclor-1248	0.2
Metals	
Hex Chrom	ND*
Chromium	10

BPS1-TT-MW301S (51 - 61 FT)

	Dec 2010	Mar 2011	Jan 2012
VOCs	ND	ND	ND
PCBs			
Aroclor-1242	**0.57 J**	**14 J**	ND
Aroclor-1248	ND	ND	**10**
Metals			
Chromium	NA	NA	2.5
Hex Chrom	NA	NA	≤10*

BPS1-FW-MW03 (52 - 67 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
TCA	0.29 J	0.39 J	0.25 J
CIS-1,2-DCE	0.34 J	0.45 J	0.49 J
PCE	**67**	**66**	**68**
TCE	3.8	3.8	3.7
PCBs			
Aroclor-1242	**2.8 J**	**2.1 J**	ND
Aroclor-1248	ND	ND	**1.9**
Metals			
Hex Chrom	NA	NA	≤10*
Chromium	NA	NA	4.6

BPS1-FW-MW02 (49 - 64 FT)

	Nov 2010	Nov 2010 (DUP)	Mar 2011	Jan 2012
VOCs				
TCA	0.62 J	0.65 J	0.98 J	0.39 J
Freon 113	ND	ND	0.31 J	0.36 J
CIS-1,2-DCE	ND	ND	0.28 J	ND
MTBE	NA	NA	NA	0.35 J
PCE	**29**	**28**	**41**	**21**
TCE	2.4	2.2	3.9	2.7
PCBs				
Aroclor-1242	0.3 J	0.29 J	0.49 J	ND
Aroclor-1248	ND	ND	ND	0.3
Metals				
Hex Chrom	NA	NA	NA	≤10*
Chromium	NA	NA	NA	8.5

BPS1-FW-MW01 (48.5 - 63.5 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
TCA	**7.9**	**23**	**8.3**
Freon 113	0.62 J	1.4	1.2
DCA	3.8	4.4	3.1
DCE	0.46 J	0.59 J	ND
CIS-1,2-DCE	**32**	**110**	**70**
PCE	**180**	**550**	**200**
Trans 1,2-DCE	0.51 J	1	0.5 J
TCE	**15**	**41**	**21**
PCBs			
Aroclor-1242	**1 J**	**1 J**	ND
Aroclor-1248	ND	ND	0.46
Metals			
Hex Chrom	NA	NA	≤10*
Chromium	NA	NA	4.4

BPS1-TT-MW302S (41 - 51 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
PCE	0.32 J	ND	ND
PCBs			
Aroclor-1242	**0.6 J**	0.26 J	ND
Aroclor-1248	ND	ND	0.43
Metals			
Hex Chrom	NA	ND	≤10*
Chromium	NA	1.3	0.63 J

BPS1-TT-MW303S (46 - 56 FT)

	Nov 2010	Nov 2010 (DUP)	Mar 2011	Jan 2012	Jan 2012 (DUP)
VOCs					
PCE	1	1	0.97	1.9	1.8
TCE	ND	ND	0.76 J	2.7	2.7
PCBs					
Aroclor-1242	0.052 J	0.056 J	0.13 J	ND	ND
Aroclor-1248	ND	ND	ND	0.21	0.2
Metals					
Hex Chrom	NA	NA	ND	≤10*	NA
Chromium	NA	NA	5.3	2.7	4.2

BPS1-TT-MW307S (40.5 - 50.5 FT)

	Jan 2012
VOCs	
DCA	0.24 J
PCE	1.3
TCE	0.57 J
PCBs	ND
Metals	
Hex Chrom	ND*
Chromium	4

BPS1-TT-MW304S (43 - 53 FT)

	Dec 2010	Mar 2011	Jan 2012
VOCs	ND	ND	ND
PCBs	ND	ND	ND
Metals			
Hex Chrom	NA	ND	ND*
Chromium	NA	1.9	1.4

BPS1-TT-MW305S (40 - 50 FT)

	Jan 2012	Jan 2012 (DUP)
VOCs	ND	ND
PCBs	ND	ND
Metals		
Hex Chrom	ND*	NA
Chromium	2.4	2.6

BPS1-TT-MW306S (50 - 60 FT)

	Jan 2012
VOCs	
PCE	0.4 J
PCBs	
Aroclor-1248	**0.54**
Metals	
Hex Chrom	ND
Chromium	1.3

0 75 150 300 Feet

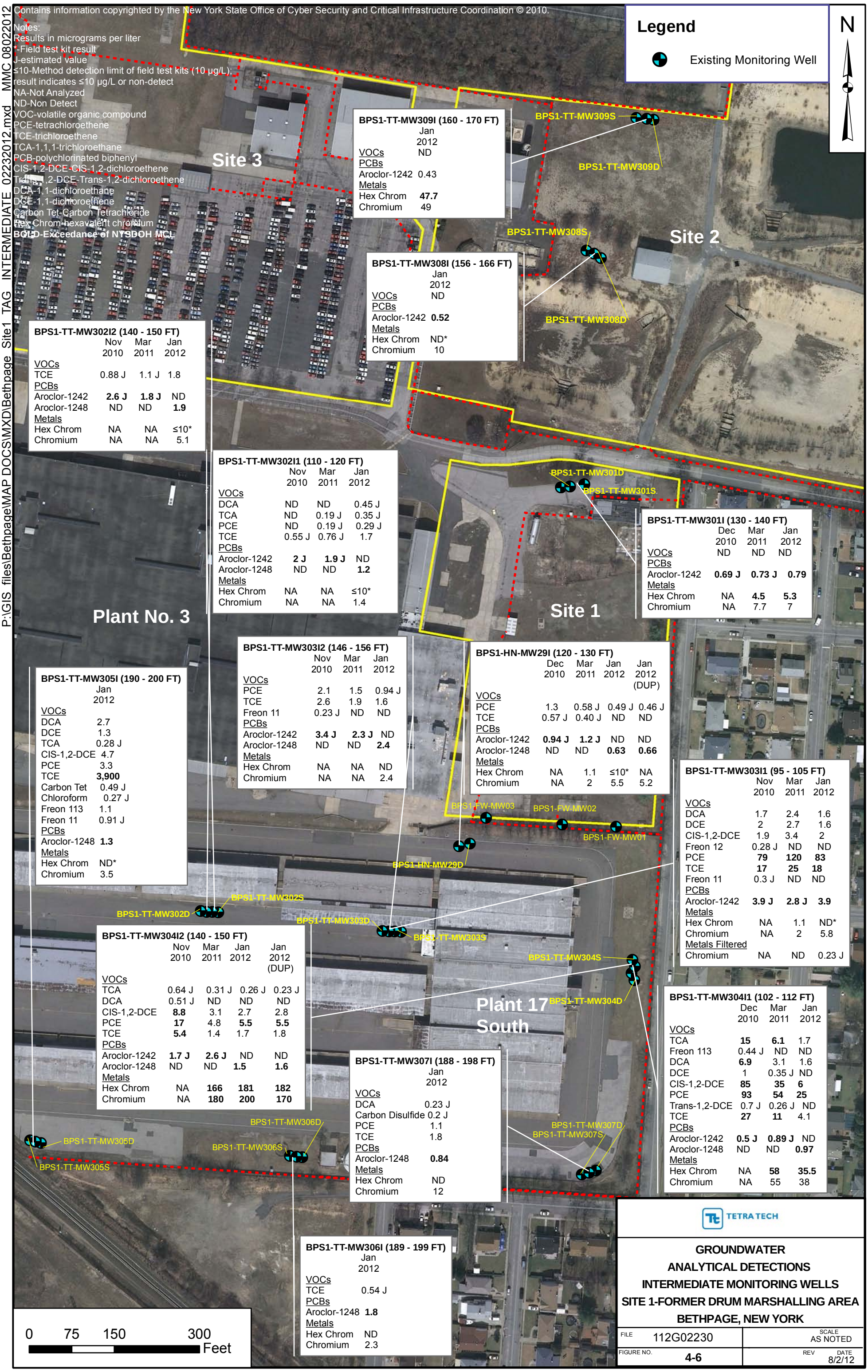
TETRA TECH

GROUNDWATER ANALYTICAL DETECTIONS SHALLOW MONITORING WELLS SITE 1 - FORMER DRUM MARSHALLING AREA BETHPAGE, NEW YORK

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	4-5	REV / DATE	8/2/12

P:\GIS files\Bethpage\MAP DOCS\MXD\Bethpage_Site1_TAG_shallow_02232012.mxd MMC 08022012

P:\GIS files\Bethpage\MAP DOCS\MXD\Bethpage Site1 TAG INTERMEDIATE 02232012.mxd MMC 08022012



BPS1-TT-MW309I (160 - 170 FT)

	Jan 2012
VOCs	ND
PCBs	
Aroclor-1242	0.43
Metals	
Hex Chrom	**47.7**
Chromium	49

BPS1-TT-MW308I (156 - 166 FT)

	Jan 2012
VOCs	ND
PCBs	
Aroclor-1242	**0.52**
Metals	
Hex Chrom	ND*
Chromium	10

BPS1-TT-MW302I2 (140 - 150 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
TCE	0.88 J	1.1 J	1.8
PCBs			
Aroclor-1242	**2.6 J**	**1.8 J**	ND
Aroclor-1248	ND	ND	**1.9**
Metals			
Hex Chrom	NA	NA	≤10*
Chromium	NA	NA	5.1

BPS1-TT-MW302I1 (110 - 120 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
DCA	ND	ND	0.45 J
TCA	ND	0.19 J	0.35 J
PCE	ND	0.19 J	0.29 J
TCE	0.55 J	0.76 J	1.7
PCBs			
Aroclor-1242	**2 J**	**1.9 J**	ND
Aroclor-1248	ND	ND	**1.2**
Metals			
Hex Chrom	NA	NA	≤10*
Chromium	NA	NA	1.4

BPS1-TT-MW301I (130 - 140 FT)

	Dec 2010	Mar 2011	Jan 2012
VOCs	ND	ND	ND
PCBs			
Aroclor-1242	**0.69 J**	**0.73 J**	**0.79**
Metals			
Hex Chrom	NA	**4.5**	**5.3**
Chromium	NA	7.7	7

BPS1-TT-MW305I (190 - 200 FT)

	Jan 2012
VOCs	
DCA	2.7
DCE	1.3
TCA	0.28 J
CIS-1,2-DCE	4.7
PCE	3.3
TCE	**3,900**
Carbon Tet	0.49 J
Chloroform	0.27 J
Freon 113	1.1
Freon 11	0.91 J
PCBs	
Aroclor-1248	**1.3**
Metals	
Hex Chrom	ND*
Chromium	3.5

BPS1-TT-MW303I2 (146 - 156 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
PCE	2.1	1.5	0.94 J
TCE	2.6	1.9	1.6
Freon 11	0.23 J	ND	ND
PCBs			
Aroclor-1242	**3.4 J**	**2.3 J**	ND
Aroclor-1248	ND	ND	**2.4**
Metals			
Hex Chrom	NA	NA	ND
Chromium	NA	NA	2.4

BPS1-HN-MW29I (120 - 130 FT)

	Dec 2010	Mar 2011	Jan 2012	Jan 2012 (DUP)
VOCs				
PCE	1.3	0.58 J	0.49 J	0.46 J
TCE	0.57 J	0.40 J	ND	ND
PCBs				
Aroclor-1242	**0.94 J**	**1.2 J**	ND	ND
Aroclor-1248	ND	ND	**0.63**	**0.66**
Metals				
Hex Chrom	NA	1.1	≤10*	NA
Chromium	NA	2	5.5	5.2

BPS1-TT-MW303I1 (95 - 105 FT)

	Nov 2010	Mar 2011	Jan 2012
VOCs			
DCA	1.7	2.4	1.6
DCE	2	2.7	1.6
CIS-1,2-DCE	1.9	3.4	2
Freon 12	0.28 J	ND	ND
PCE	**79**	**120**	**83**
TCE	**17**	**25**	**18**
Freon 11	0.3 J	ND	ND
PCBs			
Aroclor-1242	**3.9 J**	**2.8 J**	**3.9**
Metals			
Hex Chrom	NA	1.1	ND*
Chromium	NA	2	5.8
Metals Filtered			
Chromium	NA	ND	0.23 J

BPS1-TT-MW304I2 (140 - 150 FT)

	Nov 2010	Mar 2011	Jan 2012	Jan 2012 (DUP)
VOCs				
TCA	0.64 J	0.31 J	0.26 J	0.23 J
DCA	0.51 J	ND	ND	ND
CIS-1,2-DCE	**8.8**	3.1	2.7	2.8
PCE	**17**	4.8	**5.5**	**5.5**
TCE	**5.4**	1.4	1.7	1.8
PCBs				
Aroclor-1242	**1.7 J**	**2.6 J**	ND	ND
Aroclor-1248	ND	ND	**1.5**	**1.6**
Metals				
Hex Chrom	NA	**166**	**181**	**182**
Chromium	NA	**180**	**200**	**170**

BPS1-TT-MW304I1 (102 - 112 FT)

	Dec 2010	Mar 2011	Jan 2012
VOCs			
TCA	**15**	**6.1**	1.7
Freon 113	0.44 J	ND	ND
DCA	**6.9**	3.1	1.6
DCE	1	0.35 J	ND
CIS-1,2-DCE	**85**	**35**	**6**
PCE	**93**	**54**	**25**
Trans-1,2-DCE	0.7 J	0.26 J	ND
TCE	**27**	**11**	4.1
PCBs			
Aroclor-1242	**0.5 J**	**0.89 J**	ND
Aroclor-1248	ND	ND	**0.97**
Metals			
Hex Chrom	NA	**58**	**35.5**
Chromium	NA	55	38

BPS1-TT-MW307I (188 - 198 FT)

	Jan 2012
VOCs	
DCA	0.23 J
Carbon Disulfide	0.2 J
PCE	1.1
TCE	1.8
PCBs	
Aroclor-1248	**0.84**
Metals	
Hex Chrom	ND
Chromium	12

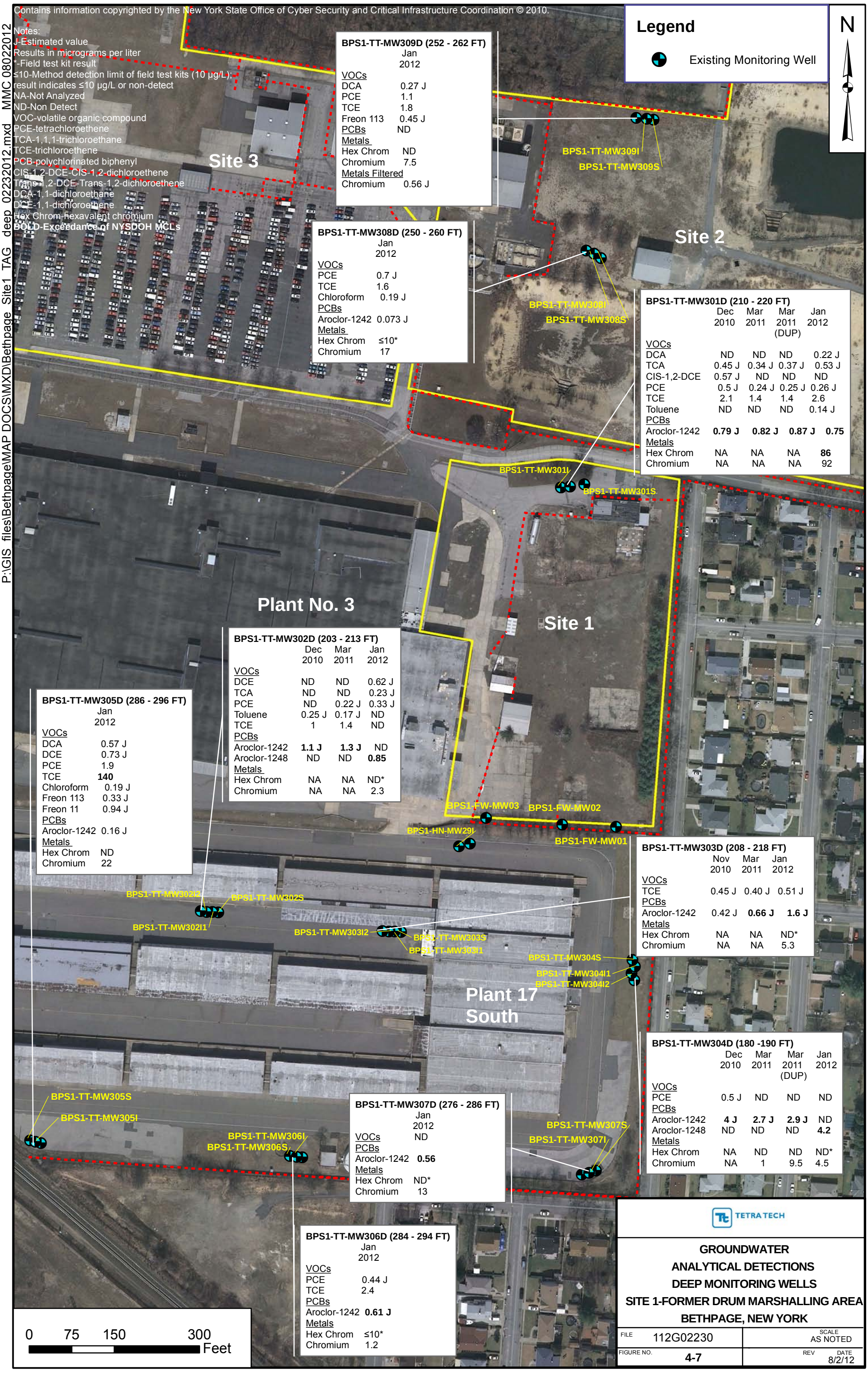
BPS1-TT-MW306I (189 - 199 FT)

	Jan 2012
VOCs	
TCE	0.54 J
PCBs	
Aroclor-1248	**1.8**
Metals	
Hex Chrom	ND
Chromium	2.3

TETRA TECH

GROUNDWATER ANALYTICAL DETECTIONS INTERMEDIATE MONITORING WELLS SITE 1-FORMER DRUM MARSHALLING AREA BETHPAGE, NEW YORK

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	4-6	REV	DATE 8/2/12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Notes:
J-Estimated value
Results in micrograms per liter
*-Field test kit result
≤10-Method detection limit of field test kits (10 µg/L); result indicates ≤10 µg/L or non-detect
NA-Not Analyzed
ND-Non Detect
VOC-volatile organic compound
PCE-tetrachloroethene
TCA-1,1,1-trichloroethane
TCE-trichloroethene
PCB-polychlorinated biphenyl
CIS-1,2-DCE-CIS-1,2-dichloroethene
Trans-1,2-DCE-Trans-1,2-dichloroethene
DCA-1,1-dichloroethane
DCE-1,1-dichloroethene
Hex Chrom-hexavalent chromium
BOLD-Exceedance of NYSDOH MCLs
Legend
Existing Monitoring Well
N
Site 3
Site 2
Site 1
Plant No. 3
Plant 17 South
BPS1-TT-MW309D (252 - 262 FT)
Jan 2012
VOCs
DCA 0.27 J
PCE 1.1
TCE 1.8
Freon 113 0.45 J
PCBs ND
Metals
Hex Chrom ND
Chromium 7.5
Metals Filtered
Chromium 0.56 J
BPS1-TT-MW309I
BPS1-TT-MW309S
BPS1-TT-MW308D (250 - 260 FT)
Jan 2012
VOCs
PCE 0.7 J
TCE 1.6
Chloroform 0.19 J
PCBs
Aroclor-1242 0.073 J
Metals
Hex Chrom ≤10*
Chromium 17
BPS1-TT-MW308I
BPS1-TT-MW308S
BPS1-TT-MW301D (210 - 220 FT)
Dec 2010 | Mar 2011 | Mar 2011 (DUP) | Jan 2012
VOCs
DCA ND ND ND 0.22 J
TCA 0.45 J 0.34 J 0.37 J 0.53 J
CIS-1,2-DCE 0.57 J ND ND ND
PCE 0.5 J 0.24 J 0.25 J 0.26 J
TCE 2.1 1.4 1.4 2.6
Toluene ND ND ND 0.14 J
PCBs
Aroclor-1242 0.79 J 0.82 J 0.87 J 0.75
Metals
Hex Chrom NA NA NA 86
Chromium NA NA NA 92
BPS1-TT-MW301I
BPS1-TT-MW301S
BPS1-TT-MW302D (203 - 213 FT)
Dec 2010 | Mar 2011 | Jan 2012
VOCs
DCE ND ND 0.62 J
TCA ND ND 0.23 J
PCE ND 0.22 J 0.33 J
Toluene 0.25 J 0.17 J ND
TCE 1 1.4 ND
PCBs
Aroclor-1242 1.1 J 1.3 J ND
Aroclor-1248 ND ND 0.85
Metals
Hex Chrom NA NA ND*
Chromium NA NA 2.3
BPS1-TT-MW305D (286 - 296 FT)
Jan 2012
VOCs
DCA 0.57 J
DCE 0.73 J
PCE 1.9
TCE 140
Chloroform 0.19 J
Freon 113 0.33 J
Freon 11 0.94 J
PCBs
Aroclor-1242 0.16 J
Metals
Hex Chrom ND
Chromium 22
BPS1-FW-MW03
BPS1-FW-MW02
BPS1-FW-MW01
BPS1-HN-MW29I
BPS1-TT-MW302I2
BPS1-TT-MW302S
BPS1-TT-MW302I1
BPS1-TT-MW303I2
BPS1-TT-MW303S
BPS1-TT-MW303I1
BPS1-TT-MW303D (208 - 218 FT)
Nov 2010 | Mar 2011 | Jan 2012
VOCs
TCE 0.45 J 0.40 J 0.51 J
PCBs
Aroclor-1242 0.42 J 0.66 J 1.6 J
Metals
Hex Chrom NA NA ND*
Chromium NA NA 5.3
BPS1-TT-MW304S
BPS1-TT-MW304I1
BPS1-TT-MW304I2
BPS1-TT-MW304D (180 -190 FT)
Dec 2010 | Mar 2011 | Mar 2011 (DUP) | Jan 2012
VOCs
PCE 0.5 J ND ND ND
PCBs
Aroclor-1242 4 J 2.7 J 2.9 J ND
Aroclor-1248 ND ND ND 4.2
Metals
Hex Chrom NA ND ND ND*
Chromium NA 1 9.5 4.5
BPS1-TT-MW305S
BPS1-TT-MW305I
BPS1-TT-MW306I
BPS1-TT-MW306S
BPS1-TT-MW307D (276 - 286 FT)
Jan 2012
VOCs ND
PCBs
Aroclor-1242 0.56
Metals
Hex Chrom ND*
Chromium 13
BPS1-TT-MW307S
BPS1-TT-MW307I
BPS1-TT-MW306D (284 - 294 FT)
Jan 2012
VOCs
PCE 0.44 J
TCE 2.4
PCBs
Aroclor-1242 0.61 J
Metals
Hex Chrom ≤10*
Chromium 1.2
0 75 150 300 Feet
TETRA TECH
GROUNDWATER
ANALYTICAL DETECTIONS
DEEP MONITORING WELLS
SITE 1-FORMER DRUM MARSHALLING AREA
BETHPAGE, NEW YORK
FILE 112G02230
SCALE AS NOTED
FIGURE NO. 4-7
REV
DATE 8/2/12
P:\GIS_files\Bethpage\MAP DOCS\MXD\Bethpage_Site1_TAG_deep_02232012.mxd MMC 08022012

APPENDICES

Appendix A

Field Forms, Logsheets, and Documentation

Boring Logs

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/12/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel,moist.	SM	Set 8" ID steel surface				
	2-3								casing to 25'				
	3-4								(Gueci - Failing F10)				
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel,moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel.	SM/ ML					
	12-13						(11'-12' silt)		Geophysical log.				
	13-14						moist						
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel.	SM					
	17-18						moist						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel.	SM					
	22-23						moist						
	23-24								Lost +/- 200 gals. Drill-				
	24-25								mud between 25'-48'.				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
12" ID HAS borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	10/15/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan-Lt. brn	Fine to coarse sand and	SM/GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel, moist.	SM/GM	cuttings.				
	27-28								Lost +/- 200 gals. Drill-				
	28-29								mud between 25'-48'.				
	29-30												
S-7	30-31					Tan-Lt. brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	31-32						little- med. to coarse gravel.	SM/GM	cuttings.				
	32-33						moist	ML	Geophysical log.				
	33-34							ML	Geophysical log.				
	34-35							ML	Geophysical log.				
S-8	35-36					Tan-Lt. brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	36-37						little- med. to coarse gravel.	SM/GM	cuttings.				
	37-38						moist						
	38-39												
	39-40												
S-9	40-41					Light brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	41-42						little- med. to coarse gravel.	SM/GM	cuttings.				
	42-43						moist						
	43-44												
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	SW	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel.	SW	cuttings.				
	47-48						moist						
S-11*	48-49	10-22			Dense	Tan to	Silty, medium-coarse sand, wet.	sm sc	Split spoon sample	0	0	0	0
	49-50	21-20				Org brn	trace f.-c. gravel, clay laminae	sm sc	10:40				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/15/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-12	50-51					Light brn	Sandy (very fine to fine) silt.	ML	Screened mud rotary	0	0	0	0
	51-52						Silt (Geophysical log)	ML	cuttings and geo-				
	52-53						Silt (Geophysical log)	ML					
	53-54						Silt (Geophysical log)	ML					
	54-55						Silt (Geophysical log)	ML					
S-13	55-56					Tan-Lt. brn	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58												
S-14*	58-59	16-21			Dense	Gray-white	Micaceous, medium to coarse	SP	Split spoon sample.	0	0	0	0
	59-60	23-24				Gray-white	sand, wet.	SP	11:10				
	60-61												
	61-62												
	62-63												
	63-64												
	64-65												
S-15	65-66					Tan - brn	Micaceous, fine to coarse sand,	SP	Screened mud rotary	0	0	0	0
	66-67						little silt, wet.	SP	cuttings.				
	67-68												
	68-69												
	69-70												
S-16	70-71					Tan - brn	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73												
	73-74												
	74-75												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/15/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-17	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, trace to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-18	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82						sand with silt laminae, trace to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-19	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, trace to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-20	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92						sand with silt laminae, trace to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												
	99-100												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/15/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	100-101					Tan - Org. brn	Silty, fine to medium sand	ML/ SM	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, trace to	ML/ SM	cuttings.				
	102-103						little lignite						
	103-104												
	104-105												
	105-106												
	106-107						Sandy silt.	ML	Geophysical log.				
	107-108						Sandy silt.	ML					
	108-109												
	109-110												
S-22	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/ SM	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae.	ML/ SM	cuttings.				
	112-113						Silt and sandy silt.	ML/ SM	Geophysical log.				
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
	118-119												
	119-120												
S-23	120-121					Tan - Org. brn	Silty, micaceous, medium to coars	SM	Screened mud rotary	0	0	0	0
	121-122						sand with silt laminae, trace to	SM	cuttings.				
	122-123						little lignite						
	123-124												
	124-125												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/15/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
	128-129												
	129-130												
S-24	130-131					Tan - Org. brn	Silty, micaceous, medium to coarse	SM	Screened mud rotary	0	0	0	0
	131-132						sand with silt laminae, trace to	SM	cuttings.				
	132-133						little lignite						
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
S-25*	138-139	25-28			Very Dense	Tan - Red brn	Silty, micaceous, medium to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	31-33					sand w/ silt laminae, trace f. gravel.	SM	13:15				
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147						Sandy silt.		Geophysical log.				
	147-148												
S-26*	148-149	10-12				Tan - Gray	Sandy (fine), clay.	CL	Split spoon sample.	0	0	0	0
	149-150	15-20				Tan - Gray		CL	13:35				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/15/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151					Gray	Sandy, clay	CL	Geophysical log and				
	151-152							CL	mud rotary return.				
	152-153							CL					
	153-154							CL					
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-27	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr.lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165						Silt (geophysical log)	ML					
	165-166												
	166-167												
	167-168												
	168-169						Silt (geophysical log)	ML					
	169-170						Silt (geophysical log)	ML					
S-28	170-171					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/ SM	cuttings.				
	172-173								11/15/2011 Stopped				
	173-174								@ 173'.				
	174-175												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/16/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176								11/16/2011 started				
	176-177								drilling from 173'.				
	177-178												
	178-179												
	179-180												
S-29	180-181					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	181-182						silty, very fine to fine sand.	ML/ SM	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-30	190-191					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	191-192						silty, very fine to fine sand.	ML/ SM	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199												
	199-200												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No

Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/16/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	200-201					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202						sand with silt laminae, tr.lignite.	SM	cuttings.				
	202-203												
	203-204												
	204-205												
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
S-32	210-211					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212						sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213												
	213-214												
	214-215												
	215-216												
	216-217						Silt (geophysical log)	ML					
S-33	217-218					Dark brn	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219					Dark brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220												
	220-221												
	221-222												
	222-223												
	223-224												
	224-225						Silt (geophysical log)						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/16/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-34	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227						trace to little silt laminae.	SM	cuttings.				
	227-228						Silt (geophysical log)	ML					
	228-229						Silt (geophysical log)	ML					
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-35	240-241					Dark brn to	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	241-242					Org brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No

Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/16/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255						Silt (geophysical log)	ML					
	255-256						Sandy (fine) clay.	CL/ SC	Geophysical log.				
	256-257							CL					
	257-258							CL					
	258-259							CL					
	259-260							CL					
	260-261												
	261-262												
S-37	262-263					Tan - Gray	Silty, micaceous fine sand and	Sm Ml	Screened mud rotary	0	0	0	0
	263-264					Tan - Gray	sandy (fine), silt.	Sm Ml	cuttings.				
	264-265												
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-38	273-274	18-23				Tan-brn	Silty fine to medium quartzose	SM	Mud rotary cuttings	0	0	0	0
	274-275	24-27				Tan-brn	sand.	SM					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: Installed 2" ID Sch 40 PVC Well Screen from 286' to 296'.
#1 Silica sandpack from 271' to 300'.
4' Bentonite pellet seal 244' to 268'. Cetco bentonite/portland cement annular seal to 10' BGS.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
DATE: 11/16/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	275-276					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	277-278												
	278-279												
	279-280												
	280-281												
	281-282												
	282-283												
	283-284												
	284-285												
	285-286												
	286-287						Silt (geophysical log)	ML					
	287-288						Silt (geophysical log)	ML					
S-40*	288-289	18-24				Tan-Gray	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	289-290	26-30							12:45				
	290-291												
	291-292												
	292-293												
	293-294												
	294-295												
	295-296												
	296-297												
	297-298												
S-41*	298-299	24-25				Tan-Org Brn.	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	299-300	30-27					13:15	SP SM	Bottom of boring=300'.				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Set 2" ID well screen (10'-0.010 slot) from 286' to 296' below ground surface.

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW305

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG:

BORING No.: MW-306-0
DATE: 11-28-11
GEOLOGIST: Vince Shickora
DRILLER: Bill Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1												
	2												
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
	14												
	15												
	16												
	17												
	18												
	19						Completed on 11-23-11						
	20												
11/28/11	21												
	22			8" Casing									
	23												
0925	24					Bm	F-C Sand and F Gravel - little Silt			0	0	0	0
	25												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: 8" steel Drive casing installed to ~ 23' BGS
7.5" Mud rotary drilling 0' to 300' BGS
2"x2' stainless split spoon samples at selected depths

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112602230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-28-11
GEOLOGIST: V. Shickosh
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		26					Brn	F-C Sand with F-M Gravel - little Silt			0	0	0	0
		27												
		28												
		29												
		30									0	0	0	0
		31												
		32					Brn Red	F-C Sand with F-M Gravel little Silt - Trace mica						
		33												
		34												
		35									0	0	0	0
		36												
		37					org							
0930		38					Brn							
		39												
		40						Same as above			0	0	0	0
		41												
		42						(More silt)						
0932		43					org Brn	(Trace clay)						
		44												
		45					Gry Brn	Silt - little clay Trace F-C Sand and Gravel			0	0	0	0
		46												
		47												
0946		48												
	S-1	49	12/17	19"			Gry Brn	F-M Sand - little Silt - Trace clay and C Sand			0	0	0	0
0957	↓	50	21/25	24"							0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (See page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portedrill
BORING No.: MW-306D
DATE: 11-28-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
1010		51					Gry Brn	F-M Sand - little Silt - Trace clay and C Sand - F Gravel			0	0	0	0
		52												
		53												
		54												
		55					Brn	Same as above			0	0	0	0
		56												
		57												
1016		58												
	S-2	59	23/31	19"			Brn	F-M Sand - Trace Silt						
1028		60	35/34	24"			Wht Tan				0	0	0	0
1044		61												
		62												
		63						(Trace C Sand)						
		64												
		65					Brn Tan	Same as above			0	0	0	0
		66												
		67												
		68						(Trace C Sand F Gravel)						
		69					Gry							
		70					Brn Tan	Same as above			0	0	0	0
		71						(Trace Clay)						
		72												
		73												
		74					Gry							
		75					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-28-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		76					Gry Brn	F-M Sand - Trace			0	0	0	0
		77					Tan	Silt, & Sand and F Gravel						
1057		78												
1102		79					Gry							
		80					Brn Tan	Same as above			0	0	0	0
		81												
		82						(micaceous)						
		83												
		84					Gry							
		85					Tan Brn	Same as above			0	0	0	0
		86												
		87												
		88						(micaceous)						
		89					Gry							
1113		90					Brn Tan	Same as above			0	0	0	0
1119		91												
		92												
		93						(micaceous)						
		94					Gry							
		95					Brn Tan	Same as above			0	0	0	0
		96												
		97												
1123		98												
1215		99					Gry							
		100					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-28-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
		101					Brn Gry	F-M Sand - Trace silt C sand and F Gravel			0	0	0	0
		102					Tan							
		103						(micaceous)						
		104					Gry							
		105					Brn Tan	Same as above			0	0	0	0
		106												
		107						(more silt)						
		108												
		109					Gry							
		110					Brn Tan	Same as above			0	0	0	0
		111												
		112												
		113						(little clay)						
		114					Gry							
		115					Brn Tan	Same as above.			0	0	0	0
		116												
		117						(little clay)						
1228		118												
1242		119					Gry							
		120					Brn Tan	F Sand - little silt Trace clay and C Sand			0	0	0	0
		121												
		122												
		123						(micaceous)						
		124					Gry							
		125					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112602230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill
BORING No.: MW-306A
DATE: 11-28-11
GEOLOGIST: V. Slickota
DRILLER: B. Murphy

	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		126					Gry Brn	F-Sand - little Silt Trace C Sand and			0	0	0	0
		127					Tan	clay						
		128						(micaceous)						
		129					Gry							
		130					Brn Tan	F-M Sand - little C Sand and Silt			0	0	0	0
		131						Trace clay						
		132						(some weathered rock frags)		rust stains				
		133												
		134					Gry	F Sand - little Silt Trace C Sand and						
		135					Tan Brn	clay			0	0	0	0
		136						(micaceous)						
		137												
1254		138					Gry							
1304	S-3	139	22/29	20"			Brn Tan	F Sand - little Silt Trace C Sand and						
1312	↓	140	33/36	24"				Clay			0	0	0	0
		141												
		142						(micaceous)						
		143												
		144					Gry							
		145					Brn Tan	Same as above			0	0	0	0
		146												
		147												
		148						(Trace weathered rock frags)		rust stains				
		149					Gry							
		150					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G0 2230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-28-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		151					Gry Brn	F-Sand - little Silt Trace C sand and			0	0	0	0
		152					Tan	clay						
		153						(little clay)			0	0	0	0
		154					Gry							
		155					Brn Tan	Same as above			0	0	0	0
		156												
		157												
1348		158					Red							
1401	S-4	159	13/17				Gry Tan	Silt - Some clay and little F-Sand						
1406	↓	160	17/19								0	0	0	0
1416		161												
		162												
		163						(Trace C Sand)						
		164					Gry							
		165					Brn Tan	Same as above			0	0	0	0
		166												
		167												
		168						(Trace weathered rock frags)						
		169					Gry							
		170					Brn Tan	Same as above			0	0	0	0
		171												
		172												
1424		173						(Trace weathered rock frags)						
1435		174					Gry							
		175					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill
BORING No.: MW-306D
DATE: 11-28-11 / 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	176					Gry Brn	Silt - Some clay and little F Sand			0	0	0	0
	177					Tan	Trace weathered rock frags						
	178												
	179					Red							
	180					Gry Tan	Same as above			0	0	0	0
	181												
	182												
	183												
	184					Gry							
	185					Brn Tan	Same as above			0	0	0	0
	186												
	187												
	188												
	189					Gry							
	190					Brn Tan	Same as above			0	0	0	0
	191												
	192						(More F Sand)						
	193						(Micaceous)						
	194					Gry							
	195					Brn Tan	Same as above			0	0	0	0
	196												
	197						(More F Sand)						
	198						(Micaceous)						
	199					Gry							
	200					Brn Tan	Same as above			0	0	0	0

11/28/11 1454 0919 11/29/11

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		201					Gry Brn Tan	Silt - Some to little clay and little FSand			0	0	0	0
		202						Trace weathered rock Frags						
0931		203						↓						
		204					Gry Brn Tan	↓						
		205						Same as above			0	0	0	0
		206						↓						
		207												
		208						(micaceous)						
		209					Gry Tan Brn	↓						
		210						Same as above			0	0	0	0
		211						↓						
		212												
		213												
		214					Gry Tan Brn	↓ (more clay)						
		215						Same as above			0	0	0	0
		216						↓						
		217												
0949		218						(micaceous)						
1008		219					Gry Brn Tan	↓						
		220						Same as above			0	0	0	0
		221						↓						
		222						(less clay)						
		223												
		224					Gry Brn Tan	↓ ↓						
		225						Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
Time		226					Gry Tan	Silt, little clay and fine sand			0	0	0	0
		227					Brn	Trace weathered rock frags						
		228						↓						
		229					Gry							
		230					Tan Brn	Same as above			0	0	0	0
		231						↓						
		232												
1018		233												
		234					Gry	↓						
		235					Brn Tan	Same as above			0	0	0	0
		236						↓						
		237						(micaceous)						
		238												
		239					Gry	↓						
		240					Brn Tan	Same as above			0	0	0	0
		241						↓						
		242												
		243												
		244					Gry	↓						
		245					Brn Tan	Same as above			0	0	0	0
		246												
		247												
1037		248						(less clay)						
1053		249					Gry	↓						
		250					Brn Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		251					Gry Brn	Silt - little VF Sand and clay - Trace			0	0	0	0
		252					Tan	weathered rock frags						
		253						(more F-Sand)						
		254					Gry							
		255					Tan Brn	Same as above			0	0	0	0
		256												
		257						(more F-Sand)						
		258						(micaceous)						
		259					Gry							
		260					Brn Tan	Same as above			0	0	0	0
		261												
		262						(less clay)						
1059		263												
		264					Gry							
		265					Tan Brn	Same as above			0	0	0	0
		266												
		267												
		268						(less clay)						
		269					Gry							
		270					Brn Tan	Same as above						
		271												
		272						(micaceous)						
		273						(more F-Sand)						
		274					Gry							
		275					Brn Tan	Same as above						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112602230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		276					Gry Brn Tan	Silt - Some F Sand and little to Trace Clay - Trace rock Frags			0	0	0	0
		277												
1115		278												
1125	5-5	279	22/26	14"										
1132		280	28/27	24"				Same as above			0	0	0	0
1223		281												
		282												
		283						(micaceous)						
		284					Gry							
		285					Brn Tan	Same as above			0	0	0	0
		286												
		287												
		288						(micaceous)						
		289					Gry							
		290					Tan Brn	Same as above			0	0	0	0
		291												
		292												
1231		293												
	5-6	294	29/36	12"			Brn Tan	F Sand - Some silt Trace clay and weathered rock Frags						
1243		295	37/48	24"							0	0	0	0
		296												
		297												
	GAS	298					Gry	(micaceous)						
		299					Brn							
		300					Tan	Same as above			0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: (see page 1)
Hole completed to ~303' BGS

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Portadrill

BORING No.: MW-306D
DATE: 11-29-11
GEOLOGIST: V. Shickora
DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	301					GY/Tn	F Sand - Some Silt Trace clay and			0	0	0	0
	302					Brn	Quartz/rock Frags						
1306	303						↓			0	0	0	0
				EOB									

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: (see page 1)

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 10/28/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2					Dark Brn	tr. little, med. Gravel,moist.	SM					
	2-3												
	3-4												
	4-5												
S-2	5-6					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	7-8						moist.						
	8-9												
	9-10												
S-3	10-11					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	22-23						moist.						
	23-24												
	24-25												

Drilling Area Background (ppm): 0

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface. (Failing F-10)
12" ID HAS borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above. (Strieber/Pratt)
Drilled borehole to depth on 10/28, installed casing 10/31.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan-brn	Silty, fine to coarse sand and	SM/ GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel moist.	SM/ GM	cuttings. 08:37				
	27-28												
	28-29												
	29-30												
	30-31												
	31-32												
	32-33						Silt	ML	Geophysical log.				
	33-34							ML					
	34-35							ML					
S-7	35-36					Tan-brn	Silty, sandy (fine) fine to med	SM/ GM	Screened mud rotary	0	0	0	0
	36-37					Tan-brn	quartzose gravel, and gravelly	SM/ GM	cuttings.				
	37-38					Tan-brn	fine to coarse sand.	SM/ GM					
	38-39												
	39-40												
	40-41												
	41-42												
	42-43												
	43-44												
	44-45												
	45-46								Mud takes in upper 25'-50'				
	46-47								of formation (+/-250 gal.)				
	47-48												
S-8*	48-49	19-23			Dense	Red brn	Silty, med-coarse sand, wet.	SM	Split spoon sample	0	0	0	0
	49-50	26-28				Red brn	tr. to little fine to med gravel.	SM	9:00				

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

Tetra Tech NUS, Inc.

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	50-51						Silt	ML	Geophysical log.				
	51-52												
	52-53												
	53-54												
	54-55												
	55-56									0	0	0	0
	56-57												
	57-58												
S-9*	58-59	22-23			Dense	Gray-Red brn	Silty, med to coarse sand,	SM	Split spoon sample.	0	0	0	0
	59-60	25-30				Gray-Red brn	tr. to little fine to med gravel,	SM					
	60-61					Gray-Red brn	wet.	SM					
S-11	61-62					Tan-Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	62-63					Tan-Red brn	silt laminae, tr. fine gravel.	SM SP	cuttings.				
	63-64												
	64-65												
	65-66									0	0	0	0
	66-67					Tan-Red brn		SM SP					
	67-68												
	68-69												
	69-70												
	70-71									0	0	0	0
	71-72					Tan-Red brn		SM SP					
	72-73												
	73-74												
	74-75												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	75-76					Tan- Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	76-77					Tan- Red brn	silt laminae, tr. fine gravel	SM SP	cuttings.				
	77-78						little lignite						
S-12	78-79					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	79-80					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:00				
	80-81												
	81-82												
	82-83												
	83-84												
	84-85												
	85-86												
	86-87												
	87-88												
S-13	88-89					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	89-90					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:20				
	90-91												
	91-92												
	92-93												
	93-94						Silt and clay	ML CL	Geophysical log.				
	94-95						Silt and clay	ML CL					
	95-96						Silt and clay	ML CL					
	96-97					Red brn		SM	Drillers mix additional mud				
	97-98								loss +/- 200 gals.				
S-14	98-99					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	99-100					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:25				

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	100-101					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary				
	101-102					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	102-103												
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
S-15	108-109					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	109-110					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	110-111												
	111-112												
	112-113												
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
S-16*	118-119	18-24				Gray-red brn	Micaceous, clayey, fine to med	SC CL	Screened mud rotary	0	0	0	0
	119-120	28-30				Gray-red brn	sand and sandy (fine) clay.	SC CL	cuttings.				
	120-121												
	121-122												
	122-123												
	123-124												
	124-125												

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
S-17*	128-129	26-30			Dense	Gray-red	Silty very fine to fine sand.	SM SP	Split spoon sample.	0	0	0	0
	129-130	34-39				Gray-red		SM SP	11:31				
	130-131												
	131-132												
	132-133												
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
	138-139												
	139-140												
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147												
	147-148						Silt and clay	ML CL	Geophysical log.				
	148-149						Silt and clay	ML CL					
	149-150						Silt and clay	ML CL					

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151						Silt and clay	ML CL	Geophysical log.				
	151-152												
	152-153												
	153-154												
	154-155												
	155-156												
	156-157												
	157-158							ML CL	Geophysical log.				
S-18	158-159					Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary	0	0	0	0
	159-160					Tan-red brn	clayey, fine-med sand.	SC CL	cuttings. 13:26				
	160-161												
	161-162												
	162-163												
	163-164												
	164-165												
	165-166												
	166-167												
	167-168												
	168-169												
	169-170												
	170-171						Silt and clay	ML CL	Geophysical log.				
	171-172												
	172-173												
	173-174												
	174-175												

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176					Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary				
	176-177					Tan-red brn	clayey, fine-med. sand.	SC CL	cuttings. 13:26				
	177-178						Sandy silt and clay	ML CL	Geophysical log.				
	178-179												
	179-180												
	180-181												
	181-182												
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
	190-191												
	191-192												
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199						Sandy silt and clay	ML CL	Geophysical log.				
	199-200												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/3-4/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201						Sandy silt and clay	ML CL	Geophysical log.				
	201-202												
	202-203												
S-19	203-204					Tan	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	204-205					Tan	Interbedded sandy(fine) silt and	SM ML	cuttings. 14:45				
	205-206					Tan	silty fine sand.	SM ML	Geophysical log.				
	206-207												
	207-208												
S-20	208-209					Gray-org Brn	Interbedded sandy(fine) silt and	SM ML					
	209-210					Gray-org Brn	silty fine sand.	SM ML					
	210-211												
	211-212												
	212-213												
	213-214												
	214-215												
	215-216												
	216-217												
	217-218												
S-21*	218-219					Gray-Org Brn	Silty fine-med sand.	SM ML	Stopped @ 218' 11/03.				
	219-220					Gray-Org Brn		SM ML	Split spoon sample				
	220-221												
	221-222												
	222-223												
	223-224												
	224-225												

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/4/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	225-226					Tan-Org brn	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	226-227												
	227-228												
	228-229												
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
	240-241												
	241-242												
	242-243												
	243-244												
	244-245												
S-22	245-246					Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	246-247												
	247-248												
S-23*	248-249					Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	249-250						laminae.						

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/4/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	250-251												
	251-252												
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
	258-259												
	259-260												
S-24	260-261					Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	261-262					Tan-gray	Silty fine-med sand.	SM					
	262-263												
	263-264												
	264-265												
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
S-25	272-273					Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	273-274					Tan-gray	Silty fine-med sand.	SM					
	274-275												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D

Tetra Tech NUS, Inc.

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/4/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	275-276												
	276-277												
	277-278												
	278-279												
	279-280												
S-26	280-281					Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	281-282					Tan-gray	Silty fine-med sand.	SM					
	282-283												
	283-284												
	284-285												
	285-286												
	286-287												
	287-288						Silt and clay	ML CL	Geopysical log.				
	288-289												
	289-290												
	290-291												
	291-292												
	292-293												
	293-294												
	294-295												
S-27	295-296					Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	296-297					Tan-gray	tr. little, med. Quartzose gravel	SM					
	297-298												
	298-299												
	299-300												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/4/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	300-301												
	301-302												
	302-303												
	303-304												
	304-305												
	305-306												
	306-307												
	307-308												
S-28*	308-309					Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	309-310					Tan-gray	laminae.	SM	Resumed drilling @ 308'				
	310-311								11/04/2011.				
	311-312												
	312-313												
	313-314												
	314-315												
	315-316												
	316-317												
	317-318												
	318-319												
	319-320												
	320-321												
	321-322												
	322-323												
S-29*	323-324	16-24			Dense	Tan-brn	Silty very fine-fine sand, tr. silt	SM SP	Split spoon sample	0	0	0	0
	324-325	26-30				Tan-brn	laminae.	SM SP					

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/4-7/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	325-326												
	326-327												
	327-328												
	328-329												
	329-330												
	330-331												
	331-332												
	332-333								Stopped @ 333' 11/04.				
	333-334												
	334-335												
	335-336												
	336-337												
	337-338												
S-30*	338-339	18-20			Dense	Gray-Red brn	Silty, very fine-fine sand.	SM	Split spoon sample	0	0	0	0
	339-340	22-26											
	340-341												
	341-342												
	342-343												
	343-344												
	344-345												
	345-346												
	346-347												
	347-348												
	348-349												
	349-350												

Drilling Area Background (ppm): 0

Remarks: 11:15 - Delta onsite to run natural gammal log from GS to 350'.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/7/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	350-351												
	351-352												
	352-353												
S-32*	353-354	18-24			Dense	Gray-red brn	Very fine-med sand, tr. silt	SP	Split spoon sample	0	0	0	0
	354-355	28-32											
	355-356												
	356-357												
	357-358												
	358-359												
	359-360												
	360-361												
	361-362												
	362-363												
	363-364												
	364-365												
	365-366												
	366-367												
	367-368												
	368-369												
	369-370												
	370-371												
	371-372												
	372-373												
S-33	373-374					Gray-red brn	Very fine-med sand, tr. silt	SP	Screened mud rotary	0	0	0	0
	374-375								cuttings.				

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/7/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	375-376												
	376-377												
	377-378												
	378-379												
	379-380												
	380-381												
	381-382												
	382-383												
S-34*	383-384	18-24			Very dense	Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	384-385	28-32				Tan-gray	laminae.	SM	13:15				
	385-386												
	386-387												
	387-388												
	388-389												
	389-390												
	390-391												
	391-392												
	392-393												
	393-394												
	394-395												
	395-396												
	396-397												
	397-398												
	398-399												
	399-400												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

Tetra Tech NUS, Inc.

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/7/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	400-401												
	401-402												
	402-403												
	403-404												
	404-405												
	405-406												
	406-407												
	407-408												
	408-409												
	409-410												
	410-411												
	411-412												
	412-413												
S-35*	413-414	22-25			Very dense	Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	414-415	27-30				Tan-gray	laminae.	SM	14:35				
	415-416												
	416-417												
	417-418												
	418-419												
	419-420												
	420-421												
	421-422												
	422-423												
S-36	423-424	16-24				Tan-gray	Silty fine-med sand, tr. silt	SM	Mud rotary cuttings.				
	424-425	26-30				Tan-gray	laminae.	SM					

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

Tetra Tech NUS, Inc.

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
DATE: 11/7/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	425-426												
	426-427												
	427-428												
	428-429												
	429-430												
	430-431												
	431-432												
	432-433												
S-37*	433-434	20-24			Very dense	Tan-gray	Fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	434-435	29-30				Tan-gray	laminae.	SM	14:35				
							Bottom of boring = 435'						

Drilling Area Background (ppm): 0

Remarks: 16:00 Delta logs borehole from GS to 433'.

Converted to Well: Yes X No ____ Well I.D. #: BPS1-TT-MW307D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Della
DRILLING RIG: Failing 110

BORING No.: BPSI-MW308S
DATE: 11-11-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		0												
							Tan	F sand and silt tr. gravel		Post hole dig to	0	0	0	0
							Blk	F sand and silt some gravel		moist 5' bgs				
											0	0	0	0
							Blk	F-M sand some silt and gravel		moist				
1125		5									0	0	0	0
							Blk DkBrn	F-C sand some silt and gravel		Moist	0	0	0	0
1135		10												
							Blk DkBrn	F-C sand some silt and sm-med pebbles tr. sm.-lg gravel		Moist	0	0	0	0
1140		15												
							Blk DkBrn	F-M sand some silt, sm pebbles sandy gravel		Moist	0	0	0	0
1144		20												
							DK Brn	F-M sand some silt and sm-med pebbles tr. sm. gravel		Moist	0	0	0	0
		25												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Cuttings logged, see MW30D for detailed boring log and gamma log
4 1/4 inch ID x 8 inch OD augers
Plug tack welded in lead auger, knocked out at TD

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: BPSI-MW308S

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW308$
DATE: 11-11-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		25												
							Brn	F-C sand some sm-med pebbles tr. silt and med. gravel		moist	0	0	0	0
1149		30												
							Brn	M-C sand some sm.-med pebbles tr. silt and med. gravel		moist	0	0	0	0
1152		35												
							Brn	M-C sand some sm-med pebbles tr. silt and med gravel		moist	0	0	0	0
1156		40												
							Org Brn	F-M sand tr. silt and sm pebbles		moist	0	0	0	0
1200		45												
							Org Brn	F-M sand tr. silt and sm. pebbles		moist	0	0	0	0
1205		50												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-MW308$

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW303S
DATE: 11-11-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
Time		50												
							org Brn	F-M sand tr. silt and sm pebbles		moist	0	0	0	0
1208		55												
							org Brn	FM sand tr. silt and C. sand		moist	0	0	0	0
1212		60												
							org Brn	F-M sand tr. silt and C. sand		moist	0	0	0	0
		64												
1216		65			EOB 64' bgs									

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: See first page

Converted to Well: Yes X No ____ Well I.D. #: BPS1-MW303S

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
DATE: 10/24/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel,moist.	SM					
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel,moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM					
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM					
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM					
	22-23						moist.						
	23-24												
	24-25												

Drilling Area Background (ppm): 0

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
12" ID HSA borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/25/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25-26												
	26-27												
	27-28												
S-6	28-29					Tan- Lt. brn	Fine to coarse sand and	SP/GP	Screened mud rotary	0	0	0	0
	29-30						fine to coarse gravel, moist.	SP/GP	cuttings.				
	30-31												
	31-32												
	32-33												
	33-34												
	34-35												
	35-36												
	36-37												
	37-38												
S-7	38-39					Tan-brn	Fine to coarse sand and	SP/GP	Screened mud rotary	0	0	0	0
	39-40					Tan-brn	fine to coarse gravel, moist.	SP/GP	cuttings.				
	40-41						Sand and gravel is quartitic.						
	41-42												
	42-43												
S-8	43-44					Tan-brn	Fine to coarse sand and	SP/GP	Screened mud rotary	0	0	0	0
	44-45						fine to coarse gravel, moist.	SP/GP	cuttings.				
	45-46												
	46-47												
	47-48												
	48-49												
	49-50												

Remarks: Lost >100 gallons mud between 43' to 48'.

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/25/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-9	50-51					Tan-brn	Fine to coarse sand and	SP/GP	Screened mud rotary	0	0	0	0
	51-52						fine to coarse gravel, moist.	SP/GP	cuttings.				
	52-53						Sand and gravel is quartz.						
S-10*	53-54	18-23	1.2		Dense	Tan-brn	Fine to coarse sand, little	SP	Split barrel sampler	0	0	0	0
	54-55	30-34	2.0				fine to coarse quartzose gravel,	SP					
	55-56						wet.						
	56-57												
	57-58												
S-11	58-59					Tan-Gray	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	59-60						sand, wet.	SM	cuttings.				
	60-61												
	61-62												
	62-63												
S-12*	63-64	12-18	1.4			Tan-Gray	Silty, micaceous, fine to coarse	SM	Split spoon sample.	0	0	0	0
	64-65	28-35	2.0				sand, trace silt laminae, wet.	SM					
	65-66												
	66-67												
	67-68								Resumed drilling 10/26.				
S-13	68-69					Tan-Gray	Silty, fine to medium sand and	SM ML	Mud rotary cuttings and	0	0	0	0
	69-70						sandy (f-m) silt.	SM ML	geophysical log.				
	70-71						Silty, Sand		Geophysical log.				
	71-72												
	72-73												
	73-74												
	74-75												

Remarks: Stopped drilling @ 68' due to broken hydraulic line. Resumed @ 68' 10/26/11.

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/26/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-14	75-76					Tan-Gray	Silty, fine to medium sand,	SM	Screened mud rotary	0	0	0	0
	76-77						trace silt laminae, wet.	SM	cuttings.				
	77-78												
S-15	78-79					Tan - Gray	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	79-80						sand with silt laminae, trace to	SM	cuttings.				
	80-81												
	81-82												
	82-83												
S-16	83-84					Tan - O. Brn.	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	84-85					Tan - O. Brn.	sand with interbedded silt	SM	cuttings.				
	85-86					Tan - O. Brn.	laminae (O. Brn).	SM					
	86-87						Sandy silt.	SM ML	Geophysical log.				
	87-88												
	88-89												
	89-90												
S-17	90-91					Tan-Gray	Silty, fine to medium sand and	SM ML	Mud rotary cuttings				
	91-92						sandy (f-m) silt.	SM ML	and geophysical log.				
	92-93						Silty, sand.	SM	Geophysical log.				
	93-94									0	0	0	0
	94-95												
	95-96						Silty, sand.	SM	Geophysical log.				
	96-97												
	97-98												
	98-99												
	99-100												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/26/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
S-18	100-101					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	101-102					Tan - Gray	fine sand with silt laminae.	SM ML	cuttings.				
	102-103												
	103-104												
	104-105												
S-19	105-106					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	106-107					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	107-108					Tan - Gray	laminae						
	108-109												
	109-110												
S-20	110-111					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	111-112					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	112-113					Tan - Gray	laminae						
	113-114												
	114-115												
S-21	115-116					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	116-117					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	117-118					Tan - Gray	laminae						
	118-119												
	119-120												
S-22	120-121					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	121-122					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	122-123						laminae						
S-23	123-124					Tan - brn	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	124-125					Tan - brn	f. sand, interbedded silt laminae.	SM ML	cuttings.				

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/26-27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-24	125-126					Tan - brn	Silty, micaceous, very fine to	ML/SM	Screened mud rotary	0	0	0	0
	126-127					Tan - brn	f. sand, interbedded silt laminae.	ML/SM	cuttings.				
	127-128												
	128-129												
	129-130												
	130-131												
	131-132												
	132-133												
S-25	133-134					Tan-Org. brn	Silty, fine to coarse sand , inter-	SM ML	Screened mud rotary	0	0	0	0
	134-135					Tan-Org. brn	bedded silt laminae, tr.to little	SM ML	cuttings.				
	135-136					Tan-Org. brn	black organic material (lignite).						
	136-137												
	137-138												
S-26	138-139					Tan-Org. brn	Silty, micaceous, medium to coars	SM	Split spoon sample.	0	0	0	0
	139-140					Tan-Org. brn	sand with silt laminae, tr. lignite.	SM					
	140-141												
	141-142												
	142-143												
S-27	143-144	25-30				Gray - White	Silty, micaceous, vf to fine	SM	Split spoon sample.	0	0	0	0
	144-145	50-35				Gray - White	sand with silt laminae, tr. lignite.	SM					
	145-146												
	146-147												
	147-148												
	148-149												
	149-150												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151												
	151-152												
	152-153												
S-28*	153-154	24-48	1.5		Dense	Tan - Gray	Silty, micaceous, very fine-med.	SM	Split spoon sample.	0	0	0	0
	154-155	51-54	2.0			Tan - Gray	sand with silt laminae, tr. oxidized	SM					
	155-156						fine gravel.						
	156-157												
	157-158												
	158-159												
	159-160												
S-29	160-161					Tan - Gray	Silty, micaceous, fine to medium	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr.oxidized	SM	cuttings.				
	162-163						fine gravel.						
	163-164												
	164-165												
S-30	165-166					Tan - Gray	Silty, micaceous, fine-medium san	SM	Screened mud rotary	0	0	0	0
	166-167					Tan - Gray	w/silt laminae, tr. Oxidized f. gravel.	SM	cuttings.				
	167-168						Silt and clay	ML CL	Geophysical log.				
	168-169												
	169-170												
S-31	170-171					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	171-172					Gray	silty, very fine to fine sand.	ML/SM	cuttings.				
	172-173						Silt and clay		Geophysical log.				
	173-174												
	174-175												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176						Silt and clay		Geophysical log.				
	176-177												
	177-178												
	178-179												
	179-180												
S-32	180-181					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	181-182					Gray	silty, very fine to fine sand.	ML/SM	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-33	190-191					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	191-192					Gray	silty, very fine to fine sand.	ML/SM	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199						Silt and clay		Geophysical log.				
	199-200						Silt and clay		Geophysical log.				

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201												
	201-202												
	202-203												
S-34	203-204					Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	204-205					Tan - Gray	trace black silt laminae.	SM ML	cuttings.				
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
	210-211												
	211-212												
	212-213												
S-35	213-214					Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	214-215					Tan - Gray	trace black silt laminae.	SM ML	cuttings.				
	215-216												
	216-217												
	217-218												
	218-219												
	219-220												
	220-221												
	221-222												
	222-223												
S-36	223-224					Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	224-225						trace black silt laminae.	SM ML	cuttings.				

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW308
PROJECT NUMBER:	112G02230	DATE:	10/27/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
S-37	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227					Tan - Gray	trace to little silt laminae.	SM	cuttings.				
	227-228												
	228-229												
	229-230												
	230-231						Silt and clay		Geophysical log.				
	231-232						Silt and clay		Geophysical log.				
	232-233												
	233-234					Tan - Gray	Silty, very fine to medium sand	SM	Screened mud rotary	0	0	0	0
	234-235					Tan - Gray	trace fine to medium gravel.	SM	cuttings.				
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-38	240-241					Dark brn to	Clayey coarse sand, tr. to little	SC GC	Screened mud rotary	0	0	0	0
	241-242					org brn	clayey fine gravel.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
DATE: 10/27/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
S-40*	258-259	25-35	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	259-260	52-35	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML					
	260-261												
	261-262						Clay and silt.		Geophysical log.				
	262-263								Geophysical log.				
	263-264								Geophysical log.				
	264-265								Geophysical log.				
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-41*	273-274	18-23	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	274-275	24-27	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML					

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
DATE: 10/27/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	275-276					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	277-278												
	278-279												
	279-280												
	280-281												
	281-282												
	282-283												
S-37*	283-284	16-22	1.5			Tan-Gray	Silty, very fine to fine sand.	SP	Split spoon sample.	0	0	0	0
	284-285	29-27	2.0					SP					
							Bottom of boring = 285'						

Drilling Area Background (ppm): 0

Remarks: Installed monitoring well MW-308, screen from 250' to 260'. Sandpack 245' to 262'.
Bentonite pellet seal from 262 to 266. Sand backfill below 266'. Sandpack from 262' to 245'. Bentonite pellet seal 245 to 241.
Bentonite cement grout mixture 241' to +/- 5' BGS.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW309$
DATE: 11-9-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
		0					light Brn	F-M sand some silt and		moist	0	0	0	0
								sm. to large gravel tr.		Post hole dig				
										to 5' bgs				
		5												
1323							light Brn	F-M sand tr. silt and		Moist	0	0	0	0
								sm. to lrg pebbles						
		10												
1328							org Brn	F-M sand some sm. to med pebbles		moist	0	0	0	0
								tr. C. sand and silt						
		15												
1333							org Brn	F-M sand tr. C. sand,		moist	0	0	0	0
								silt and sm. pebbles very few large pebbles						
		20												
1337							light Brn	M sand and gravel (sm to lg)		Moist	0	0	0	0
								some silt C. sand						
		25												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Cuttings logged, See MW309D for detailed boring log and gamma log
4 1/4 ID x 8" OD augers in 5' segments
Plug in lead auger tack welded, Knocked out at TD

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: BPS1-MW309$

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPSI-MW309$
DATE: 11-9-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		25												
1340							light Brn	M-C sand and (sm. to lg gravel)		Moist	0	0	0	0
										Collect 1 gallon				
										zig lock of soil cuttings				
										from 0-30' bgs				
		30								Composite@1340				
1344							light Brn	M-C Sand and (sm. to lg) gravel		moist	0	0	0	0
								tr. silt+F. Sand						
		35												
1348							light Brn	M-C Sand and (sm. to lg) gravel		Moist	0	0	0	0
								tr. silt and tr. sand						
		40												
1351							org Brn	F-M Sand some sm. gravel		moist	0	0	0	0
								tr. silt						
		45												
1355							org Brn	F-M Sand tr. sm. to med pebbles and silt		moist	0	0	0	0
		50												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page for details

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: BPSI-MW309$

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWLRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW309S
DATE: 11-9-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		50												
1357							org Brn	F-M sand tr. (sm. to med) pebbles and silt		Moist	0	0	0	0
		55												
1400							org Brn	F-M sand tr. (sm. to med) pebbles and silt		Moist	0	0	0	0
		60												
1404							org Brn	F-M sand tr. C. sand and silt		moist	0	0	0	0
					EOB 63' bgs					driller notes the				
		65								start of a kick at 63' bgs				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page for details

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: BPS1-MW309S

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing

BORING No.: BPS1-MW309I
DATE: 11-7-11
GEOLOGIST: J. Birkett
DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
1115		0					Brn	F-C sand some silt and pebbles		dry	0	0	0	0
										Post-hole dig to 5' bgs				
1125		5					Brn	F-C sand some silt and sm. to lg pebbles		moist	0	0	0	0
		10												
1130							Brn	FC sand some silt and sm. to lg pebbles		moist	0	0	0	0
		15												
1135							Brn	FC sand some silt and sm. to lg pebbles		moist	0	0	0	0
		20												
1140							Brn	F-M sand some silt tr. sm. to med pebbles		moist	0	0	0	0
		25												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Cuttings logged, see MW309D for detailed logs w/gamma
4 1/4" ID x 8" OD augers in 5' segments
Plug in last auger tack welded

Converted to Well: Yes X No ____ Well I.D. #: BPS1-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
DATE: 11-7-11
GEOLOGIST: J. Birkett
DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
		25												
1145						Org	Brn	F-M sand some silt		moist	0	0	0	0
								tr. pebbles and C. sand						
		30												
1150						Org	Brn	M sand some silt and F sand		Moist	0	0	0	0
								tr. pebbles and C. sand sm. to lrg						
		35												
1155						Org	Brn	M. sand some silt and F sand						
								tr. pebbles and C sand sm. to lg		moist	0	0	0	0
		40												
1307						Org	Brn	F-M sand tr. silt, C. sand, and small tumed pebbles		moist	0	0	0	0
		45												
1310						Org	Brn	F-M sand tr. silt and C. sand very few sm. pebbles		moist	0	0	0	0
		50												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: BPSI-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
DATE: 11-7-11
GEOLOGIST: J. Birkett
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		50												
1315						Org	Brn	F-M sand tr. silt and C. sand		Moist	0	0	0	0
								Very few sm. to med. pebbles						
		55												
1319						Org	Brn	F-M sand tr. silt and C. sand		Moist	0	0	0	0
								very few sm. to med pebbles						
		60												
1323						Org	Brn	F-M sand tr to some sm. pebbles		moist to wet	0	0	0	0
								tr. silt and C. sand						
										Driller notes				
		65								clay around 64' bgs in 4' thick				
1329						ORG	BRN	F-M sand tr to some silt very few pebble		wet	0	0	0	0
							light Brn	F-M sand some silt		wet	0	0	0	0
								very few pebbles						
		70												
1333							light Brn	F-M sand some silt		wet	0	0	0	0
								tr. C. sand very few pebbles						
		75												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: BPSI-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW309I
DATE: 11-7-11
GEOLOGIST: J. Birkett
DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		75												
1339						Org	light Brn	F-M sand some silt very few small pebbles		wet	0	0	0	0
										Drillers notes a small kick at 76'				
		80												
1343						Org	GBrn light	M-C sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
		85												
1347							light Brn	M-C sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
		90												
1352							light Brn	M sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
		95												
1356							light Brn	F-M sand some silt and clay tr. C. sand and sm. pebbles		wet sticky cuttings	0	0	0	0
		100								Filled bucket of front end loader driller leave to put in roll off				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
DATE: 11-7-11
GEOLOGIST: J. Birkell
DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		100												
1409							light Brn	F-M sand some silt/clay		wet sticky	0	0	0	0
								tr. C. sand and sm. pebbles						
		105												
1435							light Brn	F-M sand some silt/clay		wet sticky	0	0	0	0
								tr. C. sand						
		110												
1439							light Brn	silty F-M sand tr. C. sand		wet sticky	0	0	0	0
		115												
1444							light Brn	silty F-M sand tr. C. sand		wet	0	0	0	0
		120												
1451							light Brn	silty F-M sand tr. C. sand		wet	0	0	0	0
		125												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: See First page

Converted to Well: Yes X No _____ Well I.D. #: BPSI-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
DATE: 11-7-11 and 11-8-11
GEOLOGIST: J. Birkett
DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		125												
1455							light Brn	silty F-M sand t. C. sand		cuttings" water content increasing wet	0	0	0	0
11-7-11		130												
11-8-11							light Brn	silty F-M sand		wet	0	0	0	0
0735														
		135												
0741							light Brn	silty F-M sand		wet	0	0	0	0
		140												
0746							light Brn	F-M sand some silt		wet	0	0	0	0
		145												
0750							light Brn	F-M sand some silt		wet	0	0	0	0
		150												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: See First page

Converted to Well: Yes X No ____ Well I.D. #: BPSI-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWIRP Bethpage
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Fa
DRILLING RIG: Failing 110

BORING No.: BPS1-MW309I
DATE: 11-8-11
GEOLOGIST: J. Birkell
DRILLER: J. Gueci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
		150												
0753							light Brn	F-M sand some silt		wet	0	0	0	0
		155												
0758							light Brn	F-M sand some silt		wet	0	0	0	0
		160												
0803							light Brn	F-M sand some silt		wet	0	0	0	0
										unload cuttings				
		165												
0819							light Brn	F-M sand some silt tr. C sand		wet	0	0	0	0
		170												
					EOB 170' bgs									
		175												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: See first page

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-MW309I

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
DATE: 10/11/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
S-1	0-1					Dark Brn	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						tr.-little, med. Gravel,moist.	SM	BPS1-TT-MW309-0005				
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						tr.-little, med. Gravel,moist.	SM	BPS1-TT-MW309-0510				
	7-8												
	8-9												
	9-10												
S-3	10-11					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1015				
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1520				
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM	BPS1-TT-MW309-2025				
	22-23						moist.						
	23-24												
	24-25												

Drilling Area Background (ppm): 0

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
12" ID HSA borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/13/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan- Lt. brn.	Fine to coarse sand and	SM/GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel, moist.	SM/GM	cuttings.				
	27-28												
	28-29												
	29-30												
S-7	30-31					Tan- Lt. brn.	Silty, med.-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	31-32						little- med. to coarse gravel,	SM/GM	cuttings.				
	32-33						moist.						
	33-34												
	34-35												
S-8	35-36					Tan- Lt. brn.	Silty, med.-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	36-37						little- med. to coarse gravel,	SM/GM	cuttings.				
	37-38						moist.						
	38-39												
	39-40												
S-9	40-41					Light brn.	Silty, med.-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	41-42						little- med. to coarse gravel,	SM/GM	cuttings.				
	42-43						moist.						
	43-44												
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	SW	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel,	SW	cuttings.				
	47-48						moist.						
S-11*	48-49	12-16				Tan	Silty, med.-coarse sand, wet.	SM	Split spoon sample	0	0	0	0
	49-50	18-20						SM					

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/13/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-12	50-51					Light brn.	Fine to coarse sand and	SM/GM	Screened mud rotary	0	0	0	0
	51-52						fine to coarse gravel, moist.	SM/GM	cuttings.				
	52-53												
	53-54												
	54-55												
S-13	55-56					Tan- Lt. brn.	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58												
S-14*	58-59	14-17				Tan- Org. brn.	med. to coarse sand,	SP	Split spoon sample.	0	0	0	0
	59-60	19-23					moist to wet.	SP					
	60-61												
	61-62												
	62-63												
	63-64												
S-15	64-65					Tan - brn.	Sandy (fine to med.) Silt	ML SM	Screened mud rotary	0	0	0	0
	65-66					Tan - brn.		ML SM	and geophysical log.				
	66-67					Tan - brn.		ML SM					
	67-68					Tan - brn.		ML SM					
	68-69					Tan - brn.		ML SM					
	69-70												
S-16	70-71					Tan - brn.	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73												
	73-74												
	74-75												

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/13/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-14	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, tr. to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-15	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82						sand with silt laminae, tr. to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-16	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, tr. to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-17	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92						sand with silt laminae, tr. to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												
	99-100												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
DATE: 10/ /2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-18	100-101					Tan - Org. brn	Silty, fine to med. sand	ML/SM	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, tr. to	ML/SM	cuttings and gephysical				
	102-103						little lignite		log.				
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
	108-109												
	109-110												
S-19	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/SM	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae, tr. to	ML/SM	cuttings.				
	112-113						little lignite						
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
	118-119												
	119-120												
S-20	120-121					Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	121-122						sand with silt laminae, tr. to	SM	cuttings.				
	122-123						little lignite						
	123-124						Sandy (fine to med.) Silt	ML SM	Geophysical log.	0	0	0	0
	124-125							ML SM					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - PCB Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
DATE: 10/ /2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
	128-129												
	129-130												
S-21	130-131					Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	131-132						sand with silt laminae, tr. to	SM	cuttings.				
	132-133						little lignite						
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
S-22	138-139	15-20				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	15-20					sand with silt laminae, tr. lignite.	SM					
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147												
	147-148												
S-23	148-149	10-12				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	149-150	15-20					sand with silt laminae, tr. lignite.	SM					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No

Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/ /2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151												
	151-152												
	152-153												
	153-154												
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-24	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr. lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165												
	165-166												
	166-167												
	167-168												
	168-169												
	169-170												
S-25	170-171					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/SM	cuttings.				
	172-173												
	173-174												
	174-175												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/14/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176												
	176-177												
	177-178												
	178-179												
	179-180												
S-26	180-181					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	181-182						silty, very fine to fine sand.	ML/SM	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-27	190-191					Gray	Silty, micaceous, sandy silt and	ML/SM	Screened mud rotary	0	0	0	0
	191-192						silty, very fine to fine sand.	ML/SM	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199												
	199-200												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/14/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-28	200-201					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202						sand with silt laminae, tr. lignite.	SM	cuttings.				
	202-203												
	203-204												
	204-205												
	205-206												
	206-207												
	207-208												
	208-209												
	209-210												
S-29	210-211					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212						sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213												
	213-214												
	214-215												
	215-216												
	216-217												
S-30	217-218					Dark brn.	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219					Dark brn.	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220												
	220-221												
	221-222												
	222-223												
	223-224												
	224-225												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/14/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227						tr. to little silt laminae.	SM	cuttings.				
	227-228												
	228-229												
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-32	240-241					Dark brn. to	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	241-242					org. brn.	little to some silt, oxidized, wet.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Site 1 - Investigation
PROJECT NUMBER: 112G02230
DRILLING COMPANY: Delta Drilling
DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
DATE: 10/17/2011
GEOLOGIST: J. Ferguson
DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-33	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, tr. silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
	258-259												
	259-260												
	260-261												
	261-262												
	262-263												
	263-264												
S-34	264-265					Tan - Gray	Clayey, micaceous f.sand and	SC CL	Screened mud rotary	0	0	0	0
	265-266					Tan - Gray	sandy, clay.	SC CL	cuttings and geophysical				
	266-267								log.				
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-35*	273-274	18-23			Stiff	Dark - Gray	Sandy (fine) clay and clayey	SC CL	Split spoon sample.	0	0	0	0
	274-275	24-27				to Gray	fine sand (interbedded).	SC CL					

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: Installed 2" ID Sch 40 PVC Well Screen from 252' to 262'.
#1 Silica sandpack from 248' to 262'.
4' Bentonite pellet seal 244' to 268'. Cetco bentonite/portland cement annular seal to 10' BGS.

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	Site 1 - Investigation	BORING No.:	BPS1-TT-MW309
PROJECT NUMBER:	112G02230	DATE:	10/17/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / HSA	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	275-276					Tan - Gray	Sandy (fine) clay and clayey	SC CL	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand (interbedded).	SC CL	cuttings and geophysical				
	277-278							SC CL	log.				
	278-279							SC CL					
	279-280												
	280-281												
	281-282												
	282-283												
S-37*	283-284	16-22				Tan-Gray	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	284-285	29-27						SP SM					
							Bottom of boring = 285'						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

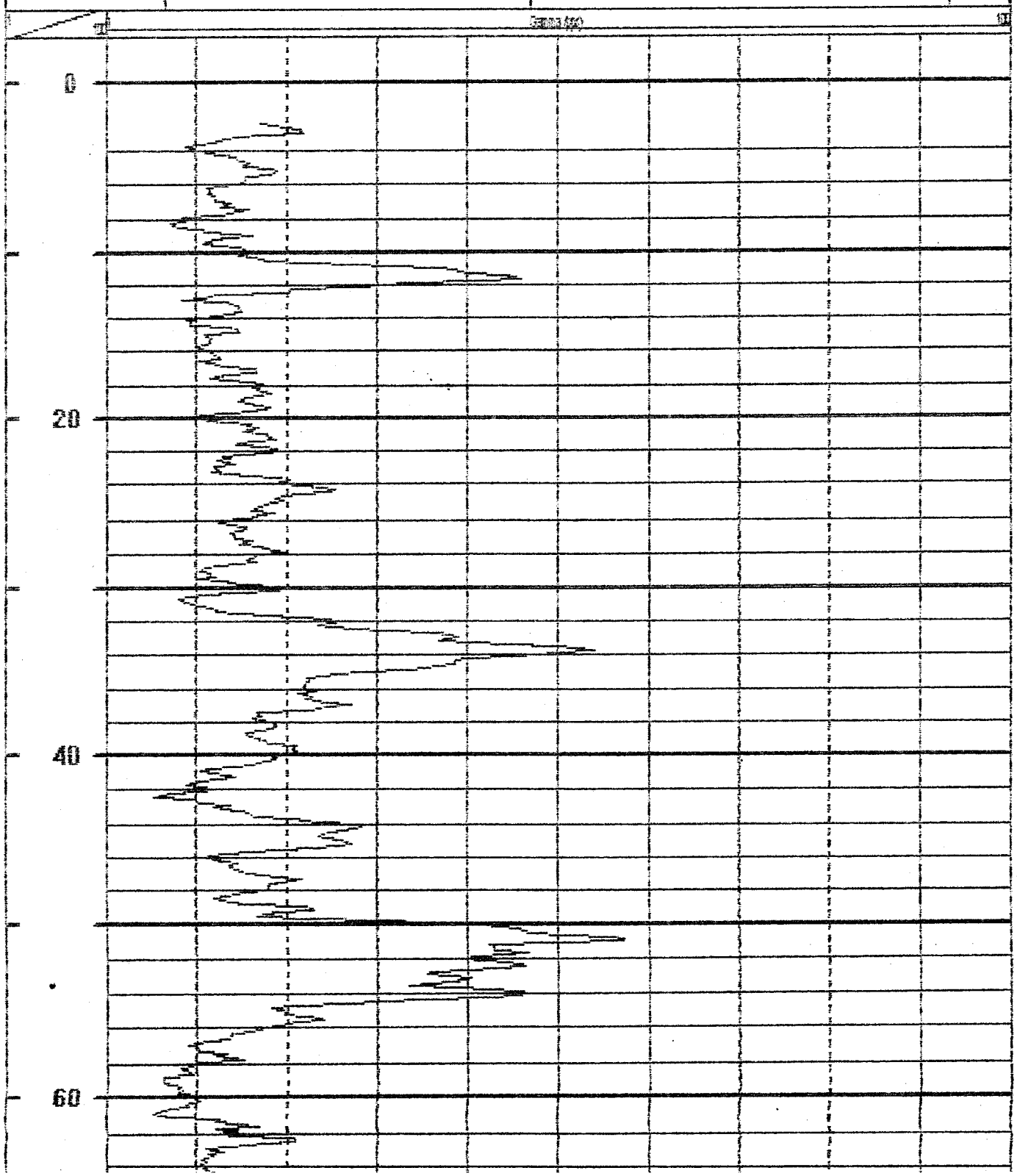
Drilling Area Background (ppm): 0

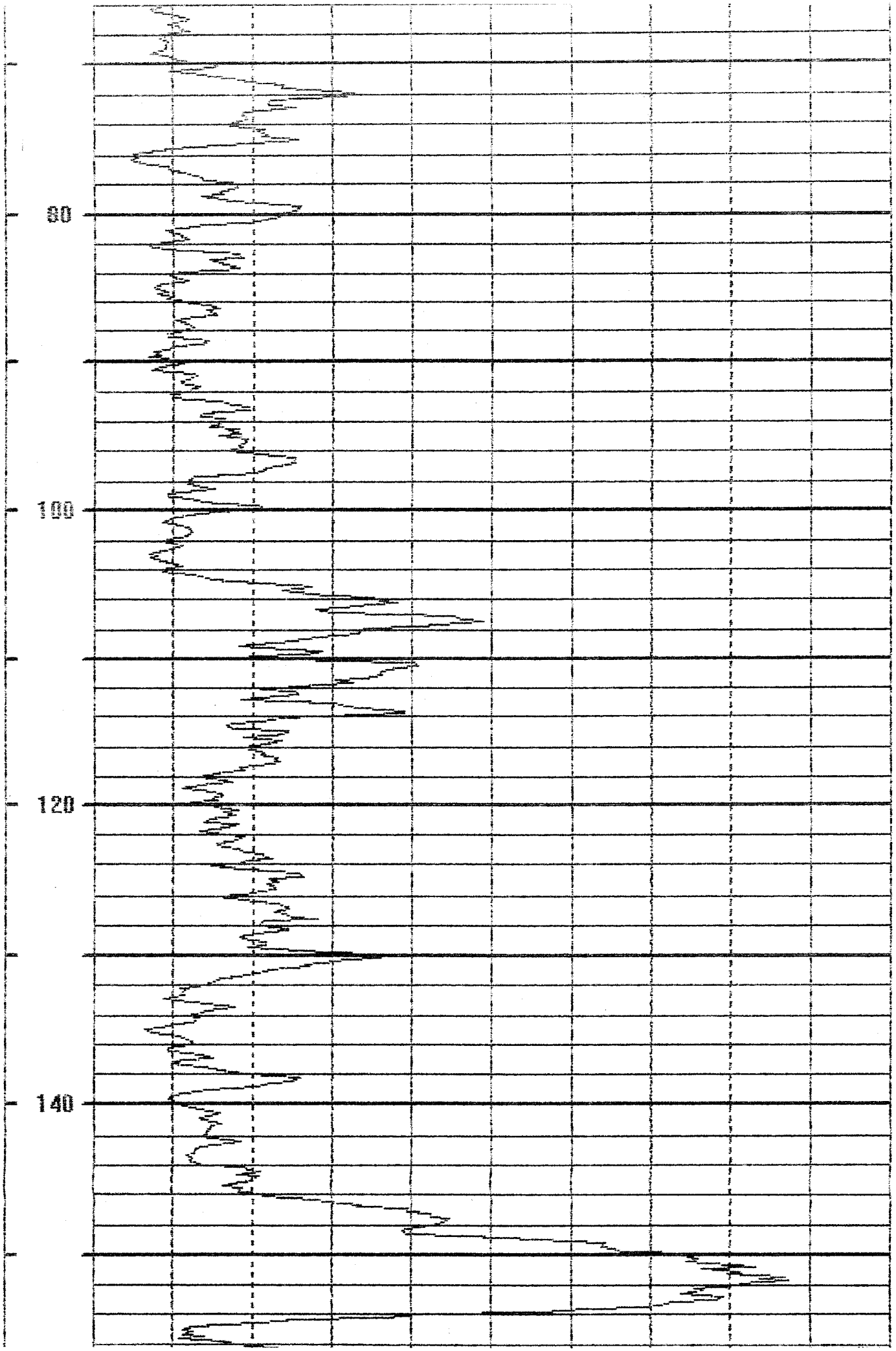
Remarks:

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

Gamma Logs

	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: NWIRP BETHPAGE		
Well	BP-S1-TT-MWS05	Depth Driller / Depth Logger	
Date	11/17/11	BH Fluid	Logged by: exrc
File Name	723	Witness: J. FERGUSON	

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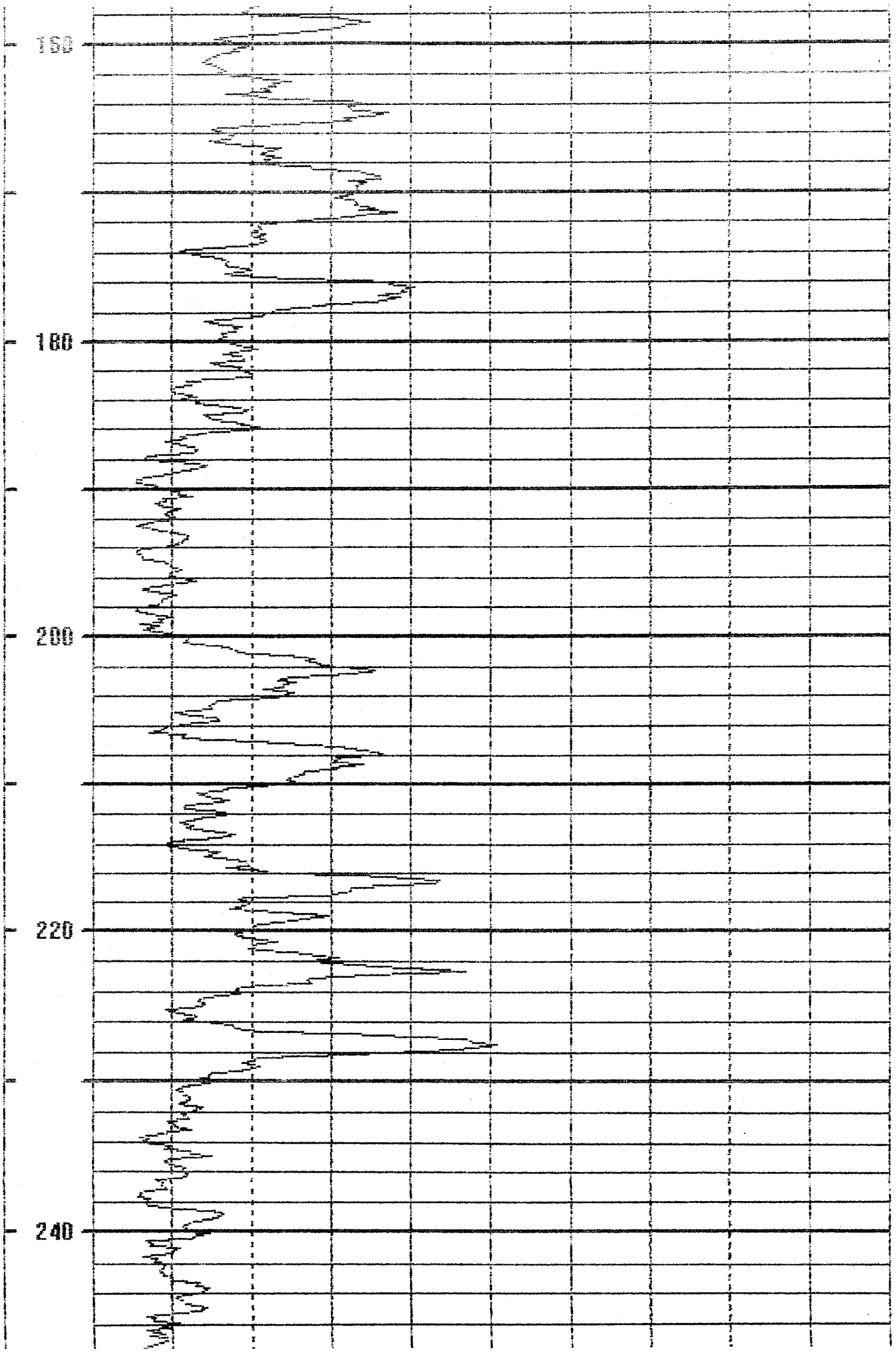
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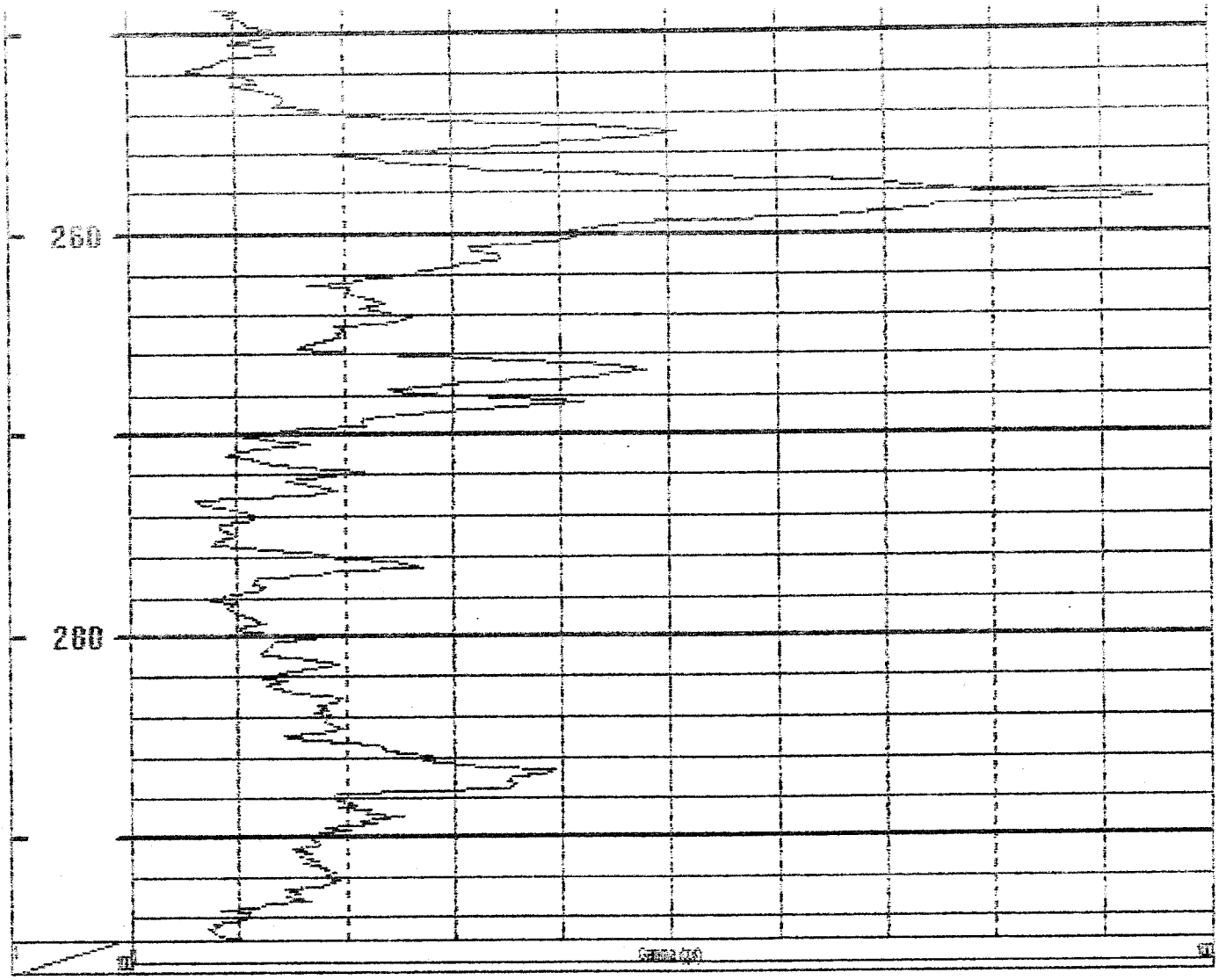
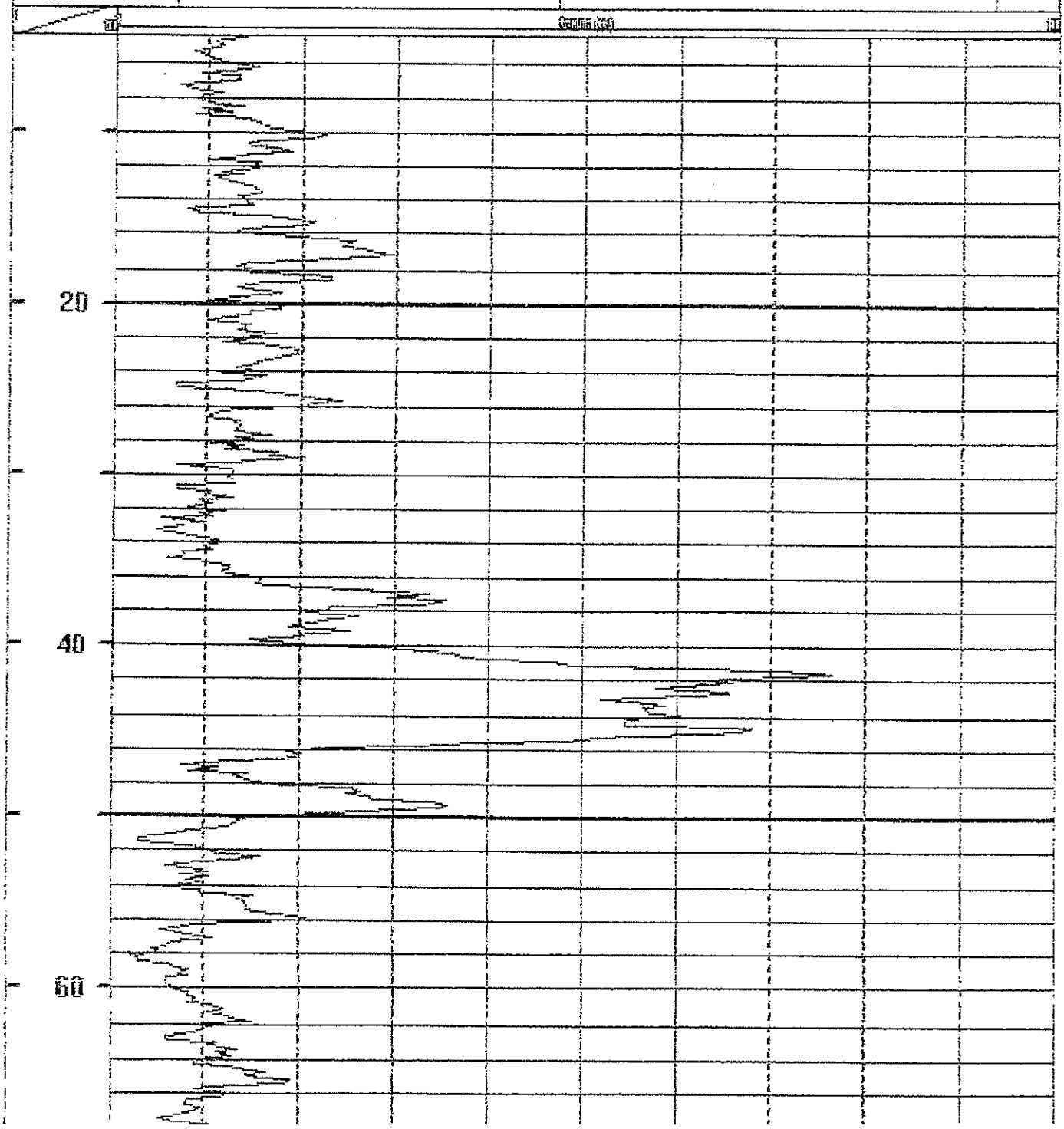
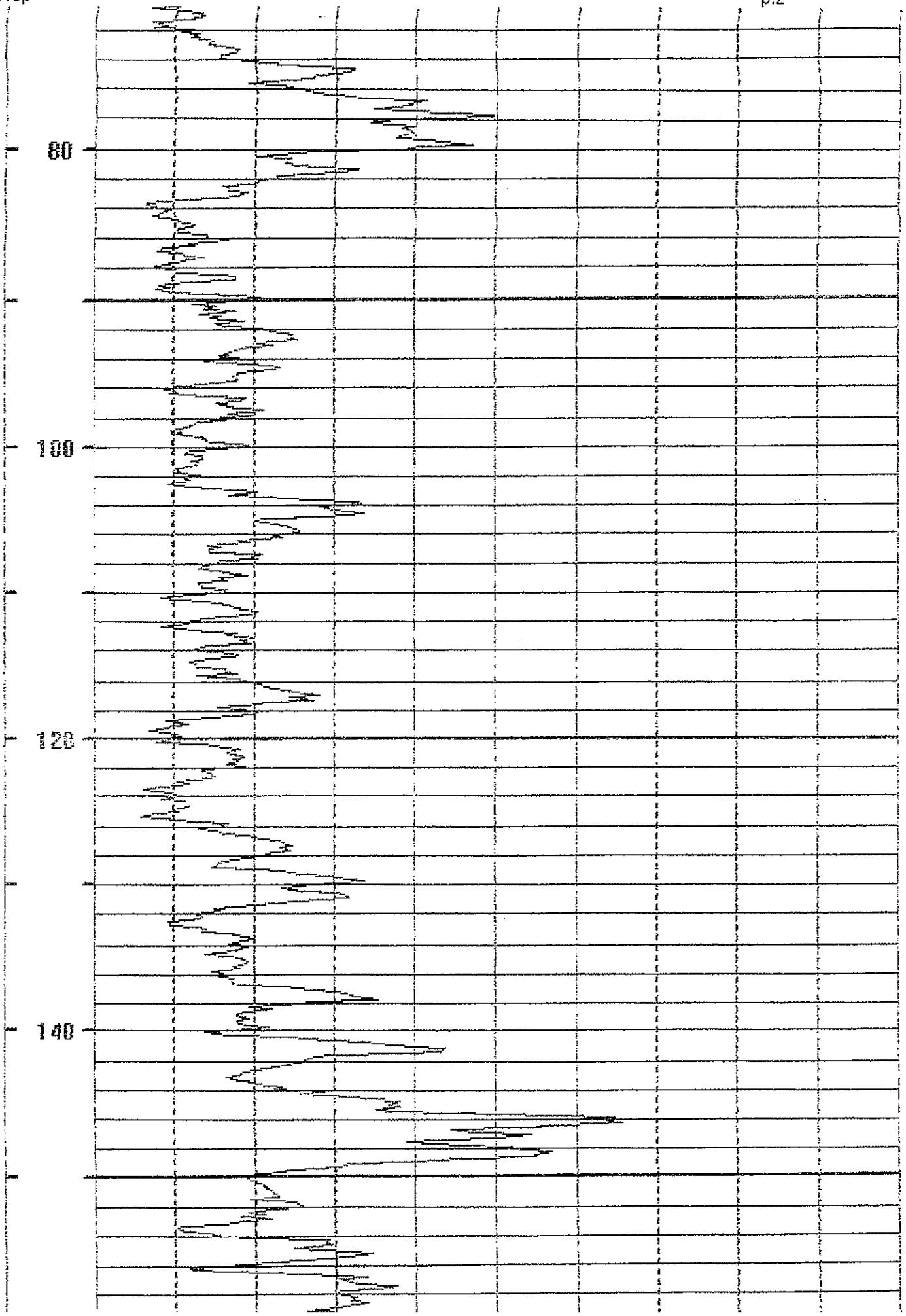

260
280

	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: NWFP BETHPAGE		
Well	BP-S1-TT-MW336	Depth Driller	
		Depth Logger	
Date	11/29/11	BH Fluid	Logged by: cmo
File Name	722	Witness: VINCE	

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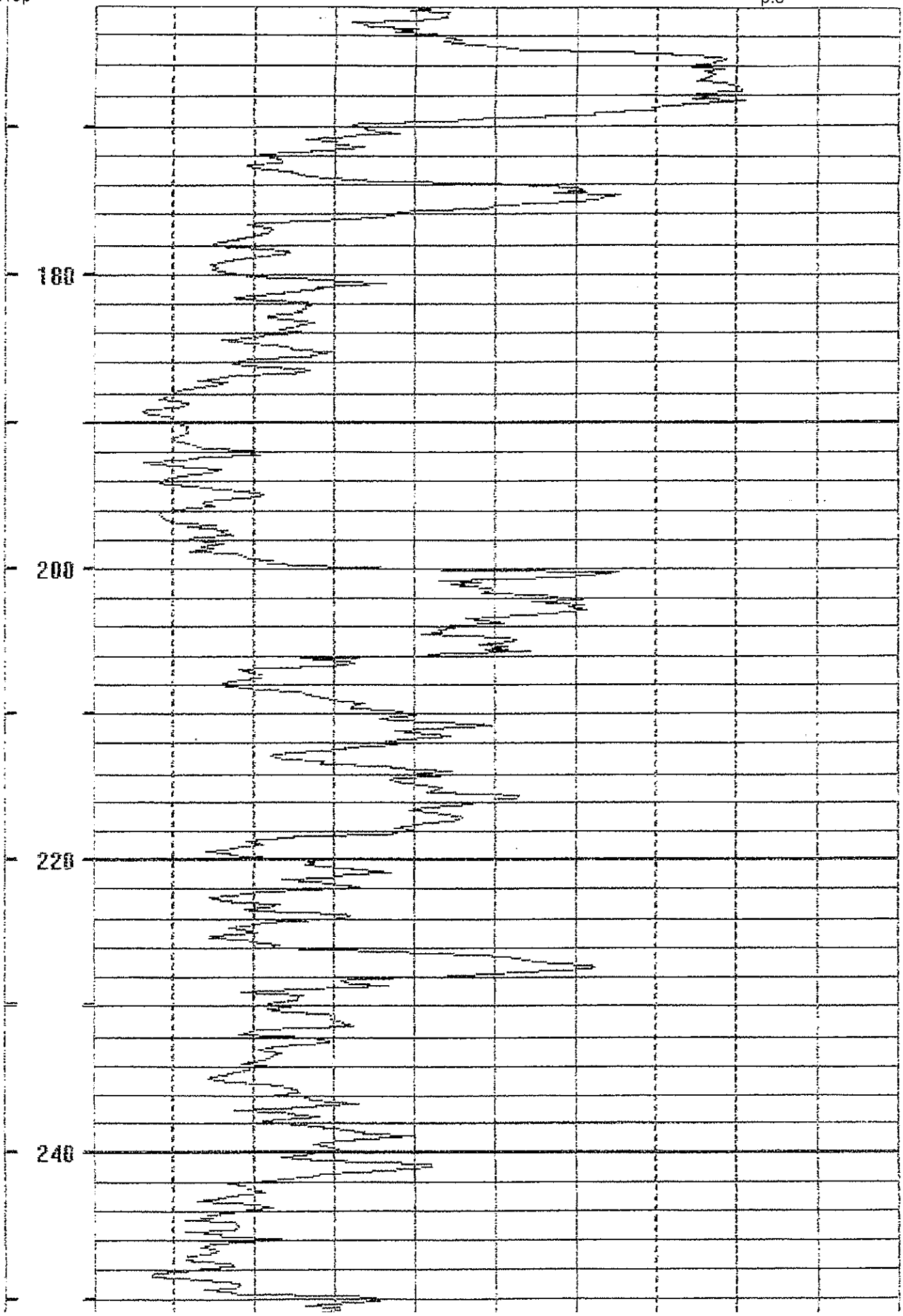
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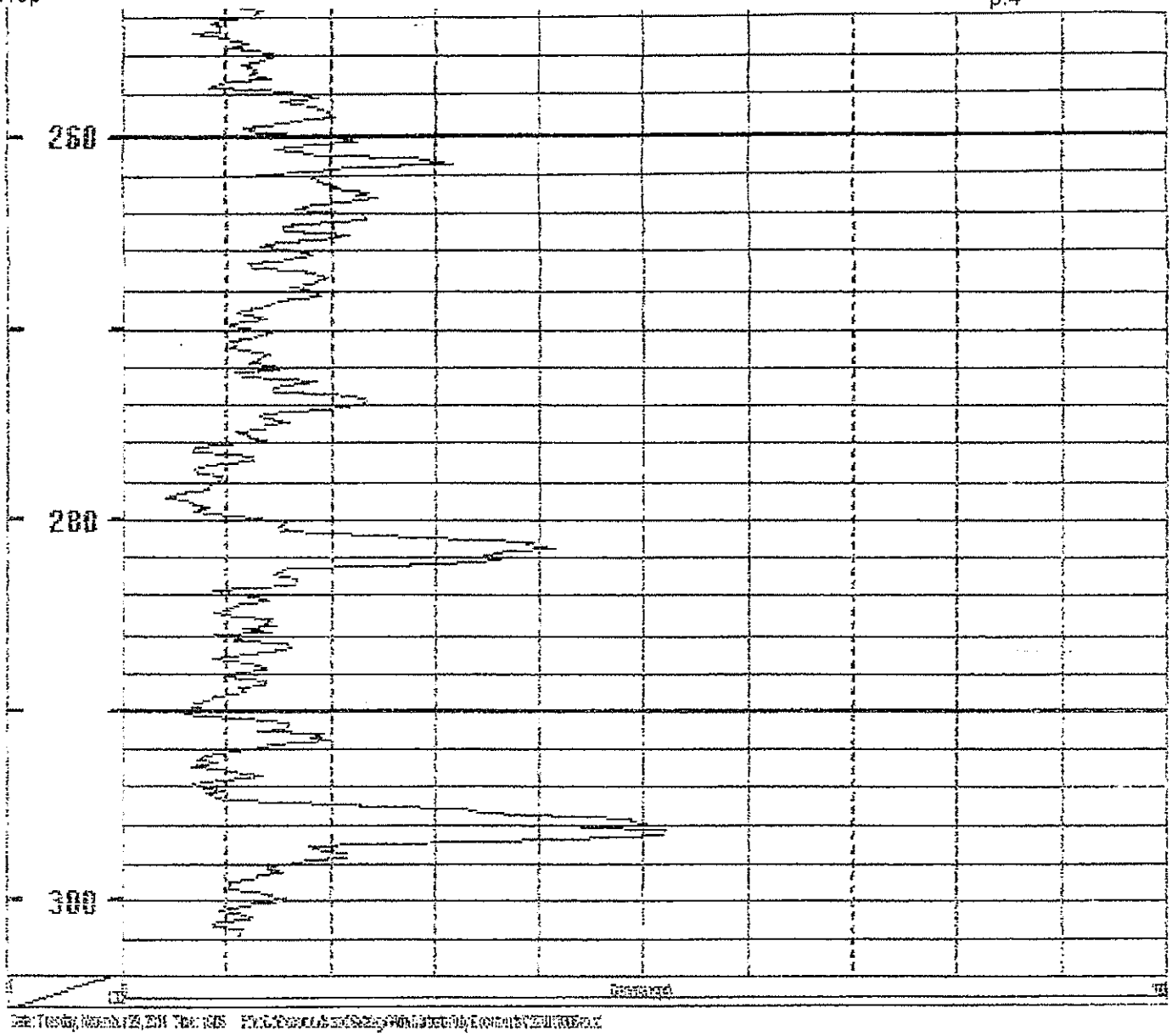
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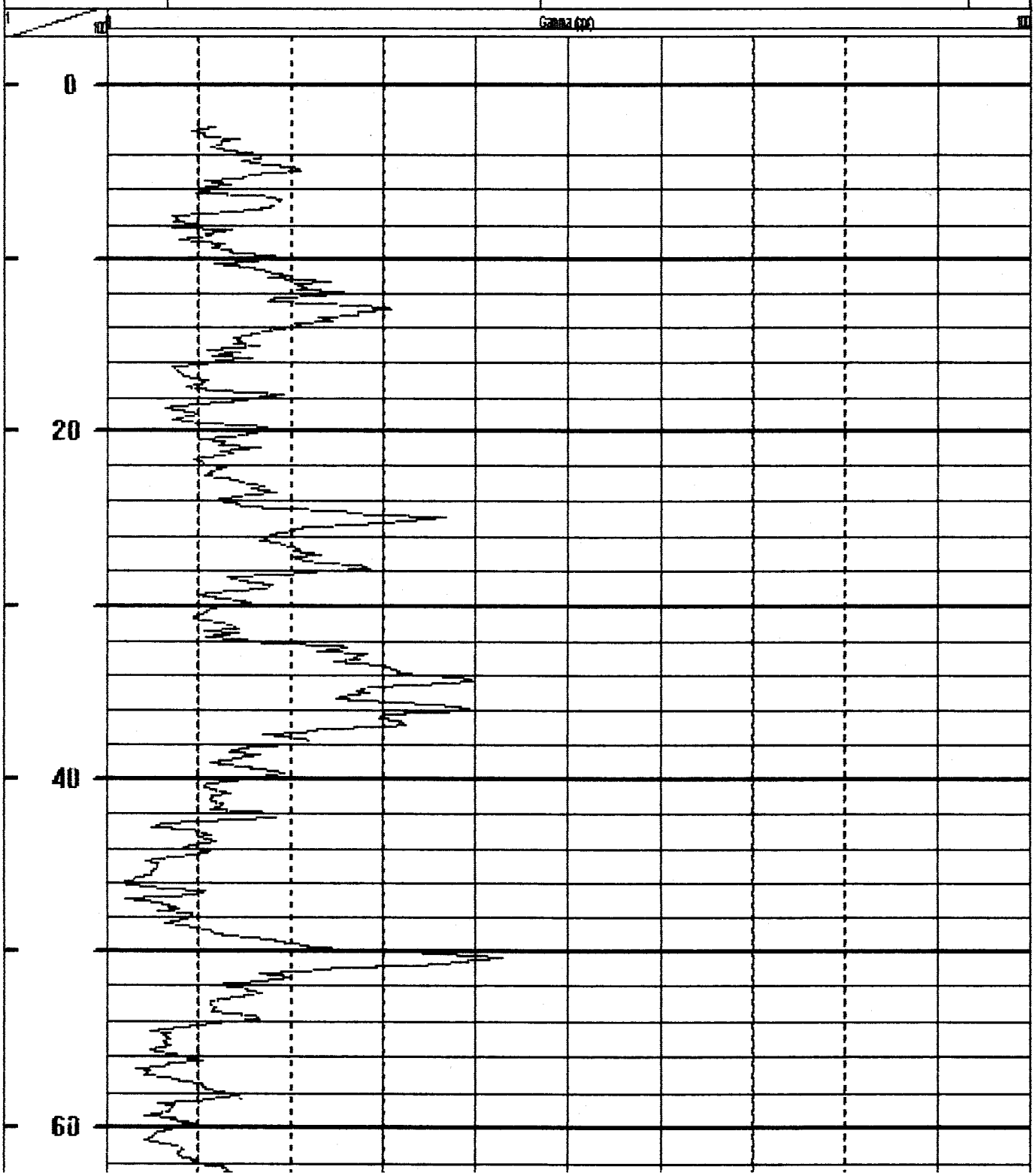
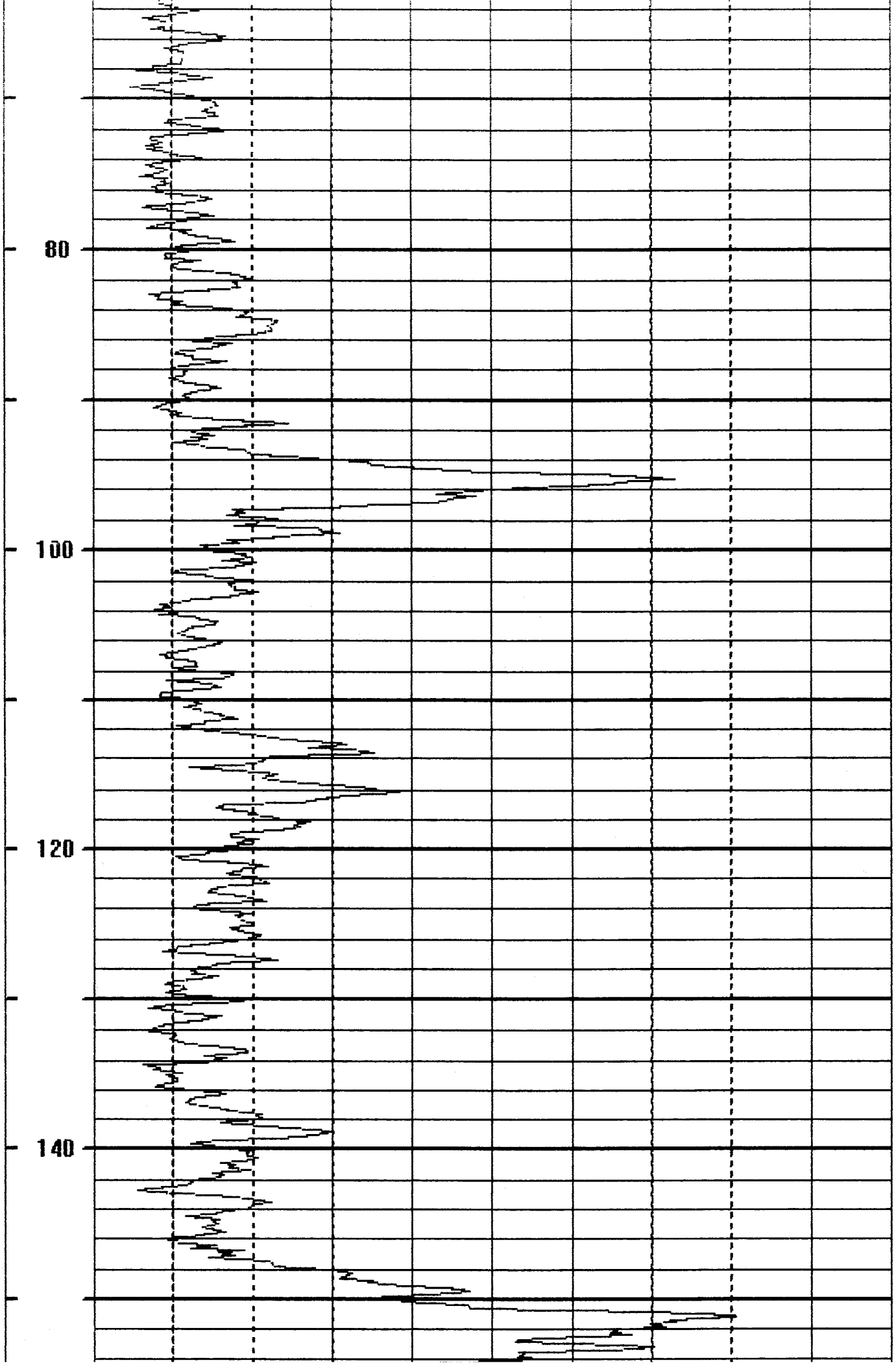
Date: Monday, November 07, 2011 Time: 1630 File: C:\Documents and Settings\Administrator\My Documents\722MW307D2.rd

	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: NWIRP BETHPAGE		
Well	BP-S1-TT-MW307	Depth Driller	
		Depth Logger	
Date	11/07/11	BH Fluid	Logged by: cmc
File Name	722	Witness: J. FERGUSON	

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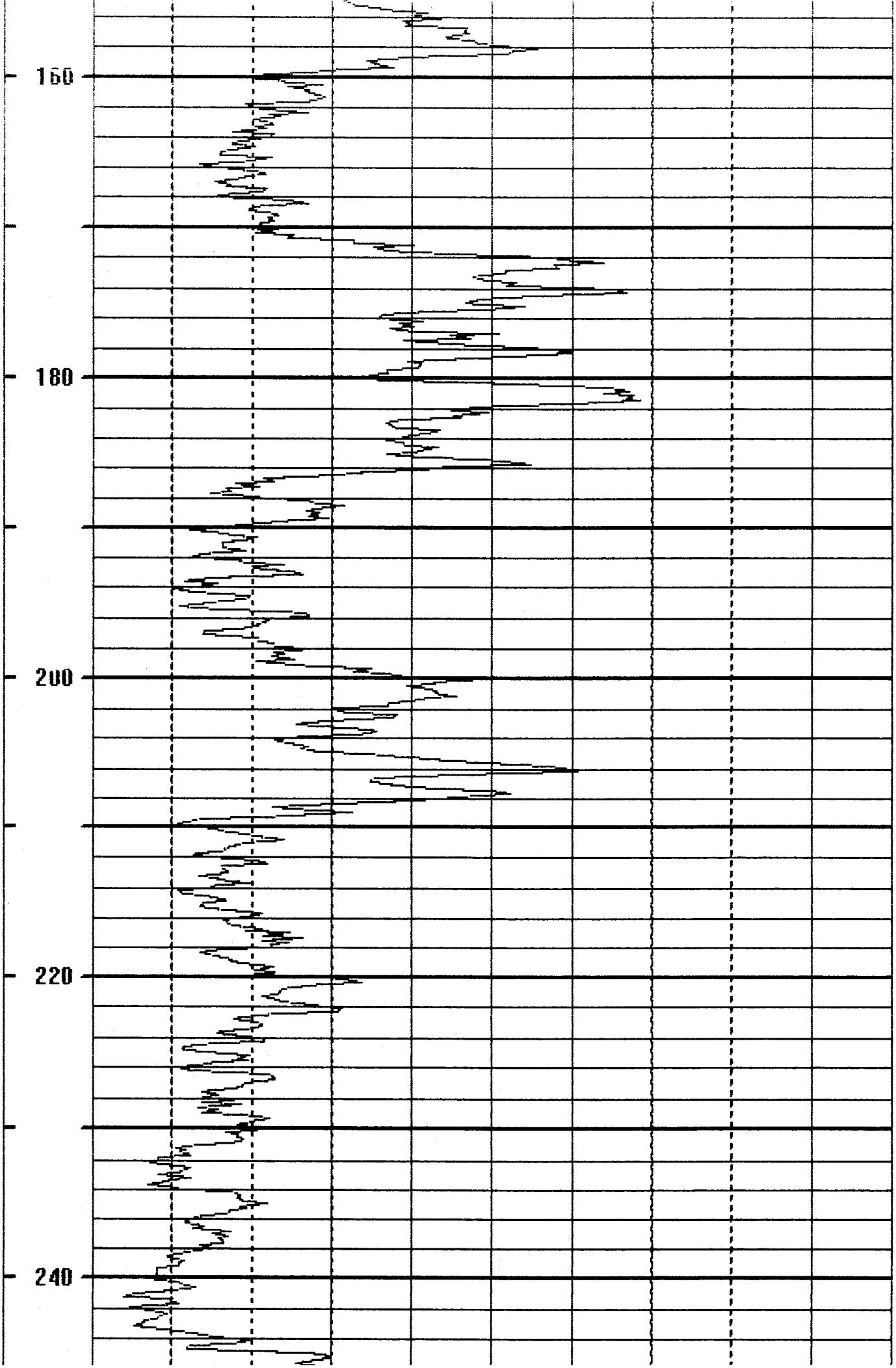
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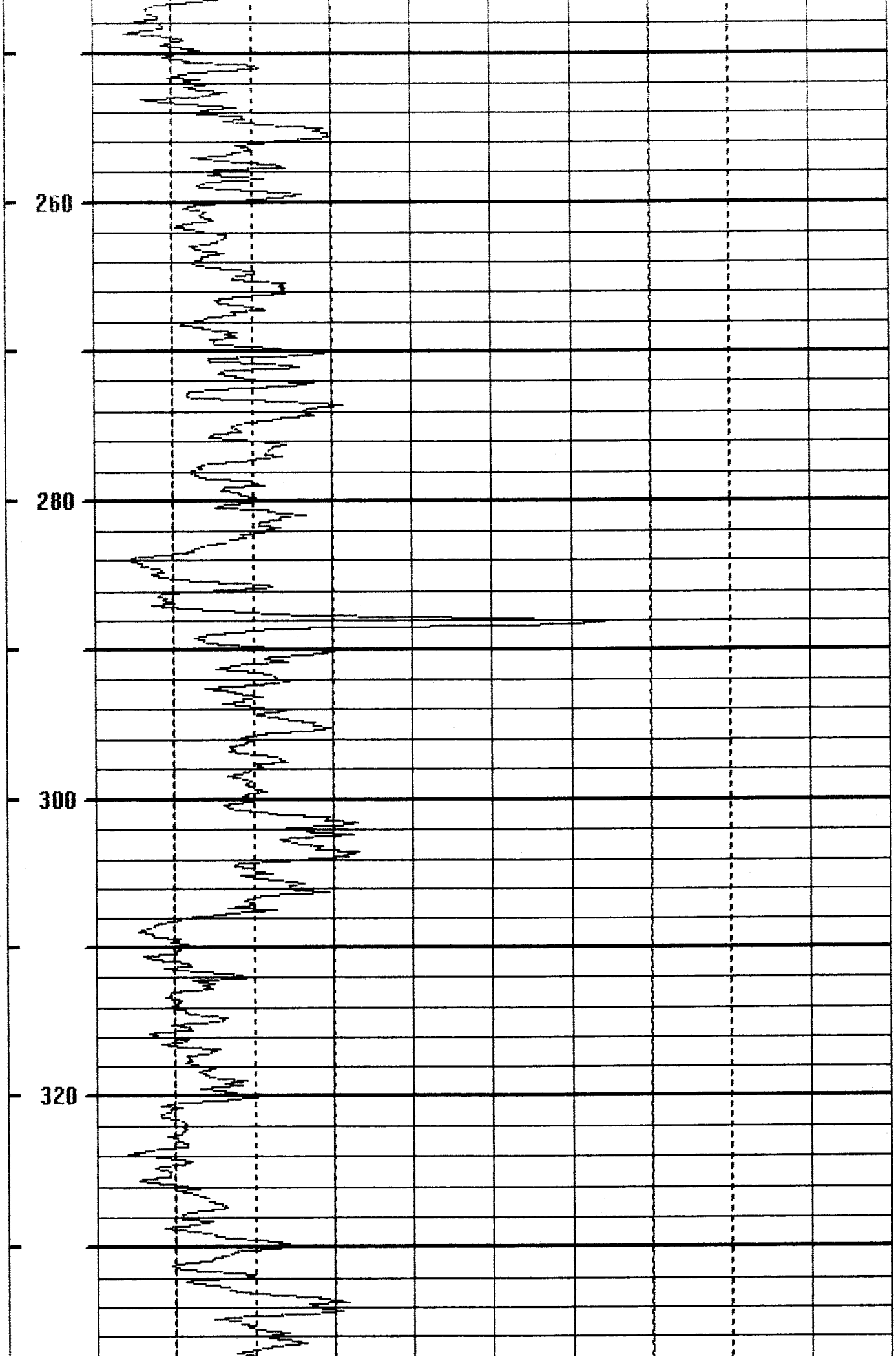
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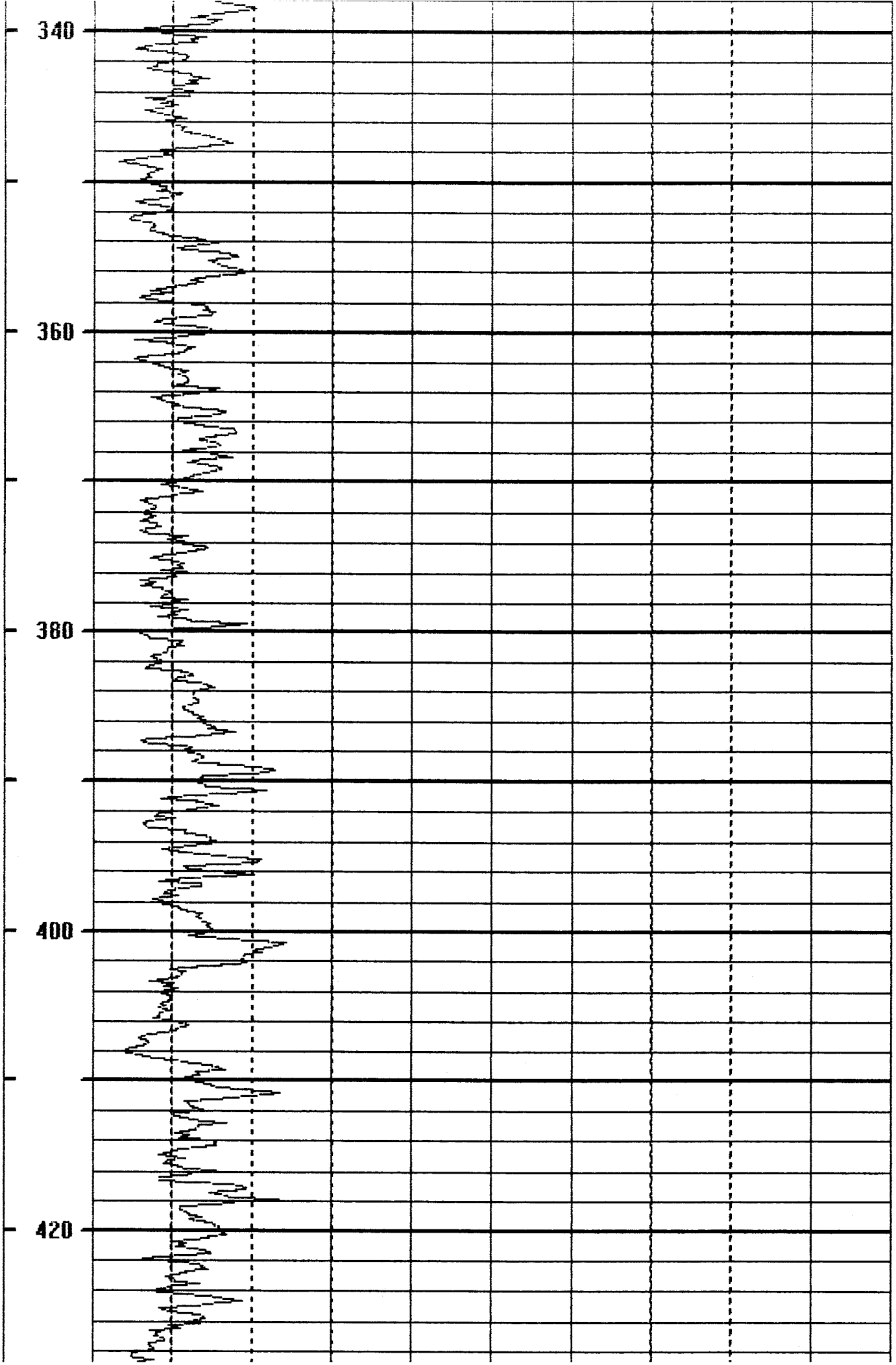
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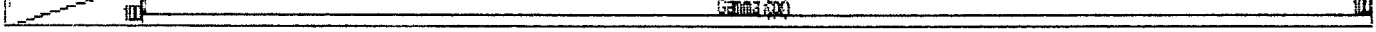
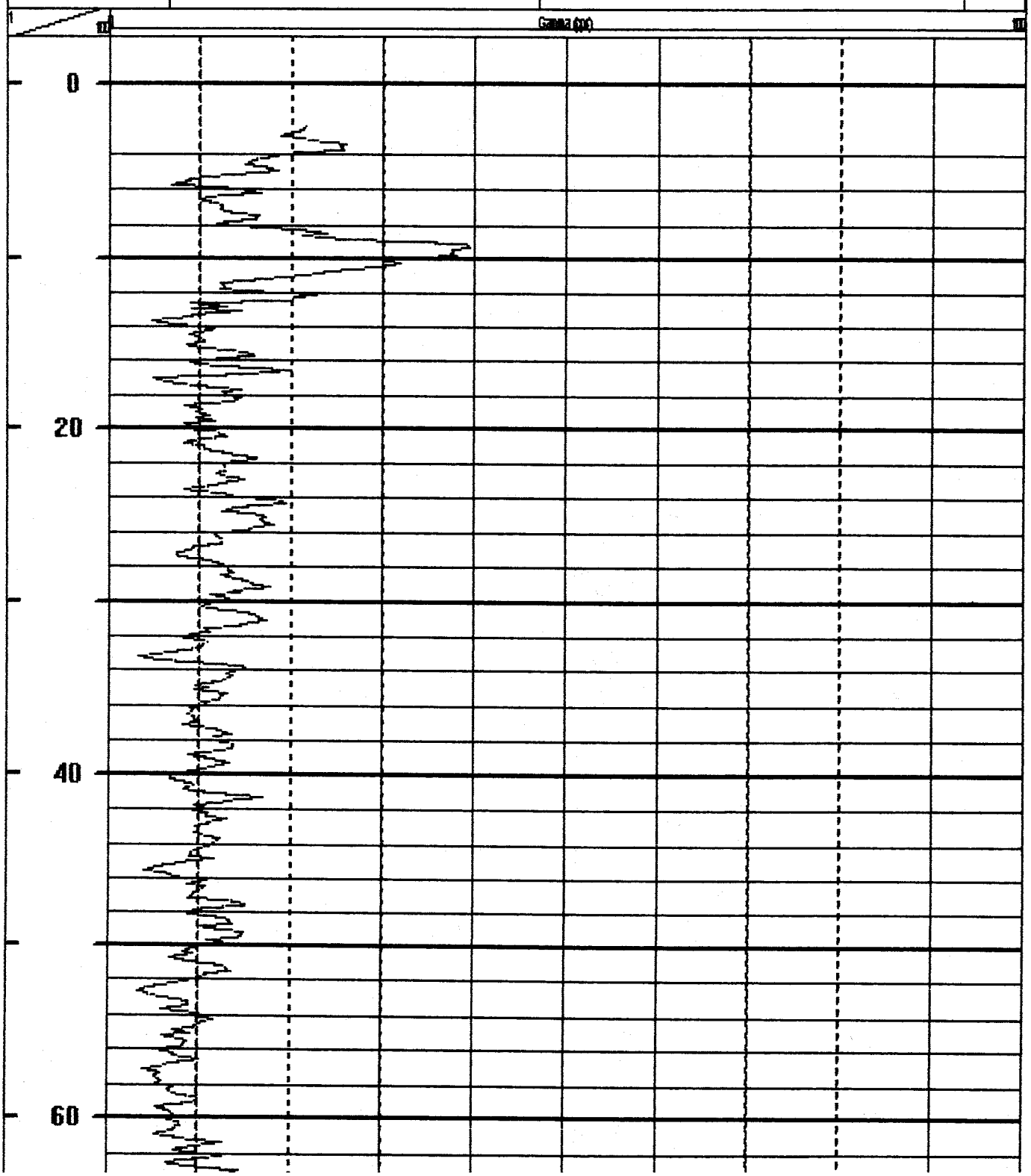
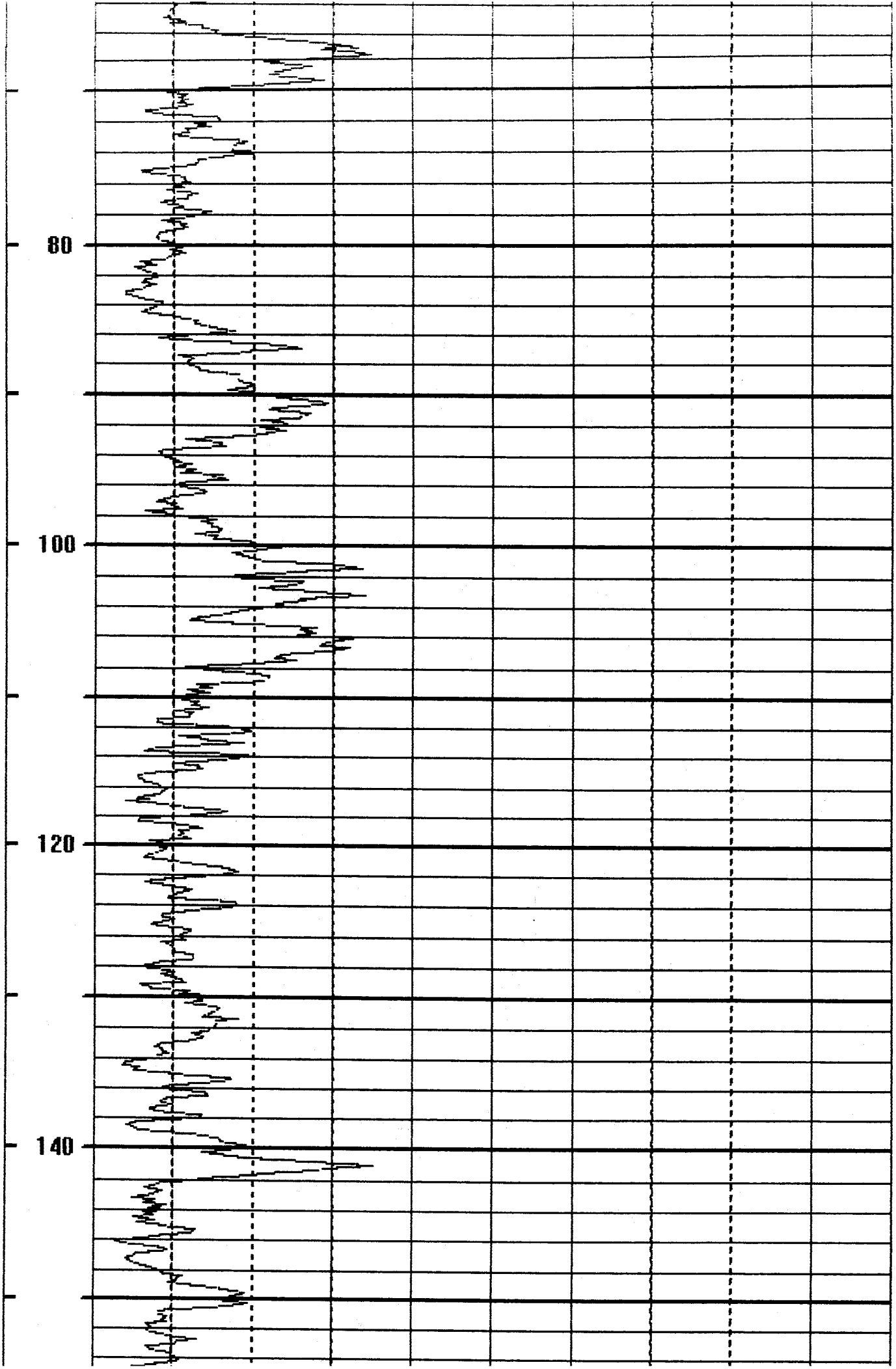


Date: Monday, November 07, 2011 Time: 16:21 File: C:\Documents and Settings\Administrator\My Documents\722\MW007D2.rd

	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: NWIRP BETHPAGE		
Well	BP-S1-TT-MW308	Depth Driller / Depth Logger	
Date	10/27/11	BH Fluid	Logged by: [illegible]
File Name	722	Witness: J. FERGUSON	

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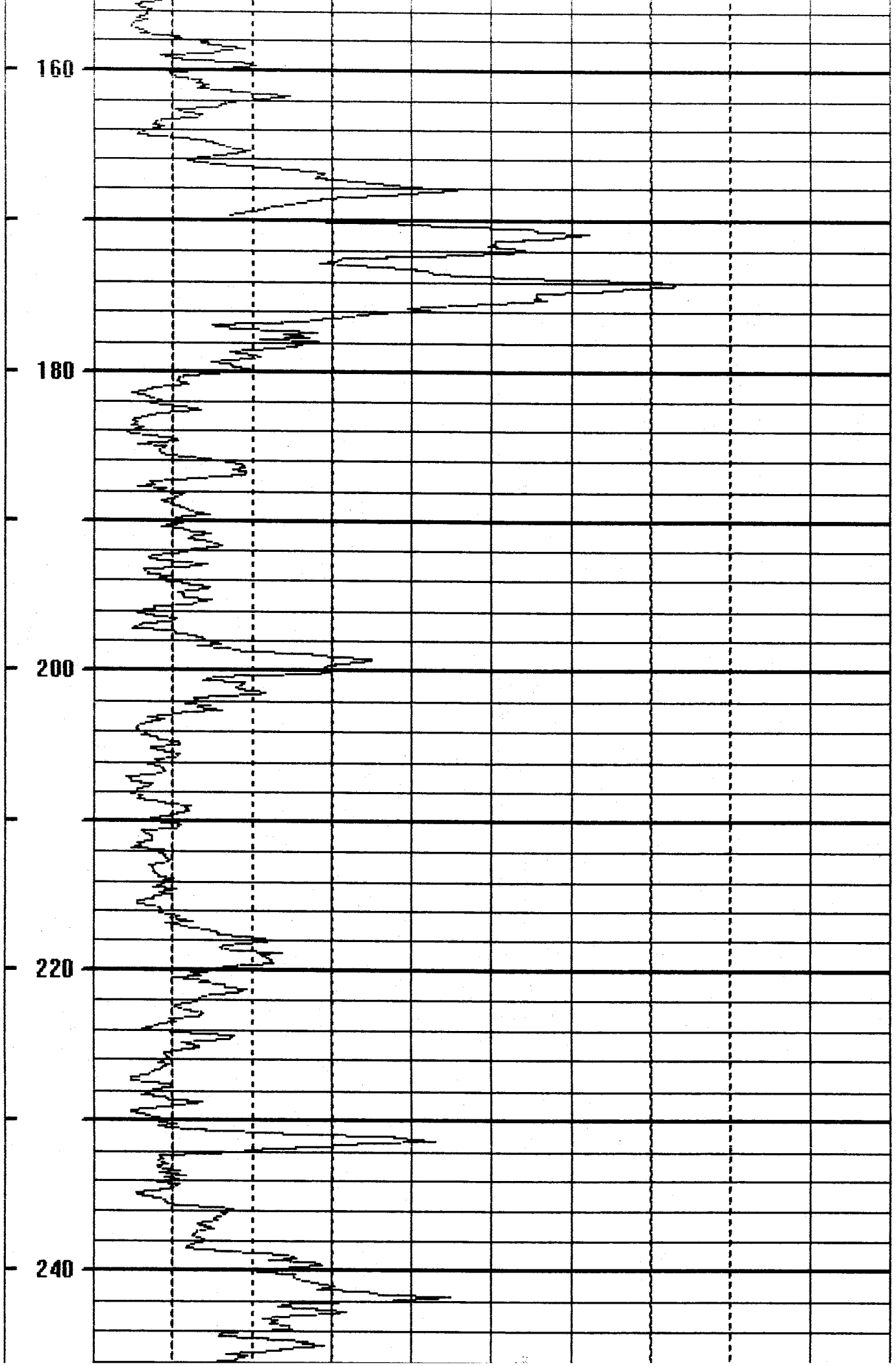
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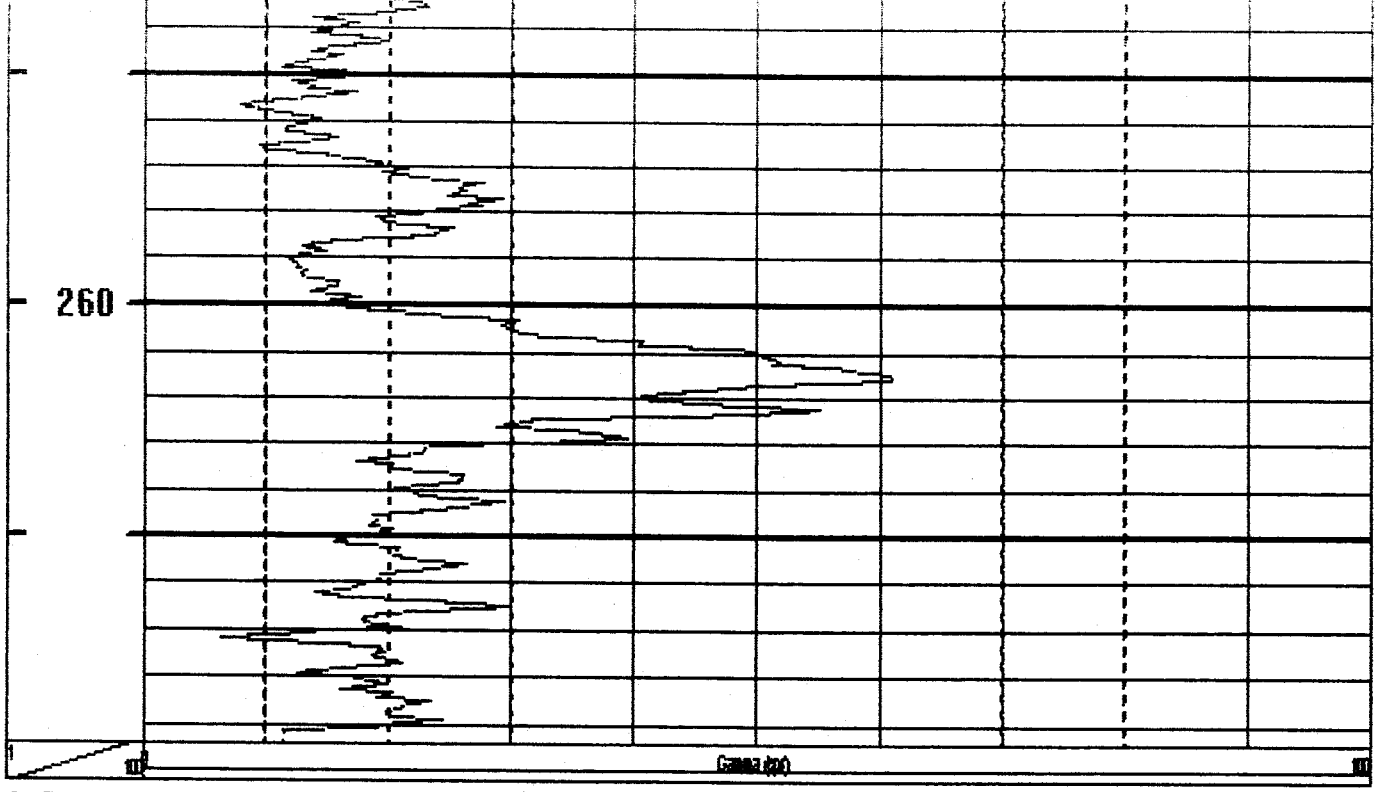
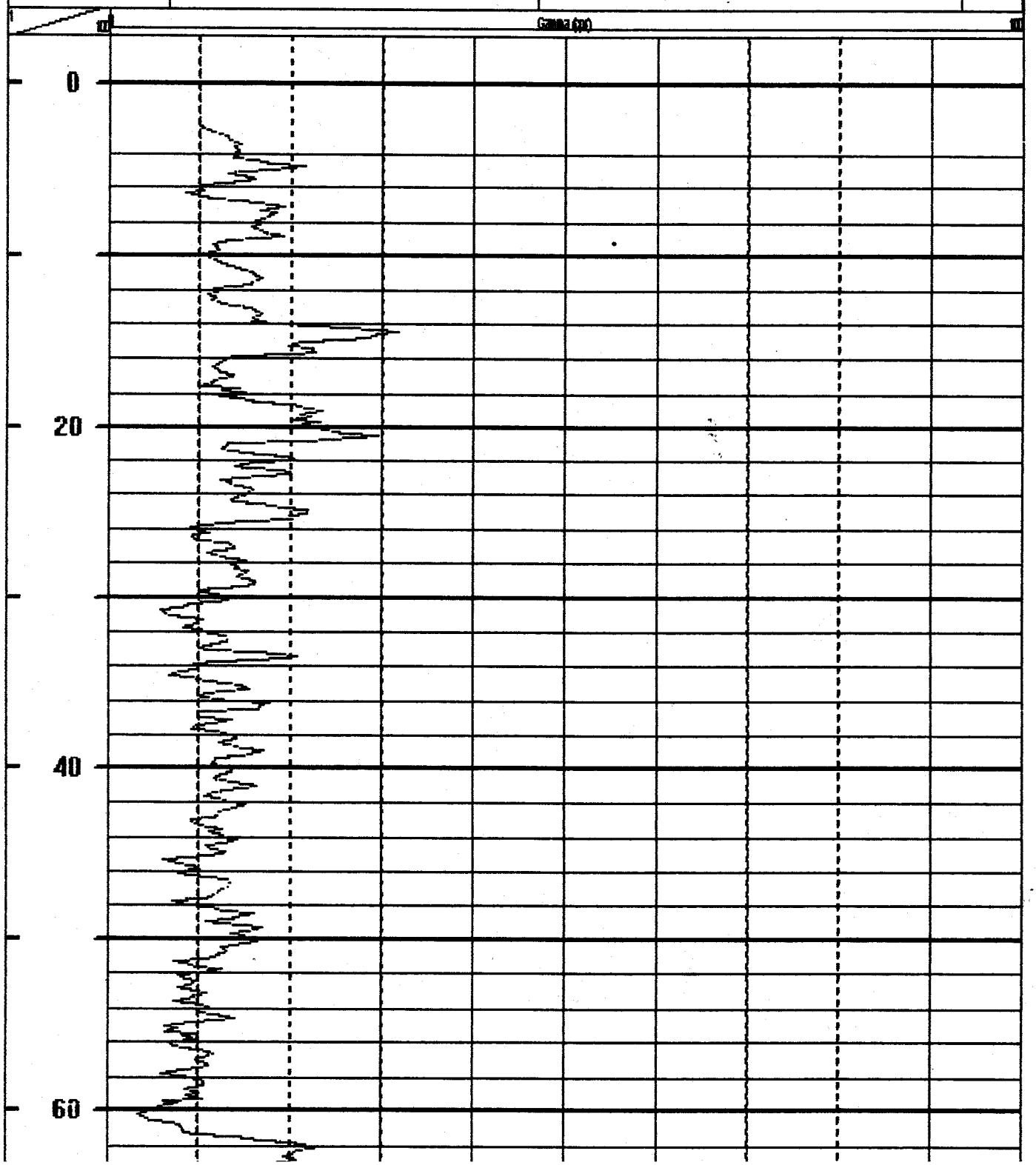
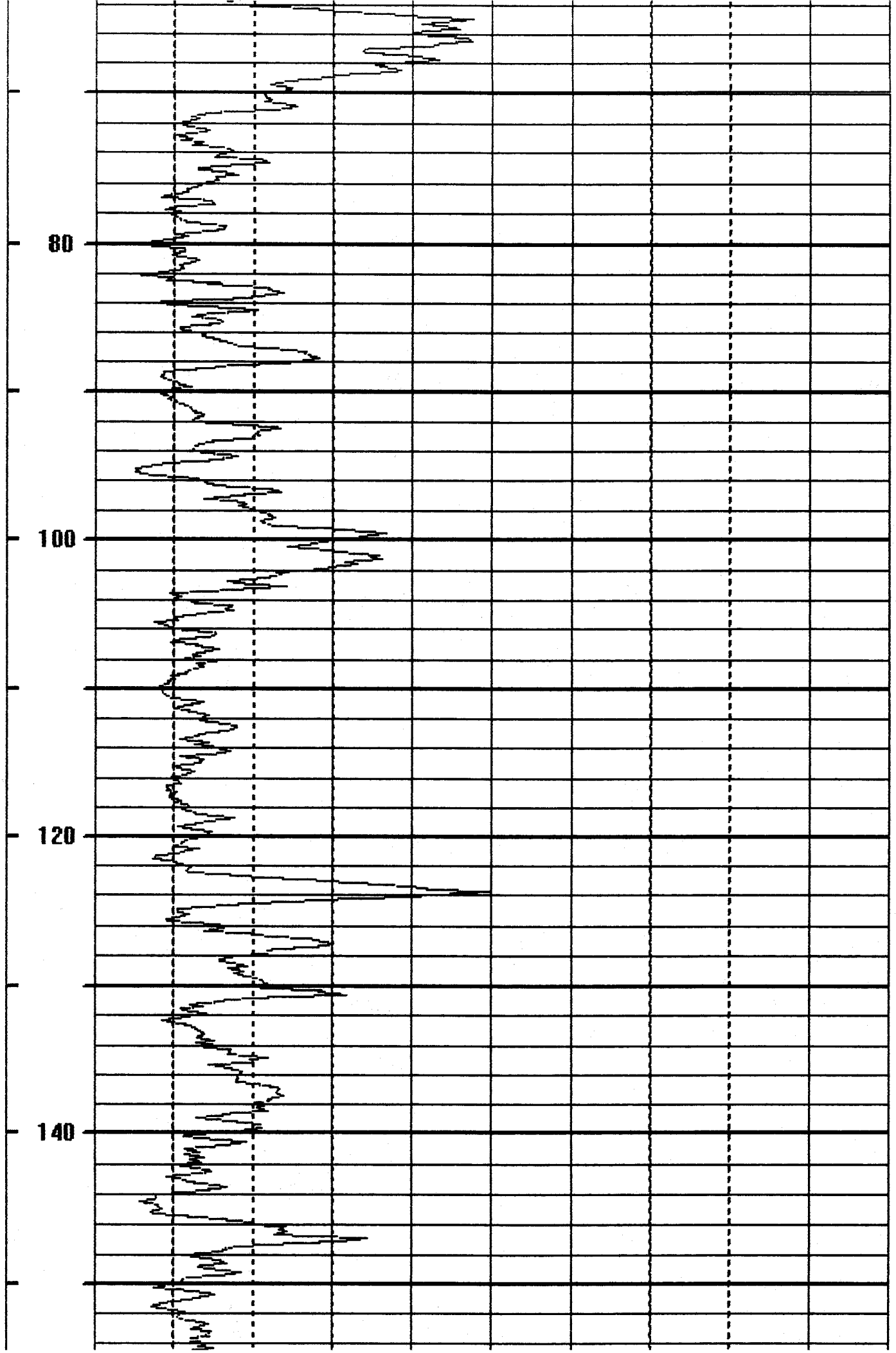


Date: Thursday, October 21, 2011 Time: 16:52

Date: Monday, October 17, 2011 Time: 12:22 File: C:\Documents and Settings\Adarbik\Gabriel\My Documents\1722\MW309.rd

	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: NWIRP BETPAGE		
Well	BPSI-TT-MW309	Depth Driller	
		Depth Logger	
Date	10/17/11	BH Fluid	Logged by: cmc
File Name	722	Witness: J. FERGUSON	

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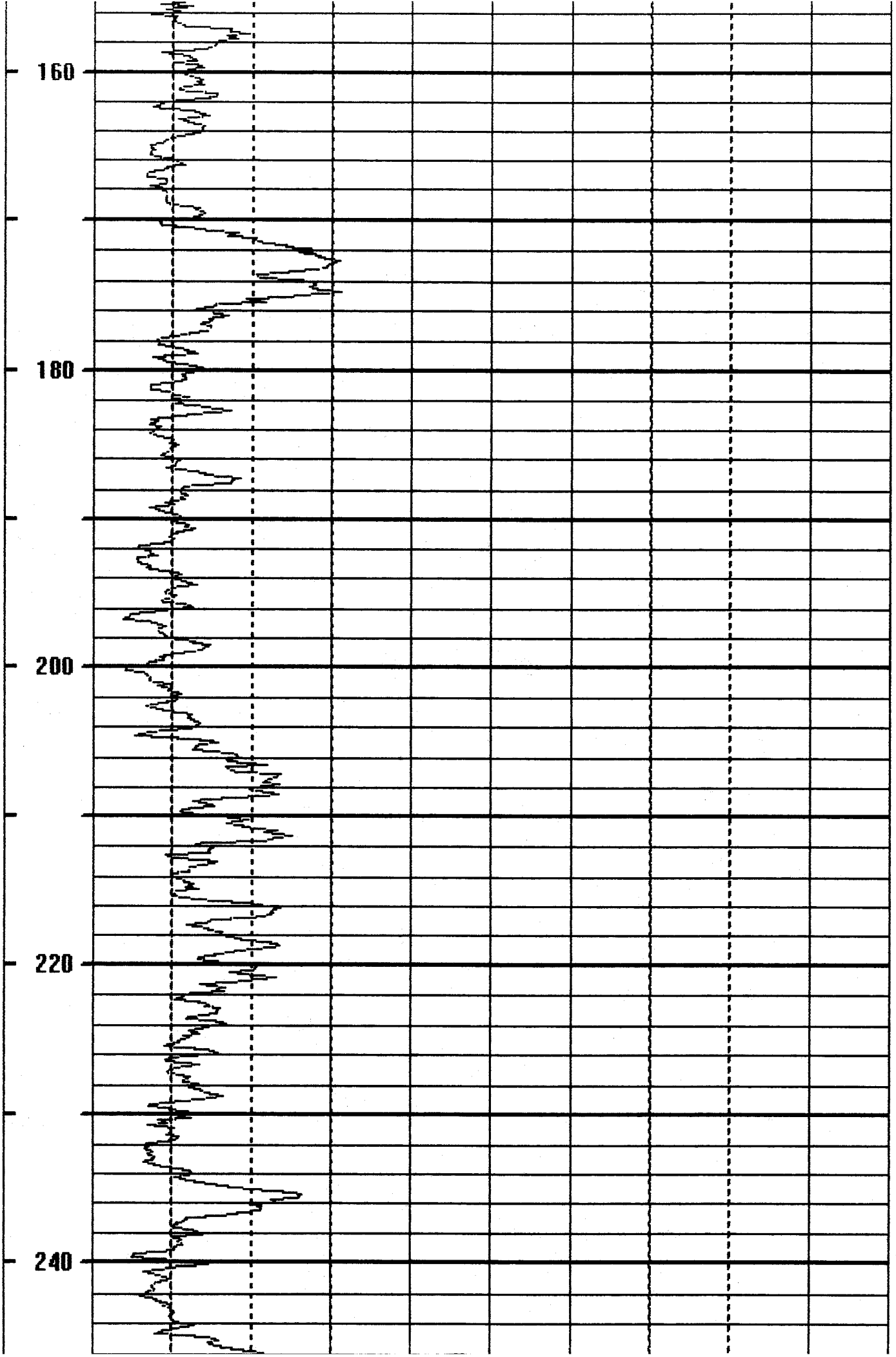
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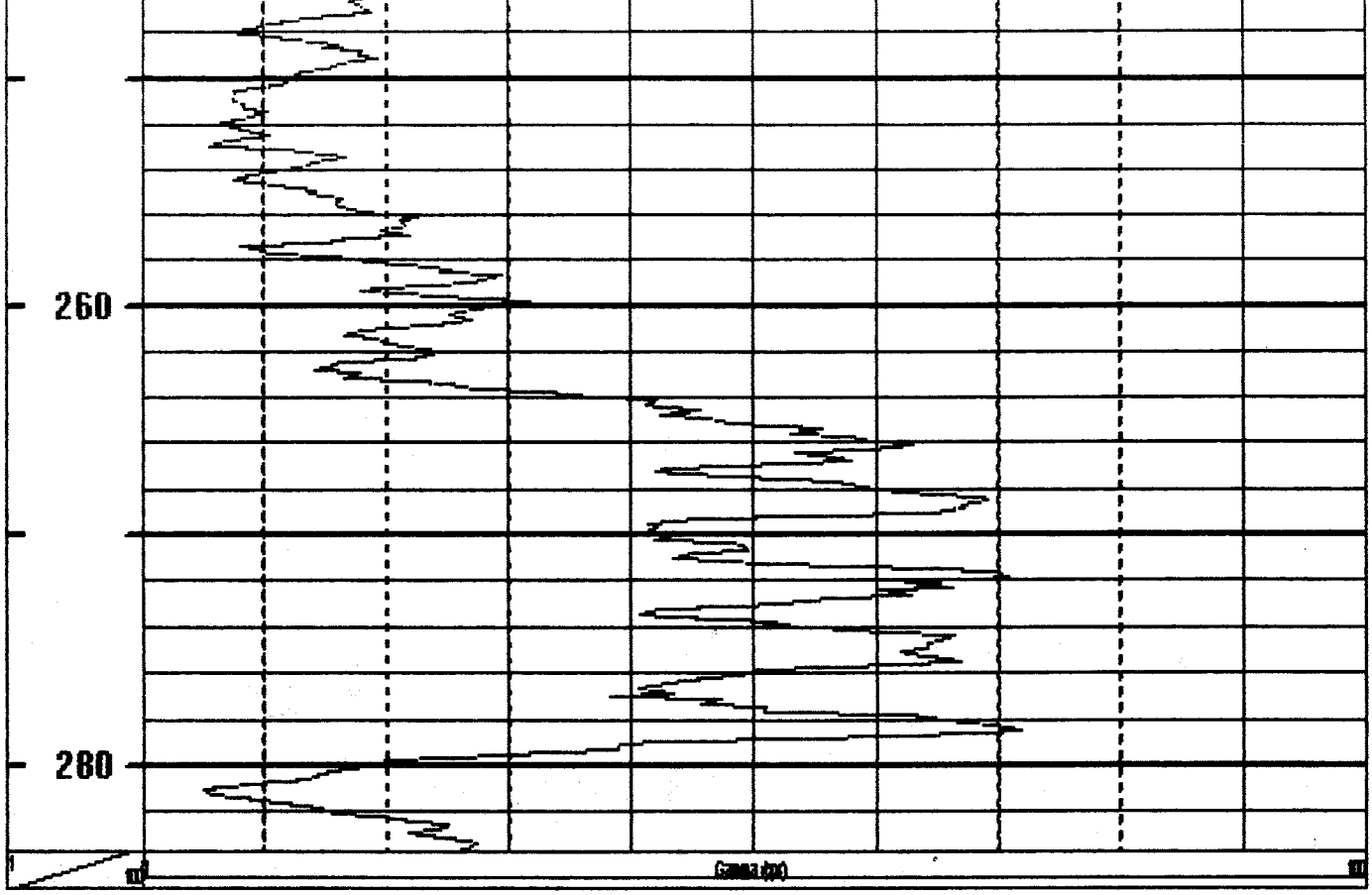


Date: Monday, October 17, 2011 Time: 12:37 File: C:\Documents and Settings\[illegible]

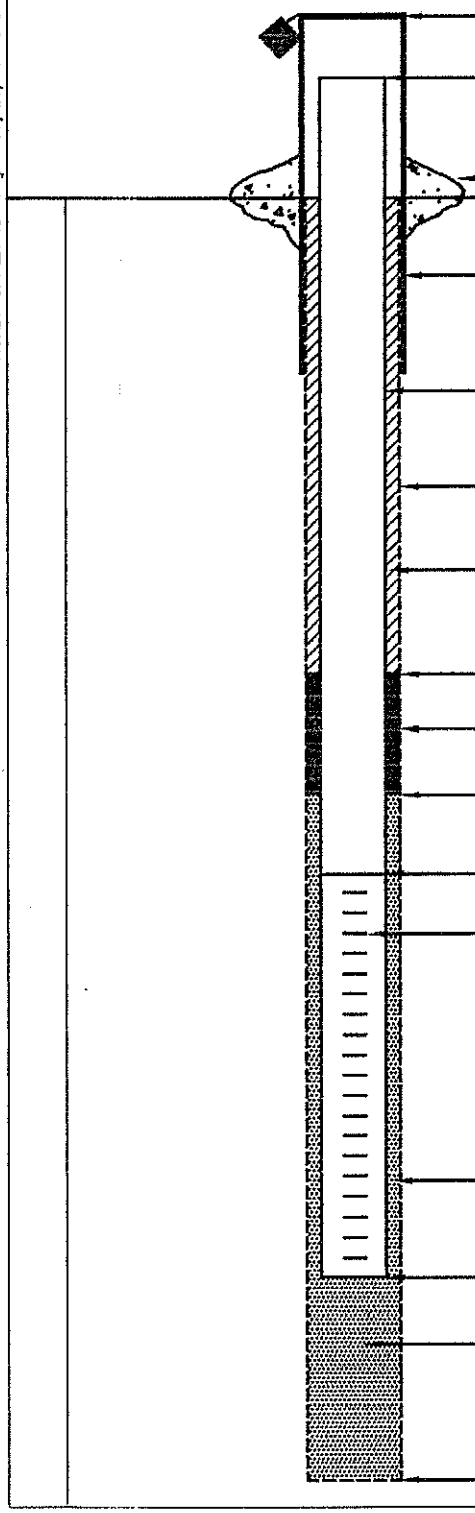
Monitoring Well Construction Logs

WELL NO.: MW-3055

Tetra Tech NUS, inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Investigation	LOCATION Bethpage New York	DRILLER J. Guerci
PROJECT NO. 112602230	BORING RPSI-TTMW3055	DRILLING METHOD Hollow Stem Auger
DATE BEGUN November 22, 2011	DATE COMPLETED Nov 22 2011	
FIELD GEOLOGIST J. Ferguson		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2" Ø
TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 8 1/4" Ø HSA

TYPE OF BACKFILL: Cetco (Bentonite) Cement (Portland) Grout

ELEVATION/DEPTH TOP OF SEAL: 34' /

TYPE OF SEAL: Bentonite Pellet Seal

DEPTH TOP OF SAND PACK: 38'

ELEVATION/DEPTH TOP OF SCREEN: 40' /

TYPE OF SCREEN: PVC Sch. 40

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica Sand

ELEVATION/DEPTH BOTTOM OF SCREEN: 50' /

ELEVATION/DEPTH BOTTOM OF SAND PACK: /
BACKFILL MATERIAL BELOW SAND:

ELEVATION/DEPTH OF HOLE: 50' /

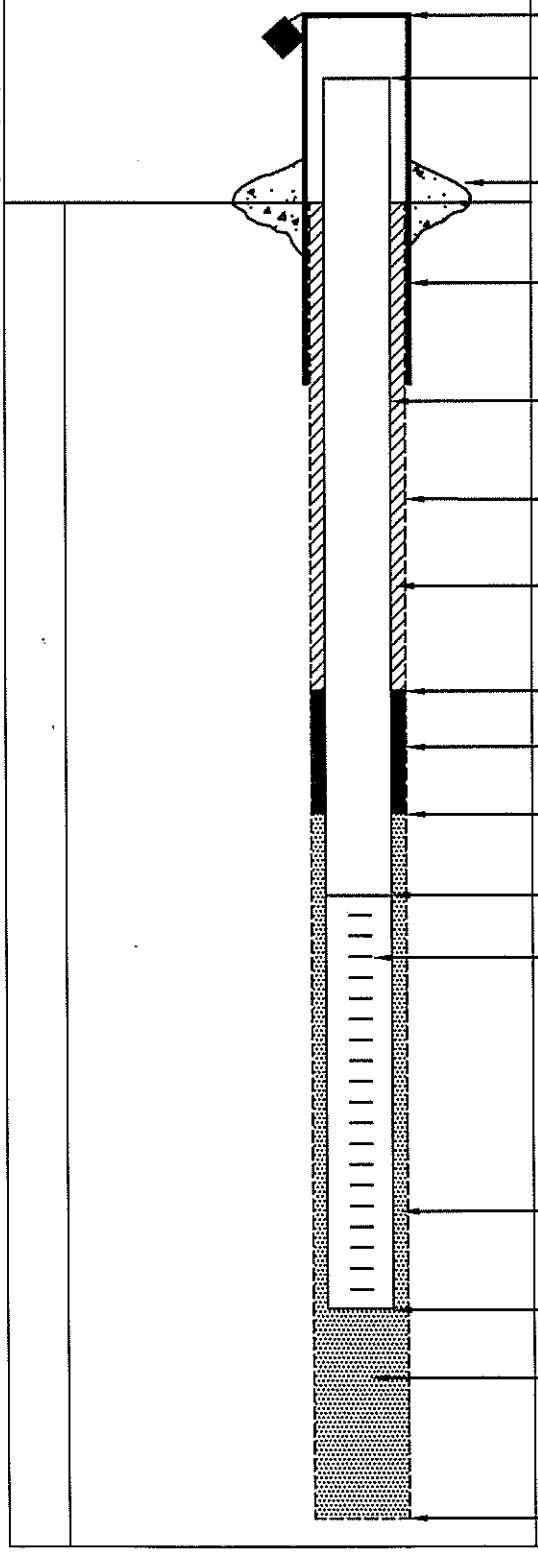
ACAD: FORM_MWSU.dwg 07/28/99 INL

WELL NO.: MW-305 I

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT NWIRP Bethpage	LOCATION Site 1	DRILLER Jason Gueci
PROJECT NO. 112602230	BORING MW-305 I	DRILLING METHOD HSA
DATE BEGUN 11-28-11	DATE COMPLETED 11-29-11	
FIELD GEOLOGIST Vince Shickora		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2 inch
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8 inch

TYPE OF BACKFILL: Bentonite/Cement Grout
Ceta High Solids bentonite / Portland Cement

ELEVATION/DEPTH TOP OF SEAL: 181'

TYPE OF SEAL: 3/8" Bentonite Holeplug

DEPTH TOP OF SAND PACK: 185'

ELEVATION/DEPTH TOP OF SCREEN: 190'

TYPE OF SCREEN: schedule 40 PVC

SLOT SIZE x LENGTH: 0.01" X 10'

I.D. OF SCREEN: 2 inch

TYPE OF SAND PACK: #1 Silica Quartz

ELEVATION/DEPTH BOTTOM OF SCREEN: 200'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 200'
BACKFILL MATERIAL BELOW SAND:
Natural Formation material

ELEVATION/DEPTH OF HOLE: 200'

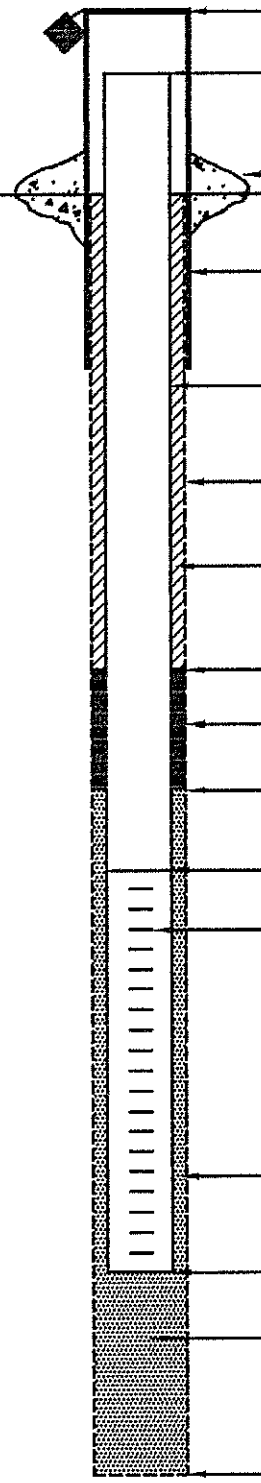
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-305D

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT 112G02230	LOCATION Bethpage New York	DRILLER MURPHY
PROJECT NO. Bethpage Site 1 Investig.	BORING BP31-TT-MW305D	DRILLING METHOD 8" Ø HSA Rotary
DATE BEGUN November 17, 2011	DATE COMPLETED November 21, 2011	DEVELOPMENT METHOD
FIELD GEOLOGIST J Engwall		
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: SCH. 40 PVC

BOREHOLE DIAMETER: 8" Ø

TYPE OF BACKFILL: Geo High Solids Bentonite Cement (Portland) grout

ELEVATION/DEPTH TOP OF SEAL: 2' /

TYPE OF SEAL: Geo High Solids Bentonite Cement grout

DEPTH TOP OF SAND PACK: 263

ELEVATION/DEPTH TOP OF SCREEN: 286' /

TYPE OF SCREEN: SCH 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2" Ø

TYPE OF SAND PACK: #1 Sand pack (270'-300') #00 Sand pac (263-270'

ELEVATION/DEPTH BOTTOM OF SCREEN: 296 /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 300' /
BACKFILL MATERIAL BELOW SAND:

ELEVATION/DEPTH OF HOLE: 300' /

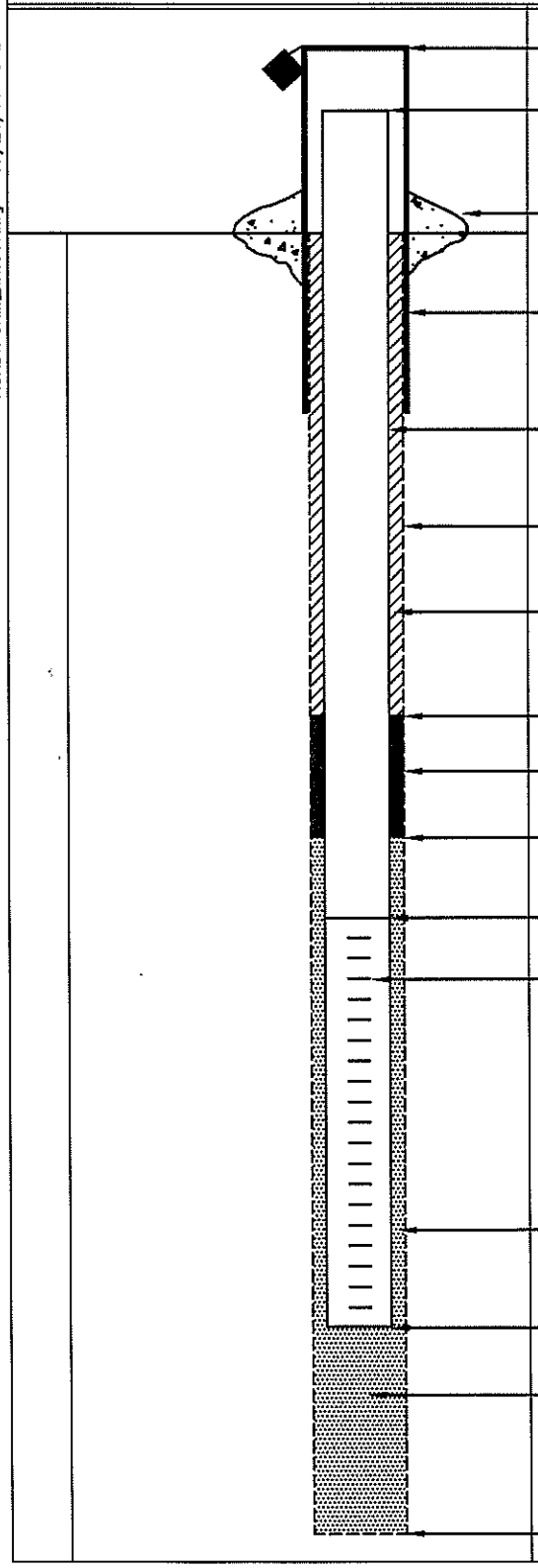
ACAD: FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-306$

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT NWIRP Bethpage	LOCATION Site 1	DRILLER Jason Gueci
PROJECT NO. 112G02230	BORING MW-306$	DRILLING METHOD HSA
DATE BEGUN 12-8-11	DATE COMPLETED 12-8-11	
FIELD GEOLOGIST Vince Shickora		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2 inch
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8 inch

TYPE OF BACKFILL: Cetco High Solids Bentonite / Portland Cement

ELEVATION/DEPTH TOP OF SEAL: 141'

TYPE OF SEAL: 3/8" Bentonite Holeplug

DEPTH TOP OF SAND PACK: 46'

ELEVATION/DEPTH TOP OF SCREEN: 150'

TYPE OF SCREEN: schedule 40 PVC

SLOT SIZE x LENGTH: 0.01" X 10'

I.D. OF SCREEN: 2 inch

TYPE OF SAND PACK: #1 Silica Quartz

ELEVATION/DEPTH BOTTOM OF SCREEN: 160'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 160'

BACKFILL MATERIAL BELOW SAND: Natural Formation

ELEVATION/DEPTH OF HOLE: 160'

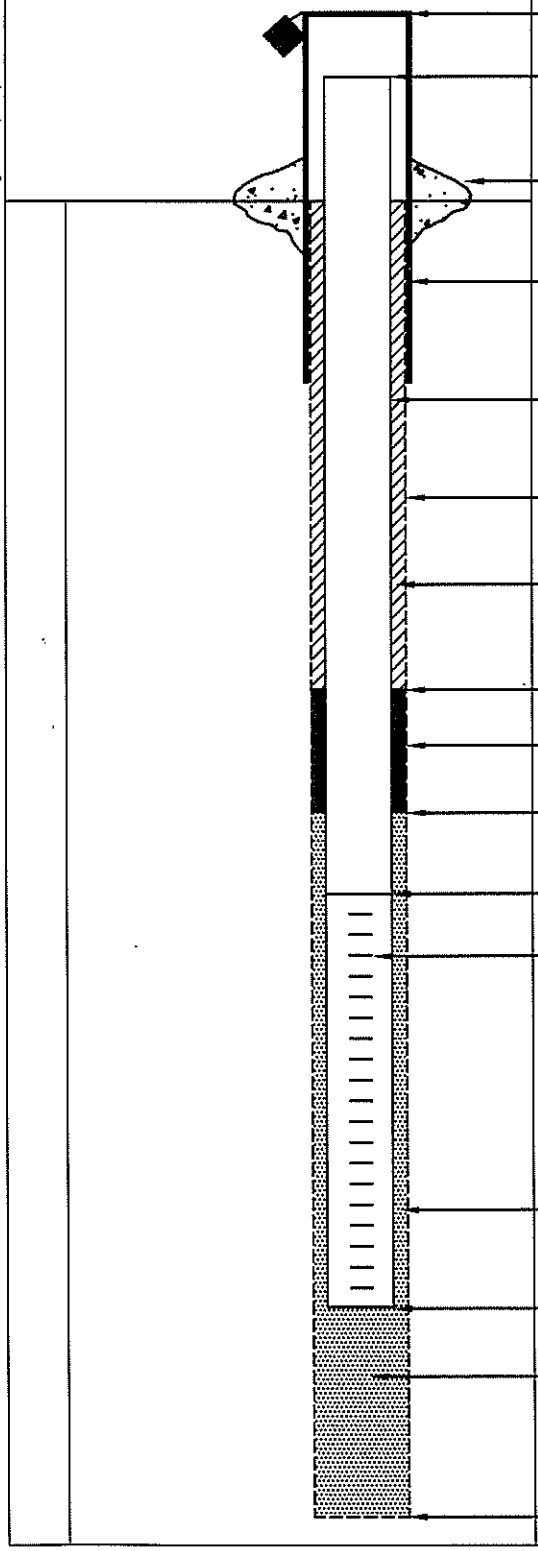
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-306I

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT NWIRP Bethpage	LOCATION Site 1	DRILLER Jason Gueci
PROJECT NO. 112G02230	BORING MW-306I	DRILLING METHOD HSA
DATE BEGUN 12-6-11	DATE COMPLETED	
FIELD GEOLOGIST Vince Shickora		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2 inch
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8 inch

TYPE OF BACKFILL: Cetco High Solids Bentonite/Portland Cement Grout

ELEVATION/DEPTH TOP OF SEAL: 180'

TYPE OF SEAL: 3/8" Bentonite Holeplug

DEPTH TOP OF SAND PACK: 185'

ELEVATION/DEPTH TOP OF SCREEN: 189'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.01" X 10'

I.D. OF SCREEN: 2 inch

TYPE OF SAND PACK: #1 Silica Quartz

ELEVATION/DEPTH BOTTOM OF SCREEN: 199'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 199'

BACKFILL MATERIAL BELOW SAND: NATURAL formation

ELEVATION/DEPTH OF HOLE: 199'

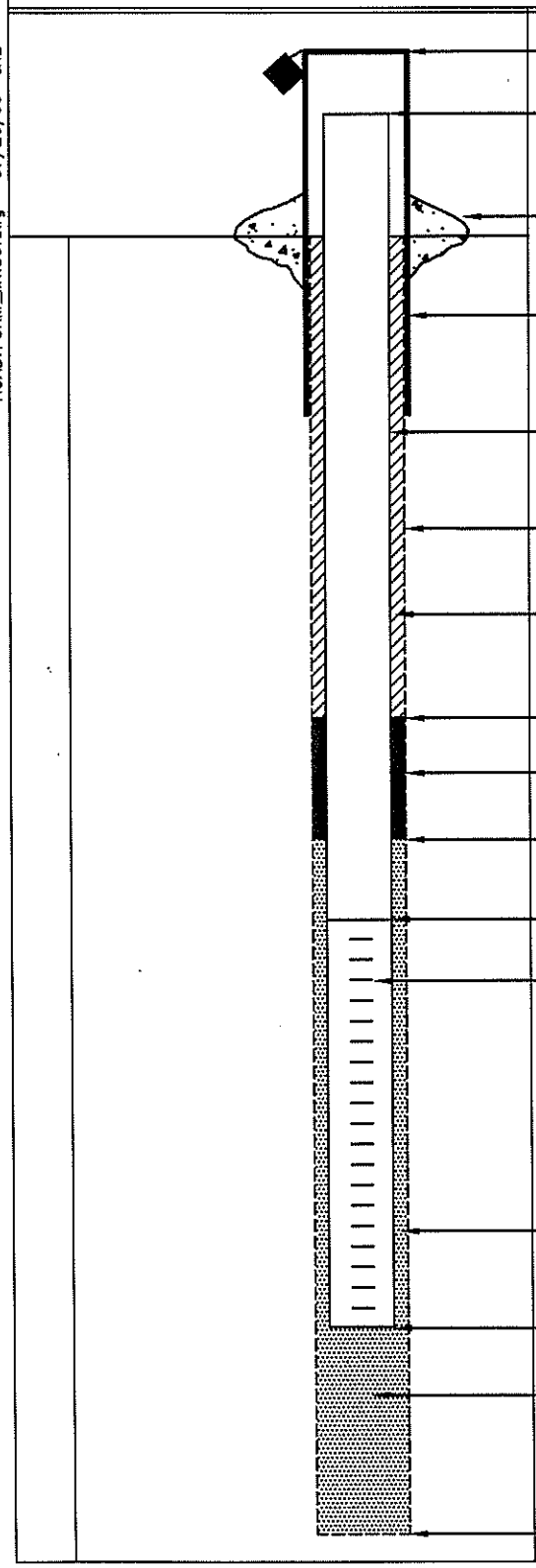
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-306D

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT NWIRP Bethpage	LOCATION Site 1	DRILLER Bill Murphy
PROJECT NO. 112G02230	BORING MW-306D	DRILLING METHOD Mud Rotary
DATE BEGUN 11-28-11	DATE COMPLETED	
FIELD GEOLOGIST Vince Shickora		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2 inch
TYPE OF RISER PIPE: schedule 40 PVC

BOREHOLE DIAMETER: 8 inch

TYPE OF BACKFILL: Cetco High Solids Bentonite - Cement (Portland) Grout

ELEVATION/DEPTH TOP OF SEAL: /

TYPE OF SEAL: Cetco High Solids Bentonite - Cement (Portland) Grout

DEPTH TOP OF SAND PACK: 270'

ELEVATION/DEPTH TOP OF SCREEN: 1284

TYPE OF SCREEN: schedule 40 PVC

SLOT SIZE x LENGTH: 0.01" X 10'

I.D. OF SCREEN: 2 inch

TYPE OF SAND PACK: #1 Silica Quartz to 279'
#00 Silica Quartz From 279' to 270' BGS

ELEVATION/DEPTH BOTTOM OF SCREEN: 1294'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 1303'

BACKFILL MATERIAL BELOW SAND: NA

ELEVATION/DEPTH OF HOLE: 1303'

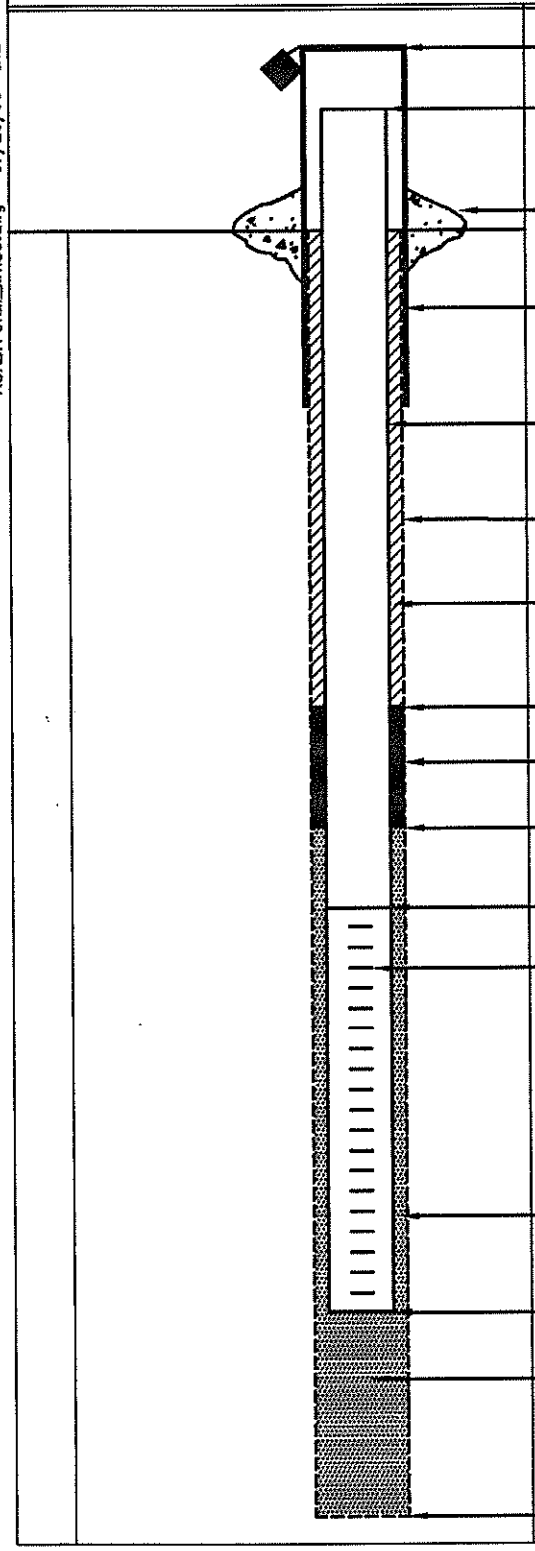
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-3075

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Investigation	LOCATION Bethpage New York
PROJECT NO. 112G02230	BORING B31-T1-MW3075
DATE BEGUN November 21 2011	DATE COMPLETED November 11 2011
FIELD GEOLOGIST J. Ferguson	
GROUND ELEVATION	DATUM
DRILLER Geoprobe	
DRILLING METHOD Hollow Stem Augers	
DEVELOPMENT METHOD	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: SCH 40

BOREHOLE DIAMETER: 8.25" ϕ

TYPE OF BACKFILL: Cetco Bentonite - Cement grout

ELEVATION/DEPTH TOP OF SEAL: 31.5' /

TYPE OF SEAL: Bentonite Pellet 3cm

DEPTH TOP OF SAND PACK: 35.5'

ELEVATION/DEPTH TOP OF SCREEN: 40.5' /

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica Sand

ELEVATION/DEPTH BOTTOM OF SCREEN: 50.5' /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 50.5' /
BACKFILL MATERIAL BELOW SAND: N/A

ELEVATION/DEPTH OF HOLE: 50.5' /

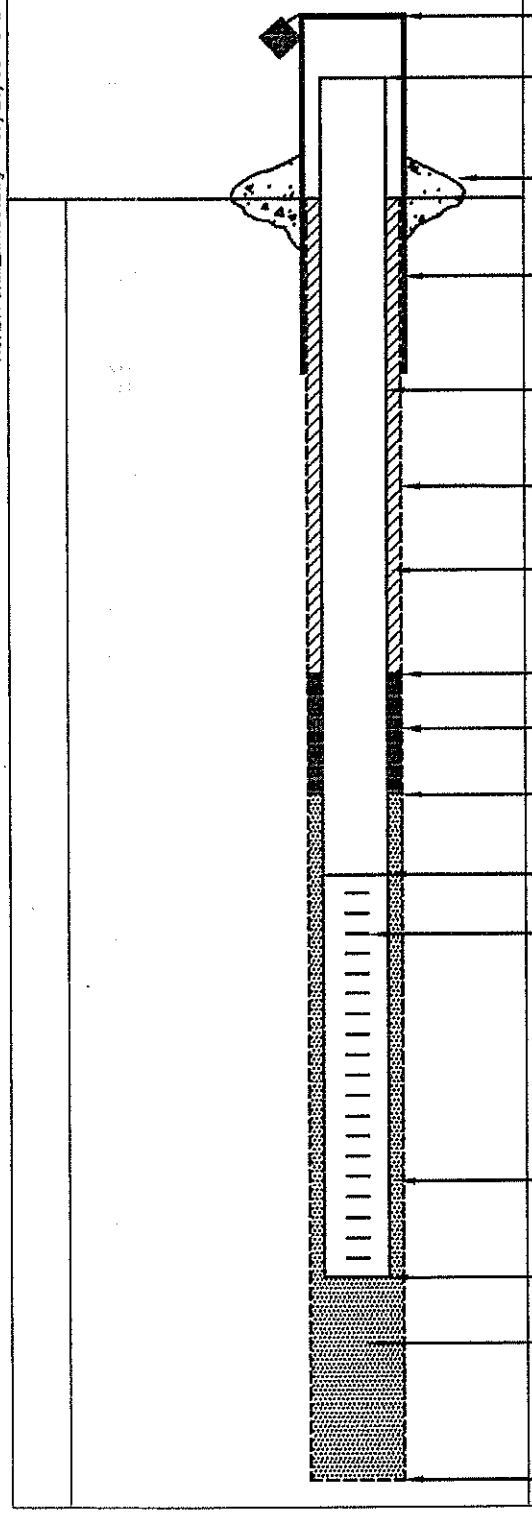
ACAD: FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-307-I

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT 112602230	LOCATION Bethpage New York	DRILLER Guekel
PROJECT NO. Bethpage Site 1 Invest.	BORING BP31-TT-MW307I	DRILLING METHOD Hollow Stem Auger
DATE BEGUN November 17, 2011	DATE COMPLETED Nov 18, 2011	DEVELOPMENT METHOD
FIELD GEOLOGIST J Ferguson		
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2" Ø
TYPE OF RISER PIPE: Sch 40 PVC

BOREHOLE DIAMETER: 8 1/4" HSA

TYPE OF BACKFILL: Cerco High Solids Bentonite Cement (Portland) Grout

ELEVATION/DEPTH TOP OF SEAL: 181 /

TYPE OF SEAL: Bentonite Pellet

DEPTH TOP OF SAND PACK: 185'

ELEVATION/DEPTH TOP OF SCREEN: 190' /

TYPE OF SCREEN: Sch 40 PVC

SLOT SIZE x LENGTH: 0.010 slot - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica Sandpack

ELEVATION/DEPTH BOTTOM OF SCREEN: 200' /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 200' /
BACKFILL MATERIAL BELOW SAND:

ELEVATION/DEPTH OF HOLE: 200' /

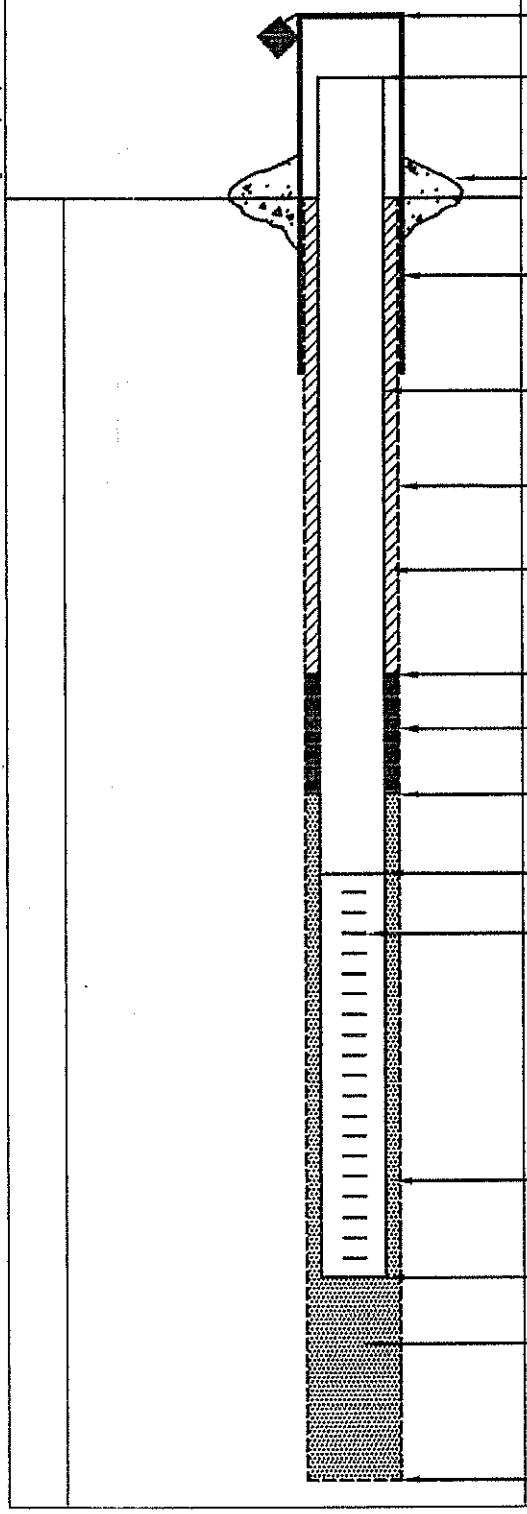
ACAD: FORM_MWSU.dwg 07/20/99 INL

WELL NO.: MW-307D

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Invest.	LOCATION Bethpage New York	DRILLER Murphy
PROJECT NO. 112602230	BORING BP01-TT-MW307D	DRILLING METHOD Mud Rotary
DATE BEGUN November 3 2011	DATE COMPLETED Nov 11 2011	
FIELD GEOLOGIST J. Ferguson		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2" Ø
TYPE OF RISER PIPE: Sch 40 PVC

BOREHOLE DIAMETER: 8" Ø Mud Rotary

TYPE OF BACKFILL: Cerco High Solids Bentonite-Cement (Portland) Grout

ELEVATION/DEPTH TOP OF SEAL: 2' /

TYPE OF SEAL: Cerco High Solids Bentonite Cement (Portland) Grout

DEPTH TOP OF SAND PACK: 266

ELEVATION/DEPTH TOP OF SCREEN: 276' /

TYPE OF SCREEN: Sch 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2" Ø

TYPE OF SAND PACK: #1 Silica Sandpack (271-286 #1 Silica) (266'-271' #00)

ELEVATION/DEPTH BOTTOM OF SCREEN: 286' /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 286' /

BACKFILL MATERIAL BELOW SAND: #1 Silica Sand (286-433)

ELEVATION/DEPTH OF HOLE: 433' /

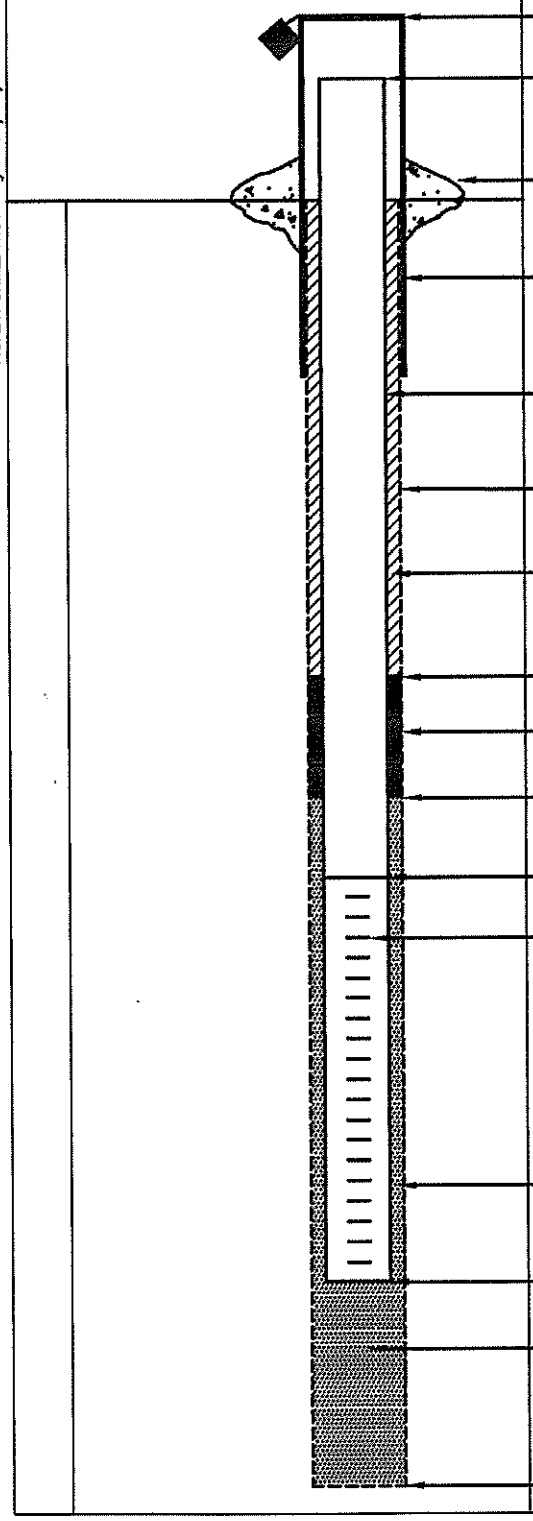
ACAD: FORM_MWSU.dwg 07/20/99 INL

WELL NO.: BP51-TT-MW3085

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Invest.	LOCATION BP51-TT-MW3085	DRILLER J. Guerct
PROJECT NO. 112602230	BORING MW-3085	DRILLING METHOD 4 1/4" HSA
DATE BEGUN 11-11-2011	DATE COMPLETED 11-14-2011	
FIELD GEOLOGIST J. Ferguson		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: SCH. 40 PVC

BOREHOLE DIAMETER: 8 1/4" Ø HSA

TYPE OF BACKFILL: Bentonite Cement Grout (Certified High Solids Bentonite)

ELEVATION/DEPTH TOP OF SEAL: 48' /

TYPE OF SEAL: Bentonite Pellet

DEPTH TOP OF SAND PACK: 50'

ELEVATION/DEPTH TOP OF SCREEN: 54 /

TYPE OF SCREEN: SCH 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica

ELEVATION/DEPTH BOTTOM OF SCREEN: 64 /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 64 /
BACKFILL MATERIAL BELOW SAND: #1 Silica

ELEVATION/DEPTH OF HOLE: 64 /

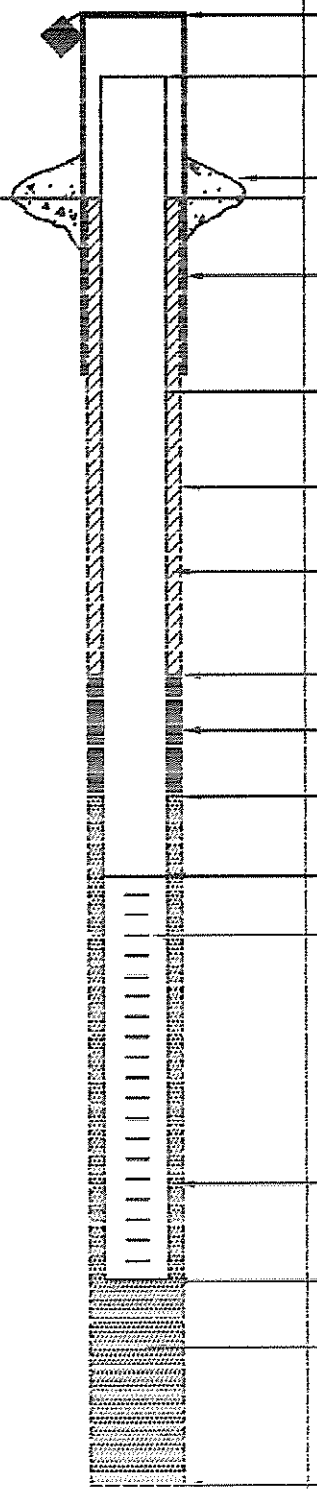
ACAD: FORM_MWSU.dwg 07/20/99 INL

WELL NO.: BP31-TT-MW308I

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Invest.	LOCATION BP31-TT-MW308I	DRILLER J. Guerci
PROJECT NO. 112602230	BORING MW-308I	DRILLING METHOD 4 1/4" Ø HSA
DATE BEGUN 11-14-2011	DATE COMPLETED 11-15-2011	
FIELD GEOLOGIST J. Ferguson		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8 1/4" Ø HSA

TYPE OF BACKFILL: Bentonite-cement grout (Letco High Solids Bentonite)

ELEVATION/DEPTH TOP OF SEAL: 146 /

TYPE OF SEAL: Bentonite Pellet

DEPTH TOP OF SAND PACK: 150

ELEVATION/DEPTH TOP OF SCREEN: 156 /

TYPE OF SCREEN: 2" Ø Sch 40, .010 Slot

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica

ELEVATION/DEPTH BOTTOM OF SCREEN: 166 /

ELEVATION/DEPTH BOTTOM OF SAND PACK: 166 /
BACKFILL MATERIAL BELOW SAND: #1 Silica

ELEVATION/DEPTH OF HOLE: /

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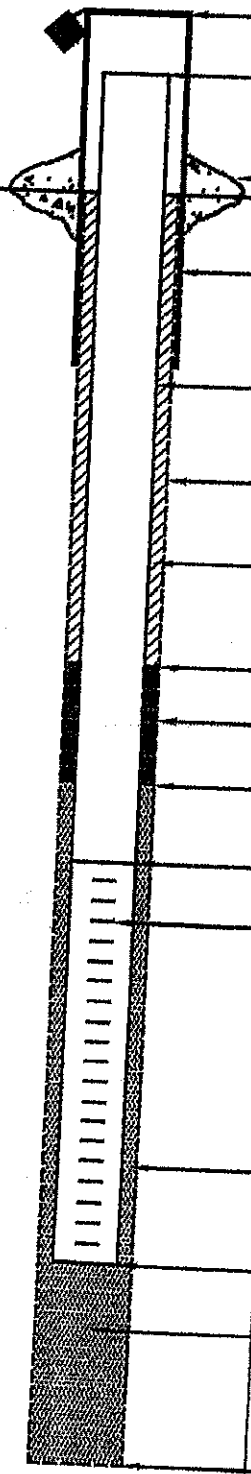
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-308D

PROJECT Bentpage Site 1 Invest.
PROJECT NO. 112602230
DATE BEGUN Oct 26, 2011
FIELD GEOLOGIST J. Ferguson
GROUND ELEVATION
LOCATION Bentpage NY
BORING BPSI-IT-MW308D
DATE COMPLETED October 31, 2011
DATUM
DRILLER B. Murphy
DRILLING METHOD Mud Rotary
DEVELOPMENT METHOD



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2" Ø
TYPE OF RISER PIPE: SCH 40 PVC

BOREHOLE DIAMETER: 8" Ø

TYPE OF BACKFILL: Cetco High Solids Bentonite Cement (Portland) Grout.

ELEVATION/DEPTH TOP OF SEAL: 241'

TYPE OF SEAL: Bentonite Pellet

DEPTH TOP OF SAND PACK: 245

ELEVATION/DEPTH TOP OF SCREEN: 250'

TYPE OF SCREEN: SCH. 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot - 10'

I.D. OF SCREEN: 2" Ø

TYPE OF SAND PACK: Silica Sandpack (#1 Silica 245-262)

ELEVATION/DEPTH BOTTOM OF SCREEN: 260'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 262'
BACKFILL MATERIAL BELOW SAND: #1 Sand 260'-262'
#1 Sand (266'-283') Bentonite (262'-266')

ELEVATION/DEPTH OF HOLE: 283'

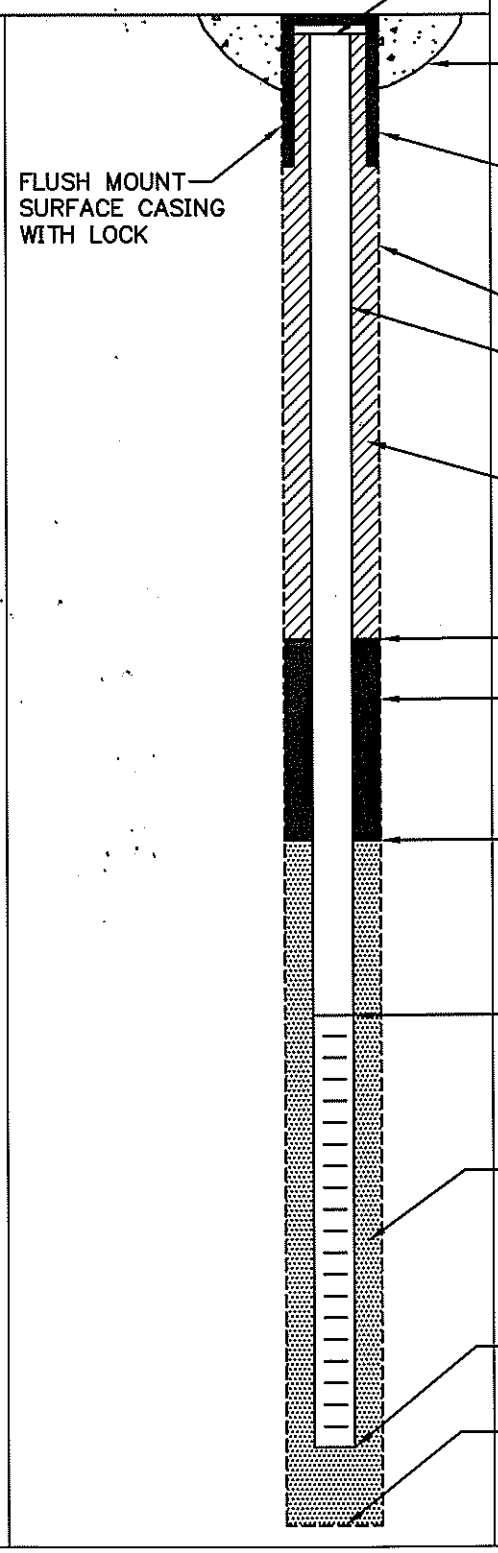
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: BPS1-MW309S

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT NWIRP Bethpage Site	LOCATION MW309S	DRILLER J. Gueci
PROJECT NO. 112G02230	BORING BPS1-MW309S	DRILLING METHOD HSA
DATE BEGUN 11-9-11	DATE COMPLETED	
FIELD GEOLOGIST J. Birkett		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL:

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 8"

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Bentonite grout w/ some cement

ELEVATION/DEPTH TOP OF SEAL: / 44.5'

TYPE OF SEAL: Hydrated bentonite pellets
Cetco Coated tablets (1/4"

ELEVATION/DEPTH TOP OF SAND: / 49'

ELEVATION/DEPTH TOP OF SCREEN: 2" / 53'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010" x 10'

TYPE OF SAND PACK: #1 Silica sand
Filpro Superior Quartz Filtration Media

~~DIAMETER OF HOLE IN BEDROCK:~~

ELEVATION / DEPTH BOTTOM OF SCREEN: / 63'

ELEVATION / DEPTH BOTTOM OF SAND: / 63

ELEVATION/DEPTH BOTTOM OF HOLE: / 63'

BACKFILL MATERIAL BELOW SAND: 63'

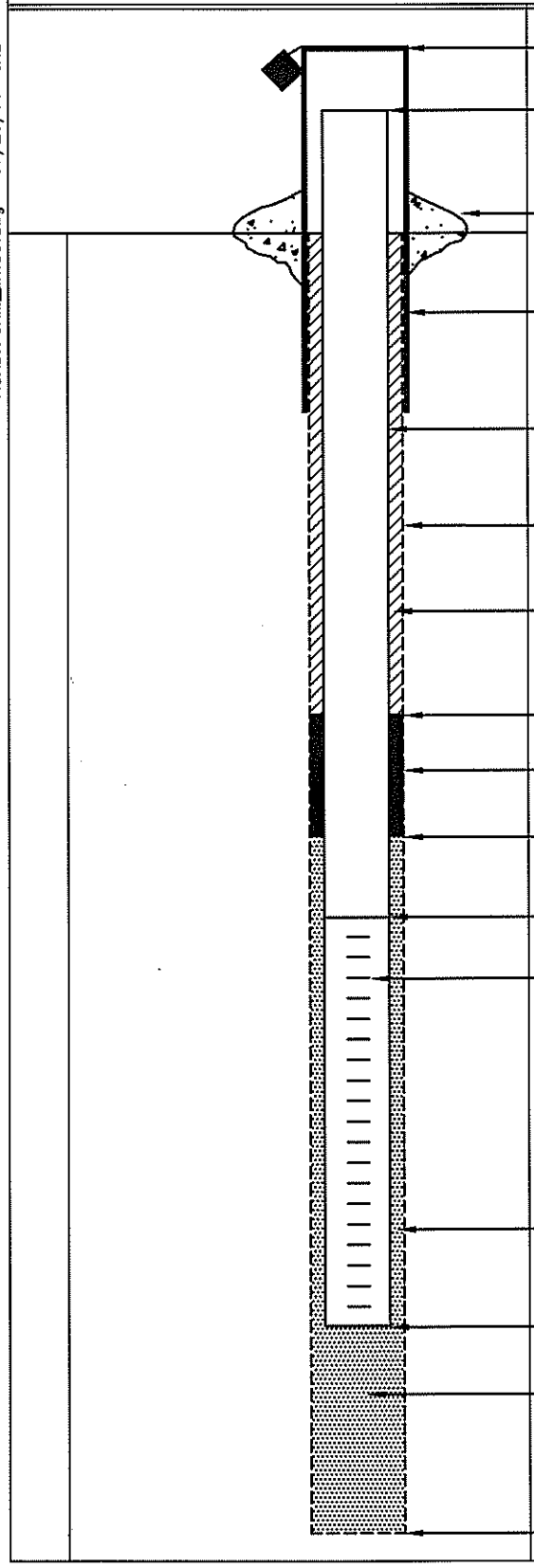
ACAD:FORM_MWFM.dwg 07/20/99 INL

WELL NO.: BPSI-MW309I

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT NWIRP Bethpage	LOCATION MW309	DRILLER Jason Gucci
PROJECT NO. 112G02230	BORING BPSI-MW309I	DRILLING METHOD HSA
DATE BEGUN 11-8-11	DATE COMPLETED 11-8-11	
FIELD GEOLOGIST J. Birkett		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: /

ELEVATION/HEIGHT OF TOP OF RISER PIPE: /

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:
TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF BACKFILL: Cement bentonite grout (bentonite grout w/little cement to ground surface) to 50' bgs

ELEVATION/DEPTH TOP OF SEAL: / 152

TYPE OF SEAL: Hydrated Bentonite pellets
Cetco coated tablets (1/4")

DEPTH TOP OF SAND PACK: 156

ELEVATION/DEPTH TOP OF SCREEN: / 160

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 10 (0.010") slot x 10' long

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 Silica Sand
Filpro Superior Quartz Filtration Media

ELEVATION/DEPTH BOTTOM OF SCREEN: / 170

ELEVATION/DEPTH BOTTOM OF SAND PACK: / 170

BACKFILL MATERIAL BELOW SAND:

ELEVATION/DEPTH OF HOLE: / 170

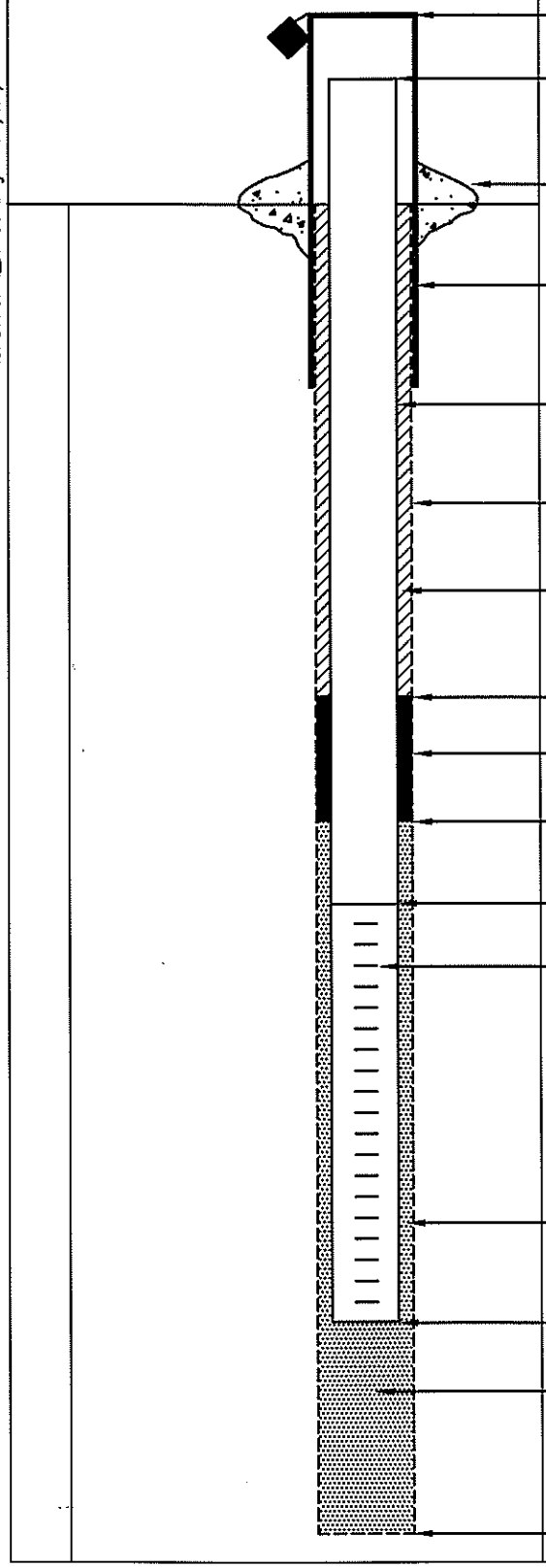
ACAD:FORM_MWSU.dwg 07/20/99 INL

WELL NO.: BPSI-TT-MW309D

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

PROJECT Bethpage Site 1 Investigation	LOCATION Bethpage New York	DRILLER B. Murphy
PROJECT NO. 112G02230	BORING BPSI-TT-MW309D	DRILLING METHOD Mud Rotary
DATE BEGUN	DATE COMPLETED Nov. 10, 2012	
FIELD GEOLOGIST J. Ferguson		DEVELOPMENT METHOD Air Lift and GroundFos
GROUND ELEVATION	DATUM	



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: / 3'

ELEVATION/HEIGHT OF TOP OF RISER PIPE: / 2.75'

TYPE OF SURFACE SEAL: Concrete

I.D. OF SURFACE CASING: 4"
TYPE OF SURFACE CASING: Protective Steel Casing Square

RISER PIPE I.D.: 2"
TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8.25"

TYPE OF BACKFILL: Cetco bentonite/portland cement

ELEVATION/DEPTH TOP OF SEAL: / 244'

TYPE OF SEAL: Bentonite Pellets

DEPTH TOP OF SAND PACK: 248'

ELEVATION/DEPTH TOP OF SCREEN: / 252'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot by 10'

I.D. OF SCREEN: 2" ID

TYPE OF SAND PACK: No. 1 Silica Sand

ELEVATION/DEPTH BOTTOM OF SCREEN: / 262'

ELEVATION/DEPTH BOTTOM OF SAND PACK: / 262'
BACKFILL MATERIAL BELOW SAND: Natural Backfill

ELEVATION/DEPTH OF HOLE: / 275'

ACAD: FORM_MWSU.dwg 07/20/99 INL

Monitoring Well Development Records

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-305S
Site: Bethpage Site 1
Date Installed: 11/12/2011
Date Developed: 12/08/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 50.3'
Static Water Level Before (ft.): 43.14'
Static Water Level After (ft.): 43.13'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	2	0	43.14'	15.34	5.86	0.119	>1000	Airlift, gray, turbid.
11:00	0	500		15.56	5.38	0.097	363	Airlift, gray, turbid.
11:15	0	1000		15.54	5.53	0.097	72.5	Airlift, gray, turbid.
11:30	0	1500		15.16	5.30	0.095	35	clear
11:45	0	2000		15.12	5.28	0.094	37	clear
12:00	0	---	43.15'	15.79	5.50	0.074	162	

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-305I
Site: Bethpage Site 1
Date Installed: 11/28/2011
Date Developed: 12/07/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 200'
Static Water Level Before (ft.): 47.85'
Static Water Level After (ft.): 47.87'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	0.5'	0	47.85'	16.4	6.08	0.211	200	Airlift -Lt. brown-brown.
11:10	↓	↓	↓	16.64	5.8	0.212	60.2	Lt. brown.
11:30	↓	↓	↓	16.64	5.81	0.210	60.1	Cloudy.
11:35	↓	↓	↓	16.6	5.89	0.216	210	Submersible - Lt. brown.
12:20	↓	↓		16.68	5.71	0.213	51	Clear
12:25	0	1100	47.87'	16.77	5.56	0.214	40.8	Clear

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-305D
Site: Bethpage Site 1
Date Installed: 11/11/2011
Date Developed: 12/07/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 291.6'
Static Water Level Before (ft.): 44.45'
Static Water Level After (ft.): 44.47'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
8:50	3.8'	0	44.45	16.42	5.98	0.397	>1000	Airlift, brown, turbid.
9:05	0	1000		16.35	6.71	0.218	403	Airlift, gray, turbid.
9:40	0	1500		16.82	6.59	0.204	269	Airlift, gray, turbid.
9:50	0	2000		16.78	6.42	0.198	300	Airlift, gray, turbid.
13:35	0	2058		17.27	5.51	0.190	138	Submersible pump
13:50	0	2116		17.24	5.30	0.198	50.9	Light gray
14:05	0	2174		17.26	5.19	0.195	39.4	
14:20	0	2232		17.27	5.11	0.193	36.1	
14:35	0	2290		17.28	4.95	0.192	36.7	Clear
14:50	0	2350	44.47	17.28	4.70	0.191	33.6	Clear

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-306S
Site: Bethpage Site 1
Date Installed: 12/07-08/2011
Date Developed: 12/08/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 50.3'
Static Water Level Before (ft.): 43.14'
Static Water Level After (ft.): 43.15'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:45	0.5'	0	47.85'	16.4	6.08	0.211	200	Airlift -Lt. brown-brown.
11:10	↓	↓		16.64	5.8	0.212	60.2	Lt. brown.
11:30	↓	↓		16.64	5.81	0.210	60.1	Cloudy.
11:35	↓	↓		16.6	5.89	0.216	210	Submersible - Lt. brown.
12:20	↓	↓		16.68	5.71	0.213	51	Clear
12:25	0	1100	47.87'	16.77	5.56	0.214	40.8	Clear

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-306I
Site: Bethpage Site 1
Date Installed: 12/05-06/2011
Date Developed: 12/09/2011
Dev. Method: Airlift/Submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 199'
Static Water Level Before (ft.): 47.5'
Static Water Level After (ft.): 47.57'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
8:30	0.5'	0	47.5'	17.13	6.07	0.181	549	Airlift -Lt. brown-brown.
9:00	↓	↓		17.33	5.67	0.172	38.9	Clear
9:30				16.87	5.16	0.167	31.8	↓
10:00				16.89	4.97	0.165	30.4	
10:30				16.89	4.97	0.164	30.2	
11:00				16.92	4.97	0.164	29.5	
11:30				16.92	4.96	0.163	28.6	
12:00	0	1150	47.57'	16.91	4.98	0.163	28.4	

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-306D
Site: Bethpage Site 1
Date Installed: 11/28-30/2011
Date Developed: 12/11/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 294'
Static Water Level Before (ft.): 43.98'
Static Water Level After (ft.): 43.96'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
13:30	+/-1.5'	Initial	43.50'	13.94	5.03	0.211	>1000	Initially, turbid, gray to white
13:45	↓	150	↓	14.62	5.90	0.177	185	
13:50	↓	300	↓	14.83	5.83	0.166	115	
14:15	↓	450	↓	13.16	5.87	0.169	423	Submersible
14:30	↓	600	↓	14.52	6.00	0.165	69.7	↓
14:45	↓	750	↓	13.95	5.89	0.165	45.2	↓
15:00	↓	1000	↓	13.94	5.88	0.165	43.1	↓
15:15	0	1100	43.46'	13.96	5.89	0.164	43.2	↓

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-TT-MW-307S
Site: Bethpage Site 1
Date Installed: 11/11/2011
Date Developed: 12/06/2011
Dev. Method: Submersible
Pump Type: Fultz-centrifugal

Depth to Bottom (ft.): 50.5'
Static Water Level Before (ft.): 47.98'
Static Water Level After (ft.): 47.75'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
9:23	1.5	0	47.98'	16.44	5.81	0.113	>1000	Tan-brown, turbid - Q = +/- 7.5 gpm
9:53		150		16.34	5.78	0.145	113	Lt. brown.
10:23		375		16.43	5.98	0.148	111	Lt. brown.
10:53		600		16.36	5.83	0.148	214.0	Clear
11:23		875		16.42	5.53	0.148	324.0	Clear
11:53		1100		16.32	5.79	0.148	57.3	Clear
12:23		1325		16.41	5.75	0.149	66.8	Clear
12:53		1550		16.5	5.91	0.150	460.0	Clear
13:13		1550		16.98	5.88	0.148	>1000	Tan-brown, turbid - Q = +/- 4.5 gpm
13:53	↓	1730	↓	15.15	5.95	0.151	345.0	Turbid
13:23	0.0	1865	47.95'	15.16	5.90	0.150	76.0	Clear

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BPSI-T-T-MW307I
Site: Site 1
Date Installed:
Date Developed: 12/2/11
Dev. Method: Pump/Surge
Pump Type: Grundfos

Depth to Bottom (ft.): 200
Static Water Level Before (ft.): 44.7
Static Water Level After (ft.): 45.21
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2"

Responsible Personnel: Kristi Francisco
Drilling Co.: DELTA
Project Name: Site 1 - PCB Investigation
Project Number: 112002230

1025 - Development begins

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units µS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO	ORP	
1325		6.00	53.49	15.86	7.03	0.206	22.6	10.26	214	clear
1330		—	53.49	15.70	6.35	0.250	1.0	9.94	212	clear
1335		—	53.49	15.72	6.26	0.241	1.40	10.09	208	clear
1340		—	53.49	15.56	6.17	0.246	0.61	10.05	211	clear
1345		—	53.49	15.62	6.14	0.241	1.20	9.86	210	clear
1350		—	53.49	15.67	6.14	0.239	1.53	9.77	210	clear
1355		—	53.49	15.41	6.12	0.241	4.64	9.82	214	clear
1400		—	53.49	15.37	6.11	0.240	1.21	9.79	214	clear
1405		6.40	53.49	15.53	6.10	0.240	0.00	9.73	215	clear

Tetra Tech

MONITORING WELL DEVELOPMENT RECORD

Well: BP-MW-307D
Site: Bethpage Site 1
Date Installed: 11/11/2011
Date Developed: 12/05/2011
Dev. Method: Airlift/submersible
Pump Type: centrifugal

Depth to Bottom (ft.): 286'
Static Water Level Before (ft.): 43.98'
Static Water Level After (ft.): 43.96'
Screen Length (ft.): 10'
Specific Capacity: Not determined
Casing ID (in.): 2" ID

Responsible Personnel: J. Ferguson
Drilling Co.: Delta Drilling
Project Name: Bethpage Site 1
Project Number: 112G02230

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below grnd)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
10:00	4'	0	43.98'	15.34	5.04	0.231	23.9	Airlift, gray, turbid.
10:30		500		15.56	5.49	0.190	83.2	Turbid.
10:45		1000		15.54	5.53	0.182	83.7	Clear
11:45		1500		15.16	5.56	0.194	71.7	Turbid.
12:00		2000		15.12	5.95	0.182	70.8	Submersible, clear
13:40		1500		15.79	5.58	0.180	69.7	Submersible - clear
14:00		1567		15.91	4.81	0.179	3.1	
14:30		1667		15.93	4.61	0.178	1.6	
15:00		1767		15.94	4.66	0.177	1.3	
15:25	0	1867	43.96'	15.95	4.69	0.177	1.3	

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BPSI-TT-MW308S
Site: Site 1
Date Installed:
Date Developed: 12/2
Dev. Method: Surge / Pump
Pump Type: Grundfos

Depth to Bottom (ft.): 67
Static Water Level Before (ft.): 55.41
Static Water Level After (ft.): 55.78
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: Kristi Francisco
Drilling Co.: DELTA
Project Name: Site 1 PCB investigation
Project Number: 112G02230

0735 - Development begins

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO	ORP	
0845		320	55.46	15.45	5.72	0.90	5.06	10.58	267	clear
0850		—	55.46	15.15	6.22	0.964	2.13	10.52	234	clear
0855		—	55.46	15.14	6.51	0.745	2.47	10.39	216	clear
0900		—	55.46	15.15	6.56	0.715	3.53	10.26	210	clear
0905		—	55.46	14.98	6.55	0.688	2.64	10.55	212	clear
0910		—	55.46	15.28	6.58	0.675	0.48	10.31	204	clear
0915		—	55.46	15.17	6.56	0.672	0.33	10.53	204	clear
0920		—	55.46	15.16	6.58	0.674	0.28	10.33	204	clear
0925		400	55.46	15.16	6.58	0.673	0.23	10.37	204	clear

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BPSI-TT-MW308I
Site: Site 1
Date Installed:
Date Developed: 12/1
Dev. Method: Purge/Surge
Pump Type: Grundfos

Depth to Bottom (ft.): 170'
Static Water Level Before (ft.): 57
Static Water Level After (ft.): 57.14
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2"

Responsible Personnel: Kristi Francisco
Drilling Co.: DELTA
Project Name: Site 1 - PCB Investigation
Project Number: 112G02230

1200 - Begin development

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO	ORP	
1420		500	56.70	13.17	5.47	.240	15.4	8.05	241	clear
1425		—	56.70	13.80	5.62	.241	5.39	6.57	237	clear
1430		—	56.70	13.77	5.61	.241	2.74	7.08	241	clear
1435		—	56.70	13.99	5.61	.241	0.86	7.66	240	clear
1440		—	56.70	13.93	5.60	.242	0.00	7.71	236	clear
1445		—	56.70	13.78	5.58	.244	0.00	7.73	234	clear
1450		—	56.70	13.71	5.58	.244	0.00	7.68	234	clear
1455		—	56.70	13.72	5.60	.240	0.61	7.45	232	clear
1500		550	56.70	13.75	5.60	.241	0.84	7.62	232	clear

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BBSI-TT-MW308D
Site: Site 1
Date Installed:
Date Developed: 12/1/11
Dev. Method: Air lift / pump
Pump Type: Grundfos

Depth to Bottom (ft.): 260'
Static Water Level Before (ft.): 51.62
Static Water Level After (ft.): 54.81'
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: Krish Francisco
Drilling Co.: DELTA
Project Name: Site 1 - PCB investigation
Project Number: 112G02236

0800 - Begin development

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO	ORP	
1055		1,400 ~~600~~	56.71	14.58	5.06	.240	1.07	7.76	248	clear
1100		—	56.71	14.53	5.41	.172	0.50	7.92	239	clear
1105		—	56.71	14.15	5.46	.164	0.15	8.51	247	clear
1110		—	56.71	14.56	5.51	.155	0.59	8.11	239	clear
1115		—	56.71	13.89	5.48	.153	12.0	8.61	241	clear
1120		—	56.71	13.83	5.49	.149	14.9	8.73	242	clear
1125		—	56.71	14.45	5.49	.149	6.68	9.01	238	clear
1130		—	56.71	14.32	5.50	.149	2.14	8.85	234	clear
1135		1,450	56.71	14.21	5.50	.149	0.50	8.72	234	clear

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BBSI-TT-MW3095
Site: Site
Date Installed:
Date Developed: 11/30/11
Dev. Method: purge/surge
Pump Type: Grundfos

Depth to Bottom (ft.): 67
Static Water Level Before (ft.): 55
Static Water Level After (ft.): 55.68
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: Kristi Francisco
Drilling Co.: Delta
Project Name: Site 1 - PCB Investigation
Project Number: 112G02230

0730 - Development begins

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO ORP
0900		360	60.21	13.15	5.37	0.90	17.6	9.02 276 orange
0905		—	60.21	13.41	5.88	0.475	17.0	8.86 260 orange
0910		—	60.21	13.46	6.00	0.403	16.9	8.63 251 orange
0915		—	60.21	13.60	6.01	0.362	16.0	8.79 244 orange
0920		—	60.21	13.60	6.02	0.360	15.2	8.34 241 orange
0925		—	60.21	13.66	6.01	0.361	13.8	8.36 241 orange
0930		—	60.21	13.64	6.00	0.341	15.0	8.34 241 orange
0935		—	60.21	13.61	5.98	0.346	13.2	8.36 241 orange
0940		400	60.21	13.66	5.98	0.346	13.9	8.38 241 orange

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BPS1-TT-MW09I
Site: Site 1
Date Installed:
Date Developed: 11/30
Dev. Method: Surge/Purge
Pump Type: Grundfos

Depth to Bottom (ft.): 177
Static Water Level Before (ft.): 57'
Static Water Level After (ft.):
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: Kristi Francisco
Drilling Co.: DELTA
Project Name: Site 1 - PCB Investigation
Project Number: 112G02230

1020 - Development begins

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO	ORP	
1330		550	57.8	14.51	5.14	0.242	1.07	9.76	249	clear
1335		—	57.8	14.35	5.20	0.252	2.60	9.63	263	clear
1340		—	57.8	14.32	5.20	0.251	1.73	9.67	259	clear
1345		—	57.8	14.29	5.20	0.247	0.18	9.63	258	clear
1350		—	57.8	14.11	5.18	0.247	1.32	9.65	263	clear
1400		—	57.8	14.04	5.19	0.248	1.52	9.63	262	clear
1405		—	57.8	14.08	5.18	0.245	0.73	9.64	254	clear
1410		—	57.8	14.12	5.17	0.246	0.0	9.61	255	clear
1415		620	57.8	14.10	5.17	0.245	0.0	9.62	255	clear

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: BPS1-TT-MW309D
Site: Side 1
Date Installed:
Date Developed: 11/28 - 11/29
Dev. Method: Airlift / Pump
Pump Type: Grundfos

Depth to Bottom (ft.): 267
Static Water Level Before (ft.): 55'
Static Water Level After (ft.): 56'
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: John Stephens / Kristi Francisco
Drilling Co.: Delta
Project Name: PCB Investigation
Project Number: 112602230

11/28/11 - Development begins at 1310 to 1515
11/29/11 - Development re-begins at 1055

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) DO ORP
1350		800	60.34	16.65	5.18	0.416	0.26	7.65 232 - clear
1400 ~~1355~~		830	60.34	16.65	5.42	0.276	0.00	6.24 211 - clear
1410		860	60.34	16.54	5.39	0.253	0.00	7.41 215
1415		870	60.34	16.47	5.39	0.231	0.00	6.55 219
1420		880	60.34	16.48	5.37	0.230	0.00	6.71 217
1425		890	60.34	16.47	5.34	0.231	0.00	6.62 217
1430		900	60.34	16.48	5.31	0.228	0.00	6.68 219
1435		910	60.34	16.45	5.31	0.223	0.00	6.65 220
1440		920	60.34	16.44	5.31	0.225	0.00	6.71 221

Groundwater Sample and Low Flow Purge Logsheets

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-FWMW01-01192012
Sample Location: BPS1-FWMW01
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 0930	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	7.08	0.461	13.93	8.9	6.71	-	248

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 52.30								
One Casing Volume(gal/L): --								
Start Purge (hrs): 08.30								
End Purge (hrs): 09.30								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	-
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	-
TOC	H2SO4	3 40-mL amber glass vials	-

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-FW-MW01
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0820	52.30									
0830	52.32	400	6.64	0.383	205	8.46	12.68	217	–	cloudy (Brown)
0835	52.32	400	7.21	0.430	254	7.14	13.92	213	–	" "
0840	52.32	400	7.35	0.420	198	6.77	14.00	222	–	" "
0845	52.32	400	6.89	0.429	147	6.58	14.36	256	–	Tinted (Tan)
0850	52.32	400	6.88	0.434	90.7	6.70	14.48	288	–	" "
0855	52.32	400	6.40	0.442	71.4	6.71	14.40	259	–	" "
0900	52.32	400	6.49	0.444	57.6	6.75	14.29	265	–	" "
0905	52.32	400	6.87	0.449	48.3	6.80	14.17	272	–	" "
0910	52.32	400	6.96	0.451	39.7	6.67	14.08	270	–	" "
0915	52.32	400	7.00	0.454	30.0	6.72	14.01	265	–	slight Tint (Tan)
0920	52.32	400	7.05	0.459	19.4	6.75	13.97	256	–	clear
0925	52.32	400	7.07	0.460	11.0	6.73	13.95	252	–	clear
0930	52.32	400	7.08	0.461	8.9	6.71	13.93	248	–	clear - collect sample

SIGNATURE(S): [illegible]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-FW-MW02-01172012
Sample Location: BPS1-FWMW02
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1515	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	Clear	6.97	0.463	15.86	6.8	7.05	–	208

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 64'								
Static Water Level (WL): 52.78'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1415								
End Purge (hrs): 1515								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	–
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	–
TOC	H2SO4	3 40-mL amber glass vials	–

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-FW-MW02
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1405	52.78	–	–	–	–	–	–	–	–	Initial
1415	52.79	350	6.85	0.447	226	8.98	14.67	231	–	cloudy (Brown)
1420	52.79	350	7.04	0.406	190	8.89	15.01	220	–	slightly cloudy (Brown)
1425	52.79	350	7.02	0.407	174	8.37	15.36	216	–	" " "
1430	52.79	350	7.03	0.410	156	8.04	15.47	209	–	" " "
1435	52.79	350	7.03	0.413	92.3	7.59	15.66	202	–	Tinted (Brown)
1440	52.79	350	7.02	0.413	46.5	7.63	15.69	203	–	slight Tint (Tan)
1445	52.79	350	7.01	0.411	29.2	7.58	15.72	204	–	" " "
1450	52.79	350	7.01	0.410	21.3	7.40	15.75	204	–	clear
1455	52.79	350	7.00	0.409	17.0	7.32	15.77	205	–	clear
1500	52.79	350	6.99	0.407	13.1	7.20	15.80	204	–	clear
1505	52.79	350	6.98	0.406	11.0	7.14	15.83	205	–	clear
1510	52.79	350	6.98	0.404	9.2	7.11	15.84	207	–	clear
1515	52.79	350	6.97	0.403	6.8	7.05	15.86	208	–	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-FW-MW03 - 01192012
Sample Location: BPS1-FW-MW03
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1110	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.28	0.182	15.30	3.1	8.90	—	229

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 51.43								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1010								
End Purge (hrs): 1110								
Total Purge Time (min): 60								
Total Vol. Purged (~~gal~~/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-FW-MW03
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1000	51.43	-	-	-	-	-	-	-	-	Initial
1010	51.45	400	5.13	0.203	246	10.17	13.52	306	-	cloudy (Brown)
1015	51.45	400	4.88	0.199	221	9.40	14.71	298	-	" "
1020	51.45	400	5.20	0.190	88.4	9.26	14.90	270	-	Tinted (Tan)
1025	51.45	400	5.59	0.185	38.7	9.16	15.10	232	-	" "
1030	51.45	400	5.97	0.183	24.0	9.08	15.21	220	-	slight Tint (Tan)
1035	51.45	400	6.13	0.184	15.2	9.07	15.16	221	-	clear
1040	51.45	400	6.26	0.184	11.0	9.07	15.15	223	-	clear
1045	51.45	400	6.29	0.183	8.2	8.99	15.21	227	-	clear
1050	51.45	400	6.29	0.183	5.0	8.92	15.30	226	-	clear
1055	51.45	400	6.30	0.183	4.8	8.95	15.35	226	-	clear
1100	51.45	400	6.29	0.182	4.0	8.93	15.32	228	-	clear
1105	51.45	400	6.28	0.182	3.6	8.92	15.29	228	-	clear
1110	51.45	400	6.28	0.182	3.1	8.90	15.30	229	-	clear-collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-HMW29I-01192012
Sample Location: BPS1-HMW29I
Sampled By: S. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 0917	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	11.21	0.339	13.13	2.63	5.20	0.02	11

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 4 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 130.5								
Static Water Level (WL): 42.11								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0810								
End Purge (hrs): 0917								
Total Purge Time (min): 67								
Total Vol. Purged (gal/L): 8 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)+Ca+Na	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
High pH
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):
—	— BPS1-Dup03-01192012 1630	

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-HN-29I MW
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0810	42.11									
0815	42.96	500	11.02	0.399	—	8.06	12.87	79	0.02	clear
0820	43.14	500	11.16	0.410	7.64	5.70	12.83	38	0.02	clear
0825	43.21	375	11.17	0.410	5.02	5.50	12.83	24	0.02	clear
0830	43.25	375	11.14	0.406	4.76	5.41	13.02	23	0.02	clear
0835	43.26	375	11.17	0.398	4.22	5.37	13.21	16	0.02	clear
0840	43.28	375	11.15	0.389	4.00	5.31	13.30	13	0.02	clear
0845	43.28	375	11.20	0.386	3.99	5.26	13.40	13	0.02	clear
0850	43.28	375	11.22	0.380	4.09	5.21	12.98	11	0.02	clear
0855	43.28	375	11.27	0.368	3.68	5.13	12.75	9	0.02	clear 5 gal
0900	43.28	375	11.21	0.360	3.31	5.22	13.28	9	0.02	clear
0905	43.28	375	11.22	0.354	2.93	5.23	13.48	9	0.02	clear
0910	43.28	375	11.19	0.344	2.64	5.24	13.50	11	0.02	clear
0915	43.28	375	11.21	0.339	2.63	5.20	13.13	11	0.02	clear 8 gal
0917	Collect sample									

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW301S 01172012
Sample Location: BPS1-TT-MW301S
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1140	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.06	0.026	17.12	0.0	8.08	—	262

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 62'								
Static Water Level (WL): 51.09'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1040								
End Purge (hrs): 1140								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW301
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1035	51.09	—	—	—	—	—	—	—	—	Initial
1040	51.11	400	5.99	0.029	26.4	8.54	14.40	234	-	clear
1045	51.11	400	6.10	0.028	9.6	7.93	15.34	239	-	clear
1050	51.11	400	6.09	0.028	7.0	8.30	16.51	248	-	clear
1055	51.11	400	6.10	0.027	2.9	8.18	16.62	249	-	clear
1100	51.11	400	6.09	0.027	1.3	8.12	16.78	250	-	clear
1105	51.11	400	6.10	0.027	0.6	8.20	16.89	249	-	clear
1110	51.11	400	6.10	0.027	0.2	8.27	16.91	253	-	clear
1115	51.11	400	6.09	0.026	0.0	8.33	16.93	253	-	clear
1120	51.11	400	6.08	0.026	0.1	8.22	17.00	255	-	clear
1125	51.11	400	6.08	0.026	0.1	8.13	17.05	257	-	clear
1130	51.11	400	6.07	0.026	0.0	8.16	17.11	259	-	clear
1135	51.11	400	6.07	0.026	0.0	8.11	17.17	261	-	clear
1140	51.11	400	6.06	0.026	0.0	8.08	17.12	262	—	clear. collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW301I-011712012
Sample Location: BPS1-TT-MW301I
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1305	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.80	0.632	13.94	0.1	8.74	—	280

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 141								
Static Water Level (WL): 50.95								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1205								
End Purge (hrs): 1305								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit results → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW301I
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1200	50.95	–	–	–	–	–	–	–	–	Initial
1205	50.96	420	6.10	0.026	21.3	6.73	12.80	260	–	clear
1210	50.96	400	5.89	0.030	6.5	7.61	13.50	266	–	clear
1215	50.96	400	5.78	0.031	5.1	8.21	13.73	274	–	clear
1220	50.96	400	5.76	0.031	1.4	8.23	13.64	277	–	clear
1225	50.96	400	5.76	0.030	1.6	8.35	13.62	278	–	clear
1230	50.96	400	5.76	0.031	0.8	8.32	13.63	279	–	clear
1235	50.96	400	5.76	0.031	0.5	8.29	13.57	280	–	clear
1240	50.96	400	5.77	0.032	0.6	8.36	13.64	280	–	clear
1245	50.96	400	5.77	0.031	0.4	8.40	13.75	279	–	clear
1250	50.96	400	5.78	0.032	0.3	8.47	13.84	278	–	clear
1255	50.96	400	5.79	0.032	0.3	8.57	13.93	279	–	clear
1300	50.96	400	5.80	0.032	0.2	8.65	13.99	279	–	clear
1305	50.96	400	5.80	0.032	0.1	8.74	13.94	280	–	clear-collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW301D-01172012
Sample Location: BPS1-TT-MW301D
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 0950	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.78	0.397	14.48	0.0	5.15	—	263

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 221'								
Static Water Level (WL): 51.75'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0850								
End Purge (hrs): 0950								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.09 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW301D
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0840	51.75	–	–	–	–	–	–	–	–	Initial
0850	51.76	400	5.89	0.506	22.2	7.49	13.06	297	–	clear
0855	51.76	400	5.89	0.492	3.6	5.91	13.74	253	–	clear
0900	51.76	400	5.89	0.490	0.5	5.77	14.09	246	–	clear
0905	51.76	400	5.90	0.488	0.3	5.67	14.19	247	–	clear
0910	51.76	400	5.90	0.471	0.1	5.53	14.26	249	–	clear
0915	51.76	400	5.88	0.449	0.2	5.40	14.24	252	–	clear
0920	51.76	400	5.85	0.446	0.1	5.41	14.30	253	–	clear
0925	51.76	400	5.84	0.434	0.1	5.29	14.34	255	–	clear
0930	51.76	400	5.82	0.418	0.1	5.18	14.38	256	–	clear
0935	51.76	400	5.80	0.402	0.0	5.27	14.45	257	–	clear
0940	51.76	400	5.78	0.399	0.0	5.31	14.47	259	–	clear
0945	51.76	400	5.78	0.397	0.0	5.26	14.46	261	–	clear
0950	51.76	400	5.78	0.397	0.0	5.15	14.48	263	–	clear

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW301D-01232012
Sample Location: BPS1-TT-MW301D
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-23-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1230	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.91	0.539	13.95	4.40	4.47	0.03	154

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 51.83								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1044								
End Purge (hrs): 1230								
Total Purge Time (min): 46								
Total Vol. Purged (gal/L): 5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	No
PCBs	--	2 1-L ambler glass vials	No
Hexavalent Chromium	--	1 250-mL plastic bottle	Yes
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	No
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	No
TOC	H2SO4	3 40-mL amber glass vials	No

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.09 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW301D-
DATE: 1-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1044	51.83									
1046	51.88	400	6.15	0.603	9.00	6.30	13.49	209	0.03	clear
1051	5.88	400	6.14	0.597	6.61	5.40	12.73	179	0.03	clear
1056	51.88	400	5.99	0.618	5.04	4.93	13.10	169	0.03	clear
1201	51.88	400	5.96	0.613	8.31	5.01	13.28	161	0.03	clear
1206	51.88	400	5.96	0.604	8.28	4.85	13.59	151	0.03	clear
1211	51.88	400	5.95	0.590	9.96	4.80	13.73	152	0.03	clear
1216	51.88	400	5.94	0.563	7.72	4.80	13.84	152	0.03	clear
1221	51.88	400	5.92	0.546	5.81	4.58	13.92	152	0.03	clear
1226	51.88	400	5.91	0.539	4.40	4.47	13.95	154	0.03	clear 5 gal
1230	Collect sample									

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW302S-01202012
Sample Location: BPS1-TT-MW302S
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-20-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 0920	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.36	0.040	16.62	0.4	7.23	—	220

PURGE DATA:

Date: 1-20-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.41'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0820								
End Purge (hrs): 0920								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW302B
DATE: 1-20-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0815	42.41	–	–	–	–	–	–	–	–	Initial
0820	42.43	400	5.84	0.095	52.0	7.36	13.78	237	–	Tinted (Tan)
0825	42.43	400	6.16	0.052	9.7	7.83	15.70	210	–	clear
0830	42.43	400	6.24	0.047	7.0	7.91	16.12	208	–	clear
0835	42.43	400	6.30	0.044	2.3	7.34	16.36	213	–	clear
0840	42.43	400	6.36	0.044	2.1	7.26	16.24	212	–	clear
0845	42.43	400	6.37	0.043	0.9	7.28	16.22	209	–	clear
0850	42.43	400	6.40	0.045	1.3	7.19	16.30	202	–	clear
0855	42.43	400	6.42	0.046	1.0	7.13	16.37	209	–	clear
0900	42.43	400	6.41	0.045	0.8	7.20	16.41	211	–	clear
0905	42.43	400	6.39	0.043	0.6	7.24	16.50	217	–	clear
0910	42.43	400	6.38	0.042	0.4	7.19	16.56	215	–	clear
0915	42.43	400	6.37	0.040	0.5	7.21	16.60	218	–	clear
0920	42.43	400	6.36	0.040	0.4	7.23	16.62	220	–	clear-collect sample

SIGNATURE(S): [illegible]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW302I1-012012
Sample Location: BPS1-TT-MW302I1
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-20-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1045	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.36	0.125	15.33	0.4	6.87	–	308

PURGE DATA:

Date: 1-20-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.47								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0945								
End Purge (hrs): 1045								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	–
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	–
TOC	H2SO4	3 40-mL amber glass vials	–

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW302I1
DATE: 1-20-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0940	42.47	—	—	—	—	—	—	—	—	Initial
0945	42.48	375	5.81	0.122	63.7	7.99	14.25	274	—	Tinted (Brown)
0950	42.48	400	5.57	0.124	55.6	7.03	14.60	263	—	slight Tint (Tan)
0955	42.48	400	5.47	0.123	40.1	7.08	14.56	272	—	" " "
1000	42.48	400	5.43	0.123	32.0	6.95	14.80	276	—	" " "
1005	42.48	400	5.38	0.124	13.2	7.00	14.97	287	—	clear
1010	42.48	400	5.37	0.124	5.9	6.98	15.06	294	—	clear
1015	42.48	400	5.37	0.124	2.8	6.95	15.11	297	—	clear
1020	42.48	400	5.37	0.124	2.1	6.97	15.10	300	—	clear
1025	42.48	400	5.37	0.125	1.4	6.94	15.11	302	—	clear
1030	42.48	400	5.35	0.124	1.5	6.89	15.16	304	—	clear
1035	42.48	400	5.36	0.125	0.8	6.90	15.22	306	—	clear
1040	42.48	400	5.36	0.125	0.6	6.85	15.30	307	—	clear
1045	42.48	400	5.36	0.125	0.4	6.87	15.33	308	—	clear-collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW302I2-01202012
Sample Location: BPS1-TT-MW302I2
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-20-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1115	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.64	6.193	14.78	6.54	5.72	0.01	218

PURGE DATA:

Date: 1-20-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.71								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1017								
End Purge (hrs): 1115								
Total Purge Time (min): 58								
Total Vol. Purged (gal/L): 8 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW302I2
DATE: 1-20-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1017	42.71									
1022	42.72	600	8.26	0.181	44.9	6.79	13.11	117	0.01	clear w/ VF sand
1027	42.72	600	7.26	0.185	98.2	7.34	15.13	174	0.01	Clear w/ VF sand
1032	42.72	600	6.58	0.187	48.5	7.71	15.54	210	0.01	clear
1037	42.72	500	6.19	0.189	30.1	6.42	15.16	220	0.01	clear
1042	42.72	500	5.84	0.191	18.5	5.89	15.05	221	0.01	clear 5 gal
1047	42.72	400	5.74	0.192	16.6	5.97	14.52	213	0.01	clear
1052	42.72	400	5.68	0.192	11.2	6.03	14.50	217	0.01	clear
1057	42.72	400	5.67	0.192	10.36	6.05	14.80	218	0.01	clear
1102	42.72	400	5.65	0.193	8.93	5.75	14.78	215	0.01	clear
1107	42.72	400	5.64	0.193	7.45	5.73	14.90	215	0.01	clear
1112	42.72	400	5.64	0.193	6.54	5.72	14.78	218	0.01	clear 8 gal
1115	Collect sample									

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW302D-01202012
Sample Location: BPS1-TT-MW 302D
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date: 1-20-12								
Time: 1000	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	9.38↓	0.264	15.16	2.19	4.73	0.01	109

PURGE DATA:

Date: 1-20-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.98								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0827								
End Purge (hrs): 1000								
Total Purge Time (min): 93								
Total Vol. Purged (gal/L): 12.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe, Ca, Na)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~~-2 feet off bottom-~~
Hexavalent Chromium Test Kit Result : 0.00mg/L

pH was high and would not stabilize - dropping

Note: Tubing was a little short, but probably near top of screen

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW302D
DATE: 1-20-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0827	42.98									
0832	43.04	600	10.73	0.363	6.71	7.06	14.86	72	0.02	clear
0837	43.03	500	10.75	0.365	5.26	6.10	15.17	57	0.02	clear
0842	43.03	500	10.78	0.361	9.06	4.75	14.80	53	0.02	clear
0847	43.03	400	10.80	0.358	5.15	4.76	14.34	50	0.02	clear
0852	43.01	400	10.77	0.354	4.27	4.50	13.96	49	0.02	clear 5 gal
0857	43.01	400	10.68	0.342	3.46	3.78	13.92	51	0.02	clear
0902	43.01	400	10.56	0.327	2.42	4.80	14.04	52	0.02	clear
0907	43.01	400	10.44	0.314	1.96	4.82	14.16	55	0.02	clear
0912	43.01	400	10.33	0.304	2.10	4.62	14.49	60	0.02	clear
0917	43.01	400	10.25	0.294	2.70	4.63	14.76	64	0.02	clear
0922	43.01	400	10.22	0.292	2.88	4.63	14.86	66	0.02	clear
0927	43.01	400	10.16	0.289	2.87	4.63	14.92	70	0.02	clear
0932	43.01	400	10.07	0.284	2.87	4.61	14.87	75	0.02	clear
0937	43.01	400	9.93	0.278	2.65	4.55	14.98	82	0.02	clear 10 gal
0942	43.01	400	9.79	0.273	2.89	4.64	15.10	89	0.02	clear
0947	43.01 JB	400	9.71	0.270	2.53	4.71	15.07	94	0.01	clear
0952	43.01 ~~Collect sample~~	400	9.62	0.268	2.34	4.66	14.99	99	0.01	clear
0957	43.01	400	9.38	0.264	2.19	4.73	15.16	109	0.01	clear 12.5 gal
1000	Collect sample 4									

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW303S-01232012
Sample Location: BPS1-TT-MW 303S
Sampled By:
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-23-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1049	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.65	0.442	16.88	4.26	9.71	0.02	156

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.15								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0949								
End Purge (hrs): 1049								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 7 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	No
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	BPS1-Dup04-01232012 1600

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW303S
DATE: 1-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0949	42.15									
0951	42.15	600	6.23	0.488	78.6	12.92	13.25	156	0.02	tan tint
0956	42.15	500	6.48	0.491	92.4	11.61	14.21	124	0.02	tan tint
1001	42.15	500	6.49	0.476	62.6	11.54	15.24	119	0.02	clear
1006	42.15	400	6.55	0.467	34.9	10.99	15.50	136	0.02	clear
1011	42.15	400	6.57	0.460	20.4	10.79	15.91	143	0.02	clear
1016	42.15	400	6.60	0.448	14.5	10.54	15.93	147	0.02	clear
1021	42.15	400	6.63	0.448	10.29	10.51	16.71	141	0.02	clear
1026	42.15	400	6.66	0.441	9.04	10.35	16.79	145	0.02	clear 5 gal
1031	42.15	400	6.66	0.444	6.20	10.20	16.87	150	0.02	clear
1036	42.15	400	6.67	0.446	4.51	10.05	16.88	151	0.02	clear
1041	42.15	400	6.65	0.443	4.86	9.91	16.90	155	0.02	clear
1046	42.15	400	6.65	0.442	4.26	9.71	16.88	156	0.02	clear 7 gal
1049	Collect sample and duplicate									

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW303I1-011920 12
Sample Location: BPS1-TT-MW303I1
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1415	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	tan color	9.61	0.206	15.81	339	0.07	—	-32

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.49								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1215								
End Purge (hrs): 1415								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 14.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.00 mg/L (without Acid added)
→ 0.00 Mg/L (with Acid Added)

Circle if Applicable:

MS/MSD	Duplicate ID No.:
	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW303I1
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1205	42.49	–	–	–	–	–	–	–	–	Initial
1215	42.52	300	9.74	0.213	305	0.94	14.13	140	–	cloudy (Brown)
1220	42.52	300	9.75	0.210	300	0.51	15.20	113	–	" "
1225	42.52	300	9.75	0.209	313	0.42	15.50	90	–	" "
1230	42.52	325	9.74	0.208	339	0.41	15.68	65	–	" "
1235	42.52	325	9.71	0.208	415	0.39	15.77	49	–	" "
1240	42.52	325	9.71	0.208	430	0.42	15.83	43	–	" "
1245	42.52	300	9.72	0.208	432	0.44	15.59	37	–	" "
1250	42.52	300	9.69	0.207	450	0.41	15.51	29	–	" "
1255	42.52	300	9.69	0.207	433	0.37	15.60	21	–	" "
1300	42.52	300	9.69	0.207	419	0.34	15.62	16	–	" "
1305	42.52	300	9.69	0.207	399	0.38	15.75	8	–	" "
1310	42.52	300	9.70	0.207	404	0.31	15.80	3	–	" "
1315	42.52	300	9.69	0.207	397	0.28	15.82	-2	–	" "
1320	42.52	300	9.67	0.207	362	0.30	15.90	-6	–	" "
1325	42.52	300	9.67	0.207	390	0.27	15.92	-11	–	" "
1330	42.52	300	9.67	0.206	400	0.25	15.91	-12	–	" "
1335	42.52	300	9.64	0.206	377	0.21	15.90	-13	–	" "
1340	42.52	300	9.62	0.206	390	0.19	15.87	-14	–	" "
1345	42.52	300	9.60	0.206	400	0.17	15.88	-18	–	" "
1350	42.52	300	9.60	0.205	311	0.15	15.88	-24	–	" "
1355	42.52	300	9.61	0.205	314	0.16	15.91	-28	–	" "
1400	42.52	300	9.61	0.205	338	0.13	15.87	-30	–	" "
1405	42.52	300	9.61	0.206	342	0.09	15.86	-32	–	" "
1410	42.52	300	9.61	0.206	348	0.08	15.83	-31	–	" "
1415	42.52	300	9.61	0.206	339	0.07	15.81	-32	–	" " collect sample

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW303I2-01192012
Sample Location: BPS1-TT-MW303I2
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1307	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.64	0.124	14.26	2.19	4.71	0.01	191

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.82								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1200								
End Purge (hrs): 1307								
Total Purge Time (min): 67								
Total Vol. Purged (gal/L): 8 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	yes
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW303I 2
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1200	42.82									
1205	42.86	650	5.72	0.127	176	6.58	12.92	141	0.01	tan color
1210	42.85	650	5.68	0.125	134	10.22	13.40	129	0.01	tan tint
1215	42.86	600	5.65	0.124	63.5	5.84	14.09	149	0.01	clear
1220	42.82	450	5.70	0.124	41.1	5.20	13.92	165	0.01	clear
1225	42.82	400	5.69	0.124	22.7	5.05	13.70	165	0.01	clear
1230	42.82	400	5.69	0.124	14.4	4.98	13.65	163	0.01	clear
1235	42.82	500	5.59	0.125	51.3	5.27	13.28	170	0.01	pump had to be restarted
1240	42.82	400	5.64	0.125	30.5	5.04	1386	158	0.01	clear 5 gal
1245	42.82	400	5.65	0.124	11.7	4.98	14.00	167	0.01	clear
1250	42.82	400	5.65	0.124	5.44	4.87	14.13	174	0.01	clear
1255	42.82	400	5.65	0.124	4.45	4.75	14.15	183	0.01	clear
1300	42.82	400	5.65	0.124	4.38	4.75	14.17	188	0.01	clear
1305	42.82	400	5.64	0.124	2.19	4.71	14.26	191	0.01	clear
1307	Collect sample									

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW303D-01192012
Sample Location: BPS1-TT-MW303D
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Date: 1-19-12								
Time: 1452								
Method: Low Flow - Grundfos	clear	6.10	0.199	14.07	15.6	5.39	0.01	165

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date: 1-19-12								
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.96								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1340								
End Purge (hrs): 1452								
Total Purge Time (min): 72								
Total Vol. Purged (gal/L): 13.951								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No Stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230
WELL ID.: BPS1-TT-MW303D
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1340	42.96									
1350	43.01	500	6.52	0.202	58.7	8.10	12.06	157	0.01	tan tint
1355	43.05	800	6.38	0.201	240	6.24	13.72	123	0.01	flush TURB out
1400	43.05	800	6.42	0.202	284	6.30	14.51	112	0.01	tan color
1405	43.05	800	6.47	0.202	203	6.33	14.71	129	0.01	tan color
1410	43.01	500	6.39	0.199	129	6.09	14.76	148	0.01	tan tint 5 gal
1415	43.01	500	6.30	0.199	87.2	5.97	14.72	155	0.01	tan tint
1420	43.01	500	6.25	0.198	65.3	5.78	14.65	156	0.01	tan tint (slight)
1425	43.00	400	6.20	0.198	48.9	5.62	14.60	160	0.01	clear
1430	43.00	400	6.18	0.198	40.8	5.54	14.43	160	0.01	clear 9 gal
1435	43.00	400	6.10	0.199	34.0	5.55	14.34	162	0.01	clear
1440	43.00	400	6.13	0.198	23.1	5.44	14.45	161	0.01	clear
1445	43.00	400	6.11	0.197	20.3	5.33	14.32	161	0.01	clear
1450	43.00	400	6.10	0.199	15.6	5.39	14.07	165	0.01	clear
1452	Collect sample									

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW304S-01182012
Sample Location: BPS1-TT-MW304S
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1045	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.45	0.002	17.30	0.1	10.54	—	293

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 54'								
Static Water Level (WL): 45.46'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0945								
End Purge (hrs): 1045								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit result → 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW304$
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0935	45.96	–	–	–	–	–	–	–	–	Initial
0945	45.97	400	5.97	0.029	36.3	10.84	15.20	235	–	slight Tint (Tan)
0950	45.97	400	6.10	0.020	17.4	10.58	16.41	235	–	clear
0955	45.97	400	6.03	0.015	13.2	10.56	16.93	243	–	clear
1000	45.97	400	5.95	0.010	8.5	10.54	17.28	252	–	clear
1005	45.97	400	5.78	0.006	4.8	10.57	17.36	257	–	clear
1010	45.97	400	5.70	0.005	2.0	10.61	17.28	272	–	clear
1015	45.97	400	5.68	0.005	1.0	10.64	17.33	275	–	clear
1020	45.97	400	5.55	0.005	1.3	10.63	17.30	279	–	clear
1025	45.97	400	5.52	0.004	0.4	10.62	17.28	285	–	clear
1030	45.97	400	5.50	0.004	0.1	10.62	17.22	292	–	clear
1035	45.97	400	5.47	0.003	0.1	10.60	17.23	297	–	clear
1040	45.97	400	5.46	0.003	0.1	10.57	17.28	295	–	clear
1045	45.97	400	5.45	0.002	0.1	10.54	17.30	293	–	clear-collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW304II-01182012
Sample Location: BPS1-TT-MW304II
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1225	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.67	0.114	15.12	9.2	7.54	—	209

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 113'								
Static Water Level (WL): 46.22'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1125								
End Purge (hrs): 1225								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit results → 0.04 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW304I1
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1110	46.22	–	–	–	–	–	–	–	–	Initial
1125	46.23	400	7.40	0.182	19.6	10.97	14.24	219	–	clear
1130	46.23	400	7.22	0.178	422	9.69	14.18	200	–	cloudy (Brown)
1135	46.23	400	6.90	0.170	245	9.13	14.70	173	–	" "
1140	46.23	400	6.83	0.162	172	8.55	14.80	184	–	" "
1145	46.23	400	6.76	0.148	119	7.60	14.84	196	–	Tinted (Tan)
1150	46.23	400	6.74	0.137	77.3	7.52	14.92	200	–	slight Tint (Tan)
1155	46.23	400	6.72	0.131	60.4	7.40	14.97	202	–	" " "
1200	46.23	400	6.71	0.123	47.5	7.32	15.01	208	–	" " "
1205	46.23	400	6.71	0.120	39.0	7.41	15.00	209	–	" " "
1210	46.23	400	6.69	0.117	26.1	7.46	15.03	207	–	" " "
1215	46.23	400	6.69	0.115	16.4	7.51	15.04	208	–	clear
1220	46.23	400	6.68	0.114	13.0	7.52	15.09	209	–	clear
1225	46.23	400	6.67	0.114	9.2	7.54	15.12	209	–	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW304I2-01182012
Sample Location: BPS1-TT-MW304I2
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1400	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.55	0.073	14.51	1.8	8.33	–	286

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 151								
Static Water Level (WL): 46.40'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1300								
End Purge (hrs): 1400								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	6
PCBs	--	2 1-L ambler glass vials	4
Hexavalent Chromium	--	1 250-mL plastic bottle	2
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	2
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	–
TOC	H2SO4	3 40-mL amber glass vials	–

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit results → 0.18 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.: (Time → 1600 hrs)
–	BPS1-TT-Dup02-01182012

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSi-TT-MW304I2
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1250	46.40	–	–	–	–	–	–	–	–	Initial
1300	46.41	400	6.73	0.082	120	11.16	14.10	198	–	Tinted (Tan)
1305	46.41	400	6.17	0.079	116	10.25	14.48	220	–	" "
1310	46.41	400	5.74	0.075	47.6	9.66	14.61	246	–	slight Tint (Tan)
1315	46.41	400	5.63	0.073	18.2	9.11	14.72	261	–	clear
1320	46.41	400	5.56	0.073	11.7	8.80	14.68	270	–	clear
1325	46.41	400	5.57	0.073	5.5	8.71	14.64	273	–	clear
1330	46.41	400	5.58	0.073	4.0	8.60	14.66	275	–	clear
1335	46.41	400	5.57	0.073	3.9	8.58	14.63	280	–	clear
1340	46.41	400	5.55	0.073	3.0	8.49	14.65	281	–	clear
1345	46.41	400	5.55	0.073	2.2	8.37	14.61	281	–	clear
1350	46.41	400	5.54	0.073	1.9	8.35	14.56	283	–	clear
1355	46.41	400	5.55	0.073	2.0	8.31	14.53	285	–	clear
1400	46.41	400	5.55	0.073	1.8	8.33	14.51	286	–	clear - collect sample

SIGNATURE(S): [illegible]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW309D-01192012
Sample Location: BPS1-TT-MW309D
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-19-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1117								
Method: Low Flow - Grundfos	Clear	5.85	0.122	14.64	11.1	7.91	0.01	190

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): ~~1015~~ 1-19-12 46.59								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1015								
End Purge (hrs): 1017								
Total Purge Time (min): 62								
Total Vol. Purged (gal/L): 8 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW304D
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1015	46.59									
1020	46.66	600	8.44	0.137	1789	16.36	12.47	163	0.01	tan color (milky)
1025	46.66	600	7.74	0.125	812	11.41	13.20	103	0.01	tan color
1030	46.65	500	7.01	0.123	188	9.89	14.74	149	0.01	tan tint
1035	46.63	400	6.58	0.123	67.2	9.63	14.68	174	0.01	tan tint
1040	46.61	400	6.32	0.123	43.8	9.51	14.36	191	0.01	clear 5 gal
1045	46.60	400	6.13	0.123	33.5	9.31	14.24	197	0.01	clear
1050	46.60	400	5.97	0.123	30.1	9.17	14.14	192	0.01	clear
1055	46.60	400	5.90	0.124	28.4	8.29	13.59	192	0.01	clear
1100	46.60	400	5.84	0.123	27.7	8.06	14.49	191	0.01	clear
1105	46.60	400	5.85	0.123	13.9	8.07	14.11	187	0.01	clear
1110	46.60	400	5.85	0.123	13.4	7.97	14.66	188	0.01	clear
1115	46.60	400	5.85	0.122	11.1	7.91	14.64	190	0.01	clear
1117	Collect sample									

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW305S-01172012
Sample Location: BPS1-TT-MW305S
Sampled By: S. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1050	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.74	0.096	18.10	3.62	10.01	0.00	215

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 49.74								
Static Water Level (WL): 42.91								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1000								
End Purge (hrs): 1050								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 13.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains, odors, or elevated PID readings

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	BPS1-Dup01-01172012 1200

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW305S
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1000	42.91	Start purge								
1007	42.97	Purgerate flunturating, can't get to stabilize (shuts off and speeds up) troubleshoot								
1020	42.99	500	5.79	0.098	26.1	10.67	18.41	186	0.00	tan color (5 gal)
1025	42.99	500	5.76	0.097	21.3	10.45	18.34	195	0.00	slight tan tint
1030	42.99	500	5.77	0.096	11.7	10.26	18.25	201	0.00	clear
1035	42.99	500	5.72	0.096	12.2	10.32	18.08	204	0.00	clear 9 gal
1040	42.99	500	5.75	0.096	4.32	10.19	18.12	211	0.00	clear
1045	42.99	500	5.74	0.096	3.62	10.01	18.10	215	0.00	13.5 gal
1050	Collect sample									

SIGNATURE(S): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW305 $
DATE: 1-16-2012

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1251	42.98									Use pump w/ eletrical tape on wiring
1255	43.05	900	5.86	0.103	—	12.84	17.11	132	0.00	tan color
1300	43.03	600	5.76	0.099	148	12.03	17.21	145	0.00	tan tint
1305	43.00	450	5.78	0.098	111	11.90	17.48	155	0.00	tan tint
1310	43.00	450	5.79	0.097	70.0	11.80	17.85	158	0.00	slight tan tint 45 gal
1315	43.00	400	5.83	0.096	35.8	11.68	17.52	166	0.00	clearish
1320	43.00	400	5.83	0.099	30.9	11.82	16.27	164	0.00	clear
1325	43.00	400	5.79	0.098	30.2	11.00	16.90	164	0.00	clear
1330			5.83	0.099		11.31	16.30	163	0.00	Pump rate slowing, keep
1335			5.81	0.100		11.31	16.34	164	0.00	increasing control box Hz
		Pump broke (wires exposed, Ground Fault)								at 300 Hz but not pumpin
										water made it through trap

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW305I-01172012
Sample Location: BPS1-TT-MW305I
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-2012	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1158								
Method: Low Flow - Grundfos	Clear	5.59	0.231	16.06	19.2	8.00	0.01	217

PURGE DATA:

Date: 1-17-2012	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 43.41								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1103								
End Purge (hrs): 1158								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): 10 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW305I
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1103	43.41									clear
1108	43.42	800	5.82	0.233	OverRange	9.22	15.34	232	0.01	light brownish orange
1113	43.42	800	6.06	0.252	" "	8.51	16.15	194	0.01	brown/orange
1118	43.41	500	5.73	0.236	864	7.49	16.08	201	0.01	light brown tint
1123	43.41	456	5.68	0.235	32	7.69	15.80	210	0.01	tan tint
1128	43.42	450	5.61	0.234	103.6	7.90	15.88	208	0.01	tan tin
1133		400	5.63	0.233	65.4	7.79	16.09	201	0.01	clearish
1138	43.42	400	5.60	0.232	45.4	7.84	16.24	204	0.01	clear
1143	43.42	400	5.61	0.231	31.8	8.24	16.17	207	0.01	
1148	43.42	400	5.61	0.231	25.9	8.01	16.22	212	0.01	
1153	43.42	400	5.59	0.231	19.2	8.00	16.06	217	0.01	10 gal
1158	Collect	Sample								

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW305D-01172012
Sample Location: BPS1-TT-MW305D
Sampled By: J. Birkeit
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-17-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1446	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.48	0.148	13.42	33.4	5.73	0.0	179

PURGE DATA:

Date: 1-17-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 43.57								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1350								
End Purge (hrs): 1446								
Total Purge Time (min): 56								
Total Vol. Purged (gal/L): 6 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L ambler glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	yes
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00mg/L

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW305D
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1350	43.57									
1354	43.81	800	6.36	0.159	—	7.53	14.01	288	0.0	clear
1359	43.65	450	6.65	0.160	1415	6.30	14.20	257	0.0	tan color
1404	43.62	400	6.62	0.158	389	6.63	14.40	176	0.0	tan tint
1409	43.62	350	6.52	0.154	255	6.52	14.29	173	0.0	tan tint
1414	43.62	350	6.56	0.154	150	6.56	13.55	173	0.0	tan tint
1419	43.62	350	6.55	0.152	92.2	6.55	13.28	176	0.0	slight tan tint 3 gal
1424	43.62	350	6.53	0.151	74.6	6.53	13.45	177	0.0	clearish
1429	43.62	350	6.52	0.150	48.0	5.37	13.33	178	0.0	clear
1434	43.62	350	6.49	0.149	47.3	5.81	13.25	178	0.0	clear
1439	43.62	350	6.48	0.149	31.8	5.69	13.39	179	0.0	clear 5 gal
1444	43.62	350	6.48	0.148	33.4	5.73	13.42	179	0.0	clear
1446	Collect sample									

SIGNATURE(S): [illegible]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW3064-01232012
Sample Location: BPS1-TT-MW3064
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-23-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1350	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.97	0.077	16.91	6.0	8.15	—	266

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 60'								
Static Water Level (WL): 44.96'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1250								
End Purge (hrs): 1350								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 7.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	3

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L
No stains or odors observed

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW306S
DATE: 1-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1245	44.96	–	–	–	–	–	–	–	–	Initial
1250	44.98	425	5.77	0.082	613	9.47	15.80	231	–	cloudy (Brown)
1255	44.98	400	5.90	0.080	566	9.01	16.30	236	–	" "
1300	44.98	400	5.94	0.078	430	8.72	16.41	249	–	" "
1305	44.97	400	6.00	0.078	199	8.27	16.40	251	–	" "
1310	44.97	400	5.99	0.078	113	8.22	16.59	252	–	Tinted (Tan)
1315	44.97	400	5.97	0.078	92.5	8.16	16.82	250	–	" "
1320	44.97	400	5.96	0.078	59.2	8.24	16.88	254	–	slight Tint (Tan)
1325	44.97	400	5.98	0.077	37.8	8.28	16.91	256	–	" " "
1330	44.98	400	5.98	0.077	28.3	8.20	16.91	259	–	" " "
1335	44.98	400	5.98	0.077	15.6	8.21	16.93	261	–	clear
1340	44.98	400	5.98	0.077	8.9	8.17	16.93	263	–	clear
1345	44.98	400	5.97	0.077	7.4	8.13	16.89	264	–	clear
1350	44.98	400	5.97	0.077	6.0	8.15	16.91	266	–	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW306I-01232012
Sample Location: BPS1-TT-MW306I
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-23-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1210	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.70	0.120	16.33	0.1	7.00	—	269

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 199'								
Static Water Level (WL): 45.34'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1110								
End Purge (hrs): 1210								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 7.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	7
PCBs	--	2 1-L ambler glass vials	6
Hexavalent Chromium	--	1 250-mL plastic bottle	1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	3

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00 Mg/L
No stains or odors observed

Circle if Applicable:

MS/MSD (Yes)
Duplicate ID No.: —

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-MW306I
DATE: 1-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1105	45.34	—	—	—	—	—	—	—	—	Initial
1110	45.36	425	5.86	0.107	204	7.79	15.16	290	—	cloudy (Brown)
1115	45.36	400	5.90	0.131	307	6.55	15.80	218	—	" "
1120	45.37	400	5.83	0.127	79.7	6.64	15.95	236	—	slight Tint (Tan)
1125	45.37	400	5.78	0.123	30.9	6.80	16.04	247	—	" " "
1130	45.37	400	5.74	0.122	18.6	6.85	16.15	251	—	clear
1135	45.36	400	5.72	0.121	7.5	6.93	16.18	255	—	clear
1140	45.37	400	5.72	0.120	4.8	6.95	16.21	258	—	clear
1145	45.37	400	5.71	0.119	2.7	6.87	16.23	261	—	clear
1150	45.36	400	5.70	0.119	2.3	6.92	16.28	263	—	clear
1155	45.36	400	5.71	0.120	1.6	6.95	16.29	263	—	clear
1200	45.36	400	5.69	0.120	0.5	7.01	16.31	267	—	clear
1205	45.36	400	5.70	0.119	0.2	6.98	16.36	268	—	clear
1210	45.36	400	5.70	0.120	0.1	7.00	16.38	269	—	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW306D-01232012
Sample Location: BPS1-TT-MW306D
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-23-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1035								
Method: Low Flow - Grundfos	clear	6.06	0.114	15.60	0.0	7.01	–	231

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 294'								
Static Water Level (WL): 45.95'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0935								
End Purge (hrs): 1035								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	–
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	–
TOC	H2SO4	3 40-mL amber glass vials	1

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

No stains or odors observed

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW306D
DATE: 1-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0925	45.95	–	–	–	–	–	–	–	–	Initial
0935	45.97	400	6.02	0.136	144	8.32	15.02	235	–	Tinted (Brown)
0940	45.97	400	6.12	0.133	209	7.63	15.08	209	–	" "
0945	45.97	400	6.15	0.125	150	7.30	15.15	192	–	" "
0950	45.97	400	6.15	0.121	76.4	7.05	15.21	201	–	slight Tint (Tan)
0955	45.97	400	6.12	0.118	30.3	7.10	15.27	207	–	" " "
1000	45.97	400	6.09	0.117	18.1	6.98	15.35	213	–	clear
1005	45.97	400	6.06	0.116	6.6	7.02	15.41	219	–	clear
1010	45.97	400	6.02	0.115	2.4	7.00	15.50	223	–	clear
1015	45.97	400	6.04	0.115	0.9	6.96	15.54	224	–	clear
1020	45.97	400	6.05	0.115	0.4	7.01	15.60	226	–	clear
1025	45.97	400	6.05	0.114	0.1	7.02	15.61	229	–	clear
1030	45.97	400	6.05	0.114	0.0	7.00	15.63	230	–	clear
1035	45.97	400	6.06	0.114	0.0	7.01	15.60	231	–	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW307S-01182012
Sample Location: BPS1-TT-MW307S
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-2012	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1450	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.44	0.183	17.57	9.55	8.30	0.01	164

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 41.73								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1328								
End Purge (hrs): 1450								
Total Purge Time (min): 82								
Total Vol. Purged (gal/L): 13 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes 3
PCBs	--	2 1-L ambler glass vials	yes 2
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes 1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW307S
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1328	41.73									
1330	41.78	800	5.96	0.142	Over Range	11.94	15.60	153	0.01	Red/brown water
1335	41.73	500	6.33	0.176	1136	6.75	16.56	122	0.01	Red color
1340	41.73	450	6.36	0.179	287	6.09	17.44	113	0.01	Red tint
1345	41.73	400	6.40	0.182	183	5.50	17.69	122	0.01	Red tint
1350	41.73	400	6.38	0.181	125	5.45	16.71	119	0.01	Red tint
1355	41.73	400	6.41	0.179	91.6	5.49	18.40	123	0.01	tan tint
1400	41.73	400	6.41	0.182	55.4	5.43	18.46	126	0.01	clear 5 gal
1405	41.73	350	6.43	0.186	51.9	6.08	17.73	128	0.01	clear, pump slowed
1410	41.73	350	6.43	0.187	132	6.44	18.02	103	0.01	increase Hz
1423	41.75	600	6.36	0.190	327	9.42	17.35	128	0.01	pump shutdown pump surged
1428	41.75	600	6.38	0.185	125	9.31	17.37	152	0.01	Red tint
1433	41.74	500	6.44	0.187	59.6	8.83	17.46	152	0.01	clearish 10 gal
1438	41.73	450	6.44	0.182	30.9	8.60	17.46	152	0.01	clear
1443	41.73	400	6.44	0.183	15.2	8.34	17.54	163	0.01	clear
1448	41.73	400	6.44	0.183	9.55	8.30	17.57	164	0.01	clear 13 gal
1450	Collect sample									

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW307J 01182012
Sample Location: BPS1-TTMW307J
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1232								
Method: Low Flow - Grundfos	clear	5.77	0.186	13.96	12.2	365	0.1	166

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 198								
Static Water Level (WL): 42.14								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1126								
End Purge (hrs): 1232								
Total Purge Time (min): 66								
Total Vol. Purged (gal/L): 8.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes 3
PCBs	--	2 1-L ambler glass vials	yes 2
Hexavalent Chromium	--	1 250-mL plastic bottle	yes 1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes 1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result: 0.00 mg/L
Dup: 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW307 I
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1126	42.14									clear
1130	42.30	600	5.85	0.198	2139	9.97	14.21	149	0.01	tan color
1135	42.32	500	5.85	0.197	1008	3.07	13.97	136	0.01	tan tint/color
1140	42.32	500	5.82	0.196	346	2.16	14.07	138	0.01	tan color
1145	42.30	450	5.82	0.194	167	2.38	14.34	142	0.01	tan tint
1150	42.30	450	5.81	0.192	84.8	2.99	14.28	150	0.01	tan tint
1155	42.30	450	5.80	0.192	60.8	2.87	14.14	153	0.01	tan tint (5 gal)
1200	42.30	450	5.79	0.190	38.2	3.00	14.23	155	0.01	clear
1205	42.30	400	5.79	0.190	30.9	3.05	14.15	156	0.01	clear
1210	42.30	400	5.79	0.189	24.9	3.54	13.89	159	0.01	clear
1215	42.30	400	5.77	0.187	22.8	3.82	13.77	161	0.01	clear
1220	42.30	400	5.78	0.186	17.3	3.59	13.85	162	0.01	clear
1225	42.30	400	5.77	0.186	16.5	3.76	13.86	164	0.01	clear
1230	42.30	400	5.77	0.186	12.2	3.65	13.96	166	0.01	clear (8.5 gal)
1232	Collect sample									

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW307D01182012
Sample Location: BPS1-TT-MW307D
Sampled By: J. Birkett
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1042	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.56	0.203	13.94	10.44	4.39	0.01	106

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 286								
Static Water Level (WL): 42.62								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0940								
End Purge (hrs): 1042								
Total Purge Time (min): 62								
Total Vol. Purged (gal/L): 3 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes 3
PCBs	--	2 1-L ambler glass vials	yes 2
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes 1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result: 0.0mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW307D
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0940	42.62									
0945	42.67	425	5.85	0.229	8.85	7.09	12.79	239	0.01	clear
0950	42.67	425	6.25	0.211	48.6	5.73	13.09	117	0.01	clear
0955	42.67	425	6.35	0.206	62.3	5.14	12.90	92	0.01	tan tint
1000	42.67	425	6.41	0.203	43.3	4.47	13.34	87	0.01	clear
1005	42.67	425	6.45	0.203	48.0	4.99	13.60	88	0.01	clear
1010	42.67	425	6.48	0.203	31.6	4.36	13.39	90	0.01	clear
1015	42.67	425	6.51	0.203	25.2	4.36	13.83	96	0.01	clear 5 gal
1020	42.67	425	6.52	0.203	17.6	4.54	13.56	97	0.01	clear
1025	42.67	425	6.53	0.203	14.7	4.35	13.70	102	0.01	clear
1030	42.67	425	6.53	0.202	16.0	4.67	13.89	105	0.01	clear
1035	42.67	425	6.55	0.203	11.5	4.41	13.72	106	0.01	clear
1040	42.67	425	6.56	0.203	10.44	4.39	13.94	106	0.01	clear 8 gal
1042	Collect sample									

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW308$-01162012
Sample Location: BPS1-TT-MW308$
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-16-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1605	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	6.16	0.283	13.85	4.9	9.67	–	244

PURGE DATA:

Date: 1-16-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 64'								
Static Water Level (WL): 55.24'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1510								
End Purge (hrs): 1605								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	7
PCBs	--	2 1-L ambler glass vials	6
Hexavalent Chromium	--	1 250-mL plastic bottle	–
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	3
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	–
TOC	H2SO4	3 40-mL amber glass vials	–

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD: Yes
Duplicate ID No.: —

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW308$
DATE: 1-16-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1500	55.24	-	-	-	-	-	-	-	-	Initial
1510	55.25	400	6.12	0.292	747	11.20	12.49	237	-	cloudy (Brown)
1515	55.25	400	6.12	0.291	194	11.04	12.95	237	-	" "
1520	55.25	400	6.13	0.294	65.8	10.73	13.40	238	-	Slight Tint (Tan)
1525	55.25	400	6.14	0.295	32.9	10.41	13.86	239	-	" " "
1530	55.25	400	6.15	0.290	24.0	10.36	13.84	238	-	" " "
1535	55.25	400	6.17	0.288	17.3	10.32	13.88	237	-	clear
1540	55.25	400	6.16	0.287	11.6	10.27	13.82	239	-	clear
1545	55.25	400	6.16	0.286	8.45	10.28	13.78	241	-	clear
1550	55.25	400	6.16	0.283	7.0	9.99	13.85	241	-	clear
1555	55.25	400	6.16	0.284	6.4	9.80	13.84	242	-	clear
1600	55.25	400	6.16	0.283	5.8	9.69	13.87	243	-	clear
1605	55.25	400	6.16	0.283	4.9	9.67	13.85	244	-	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW308I-01162012
Sample Location: BPS1-TT-MW308I
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-16-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1440	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.88	0.312	14.29	7.2	4.11	—	241

PURGE DATA:

Date: 1-16-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 166'								
Static Water Level (WL): 55.69'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1330								
End Purge (hrs): 1440								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): 7.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW308I
DATE: 1-16-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1315	55.69	-	-	-	-	-	-	-	-	Initial
1330	55.71	425	6.16	0.249	617	11.02	11.03	255	-	cloudy (Gry-Brn)
1335	55.71	425	6.07	0.272	844	9.91	12.25	230	-	cloudy (Brown)
1340	55.71	425	5.96	0.319	403	8.66	14.77	216	-	cloudy (Brown)
1345	55.71	425	5.94	0.319	226	6.39	14.28	220	-	" "
1350	55.71	425	5.91	0.318	138	4.97	13.99	223	-	Tinted (Gray-Tan)
1355	55.71	425	5.91	0.319	80.4	4.96	13.98	225	-	Slight Tint (Gry)
1400	55.71	425	5.90	0.319	69.3	4.93	13.97	227	-	" "
1405	55.71	425	5.90	0.316	40.4	4.60	14.02	229	-	very slight Tint (Gry)
1410	55.71	425	5.90	0.315	29.2	4.38	14.06	231	-	" " " "
1415	55.71	425	5.90	0.314	21.5	4.29	14.09	234	-	clear
1420	55.71	425	5.90	0.314	15.3	4.21	14.12	238	-	clear
1425	55.71	425	5.89	0.313	9.6	4.19	14.17	239	-	clear
1430	55.71	425	5.89	0.313	8.7	4.17	14.22	240	-	clear
1435	55.71	425	5.88	0.313	7.9	4.14	14.26	241	-	clear
1440	55.71	425	5.88	0.312	7.2	4.11	14.29	241	-	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW3030-0116 2012
Sample Location: BPS1-TT-MW3030
Sampled By: VAS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-16-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: 1230	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	clear	5.99	0.170	14.51	6.5	5.24	—	221

PURGE DATA:

Date: 1-16-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2 " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 260'								
Static Water Level (WL): 53.30'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1115								
End Purge (hrs): 1230								
Total Purge Time (min): 75								
Total Vol. Purged (gal/L): 7.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L ambler glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	—
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	—
TOC	H2SO4	3 40-mL amber glass vials	—

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result : 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW308D
DATE: 1-16-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1105	56.30	—	—	—	—	—	—	—	-	Initial
1115	56.31	400	5.67	0.168	139.7	9.50	12.45	266	-	slight Tint (Tan)
1120	56.31	400	5.95	0.160	204	7.88	12.72	262	-	slightly cloudy
1125	56.31	400	6.00	0.162	190	6.18	13.41	192	-	Tinted (Tan)
1130	56.31	400	6.01	0.162	186	6.12	13.59	194	-	Tinted (Tan)
1135	56.31	400	6.04	0.164	132	5.97	13.62	197	-	" "
1140	56.31	400	6.08	0.164	103	5.95	13.80	198	-	slight Tint (Tan)
1145	56.31	400	6.04	0.167	55.2	5.69	14.12	190	-	very slight Tint (Tan)
1150	56.31	400	6.03	0.170	47.6	5.72	14.29	202	-	" " " "
1155	56.31	400	6.01	0.171	34.3	5.63	14.33	212	-	" " " "
1200	56.31	400	6.01	0.172	27.1	5.45	14.30	216	-	" " " "
1205	56.31	400	6.00	0.171	16.8	5.36	14.41	217	-	clear
1210	56.31	400	6.00	0.170	9.7	5.31	14.45	218	-	clear
1215	56.31	400	6.00	0.170	8.6	5.28	14.49	219	-	clear
1220	56.31	400	5.99	0.170	6.5	5.24	14.51	221	-	clear - collect sample

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: SITE 1 PCB INVES.
Project No.: 112G02230

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: BPS1-TT-MW03S-01102012
Sample Location: BPS1-TT-MW03S
Sampled By: SJC
C.O.C. No.: 1106
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 1/10/12 Time: 1500 Method: SUB PUMP	CLEAR	6.52	.317	17.11	41	3.54	02	155

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 1/10/12								
Method: 2" SUB								
Monitor Reading (ppm): 0								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 65.00	TPVC							
Static Water Level (WL): 56.00	TPVC							
One Casing Volume(gal/L):								
Start Purge (hrs): 1230								
End Purge (hrs): 1500								
Total Purge Time (min): 150								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4°C	3- 40 ml VIALS	✓
PCBs	4°C	2- 1L AMBER	✓
TAL METALS (T)	HNO3/4°C	1- 250 ml PE (500ml)	✓
TAL METALS (D)	HNO3/4°C	1- 250ml PE (500 mL	✓
HEX CR.	4°C	1- 250ml PE	✓
TOC	H2SO4/4°C	3- 40 ml VIALS	NO
		(8) TOTAL	

OBSERVATIONS / NOTES:

SCREEN 53-63 BGS. AVE FLOW 300 ml/min

- Repurge well on 1-24-12 to conduct Hexavalent Chromium Test Kit analysis. Well purged for 60 minutes at 400 ML/min.
Hexavalent Chromium Test Kit Result → 0.01 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): SJ Conti

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: SITE 1 PCB INVES.
PROJECT NUMBER: 112G02230

WELL ID.: BPS1-TT-MW-309S
DATE: 1/10/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1200	56.00	~200	—	—	—	—	—	—		
1215	56.00	"	—	—	—	—	—	—		PUMP ADJUSTMENT
* 1230	56.00	~300	—	—	—	—	—	—		START *
1245	56.00	"	6.50	.324	461	4.01	17.17	157	.02%	SL. TURBID
1300	56.02	"	6.50	.322	189	3.51	17.10	153	.02%	" "
1315	56.02	"	6.52	.320	115	2.75	16.59	163	.02%	" "
1330	56.02	"	6.54	.319	174	3.86	17.37	155	.02%	" "
1345	56.02	"	6.53	.321	115	3.54	17.18	162	.02%	" "
1400	56.02	"	6.52	.321	60	3.39	17.33	160	—	BECOMES CLEAR
1415	56.02	"	6.55	.319	48	3.56	18.10	150	.02%	"
1430	56.02	"	6.53	.317	61	3.59	16.92	161	.02%	"
1445	56.02	"	6.51	.317	45	3.61	17.10	163	.02%	"
1500	56.02	"	6.52	.317	41	3.54	17.11	155	.02%	"

SAMPLE @ 1500 HRS.

FLOW RATE VARY 200 → 500 ml/min.
DIFFICULT TO ADJUST TO 200 ml/min.
170 → 190 HZ ON BOX

SIGNATURE(S): SJ Conti

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Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

01112012

Project Site Name: SITE 1 PCB INVESTIGATION
Project No.: 112G02230

Sample ID No.: BPS1-TT-MW309I-
Sample Location: BPS1-TT-MW309I
Sampled By: SJC

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

C.O.C. No.: 1107
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA: SAL.

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1/11/12	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Time: 1000								
Method: 2" GRUNDFOS	CLEAR	5.62	.312	15.48	5.91	5.58	213	.01 %

PURGE DATA:

Date: 1/11/12								
Method: 2" GRUNDFOS								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2"Φ PVC								
Total Well Depth (TD): ~172'	TPVC							
Static Water Level (WL): 56.70	TPVC							
One Casing Volume(gal/L):								
Start Purge (hrs): 0900								
End Purge (hrs): 1000								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	3- 40ml Glass Vials	✓
PCBs	4 DEG C	2-1L Amber	✓
TAL METALS TOT Cr and Fe (Total)	HNO3/4 DEG C	1-500ml PE	✓
TAL METALS TOT Cr and Fe (Dissolved)	HNO3/4 DEG C	1-500ml PE	—
HEX CHROME	4 DEG C	1-250ml PE	✓
TOC	H2SO4/4 DEG C	3-40ml Amber Glass Vials	—

OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

1-24-12 Hex Chrom test kit result = 0.12mg/L w/o acid in blank
0950 = 0.06 mg/L with acid in blank

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): SJ Conti

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: SITE 1 PCB
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW309I
DATE: 1/11/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0900	56.70	~400	—	—	—	—	—	—	—	CLOUDY, GRAY
0915	56.70	"	5.62	.323	223	5.95	15.24	182	.02%	SL TURBID
0930	56.70	"	5.62	.315	87	5.75	15.27	199	.01%	BECOMES CLERRER
0940	56.70	"	5.61	.313	25	6.10	15.29	202	.01%	CLEAR
0950	56.70	"	5.62	.312	9.98	5.54	15.40	208	.01%	"
1000	56.70	"	5.62	.312	5.91	5.58	15.48	213	.01%	"
	SAMPLE @	1000	HRS.							
	169.60 HZ									
1-24-12 0845	Start purge	(~30 min	then run	Cr6+ test	kit					
0950	Run Cr6+ test kit				47.1					

SIGNATURE(S): [signature] for SC

PAGE___OF___

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

01112012

Project Site Name: SITE 1 PCB INVESTIGATION
Project No.: 112G02230

Sample ID No.: BPS1-TT-MW 309 D –
Sample Location: BPS1-TT-MW
Sampled By: SJC

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

C.O.C. No.: 1107
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA: SAL

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1 / 11 / 12	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
Time: 1410								
Method: 2" GRUNDFOS	V. SL	6.00	.267	15.10	62.8	0.00	124	.01%

PURGE DATA: TURBID

Date: 1/11/12								
Method: 2" GRUNDFOS								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2"Φ PVC								
Total Well Depth (TD): ~264	TPVC							
Static Water Level (WL): 56.59	TPVC							
One Casing Volume(gal/L):								
Start Purge (hrs): 1200								
End Purge (hrs): 1410								
Total Purge Time (min): 130								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	3- 40ml Glass Vials	✓
PCBs	4 DEG C	2-1L Amber	✓
TAL METALS TOT Cr and Fe (Total)	HNO3/4 DEG C	1-500ml PE	✓
TAL METALS TOT Cr and Fe (Dissolved)	HNO3/4 DEG C	1-500ml PE	✓
HEX CHROME	4 DEG C	1-250ml PE	✓
TOC	H2SO4/4 DEG C	3-40ml Amber Glass Vials	—

OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

1-24-12 0830 Hex Chrom test kit result = 0.00 mg/L

252-262 SCREEN BGS

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): SJ Conti

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: SITE 1 PCB
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW309D
DATE: 1/11/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1200	56.59	~400	—	—	—	—	—	—	—	SL. TURBID GRAY
1210	56.69	"	6.22	.287	105	0.00	15.48	112	.01 %	SL. " "
1220	56.69	"	6.15	.284	67.3	0.00	15.56	117	.01 %	BECOMING CLEAR
1230	56.69	"	6.14	.280	68.5	0.00	15.59	118	.01 %	" "
1240	56.69	"	6.13	.277	80.4	0.00	15.53	119	.01 %	" "
1250	56.69	"	6.11	.275	91.7	0.00	15.47	119	.01 %	" "
1300	56.69	"	6.09	.274	94.7	0.00	15.44	119	.01 %	" "
1310	56.69	"	6.07	.273	84.3	0.00	15.41	120	.01 %	" "
1320	56.69	"	6.05	.271	84.5	0.00	15.22	121	.01 %	" "
1330	56.69	~300	6.02	.271	74.8	0.00	15.27	122	.01 %	" "
1340	—	—	—	—	—	—	—	—	—	
1350	56.69	"	6.01	.269	72.8	0.00	15.33	124	.01 %	" "
1400	56.69	"	6.02	.268	63.1	0.00	15.11	124	.01 %	V.SL TURBID
1410	56.69	"	6.00	.267	62.8	0.00	15.10	124	.01 %	" "
		SAMPLE @		1410						
	169.00 HZ									
1-24-12 0755	Start purge	(run for	~15 min)	then perform Cr6+		test Kit				
0830	Run Cr6+ test kit				27.1					
	0.00mg/L									

SIGNATURE(S): SJ Conte

PAGE 1 OF 1

QA Sample Logs

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location: Site 4
QA Sample Type:

[X] Trip Blank
[] Source Water Blank

Sample ID Number: BPS1-TB01-01162012
Sampled By: JB/Lab
C.O.C. Number:

[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-16-12
Time: 0935
Method: Lab prepared

WATER SOURCE:

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	2 ~~3~~ 40-mL clear glass vials	(YES) / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location:
QA Sample Type:

Sample ID Number: BPS1-TB02-01182012
Sampled By: Lab
C.O.C. Number:

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-18-2012
Time: 0800
Method: Lab prepared

WATER SOURCE:

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location: Lab prep'd
QA Sample Type:

Sample ID Number: BPS1-TB03-01192012
Sampled By: JB/Lab
C.O.C. Number:

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-19-12
Time: 0745
Method: Lab prepared

WATER SOURCE:

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	~~2~~ 3 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location: site4 / Lab
QA Sample Type:

Sample ID Number: BPS1-TB04-01202012
Sampled By: JB
C.O.C. Number:

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 10-20-12
Time: 0730
Method: Lab prepared

WATER SOURCE:

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	~~2~~ 3 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Bethpage
Project Number: 112G02230
Sample Location: Site 4 / Lab
QA Sample Type:

Sample ID Number: BPS1-TB05-01232012
Sampled By: JB/Lab
C.O.C. Number:

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-23-12
Time: 0730
Method: Lab prepared

WATER SOURCE:

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	2 40mL glass vials	YES / NO
Semivolatiles	Cool 4°C		YES / NO
Pesticide / PCB	Cool 4°C		YES / NO
Metals	Cool 4°C & HNO_3		YES / NO
Cyanide	Cool 4°C & NaOH		YES / NO

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location: Field office
QA Sample Type:

Sample ID Number: BPS1-FB01-01182012
Sampled By: VAS and JB
C.O.C. Number:

[] Trip Blank
[X] Source Water Blank
[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-18-12
Time: 0810
Method: Direct Pour

WATER SOURCE:

[] Laboratory Prepared
[X] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name: Distilled Water
Supplier: Stop & Shop
Manufacturer: DS waters of America
Order Number: —
Lot Number: —
Expiration Date: 1-12-14

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO
TAL Metals (dissolved)	Cool 4°C + HNO_3	1 500 mL plastic	yes

OBSERVATIONS / NOTES:

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWIRP Bethpage
Project Number: 112G02230
Sample Location: Main Building near Grate
QA Sample Type:

[] Trip Blank
[X] Source Water Blank
[] Rinsate Blank
[] Other Blank

Sample ID Number: BPS1-FB02-01232012
Sampled By: J. Birkett
C.O.C. Number:

SAMPLING DATA:

Date: 1-23-12
Time: 1430
Method: Direct Pour

WATER SOURCE:

[] Laboratory Prepared
[] Purchased
[] Other
[X] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40 mL glass vials	(YES) / NO
~~Semivolatiles~~ Hexavalent Chrom.	Cool 4°C	1 250 mL poly bottle	(YES) / NO
~~Pesticide~~ / PCB	Cool 4°C	2 1 L amber glass bottles	(YES) / NO
Metals (Fe & Cr)	Cool 4°C & HNO_3	1 500 mL poly bottle	(YES) / NO
Cyanide	Cool 4°C & NaOH		YES / (NO)

OBSERVATIONS / NOTES:

Direct fill from hose in main building.
Water used for decon.
Hex. Chrom. Test Kit Result: 0.00 mg/L

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project Number: 112G02230
Sample Location: Field office
QA Sample Type:

Sample ID Number: BPS1-RB01-01182012
Sampled By: VAS and JB
C.O.C. Number:

[] Trip Blank
[] Source Water Blank
[X] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-18-12
Time: 0820
Method: Direct pour

WATER SOURCE:

[] Laboratory Prepared
[X] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name: Distilled Water
Supplier: Stop + Shop
Manufacturer: DS waters of America
Order Number: –
Lot Number: –
Expiration Date: 1-12-14

RINSATE INFORMATION (If Applicable):

Media Type: Aqueous
Equipment Used: Redi-Flow pump
Equipment Type:
[] Dedicated
[X] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO_3	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H_2SO_4	3 40-mL amber glass vials	YES / NO
TAL Metals (dissolved)	Cool 4°C + HNO_3	1 500 ml plastic	yes

OBSERVATIONS / NOTES:

- Water poured over cleaned Redi-Flow pump directly into sample bottles

Signature(s):

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage
Project Number: 112G02230
Sample Location:
QA Sample Type:

Sample ID Number: BPSI-RB02-01232012
Sampled By: J. Birkett
C.O.C. Number:

[] Trip Blank
[] Source Water Blank
[X] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1-23-12
Time: 1330
Method: Direct pour over pump

WATER SOURCE:

[] Laboratory Prepared
[X] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name: Arcadia Distilled Water
Supplier: Stop N Shop
Manufacturer: DS Waters of America Inc.
Order Number: -
Lot Number:
Expiration Date: 1-12-14

RINSATE INFORMATION (If Applicable):

Media Type: Aqueous
Equipment Used: Grundfos Rediflo.
Equipment Type:
[] Dedicated
[X] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40 mL glass vials	YES / NO
~~Semivolatiles~~ PCBs	Cool 4°C	2 1 L Amber bottles	YES / NO
~~Pesticide / PCB~~	~~Cool 4°C~~		YES / NO
Metals (Fe + Cr)	Cool 4°C & HNO_3	1 ~~25~~ 500mL poly bottle	YES / NO
~~Cyanide~~	~~Cool 4°C & NaOH~~		YES / NO
Hexavalent Chrom	Cool 4°C	1 250mL poly bottle	yes

OBSERVATIONS / NOTES:

Poured DI water over decomed grundfos
Hex Chrom Test Kit Result: 0.00mg/L

Signature(s):

Groundwater Level Measurement Sheets

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWIRP Bethpage Site 1 GW Sampling
Project No.: 112G02230
Location: Site 1 - Former Drum Marshalling Area
Personnel: J. Birkett, V. Shickora
Weather Conditions: High 40° sunny breezy
Measuring Device:
Tidally Influenced: Yes ___ No _X_
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
BPS1-FW-MW01	1-24-12	1450		63.47	52.25			
BPS1-FW-MW02		1448		64.18	52.89			
BPS1-FW-MW03		1446		67	51.39			
BPS1-HN-MW-29I		1545		130.5	42.15			
BPS1-HN-MW-29D		1546			42.33			
BPS1-TT-MW301S		1438		62	51.24			
BPS1-TT-MW301I		1436		141	~~51.81~~ 51.08			
BPS1-TT-MW301D		1435		221	~~51.08~~ 51.81 JB 1-24-12			
BPS1-TT-MW302S		1504		53.65	42.38			
BPS1-TT-MW302I1		1502		121	42.43			
BPS1-TT-MW302I2		1501		151	42.69			
BPS1-TT-MW302D		1500		218	42.96			
BPS1-TT-MW303S		1512		55.84	42.13			
BPS1-TT-MW303I1		1510		106	42.50			
BPS1-TT-MW303I2		1508		157	42.84			
BPS1-TT-MW303D		1506		228	43.61			
BPS1-TT-MW304S		1544		54	46.03			
BPS1-TT-MW304I1		1543		113	46.26			
BPS1-TT-MW304I2		1541		150.3	46.45			
BPS1-TT-MW304D		1540		191	46.60			
BPS1-TT-MW305S		1514			42.96			
BPS1-TT-MW305I		1516			43.55			
BPS1-TT-MW305D		1517			43.78			
BPS1-TT-MW306S		1530			44.90			Slip coupling loose but tightened
BPS1-TT-MW306I	✓	1528			45.34			

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWIRP Bethpage Site 1 GW Sampling
Project No.: 112G02230
Location: Site 1 - Former Drum Marshalling Area
Personnel: J. Birkett, V. Shickora
Weather Conditions:
Measuring Device:
Tidally Influenced: Yes ___ No _X_
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
BPS1-TT-MW306D	1-24-12	1526			46.04			
BPS1-TT-MW307S		1537			41.81			
BPS1-TT-MW307I		1535		200	42.21			
BPS1-TT-MW307D		1533			42.66			
BPS1-TT-MW308S		1426		67	55.54			
BPS1-TT-MW308I		1427		170	55.70			
BPS1-TT-MW308D		1428		260	56.27			
BPS1-TT-MW309S		1420		67	55.82			
BPS1-TT-MW309I		1421		177	56.45			
BPS1-TT-MW309D		1422		267	56.39			
BPS1-RA-MW02		1442			47.79			
BPS1-RA-MW04	↓	Could not		locate	, under sand+gravel			South of Plant 3

* All measurements to the nearest 0.01 foot

Surface Water Sample Log Sheets

Tetra Tech NUS, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Storm Water Outfall
[] QA Sample Type:

Sample ID No.: BPS1-SW3001
Sample Location: BPS1-SW3001
Sampled By: J. Ferguson
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	~~Other~~ ORP (mV)
Date: 10-19-2011								
Time: 1100								
Depth: —	Clear	6.04	0.030	18.16	20.5	4.95	—	216
Method: Direct Pour								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOC	HCl	3 40 mL glass vials	yes
PCBs	—	2 1 L Amber bottles	yes
Total/Hexavalent Chromium	HNO_3	1 500mL poly bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

For Jim Ferguson

Tetra Tech NUS, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: NWIRP Bethpage Site 1
Project No.: 112G02230

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Storm Water Outfall
[] QA Sample Type:

Sample ID No.: BPS1-SW3002
Sample Location: BPS1-SW3002
Sampled By: J. Ferguson
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10-19-2011	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	~~Other~~ ORP (mv)
Time: 1130								
Depth: —	Clear	6.65	0.245	17.67	0.0	5.03	–	192
Method: Direct Pour								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40mL glass vials	yes
PCBs	—	2 1L amber bottle	yes
Total/Hexavalent Chromium	HNO_3	1 500mL poly bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

for Jim Ferguson

Appendix B

Survey Data

BANC3, Inc.
Consulting Engineers
www.banc3.com

- Engineers
- Surveyors
- Construction Managers
- Information Technology

300 Alexander Park, Suite 350
Princeton, NJ 08540
609.759.1900 phone
609.919.9022 fax

February 14, 2012

Robert Sok, P.G.
Project Manager / Geologist
Tetra Tech NUS, Inc.
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk, VA 23502

Re.: Survey Report
US Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04

Dear Mr. Sok,

Per your request, I have enclosed three signed and sealed copies of our Survey Report dated February 14, 2012 for the above captioned project. Two copies have been bound and one copy is provided unbound, for your use.

We appreciate the opportunity to work with Tetra Tech NUS, Inc. and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller

Thomas F. Miller, PLS, PP

BANC3, Inc.
Consulting Engineers
www.banc3.com

- Engineers
- Surveyors
- Construction Managers
- Information Technology

300 Alexander Park, Suite 350
Princeton, NJ 08540
609.759.1900 phone
609.919.9022 fax

Survey Report
U.S. Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44

BANC3 Project # 2000215-04

February 14, 2012

BANC3, Inc.
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February 14, 2012

Robert Sok, P.G.
Project Manager / Geologist
Tetra Tech NUS, Inc.
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk, VA 23502

Re.: Survey Report
US Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04

Dear Mr. Sok,

BANC3 Inc. is pleased to provide you with our completed Survey Report for the above referenced project.

BANC3 performed field surveys relative to the subject project to include Global Positioning Systems (GPS), conventional Total Station Surveys and differential leveling surveys. From the data, a table of Monitoring Well and Soil Boring Locations was prepared and included herein. The table includes control points utilized, locations and elevations of Monitoring Well cover, inner casing and adjacent ground where appropriate and Soil Boring locations and elevations. BANC3 performed field reconnaissance and locations of survey control markers tied National Geodetic Survey (NGS) monument designated as "15E 14N" (PID # KU5039) included herein. BANC3 verified the positioning and accuracy of the Monitoring Wells and Soil Borings through our ground field locations and redundant measurements of survey control points. All locations are referenced to New York State Plane Coordinates (Long Island Zone), North American Datum of 1983 and elevations referenced to North American Vertical Datum of 1988. (NAD83, NAVD 88).

We appreciate the opportunity to work with your organization and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller, PLS, PP
State of New York Professional Land Surveyor #050484

STATE OF NEW YORK
THOMAS F. MILLER
050484
LICENSED LAND SURVEYOR

BETHPAGE, NEW YORK / JANUARY 26, 2012

MONITORING WELL & SOIL VAPOR EXTRACTION WELL LOCATIONS

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
GPS MON	214296.002	1125124.594	122.84	15E14N
CIP / CONTROL POINT	214063.933	1123668.505	123.38	1
MW301S	214560.160	1124865.210	126.40	1574
INNER CASING	214560.546	1124865.178	126.00	1575
GROUND	214559.968	1124864.936	126.38	1576
MW301D	214562.161	1124880.995	126.33	1578
INNER CASING	214562.630	1124881.106	125.93	1579
GROUND	214561.885	1124881.124	126.32	1577
MW301I	214565.915	1124905.714	126.09	1580
INNER CASING	214566.352	1124906.082	125.56	1581
GROUND	214565.459	1124905.933	126.04	1582
MW305S	213411.314	1123930.003	116.49	1538
INNER CASING	213411.021	1123930.127	116.04	1539
GROUND	213409.185	1123930.184	116.52	1529
MW305D	213406.292	1123949.047	116.28	1534
INNER CASING	213405.975	1123949.183	115.94	1535
GROUND	213404.255	1123948.903	116.25	1531
MW305I	213408.673	1123939.648	116.43	1537
INNER CASING	213408.557	1123939.487	116.16	1536
GROUND	213406.936	1123939.665	116.38	1530
MW306S	213383.396	1124387.860	118.48	1552
INNER CASING	213383.550	1124387.814	117.82	1551
GROUND	213383.190	1124388.302	115.33	1550
MW306D	213381.032	1124409.879	118.62	1546
INNER CASING	213380.799	1124409.899	118.06	1545
GROUND	213380.768	1124410.251	115.59	1544

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
MW306I	213381.956	1124399.469	118.56	1548
INNER CASING	213382.124	1124399.458	117.76	1547
GROUND	213381.577	1124399.699	115.45	1549
MW307S	213350.889	1124902.305	114.58	1562
INNER CASING	213350.824	1124901.871	114.39	1563
GROUND	213351.290	1124900.960	114.59	1561
MW307D	213357.390	1124926.585	114.85	1568
INNER CASING	213357.307	1124926.918	114.42	1569
GROUND	213357.831	1124925.942	114.85	1567
MW307I	213353.948	1124915.179	114.65	1565
INNER CASING	213353.775	1124914.838	114.16	1564
GROUND	213354.844	1124915.305	114.67	1566
MW308S	214978.217	1124909.927	131.58	1589
INNER CASING	214978.065	1124909.900	131.05	1588
GROUND	214977.778	1124910.412	128.586	1587
MW308D	214965.058	1124935.523	131.61	1595
INNER CASING	214965.082	1124935.463	130.98	1594
GROUND	214964.782	1124934.963	128.78	1593
MW308I	214972.536	1124923.282	131.51	1592
INNER CASING	214972.484	1124923.261	130.73	1591
GROUND	214972.278	1124923.640	128.58	1590
MW309S	215211.896	1124997.760	132.45	1602
INNER CASING	215212.060	1124997.916	131.77	1601
GROUND	215212.026	1124997.416	129.41	1600
MW309D	215208.337	1125028.364	132.14	1608
INNER CASING	215208.441	1125028.421	131.52	1607
GROUND	215208.448	1125028.046	129.42	1606
MW309I	215209.976	1125016.064	132.36	1605
INNER CASING	215209.932	1125016.144	131.83	1604
GROUND	215210.375	1125015.580	129.44	1603

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
SVE-107D	213936.763	1124748.817	115.77	1501
INNER CASING	213936.904	1124749.376	115.49	1502
GROUND	213935.960	1124748.782	115.70	1500
SVE-108D	213957.882	1124515.465	117.43	1504
INNER CASING	213957.528	1124515.629	117.01	1503
GROUND	213958.809	1124514.989	117.27	1505
SVE-109D	213976.646	1124241.948	117.94	1507
INNER CASING	213976.388	1124242.354	117.49	1508
GROUND	213978.450	1124242.971	117.78	1506
SVE-110D	213991.041	1123998.401	117.04	1510
INNER CASING	213990.593	1123998.498	116.36	1509
GROUND	213991.920	1123998.760	116.88	1511
SVE-111D	214044.084	1123802.414	122.59	1513
INNER CASING	214043.723	1123802.430	122.01	1514
GROUND	214045.635	1123802.456	122.39	1512

BANC3

Tetra Tech - Bethpage, NY

16 June 2011

INPUT	OUTPUT
Geographic, NAD83	State Plane, NAD83 3104 - New York Long Island, U.S. Feet

15E14N (KU5039)

1/1

Latitude: 40 45 13.49016
Longitude: 073 29 29.50713

Northing/Y: 214296.001
Easting/X: 1125124.593

Convergence: 0 19 57.29260
Scale Factor: 0.999996308

Remark: Prepared by: Thomas F. Miller, PLS, PP

Corpscon v6.0.1, U.S. Army Corps of Engineers

DERIVATION OF ORTHOMETRIC HEIGHT OF NATIONAL GEODETIC SURVEY MONUMENT 15E 14N (PID # KU5039)

"It is a straightforward procedure to algebraically subtract an interpolated geoid height, N, from a GPS ellipsoidal height, h, to obtain and orthometric height, H:

$$H = h - N"$$ [1]

<u>For NGS Monument 15E 14N:</u>

H = Orthometric Height (to be determined)

h = Ellipsoidal Height (6.331 meters) Adjusted 02/10/07

N = Geoid Height (-31.11 meters)

<u>or</u>

H = 6.331m – (-31.11m)

H = 37.441m (or 122.84 feet)

[1] Converting GPS Height into NAVD88 Elevation with the GEOID96 Geoid Height Model, Dennis G. Milbert, Ph.D. and Dru A. Smith, Ph.D., National Geodetic Survey, NOAA

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 14, 2012
 KU5039 ***********************************************************************
 KU5039  DESIGNATION -  15E 14N
 KU5039  PID         -  KU5039
 KU5039  STATE/COUNTY-  NY/NASSAU
 KU5039  USGS QUAD   -  HUNTINGTON (1979)
 KU5039
 KU5039                         *CURRENT SURVEY CONTROL
 KU5039
 KU5039* NAD 83(2007)-  40 45 13.49016(N)    073 29 29.50713(W)     ADJUSTED
 KU5039* NAVD 88     -        37.4    (meters)     123.     (feet)  VERTCON
 KU5039
 KU5039  EPOCH DATE  -        2002.00
 KU5039  X           -   1,374,891.931 (meters)                     COMP
 KU5039  Y           -  -4,639,038.874 (meters)                     COMP
 KU5039  Z           -   4,141,749.994 (meters)                     COMP
 KU5039  LAPLACE CORR-           4.02  (seconds)                   DEFLEC09
 KU5039  ELLIP HEIGHT-           6.331 (meters)          (02/10/07) ADJUSTED
 KU5039  GEOID HEIGHT-         -31.11  (meters)                     GEOID09
 KU5039
 KU5039  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 KU5039  Type    PID    Designation                       North   East  Ellip
 KU5039  ----------------------------------------------------------------------
 KU5039  NETWORK KU5039 15E 14N                            1.29   1.12   2.78
 KU5039  ----------------------------------------------------------------------
 KU5039
 KU5039.The horizontal coordinates were established by GPS observations
 KU5039.and adjusted by the National Geodetic Survey in February 2007.
 KU5039
 KU5039.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 KU5039.See National Readjustment for more information.
 KU5039
 KU5039.The horizontal coordinates are valid at the epoch date displayed above
 KU5039.which is a decimal equivalence of Year/Month/Day.
 KU5039
 KU5039.The NAVD 88 height was computed by applying the VERTCON shift value to
 KU5039.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 KU5039
 KU5039.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 KU5039
 KU5039.The Laplace correction was computed from DEFLEC09 derived deflections.
 KU5039
 KU5039.The ellipsoidal height was determined by GPS observations
 KU5039.and is referenced to NAD 83.
 KU5039
 KU5039.The geoid height was determined by GEOID09.
 KU5039
 KU5039;                     North         East     Units Scale Factor Converg.
 KU5039;SPC NY L     -    65,317.552   342,938.662   MT  0.99999631   +0 19 57.3
 KU5039;SPC NY L     -   214,296.00  1,125,124.59   sFT  0.99999631   +0 19 57.3
 KU5039;UTM  18      - 4,512,515.673   627,337.852   MT  0.99979958   +0 59 05.6
```

```
KU5039
KU5039!              -  Elev Factor  x  Scale Factor =   Combined Factor
KU5039!SPC NY L      -   0.99999901  x   0.99999631  =   0.99999532
KU5039!UTM  18       -   0.99999901  x   0.99979958  =   0.99979859
KU5039
KU5039:                  Primary Azimuth Mark                      Grid Az
KU5039:SPC NY L      -   15E 14N AZ                                093 49 50.7
KU5039:UTM  18       -   15E 14N AZ                                093 10 42.4
KU5039
KU5039|-----------------------------------------------------------------------|
KU5039| PID    Reference Object                      Distance      Geod. Az  |
KU5039|                                                            dddmmss.s |
KU5039| KU5058 15E 14N AZ                          APPROX. 0.6 KM 0940948.0 |
KU5039|-----------------------------------------------------------------------|
KU5039
KU5039                          SUPERSEDED SURVEY CONTROL
KU5039
KU5039  ELLIP H (12/03/02)     6.339  (m)                        GP(       ) 4 2
KU5039  NAD 83(1996)-  40 45 13.48989(N)    073 29 29.50681(W) AD(       ) 1
KU5039  ELLIP H (01/11/99)     6.342  (m)                        GP(       ) 4 1
KU5039  NAD 83(1996)-  40 45 13.49288(N)    073 29 29.50569(W) AD(       ) 1
KU5039  NAD 83(1992)-  40 45 13.49274(N)    073 29 29.50540(W) AD(       ) 1
KU5039  NAD 83(1986)-  40 45 13.49343(N)    073 29 29.50648(W) AD(       ) 1
KU5039  NGVD 29 (03/24/92)    37.8    (m)          124.     (f) GPS OBS
KU5039
KU5039.Superseded values are not recommended for survey control.
KU5039.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KU5039.See file dsdata.txt to determine how the superseded data were derived.
KU5039
KU5039_U.S. NATIONAL GRID SPATIAL ADDRESS: 18TXL2733712515(NAD 83)
KU5039
KU5039_MARKER: DO = NOT SPECIFIED OR SEE DESCRIPTION
KU5039_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)
KU5039_SP_SET: STAINLESS STEEL ROD IN SLEEVE
KU5039_STAMPING: 15E14N
KU5039_MARK LOGO: NYDPW
KU5039_PROJECTION: RECESSED 8 CENTIMETERS
KU5039_MAGNETIC: N = NO MAGNETIC MATERIAL
KU5039_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
KU5039+STABILITY: POSITION/ELEVATION WELL
KU5039_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KU5039+SATELLITE: SATELLITE OBSERVATIONS - 1990
KU5039_ROD/PIPE-DEPTH: 20.6 meters
KU5039_SLEEVE-DEPTH  : 1.52 meters
KU5039
KU5039  HISTORY     - Date     Condition        Report By
KU5039  HISTORY     - 1990     MONUMENTED       SBAS
KU5039
KU5039                           STATION DESCRIPTION
KU5039
KU5039'DESCRIBED BY SIDNEY B BOWNE AND SON 1990
KU5039'THE POINT IS LOCATED IN BETHPAGE, TOWN OF OYSTER BAY, 21 FEET (6.4 M)
KU5039'SOUTH OF THE CENTERLINE OF SYCAMORE AVENUE AND 40 FEET (12.2 M) EAST
KU5039'OF THE CENTERLINE OF NORTH 11TH STREET,IN THE CONCRETE SIDEWALK.
KU5039'THE LOCATION TIES ARE 42.5 FEET (13.0 M) FROM THE CENTER OF THE
KU5039'HYDRANT, 48.6 FEET (14.8 M) FROM THE CENTER OF THE SEWER MANHOLE AND
KU5039'33.8 FEET (10.3 M) FROM THE NORTH WEST CORNER OF HOUSE NUMBER 207.

*** retrieval complete.
Elapsed Time = 00:00:03
```

Appendix C

Chain of Custody Forms and Analytical Results

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER № 1129 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112602230	North/Grumman Bethpage	Robert Sox	757-466-4904	Tri-Matrix - Walt Roudebush

SAMPLERS (SIGNATURE)	FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
[signature]	Jim Ferguson	412-496-9283	5560 Corporate Exchange Court

CARRIER/WAYBILL NUMBER	CITY, STATE
Fed Ex AB # 873560121350	Grand Rapids, MI 49512

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, P, P

PRESERVATIVE USED: HCL, 1, HNO3, 1

19-1
717 White
Cart 3
E-1110398

DATE YEAR 2011	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TCL VOC	PCBs	Total/Hex Chromium	Total/Hex Chromium	PCB's		TEST GROUP		COMMENTS
10/19	11:00	BPSI-SW3001	SW 3001	—	—	SW	G	7	3	2	1	1	—		01	*	Hex Chrome 24 hr Hold Time
10/19	11:30	BPSI-SW3002	SW 3002	—	—	SW	G	7	3	2	1	1	—		01	*	Hex Chrome 24 hr Hold Time
10/19	14:00	BPSI-TT-MW309-1520	MW 309	15'	20'	SO	G	1	—	—	—	—	1		02		
10/19	13:45	BPSI-TT-MW309-2025	MW 309	20'	25'	SO	G	1	—	—	—	—	1		02		
10/19	14:15	BPSI-TT-MW309-1015	MW 309	10'	15'	SO	G	1	—	—	—	—	1		02		
10/19	13:15	BPSI-TT-MW309-0005	MW 309	00'	05'	SO	G	1	—	—	—	—	1		02		
10/19	13:30	BPSI-TT-MW309-0510	MW 309	05'	10'	SO	G	1	—	—	—	—	1		02		
10/19	0800	BPSI-TT-TB1019	—					2	2						03		Added per TtNUS [initials] 10/20/11

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY [signature]	10/19/2011	16:00	1. RECEIVED BY Fed Ex AB # 873560121350	10/19/2011	16:00
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY [signature] Tri Matrix	10/20/11	0705

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

: 00018

E.1201112

TETRA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER № 1106 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	SITE 1 PCB	ROB SOK	757 618 2104	TRIMATRIX/WALT R.
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 551 2629	5560 CORPORATE EXC. COURT
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX # 8735 5966 0542		GRAND RAPIDS, MI. 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, P, P, P

PRESERVATIVE USED: 4°C HCL, 4°C, 4°C HNO3, 4°C, 4°C HNO3

TYPE OF ANALYSIS: VOCs (40ml), PCBs (1L Amber), TAL METALS TOT Cr, Fe, HEX Cr., TAL METALS TOT Cr, Fe (DISS), TEST Group

Rack# 6599 47-2 Cart 4

	DATE YEAR 2012	TIME	SAMPLE ID *	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs (40ml)	PCBs (1L Amber)	TAL METALS TOT Cr, Fe	HEX Cr.	TAL METALS TOT Cr, Fe (DISS)		TEST Group		COMMENTS
01	1/10	1200	BPS1-TB-01102012	TB	—	—	QC	G	2	2						04		
02	1/10	1500	BPS1-TT-MW309S-01102012		—	—	GW	G	7	3	2	1	1			05		
03	1/10	1500	BPS1-TT-MW309S-01102012-F		—	—	GW	G	1				[illegible]	1		06		

1. RELINQUISHED BY SJ Conti	DATE 1/10/12	TIME 1800	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY [signature]	DATE 1/11/12	TIME 0845

COMMENTS * CALL ROB SOK FOR TAT./ANALYZE HEX Cr. ASAP.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

:00031

E-1201126

Cart 2 678 Blue 49-2

TETRA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER № 1107 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	SITE 1 PCB	ROB SOK	757 618 2104	TRIMATRIX / WALT R
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
SJ Conti		S CONTI	412 551 2629	5560 CORP EXC COURT
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FED EX # 8735 5966 0531		GRAND RAPIDS, MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, P, P, P

PRESERVATIVE USED: 4°C HCL, 4°C, 4°C HNO3, 4°C, 4°C HNO3

TYPE OF ANALYSIS: VOCs (40ml), PCBs (1L AMBER), TAL METALS TOT Cr, Fe, HEX Cr., TAL METALS (DISS), TEST GROUP

	DATE YEAR 2012	TIME	SAMPLE ID	~~LOCATION ID~~	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs (40ml)	PCBs (1L AMBER)	TAL METALS TOT Cr, Fe	HEX Cr.	TAL METALS (DISS)		TEST GROUP		COMMENTS
01	1/11	0800	BPS1-TB-01112012	TB	–	–	QC	G	2	2						04		TRIP BLANK
02	1/11	1000	BPS1-TT-MW309I-0111	2012	–	–	GW	G	7	3	2	1	1			05		MW309I
03	1/11	1410	BPS1-TT-MW309D-0111	2012	–	–	GW	G	7	3	2	1	1			05		MW309D
04	1/11	1410	BPS1-TT-MW309D-0111	2012	F	–	GW	G	1					1		06		MW309D (F)

		DATE	TIME		DATE	TIME
1. RELINQUISHED BY	SJ Conti	1/11/12	1630	1. RECEIVED BY FED EX.		
2. RELINQUISHED BY				2. RECEIVED BY		
3. RELINQUISHED BY				3. RECEIVED BY [signature]	1/12/12	0900

COMMENTS: CALL ROB SOK w/ ANY QUESTIONS.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

:00036

E-1201218

Cart 10 Rack #5 MG 32446

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER № 1167 | PAGE 1 OF 1 9-5

PROJECT NO: 112G02230	FACILITY: NWIRP Bethpage	PROJECT MANAGER: Rob Sok	PHONE NUMBER: 757-466-4904	LABORATORY NAME AND CONTACT: TriMatrix Walt Roulebush
SAMPLERS (SIGNATURE): Jacob Birkett		FIELD OPERATIONS LEADER: Vince Shickora	PHONE NUMBER: 610-909-1893	ADDRESS: 5560 Corporate Exchange Court
		CARRIER/WAYBILL NUMBER: FedEx 8729-3229-8874		CITY, STATE: Grand Rapids MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G P P
PRESERVATIVE USED: HCl – HNO3 –

	DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs	PCBs	Metals (Fe+Cr)	Hexavalent Cr.		TEST GROUP			COMMENTS
1	1-16	0935	BPSI-TB01-01162012	—	—	—	QC	—	2	2					04			Lab prepared
2	1-16	1230	BPSI-TT-MW308D-01162012	—	—	-	GW	G	6	3	2	1			07			
3	1-16	1440	BPSI-TT-MW308I-01162012	—	—	—	GW	G	6	3	2	1			07			
4	1-16	1605	BPSI-TT-MW308S-01162012	—	—	—	GW	G	16	7	6	3			08			Run MSMSD
5	1-17	0950	BPSI-TT-MW301D-01172012	—	—	—	GW	G	6	3	2	1			07			
6	1-17	1050	BPSI-TT-MW305S-01172012	—	—	—	GW	G	6	3	2	1			07			
7	1-17	1140	BPSI-TT-MW301S-01172012	—	—	-	GW	G	6	3	2	1			07			
8	1-17	1158	BPSI-TT-MW305I-01172012	—	—	—	GW	G	6	3	2	1			07			
9	1-17	1305	BPSI-TT-MW301I-01172012	—	—	—	GW	G	7	3	2	1	1		05			
10	1-17	1446	BPSI-TT-MW305D-01172012	—	—	—	GW	G	7	3	2	1	1		05			
11	1-17	1515	BPSI-FW-MW02-01172012	—	—	—	GW	G	6	3	2	1			07			
12	1-17	1200	BPSI-Dup01-01172012	—	—	-	GW	G	6	3	2	1			09			

1. RELINQUISHED BY: Jacob Birkett	DATE: 1-17-12	TIME: 1720	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE: 1-18-12	TIME: 0845

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

00041

Rack 306G ? Cart 11

1201344

TETRA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER № 1168 | PAGE 1 OF 1

11-2

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	NWIRP Bethpage	Rob Sok	757-466-4904	Trimatrix Walt Roudebush
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
		Vince Shickora	610-909-1893	5560 Corporate Exchang Court SE
		CARRIER/WAYBILL NUMBER		CITY, STATE
		FedEx 8729 3229 8680		Grand Rapids, MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G P P P
PRESERVATIVE USED: HCl / HNO3 HNO3 /

	DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs	PCBs	Total Metals (Fe+Cr)	Filtered Dissolved Metals (Fe+Cr)	Hexavalent Cr.		TEST GROUP		COMMENTS
1	1-18	0800	BPSI-TB02-01182012	—	—	—	QC	—	2	2						04		Lab prepared
2	1-18	0810	BPSI-FB01-01182012	—	—	—	QC	—	8	3	2	1	1	1		10		Field Blank
3	1-18	0820	BPSI-RB01-01182012	—	—	—	QC	—	8	3	2	1	1	1		11		Rinsate Blank over Grundfos
4	1-18	1042	BPSI-TT-MW307D-01182012	—	—	—	GW	G	6	3	2	1				07		
5	1-18	1045	BPSI-TT-MW304S-01182012	—	—	—	GW	G	6	3	2	1				07		
6	1-18	1225	BPSI-TT-MW304I1-01182012	—	—	—	GW	G	7	3	2	1	X JB 1-18-12	1		05		
7	1-18	1232	BPSI-TT-MW307I-01182012	—	—	—	GW	G	7	3	2	1		1		05		
8	1-18	1400	BPSI-TT-MW304I2-01182012	—	—	—	GW	G	7	3	2	1		1		05		
9	1-18	1450	BPSI-TT-MW307S-01182012	—	—	—	GW	G	6	3	2	1				07		
10	1-18	1600	BPSI-TT-Dup02-01182012	—	—	—	GW	G	7	3	2	1		1		12		Duplicate

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	1-18-2012	1700	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY	1-19-12	0845

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

000048

Cart 4 3.3 Rack #377G E-1201254

TETRA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER № 1134 | PAGE 1 OF 1 13.5

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	NWIRP Bethpage	Rob Sok	757-466-4904	TriMatrix Walt Roudebush
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: Vince Shickom	PHONE NUMBER: 610-909-1893	ADDRESS: 5560 Corporate Exchange Court SE
		CARRIER/WAYBILL NUMBER: FedEx 8729 3229 8679		CITY, STATE: Grand Rapids, MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

	DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOC	PCB	Total Metals (Fe+Cr)	Filtered/Dissolved Metals (Fe+Cr)	Total Metals (Fe, Cr, Ca, Na)	Hexavalent Chromium		TEST GROUP	COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G	P	P	P	P			
PRESERVATIVE USED										HCl	—	HNO3	HNO3	HNO3	—			
1	1-19	0745	BPSI-TB03-01192012	—	—	—	QC	—	2	2							04	Lab Prepared
2	1-19	0917	BPSI-HN-MW29I-01192012	—	—	—	GW	G	6	3	2			1			01	
3	1-19	0930	BPSI-FW-MW01-01192012	—	—	—	GW	G	6	3	2	1					07	
4	1-19	1110	BPSI-FW-MW03-01192012	—	—	—	GW	G	6	3	2	1					07	
5	1-19	1117	BPSI-TT-MW304D-01192012	—	—	—	GW	G	6	3	2	1					07	
6	1-19	1307	BPSI-TT-MW303I2-01192012	—	—	—	GW	G	7	3	2	1			1		05	
7	1-19	1415	BPSI-TT-MW303I1-01192012	—	—	—	GW	G	7	3	2	1	1				13	
8	1-19	1452	BPSI-TT-MW303D-01192012	—	—	—	GW	G	6	3	2	1					07	
9	1-19	1630	BPSI-Dup03-01192012	—	—	—	GW	G	6	3	2	1					09	Duplicate

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	1-19-12	1645	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY	1-20-12	0845

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

00022

E-1201287

Rack # 160 Blue Cart 2 15-7 TM 1395

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER № 1132 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	NWIRP Bethpage	Rob Sok	757-~~814~~ 466-4904	Tri Matrix Walt Raudebush
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: Vince Shickora	PHONE NUMBER: 610-909-1893	ADDRESS: 5560 Corporate Exchange Court SE
		CARRIER/WAYBILL NUMBER: FedEx 8729-3229-8830		CITY, STATE: Grand Rapids, MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

	DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs	PCBs	Total Metals (Fe & Cr)	Total Metals (Fe, Cr, Cu, Mn)		TEST GROUP			COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G	P	P					
PRESERVATIVE USED										HCl	/	HNO_3	HNO_3					
01	1-20	0730	BPSI-TB04-01202012	—	—	—	QC	—	2	2					04			Lab prepared
02	1-20	0920	BPSI-TT-MW302S-01202012	—	—	—	GW	G	6	3	2	1			07			
03	1-20	1000	BPSI-TT-MW302D-01202012	—	—	—	GW	G	6	3	2		1		01			
04	1-20	1045	BPSI-TT-MW302I1-01202012	—	—	—	GW	G	6	3	2	1			07			
05	1-20	1115	BPSI-TT-MW302I2-01202012	—	—	—	GW	G	6	3	2	1			07			

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	1-20-12	1400	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY Tri Matrix	1/21/12	0845

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

00028

E-1201310

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 2674

Rack # 12, ~~914~~ Cart 9 white

19-3

PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02230	NWIRP Bethpage	Rob Sok	757-466-4904	TriMatrix Walt Roudebush
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: Vince Shickora	PHONE NUMBER: 610-909-1893	ADDRESS: 5560 Corporate Exchange Court SE
		CARRIER/WAYBILL NUMBER: FedEx 8749-3229-8841		CITY, STATE: Grand Rapids, MI 49512

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G P P G

PRESERVATIVE USED: HCl / HNO3 / H2SO4

TYPE OF ANALYSIS

	DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs	PCBs	Total Metals (Fe+Cl)	Hexavalent Chromium	TOC		TEST GROUP		COMMENTS
01	1-23	0730	BPSI-TB05-01232012	—	—	—	QC	—	2	2						04		Lab prepared
02	1-23	1035	BPSI-TT-MW306D-01232012	—	—	—	GW	G	9	3	2	1		3		14		
03	1-23	1049	BPSI-TT-MW303S-01232012	—	—	—	GW	G	6	3	2	1				07		
04	1-23	1210	BPSI-TT-MW306I-01232012	—	—	—	GW	G	18	7	6	1	1	3		15		Run MS/MSD on everything except TOC
05	1-23	1230	BPSI-TT-MW301D-01232012	—	—	—	GW	G	1				1			16		
06	1-23	1330	BPSI-RB02-01232012	—	—	—	QC	—	7	3	2	1	1			17		Rinsate Blank
07	1-23	1350	BPSI-TT-MW306S-01232012	—	—	—	GW	G	10	3	2	1	1	3		~~14~~	19	
08	1-23	1430	BPSI-FB02-01232012	—	—	—	QC	—	7	3	2	1	1			18		Source Blank
09	1-23	1600	BPSI-Dup04-01232012	—	—	—	GW	G	6	3	2	1				09		

1. RELINQUISHED BY	DATE 1-23-12	TIME	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY TriMatrix	DATE 1/24/12	TIME 0845

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R

FORM NO. TINUS-001

00034

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-03 File ID: 1201254-03.D

Sampled: 01/19/12 09:30 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	3.1	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	70	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	J
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-03 File ID: 1201254-03.D

Sampled: 01/19/12 09:30 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	230	0.16	0.50	1.0	E
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	8.3	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	21	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.2	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.0	100	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	524227	5.13	88	5.13	
Chlorobenzene-d5	490570	8.08	89	8.08	
1,4-Dichlorobenzene-d4	259473	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-03RE1 File ID: 1201254-03D.D

Sampled: 01/19/12 09:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 16:36

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	2	2.0	1.3	2.0	20	U
71-43-2	Benzene	2	1.0	0.23	1.0	2.0	U
74-97-5	Bromochloromethane	2	1.0	0.31	1.0	2.0	U
75-27-4	Bromodichloromethane	2	1.0	0.27	1.0	2.0	U
75-25-2	Bromoform	2	0.50	0.20	0.50	2.0	U
74-83-9	Bromomethane	2	1.0	0.56	1.0	2.0	U
75-15-0	Carbon Disulfide	2	1.0	0.37	1.0	10	U
56-23-5	Carbon Tetrachloride	2	1.0	0.29	1.0	2.0	U
108-90-7	Chlorobenzene	2	1.0	0.26	1.0	2.0	U
75-00-3	Chloroethane	2	1.0	0.30	1.0	2.0	U
67-66-3	Chloroform	2	1.0	0.32	1.0	2.0	U
74-87-3	Chloromethane	2	1.0	0.36	1.0	2.0	U
110-82-7	Cyclohexane	2	1.0	0.58	1.0	10	U
96-12-8	1,2-Dibromo-3-chloropropane	2	1.0	0.50	1.0	4.0	U
124-48-1	Dibromochloromethane	2	0.50	0.19	0.50	2.0	U
106-93-4	1,2-Dibromoethane	2	0.50	0.21	0.50	2.0	U
95-50-1	1,2-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
541-73-1	1,3-Dichlorobenzene	2	0.50	0.21	0.50	2.0	U
106-46-7	1,4-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
75-71-8	Dichlorodifluoromethane	2	1.0	0.50	1.0	2.0	U
75-34-3	1,1-Dichloroethane	2	3.0	0.39	1.0	2.0	
107-06-2	1,2-Dichloroethane	2	1.0	0.24	1.0	2.0	U
75-35-4	1,1-Dichloroethene	2	1.0	0.35	1.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	2	64	0.34	1.0	2.0	
156-60-5	trans-1,2-Dichloroethene	2	1.0	0.23	1.0	2.0	U
78-87-5	1,2-Dichloropropane	2	1.0	0.29	1.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2	0.20	0.10	0.20	2.0	U
10061-02-6	trans-1,3-Dichloropropene	2	0.50	0.22	0.50	2.0	U
123-91-1	1,4-Dioxane	2	50	20	50	100	U
100-41-4	Ethylbenzene	2	0.50	0.21	0.50	2.0	U
591-78-6	2-Hexanone	2	1.0	0.48	1.0	10	U
98-82-8	Isopropylbenzene	2	1.0	0.34	1.0	2.0	U
79-20-9	Methyl Acetate	2	1.0	0.55	1.0	10	U
1634-04-4	Methyl tert-Butyl Ether	2	1.0	0.26	1.0	2.0	U
108-87-2	Methylcyclohexane	2	1.0	0.47	1.0	10	U
75-09-2	Methylene Chloride	2	1.0	0.69	1.0	2.0	U
78-93-3	2-Butanone (MEK)	2	1.0	0.56	1.0	10	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-03RE1 File ID: 1201254-03D.D

Sampled: 01/19/12 09:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 16:36

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	2	1.0	0.47	1.0	10	U
100-42-5	Styrene	2	0.20	0.11	0.20	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2	1.0	0.24	1.0	2.0	U
127-18-4	Tetrachloroethene	2	200	0.33	1.0	2.0	
108-88-3	Toluene	2	0.20	0.11	0.20	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2	1.0	0.28	1.0	4.0	U
120-82-1	1,2,4-Trichlorobenzene	2	1.0	0.29	1.0	4.0	U
71-55-6	1,1,1-Trichloroethane	2	7.8	0.29	1.0	2.0	
79-00-5	1,1,2-Trichloroethane	2	1.0	0.30	1.0	2.0	U
79-01-6	Trichloroethene	2	20	0.37	1.0	2.0	
75-69-4	Trichlorofluoromethane	2	1.0	0.36	1.0	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2	1.0	0.45	1.0	2.0	J
75-01-4	Vinyl Chloride	2	1.0	0.48	1.0	2.0	U
179601-23-1	Xylene, Meta + Para	2	1.0	0.57	1.0	4.0	U
95-47-6	Xylene, Ortho	2	0.50	0.21	0.50	2.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	493663	5.13	93	5.13	
Chlorobenzene-d5	472107	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254308	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-03 File ID: A87_039-0

Sampled: 01/19/12 09:30 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 00:55

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.169	84	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-03RE1 File ID: A87_372-0

Sampled: 01/19/12 09:30 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 02:18

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.46	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.192	95	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 09:30
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-03
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	860	ug/L	8.1	10	20		01/30/12 14:25

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 09:30
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-03
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.4	ug/L	0.20	0.50	1.0		01/31/12 16:08

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-11 File ID: 1201218-11.D

Sampled: 01/17/12 15:15 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 13:46

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.35	0.13	0.50	1.0	J
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-12
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Matrix: Ground Water
Laboratory ID: 1201218-11
File ID: 1201218-11.D
Sampled: 01/17/12 15:15
Prepared: 01/24/12 08:00
Analyzed: 01/24/12 13:46
Solids:
Preparation: 5030B Aqueous Purge &
Initial/Final: 5 mL / 5 mL
QC Batch: 1201603
Sequence: 2A25008
Calibration: 2A18010
Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	21	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.39	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.36	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530321	5.13	89	5.13	
Chlorobenzene-d5	499909	8.08	90	8.08	
1,4-Dichlorobenzene-d4	268517	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-11 File ID: A87_022-0

Sampled: 01/17/12 15:15 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 18:02

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.184	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.161	80	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-11RE1 File ID: A87_179-0

Sampled: 01/17/12 15:15 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 17:30

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01038 Calibration: 2B01011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.30	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.188	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.167	83	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 15:15
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-11
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	8.5	ug/L	0.20	0.50	1.0		01/31/12 15:36

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 15:15
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-11
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	330	ug/L	8.1	10	20		01/30/12 12:46

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-04 File ID: 1201254-04.D

Sampled: 01/19/12 11:10 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 15:37

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.49	0.17	0.50	1.0	J
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-04 File ID: 1201254-04.D

Sampled: 01/19/12 11:10 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 15:37

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	68	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.25	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525475	5.13	88	5.13	
Chlorobenzene-d5	499629	8.08	90	8.08	
1,4-Dichlorobenzene-d4	262518	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-04 File ID: A87_040-0

Sampled: 01/19/12 11:10 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 01:19

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.152	75	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-04RE1 File ID: A87_374-0

Sampled: 01/19/12 11:10 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 03:07

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 11:10
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-04
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	110	ug/L	8.1	10	20		01/30/12 14:29

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 11:10
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-04
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.6	ug/L	0.20	0.50	1.0		01/31/12 16:10

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-02 File ID: 1201254-02.D

Sampled: 01/19/12 09:17 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 14:42

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-02 File ID: 1201254-02.D

Sampled: 01/19/12 09:17 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 14:42

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.49	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	511183	5.13	86	5.13	
Chlorobenzene-d5	481292	8.08	87	8.08	
1,4-Dichlorobenzene-d4	257465	10.38	80	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-02 File ID: A87_038-0

Sampled: 01/19/12 09:17 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 00:31

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.191	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-02RE1 File ID: A87_371-0

Sampled: 01/19/12 09:17 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 01:54

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.63	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.126	62	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 09:17
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-02
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	1	24000	ug/L	230	500	500		01/30/12 14:21
7439-89-6	Iron, Total	1	83	ug/L	8.1	10	20		01/30/12 14:21
7440-23-5	Sodium, Total	1	7800	ug/L	130	500	500		01/30/12 14:21

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 09:17
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-02
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.5	ug/L	0.20	0.50	1.0		01/31/12 16:07

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-09 File ID: 1201254-09.D

Sampled: 01/19/12 16:30 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 17:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-13
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Matrix: Ground Water
Laboratory ID: 1201254-09
File ID: 1201254-09.D
Sampled: 01/19/12 16:30
Prepared: 01/24/12 08:00
Analyzed: 01/24/12 17:55
Solids:
Preparation: 5030B Aqueous Purge &
Initial/Final: 5 mL / 5 mL
QC Batch: 1201603
Sequence: 2A25008
Calibration: 2A18010
Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.46	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	527482	5.13	88	5.13	
Chlorobenzene-d5	495899	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264783	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-09 File ID: A87_045-0

Sampled: 01/19/12 16:30 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 03:20

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.178	88	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-09RE1 File ID: A87_385-0

Sampled: 01/19/12 16:30 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 07:34

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.66	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.195	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.176	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 16:30
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-09
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	93	ug/L	8.1	10	20		01/30/12 14:58

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 16:30
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-09
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.2	ug/L	0.20	0.50	1.0		01/31/12 16:15

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-07 File ID: 1201218-07.D

Sampled: 01/17/12 11:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 13:46

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-07 File ID: 1201218-07.D

Sampled: 01/17/12 11:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 13:46

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	561816	5.13	93	5.13	
Chlorobenzene-d5	537929	8.08	94	8.08	
1,4-Dichlorobenzene-d4	296519	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-07 File ID: A87 016-0

Sampled: 01/17/12 11:40 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 15:37

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.182	89	40 - 135	
Tetrachloro-m-xylene	0.204	0.174	86	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-07RE1 File ID: A87_172-0

Sampled: 01/17/12 11:40 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 14:40

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2B02020 Calibration: 2B02004 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	10	10	0.54	0.80	2.0	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 11:40
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-07
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	56	ug/L	8.1	10	20		01/30/12 12:30

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 11:40
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-07
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.5	ug/L	0.20	0.50	1.0		01/31/12 15:29

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-09 File ID: 1201218-09.D

Sampled: 01/17/12 13:05 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 13:19

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-09 File ID: 1201218-09.D

Sampled: 01/17/12 13:05 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 13:19

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	516158	5.13	86	5.13	
Chlorobenzene-d5	479498	8.08	87	8.08	
1,4-Dichlorobenzene-d4	259720	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-09 File ID: A87 018-0

Sampled: 01/17/12 13:05 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 16:25

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-09RE1 File ID: A87_175-0

Sampled: 01/17/12 13:05 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 15:53

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.79	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.190	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.159	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 13:05
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-09
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	17	ug/L	8.1	10	20	J	01/30/12 12:38

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 13:05
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-09
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.0	ug/L	0.20	0.50	1.0		01/31/12 15:34

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 13:05
Solids: 0.00
QC Batch: 1201614

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-09
Prepared: 01/18/12 10:14
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	5.3	ug/L	0.3	1.0	1.0		01/18/12 10:40

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-05 File ID: 1201218-05.D

Sampled: 01/17/12 09:50 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 12:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.22	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-05 File ID: 1201218-05.D

Sampled: 01/17/12 09:50 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 12:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.26	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.14	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.53	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	567161	5.13	94	5.13	
Chlorobenzene-d5	534103	8.08	93	8.08	
1,4-Dichlorobenzene-d4	295193	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-05 File ID: A87_014-0

Sampled: 01/17/12 09:50 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 14:48

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.177	87	40 - 135	
Tetrachloro-m-xylene	0.204	0.154	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-05RE1 File ID: A87_170-0

Sampled: 01/17/12 09:50 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 13:52

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.75	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.167	82	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 09:50
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-05
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	14	ug/L	8.1	10	20	J	01/30/12 12:21

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 09:50
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-05
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	92	ug/L	0.20	0.50	1.0		01/31/12 15:27

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW301D-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 12:30
Solids: 0.00
QC Batch: 1201753

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-05
Prepared: 01/24/12 10:38
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	5	86.0	ug/L	1.5	5.0	5.0		01/24/12 11:25

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-02 File ID: 1201287-02.D

Sampled: 01/20/12 09:20 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 12:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-02 File ID: 1201287-02.D

Sampled: 01/20/12 09:20 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 12:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.4	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514821	5.13	97	5.13	
Chlorobenzene-d5	484007	8.08	95	8.08	
1,4-Dichlorobenzene-d4	261639	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-02 File ID: A87_082-0

Sampled: 01/20/12 09:20 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 21:18

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 960 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.208	100	40 - 135	
Tetrachloro-m-xylene	0.208	0.176	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-02RE1 File ID: A87_281-0

Sampled: 01/20/12 09:20 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 02:03

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 960 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03005 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.43	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.167	80	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 09:20
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-02
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	22	ug/L	8.1	10	20		01/30/12 15:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 09:20
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-02
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.63	ug/L	0.20	0.50	1.0	J	01/31/12 16:21

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-04 File ID: 1201287-04.D

Sampled: 01/20/12 10:45 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 13:22

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.45	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-04 File ID: 1201287-04.D

Sampled: 01/20/12 10:45 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 13:22

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.29	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.35	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.0	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492765	5.13	93	5.13	
Chlorobenzene-d5	466376	8.08	92	8.08	
1,4-Dichlorobenzene-d4	251538	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-04 File ID: A87_084-0

Sampled: 01/20/12 10:45 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 22:07

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.209	102	40 - 135	
Tetrachloro-m-xylene	0.204	0.156	77	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-04RE1 File ID: A87_283-0

Sampled: 01/20/12 10:45 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 02:51

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03005 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	1.2	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.191	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 10:45
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-04
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	34	ug/L	8.1	10	20		01/30/12 15:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 10:45
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-04
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	1.0		01/31/12 16:23

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-05 File ID: 1201287-05.D

Sampled: 01/20/12 11:15 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 13:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-05 File ID: 1201287-05.D

Sampled: 01/20/12 11:15 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 13:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	496718	5.13	94	5.13	
Chlorobenzene-d5	470247	8.08	93	8.08	
1,4-Dichlorobenzene-d4	255582	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-05 File ID: A87_085-0

Sampled: 01/20/12 11:15 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 22:31

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.163	81	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-05RE1 File ID: A87_285-0

Sampled: 01/20/12 11:15 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 03:40

Solids: Preparation: 3510C Liquid-Liquid Ex: Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03005 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.200	99	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 11:15
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-05
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	59	ug/L	8.1	10	20		01/30/12 15:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 11:15
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-05
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.1	ug/L	0.20	0.50	1.0		01/31/12 16:24

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-03 File ID: 1201287-03.D

Sampled: 01/20/12 10:00 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 12:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.62	0.17	0.50	1.0	J
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201287-03 File ID: 1201287-03.D

Sampled: 01/20/12 10:00 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 12:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.33	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.23	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3.9	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.0	97	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	504030	5.13	95	5.13	
Chlorobenzene-d5	470972	8.08	93	8.08	
1,4-Dichlorobenzene-d4	253629	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201287-03 File ID: A87_083-0

Sampled: 01/20/12 10:00 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 21:42

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 960 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.211	101	40 - 135	
Tetrachloro-m-xylene	0.208	0.163	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-13
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO W
Matrix: Ground Water
Laboratory ID: 1201287-03RE1
File ID: A87_282-0
Sampled: 01/20/12 10:00
Prepared: 01/25/12 08:27
Analyzed: 02/03/12 02:27
Solids:
Preparation: 3510C Liquid-Liquid Ex
Initial/Final: 960 mL / 2 mL
QC Batch: 1201593
Sequence: 2B03005
Calibration: 2B03001
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.85	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.192	92	40 - 135	
Tetrachloro-m-xylene	0.208	0.153	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 10:00
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-03
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	1	8000	ug/L	230	500	500		01/30/12 15:06
7439-89-6	Iron, Total	1	75	ug/L	8.1	10	20		01/30/12 15:06
7440-23-5	Sodium, Total	1	24000	ug/L	130	500	500		01/30/12 15:06

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/20/12 10:00
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201287-03
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:22

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-03 File ID: 1201310-03.D

Sampled: 01/23/12 10:49 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 14:45

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-03 File ID: 1201310-03.D

Sampled: 01/23/12 10:49 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 14:45

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.6	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	507152	5.13	96	5.13	
Chlorobenzene-d5	475239	8.08	94	8.08	
1,4-Dichlorobenzene-d4	257292	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-13
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO W
Matrix: Ground Water
Laboratory ID: 1201310-03
File ID: A87_087-0
Sampled: 01/23/12 10:49
Prepared: 01/25/12 08:27
Analyzed: 01/26/12 23:19
Solids:
Preparation: 3510C Liquid-Liquid Ext
Initial/Final: 990 mL / 2 mL
QC Batch: 1201593
Sequence: 2B03015
Calibration: 2A20001
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-03RE1 File ID: A87 289-0

Sampled: 01/23/12 10:49 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 05:17

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B07033 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.21	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 10:49
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-03
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	66	ug/L	8.1	10	20		01/30/12 15:30

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 10:49
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-03
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.7	ug/L	0.20	0.50	1.0		01/31/12 16:26

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-09 File ID: 1201310-09.D

Sampled: 01/23/12 16:00 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 16:08

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup04-01232012

BPS1-TT-MW303S'

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-09 File ID: 1201310-09.D

Sampled: 01/23/12 16:00 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 16:08

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.8	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	37.9	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	484017	5.13	91	5.13	
Chlorobenzene-d5	461266	8.08	91	8.08	
1,4-Dichlorobenzene-d4	247962	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup04-01232012

13PS1-TT-MW303,5

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-09 File ID: A87_094-0

Sampled: 01/23/12 16:00 Prepared: 01/25/12 08:27 Analyzed: 01/27/12 02:09

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.209	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.171	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup04-01232012

BPS1-TT-MW303S

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-09RE1 File ID: A87_294-0

Sampled: 01/23/12 16:00 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 07:18

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B07033 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.164	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-Dup04-01232012

BPS1-TT-MW303S

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 16:00
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-09
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	210	ug/L	8.1	10	20		01/30/12 16:07

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup04-01232012

BPS1-TT-MW303S

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 16:00
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-09
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.2	ug/L	0.20	0.50	1.0		01/31/12 16:42

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-07 File ID: 1201254-07.D

Sampled: 01/19/12 14:15 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 17:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.6	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	2.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-07 File ID: 1201254-07.D

Sampled: 01/19/12 14:15 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 17:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	83	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	18	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514906	5.13	86	5.13	
Chlorobenzene-d5	488654	8.08	88	8.08	
1,4-Dichlorobenzene-d4	259158	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-07 File ID: A87_043-0

Sampled: 01/19/12 14:15 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 02:32

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.195	94	40 - 135	
Tetrachloro-m-xylene	0.206	0.173	84	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-07RE1 File ID: AFEB010-0

Sampled: 01/19/12 14:15 Prepared: 01/23/12 11:22 Analyzed: 02/09/12 14:22

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09057 Calibration: 2B09015 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	3	3.9	0.19	0.24	0.60	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.225	109	40 - 135	
Tetrachloro-m-xylene	0.206	0.192	93	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:15
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-07
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	6000	ug/L	8.1	10	20		01/30/12 14:49

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:15
Solids: 0.00
QC Batch: 1201623

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-07
Prepared: 01/27/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	70	ug/L	8.1	10	20		01/30/12 16:31

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:15
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-07
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.8	ug/L	0.20	0.50	1.0		01/31/12 16:13

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:15
Solids: 0.00
QC Batch: 1201624

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-07
Prepared: 01/27/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.23	ug/L	0.20	0.50	1.0	J	01/31/12 15:08

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-06 File ID: 1201254-06.D

Sampled: 01/19/12 13:07 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 16:32

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-06 File ID: 1201254-06.D

Sampled: 01/19/12 13:07 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 16:32

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.94	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	510032	5.13	86	5.13	
Chlorobenzene-d5	480629	8.08	87	8.08	
1,4-Dichlorobenzene-d4	259640	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-06 File ID: A87 042-0

Sampled: 01/19/12 13:07 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 02:08

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.215	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.180	87	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-06RE1 File ID: A87_378-0

Sampled: 01/19/12 13:07 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 04:44

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	2.4	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.214	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.179	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 13:07
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-06
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	69	ug/L	8.1	10	20		01/30/12 14:45

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 13:07
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-06
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 16:12

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 13:07
Solids: 0.00
QC Batch: 1201627

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-06
Prepared: 01/20/12 10:46
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/20/12 11:15

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-08 File ID: 1201254-08.D

Sampled: 01/19/12 14:52 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 17:28

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-08 File ID: 1201254-08.D

Sampled: 01/19/12 14:52 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 17:28

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.51	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530402	5.13	89	5.13	
Chlorobenzene-d5	497230	8.08	90	8.08	
1,4-Dichlorobenzene-d4	266672	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-08 File ID: A87_044-0

Sampled: 01/19/12 14:52 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 02:56

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 940 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	1	0.085	0.031	0.085	0.21	U
37324-23-5	PCB-1262	1	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268	1	0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.210	99	40 - 135	
Tetrachloro-m-xylene	0.213	0.181	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-08RE1 File ID: A87 384-0

Sampled: 01/19/12 14:52 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 07:10

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 940 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09045 Calibration: 2B09015 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	2	1.6	0.13	0.17	0.43	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.213	100	40 - 135	
Tetrachloro-m-xylene	0.213	0.186	88	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:52
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-08
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	520	ug/L	8.1	10	20		01/30/12 14:54

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 14:52
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-08
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.3	ug/L	0.20	0.50	1.0		01/31/12 16:14

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-05 File ID: 1201244-05.D

Sampled: 01/18/12 10:45 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-05 File ID: 1201244-05.D

Sampled: 01/18/12 10:45 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530181	5.13	89	5.13	
Chlorobenzene-d5	493846	8.08	89	8.08	
1,4-Dichlorobenzene-d4	269552	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-12
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO W
Matrix: Ground Water
Laboratory ID: 1201244-05
File ID: A87_027-0
Sampled: 01/18/12 10:45
Prepared: 01/23/12 11:04
Analyzed: 01/25/12 20:04
Solids:
Preparation: 3510C Liquid-Liquid Ex
Initial/Final: 970 mL / 2 mL
QC Batch: 1201461
Sequence: 2A31043
Calibration: 2A20001
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.205	99	40 - 135	
Tetrachloro-m-xylene	0.206	0.167	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 10:45
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-05
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	58	ug/L	8.1	10	20		01/30/12 13:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 10:45
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-05
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	1.0		01/31/12 15:42

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-06 File ID: 1201244-06.D

Sampled: 01/18/12 12:25 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 16:59

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	6.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-06 File ID: 1201244-06.D

Sampled: 01/18/12 12:25 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 16:59

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	25	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	1.7	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	4.1	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	550781	5.13	91	5.13	
Chlorobenzene-d5	528117	8.08	92	8.08	
1,4-Dichlorobenzene-d4	290850	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-06 File ID: A87_028-0

Sampled: 01/18/12 12:25 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 20:28

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.194	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-06RE1 File ID: A87_277-0

Sampled: 01/18/12 12:25 Prepared: 01/23/12 11:04 Analyzed: 02/03/12 00:26

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2B03005 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.97	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:25
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-06
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	400	ug/L	8.1	10	20		01/30/12 13:18

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:25
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-06
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	38	ug/L	0.20	0.50	1.0		01/31/12 15:43

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:25
Solids: 0.00
QC Batch: 1201625

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-06
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	35.5	ug/L	0.6	2.0	2.0		01/19/12 11:23

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-08 File ID: 1201244-08.D

Sampled: 01/18/12 14:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 17:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	2.7	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-08 File ID: 1201244-08.D

Sampled: 01/18/12 14:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 17:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.26	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	532905	5.13	88	5.13	
Chlorobenzene-d5	512136	8.08	89	8.08	
1,4-Dichlorobenzene-d4	285184	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-12
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO W
Matrix: Ground Water
Laboratory ID: 1201244-08
File ID: A87_032-0
Sampled: 01/18/12 14:00
Prepared: 01/23/12 11:04
Analyzed: 01/25/12 22:05
Solids:
Preparation: 3510C Liquid-Liquid Ext
Initial/Final: 990 mL / 2 mL
QC Batch: 1201461
Sequence: 2A31043
Calibration: 2A20001
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.178	88	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-08RE1 File ID: A87_239-0

Sampled: 01/18/12 14:00 Prepared: 01/23/12 11:04 Analyzed: 02/01/12 17:28

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2B02024 Calibration: 2B01011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.5	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.137	68	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

mmc 3/15/12

TT-MW304I2-
BPS1-~~TTMW-304I2-~~01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 14:00
Solids: 0.00
QC Batch: 1201437

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-08
Prepared: 01/31/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	16	ug/L	8.1	10	20	J	02/01/12 10:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

MMC 3/15/12

BPS1-TT-MW304I2-
~~BPS1-TTMW-304I2~~-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 14:00
Solids: 0.00
QC Batch: 1201436

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-08
Prepared: 01/23/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	5	200	ug/L	0.98	2.5	5.0		01/31/12 16:43

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

MMC 3/5/12

-TT-MW304I2-
BPS1-~~TTMW-304I2~~-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 14:00
Solids: 0.00
QC Batch: 1201626

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-08
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	181	ug/L	0.3	1.0	1.0		01/19/12 11:43

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-10 File ID: 1201244-10.D

Sampled: 01/18/12 16:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 18:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	2.8	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-10 File ID: 1201244-10.D

Sampled: 01/18/12 16:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 18:50

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.23	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.6	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	540587	5.13	90	5.13	
Chlorobenzene-d5	516262	8.08	90	8.08	
1,4-Dichlorobenzene-d4	282850	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-10 File ID: A87_034-0

Sampled: 01/18/12 16:00 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 22:53

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.182	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.144	71	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-10RE1 File ID: A87_240-0

Sampled: 01/18/12 16:00 Prepared: 01/23/12 11:04 Analyzed: 02/01/12 17:52

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2B02024 Calibration: 2B01011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.6	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.123	61	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-Dup02-01182012

BPS1-TT-MW30412

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 16:00
Solids: 0.00
QC Batch: 1201437

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-10
Prepared: 01/31/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	10	ug/L	8.1	10	20	J	02/01/12 10:48

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 16:00
Solids: 0.00
QC Batch: 1201436

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-10
Prepared: 01/23/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	5	170	ug/L	0.98	2.5	5.0		01/31/12 16:44

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 16:00
Solids: 0.00
QC Batch: 1201626

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-10
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	182	ug/L	0.3	1.0	1.0		01/19/12 11:46

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-05 File ID: 1201254-05.D

Sampled: 01/19/12 11:17 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 16:05

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201254-05 File ID: 1201254-05.D

Sampled: 01/19/12 11:17 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 16:05

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	495461	5.13	83	5.13	
Chlorobenzene-d5	466712	8.08	84	8.08	
1,4-Dichlorobenzene-d4	249857	10.38	78	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-05 File ID: A87_041-0

Sampled: 01/19/12 11:17 Prepared: 01/23/12 11:22 Analyzed: 01/26/12 01:43

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 1000 mL / 2 mL

QC Batch: 1201518 Sequence: 2B06048 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.198	99	40 - 135	
Tetrachloro-m-xylene	0.200	0.163	82	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201254-05RE1 File ID: A87_376-0

Sampled: 01/19/12 11:17 Prepared: 01/23/12 11:22 Analyzed: 02/07/12 03:56

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 1000 mL / 2 mL

QC Batch: 1201518 Sequence: 2B09039 Calibration: 2B09014 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	4	4.2	0.22	0.32	0.80	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.194	97	40 - 135	
Tetrachloro-m-xylene	0.200	0.156	78	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 11:17
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-05
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	160	ug/L	8.1	10	20		01/30/12 14:41

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/19/12 11:17
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201254-05
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.5	ug/L	0.20	0.50	1.0		01/31/12 16:11

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-06 File ID: 1201218-06.D

Sampled: 01/17/12 10:50 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 13:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-06 File ID: 1201218-06.D

Sampled: 01/17/12 10:50 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 13:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.8	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	569876	5.13	95	5.13	
Chlorobenzene-d5	542177	8.08	94	8.08	
1,4-Dichlorobenzene-d4	296764	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-06 File ID: A87_015-0

Sampled: 01/17/12 10:50 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 15:13

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.162	80	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 10:50
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-06
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	560	ug/L	8.1	10	20		01/30/12 12:26

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 10:50
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-06
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 15:28

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup01-01172012

BPS1-TT-MW305S

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-12 File ID: 1201218-12.D

Sampled: 01/17/12 12:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 19:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup01-01172012

BPS1-TT-MW305S

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-12 File ID: 1201218-12.D

Sampled: 01/17/12 12:00 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 19:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	39.2	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	541628	5.13	90	5.13	
Chlorobenzene-d5	515065	8.08	90	8.08	
1,4-Dichlorobenzene-d4	285259	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-Dup01-01172012

BPS1-TT-MW305S

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-12 File ID: A87_023-0

Sampled: 01/17/12 12:00 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 18:27

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.184	90	40 - 135	
Tetrachloro-m-xylene	0.204	0.162	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-Dup01-01172012

BPS1-TT-MW305S

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 12:00
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-12
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	650	ug/L	8.1	10	20		01/30/12 12:50

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup01-01172012

BPS1- TT-MW305 S

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 12:00
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-12
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.6	ug/L	0.20	0.50	1.0		01/31/12 15:38

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-08 File ID: 1201218-08.D

Sampled: 01/17/12 11:58 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 14:13

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.49	0.14	0.50	1.0	J
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.27	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	2.7	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.3	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	4.7	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-08 File ID: 1201218-08.D

Sampled: 01/17/12 11:58 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 14:13

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	3.3	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.28	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3100	0.18	0.50	1.0	E
75-69-4	Trichlorofluoromethane	1	0.91	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.1	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	573063	5.13	95	5.13	
Chlorobenzene-d5	539488	8.08	94	8.08	
1,4-Dichlorobenzene-d4	298649	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-08RE1 File ID: 1201218-08D.D

Sampled: 01/17/12 11:58 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 18:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	50	50	33	50	500	U
71-43-2	Benzene	50	25	5.8	25	50	U
74-97-5	Bromochloromethane	50	25	7.8	25	50	U
75-27-4	Bromodichloromethane	50	25	6.7	25	50	U
75-25-2	Bromoform	50	12	5.1	12	50	U
74-83-9	Bromomethane	50	25	14	25	50	U
75-15-0	Carbon Disulfide	50	25	9.4	25	250	U
56-23-5	Carbon Tetrachloride	50	25	7.2	25	50	U
108-90-7	Chlorobenzene	50	25	6.4	25	50	U
75-00-3	Chloroethane	50	25	7.5	25	50	U
67-66-3	Chloroform	50	25	8.0	25	50	U
74-87-3	Chloromethane	50	25	9.0	25	50	U
110-82-7	Cyclohexane	50	25	14	25	250	U
96-12-8	1,2-Dibromo-3-chloropropane	50	25	13	25	100	U
124-48-1	Dibromochloromethane	50	12	4.7	12	50	U
106-93-4	1,2-Dibromoethane	50	12	5.4	12	50	U
95-50-1	1,2-Dichlorobenzene	50	25	7.7	25	50	U
541-73-1	1,3-Dichlorobenzene	50	12	5.3	12	50	U
106-46-7	1,4-Dichlorobenzene	50	25	7.8	25	50	U
75-71-8	Dichlorodifluoromethane	50	25	12	25	50	U
75-34-3	1,1-Dichloroethane	50	25	9.7	25	50	U
107-06-2	1,2-Dichloroethane	50	25	6.1	25	50	U
75-35-4	1,1-Dichloroethene	50	25	8.6	25	50	U
156-59-2	cis-1,2-Dichloroethene	50	25	8.6	25	50	U
156-60-5	trans-1,2-Dichloroethene	50	25	5.7	25	50	U
78-87-5	1,2-Dichloropropane	50	25	7.3	25	50	U
10061-01-5	cis-1,3-Dichloropropene	50	5.0	2.5	5.0	50	U
10061-02-6	trans-1,3-Dichloropropene	50	12	5.4	12	50	U
123-91-1	1,4-Dioxane	50	1200	500	1200	2500	U
100-41-4	Ethylbenzene	50	12	5.4	12	50	U
591-78-6	2-Hexanone	50	25	12	25	250	U
98-82-8	Isopropylbenzene	50	25	8.4	25	50	U
79-20-9	Methyl Acetate	50	25	14	25	250	U
1634-04-4	Methyl tert-Butyl Ether	50	25	6.4	25	50	U
108-87-2	Methylcyclohexane	50	25	12	25	250	U
75-09-2	Methylene Chloride	50	25	17	25	50	U
78-93-3	2-Butanone (MEK)	50	25	14	25	250	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-08RE1 File ID: 1201218-08D.D

Sampled: 01/17/12 11:58 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 18:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	50	25	12	25	250	U
100-42-5	Styrene	50	5.0	2.8	5.0	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	25	6.0	25	50	U
127-18-4	Tetrachloroethene	50	25	8.2	25	50	U
108-88-3	Toluene	50	5.0	2.8	5.0	50	U
87-61-6	1,2,3-Trichlorobenzene	50	25	6.9	25	100	U
120-82-1	1,2,4-Trichlorobenzene	50	25	7.4	25	100	U
71-55-6	1,1,1-Trichloroethane	50	25	7.2	25	50	U
79-00-5	1,1,2-Trichloroethane	50	25	7.6	25	50	U
79-01-6	Trichloroethene	50	3900	9.2	25	50	
75-69-4	Trichlorofluoromethane	50	25	9.0	25	50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	25	11	25	50	U
75-01-4	Vinyl Chloride	50	25	12	25	50	U
179601-23-1	Xylene, Meta + Para	50	25	14	25	100	U
95-47-6	Xylene, Ortho	50	12	5.2	12	50	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	37.6	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523098	5.13	88	5.13	
Chlorobenzene-d5	496296	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264842	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-08 File ID: A87 017-0

Sampled: 01/17/12 11:58 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 16:01

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.192	94	40 - 135	
Tetrachloro-m-xylene	0.204	0.169	83	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-08RE1 File ID: A87_174-0

Sampled: 01/17/12 11:58 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 15:29

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01038 Calibration: 2B01011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.3	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.193	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 11:58
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-08
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 11:58
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-08
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	3.5	ug/L	0.20	0.50	1.0		01/31/12 15:33

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-10 File ID: 1201218-10.D

Sampled: 01/17/12 14:46 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.19	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.57	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.73	0.17	0.50	1.0	J
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-10 File ID: 1201218-10.D

Sampled: 01/17/12 14:46 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 15:09

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	140	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.94	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.33	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.8	102	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	555682	5.13	92	5.13	
Chlorobenzene-d5	527690	8.08	92	8.08	
1,4-Dichlorobenzene-d4	295729	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-10 File ID: A87_021-0

Sampled: 01/17/12 14:46 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 17:38

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 960 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.166	80	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-10RE1 File ID: A87_178-0

Sampled: 01/17/12 14:46 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 17:06

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 960 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.16	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.207	99	40 - 135	
Tetrachloro-m-xylene	0.208	0.173	83	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 14:46
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-10
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:42

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 14:46
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-10
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	22	ug/L	0.20	0.50	1.0		01/31/12 15:35

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/17/12 14:46
Solids: 0.00
QC Batch: 1201614

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-10
Prepared: 01/18/12 10:14
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/18/12 10:41

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-07 File ID: 1201310-07.D

Sampled: 01/23/12 13:50 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 15:41

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0:15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-07 File ID: 1201310-07.D

Sampled: 01/23/12 13:50 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 15:41

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.40	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	491916	5.12	93	5.13	
Chlorobenzene-d5	470240	8.08	93	8.08	
1,4-Dichlorobenzene-d4	252002	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-07 File ID: A87_092-0

Sampled: 01/23/12 13:50 Prepared: 01/25/12 08:27 Analyzed: 01/27/12 01:21

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B06054 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.202	100	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-07RE1 File ID: A87_292-0

Sampled: 01/23/12 13:50 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 06:30

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B07033 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.54	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 13:50
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-07
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	310	ug/L	8.1	10	20		01/30/12 15:59

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 13:50
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-07
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.3	ug/L	0.20	0.50	1.0		01/31/12 16:40

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 13:50
Solids: 0.00
QC Batch: 1201753

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-07
Prepared: 01/24/12 10:38
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:30

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 13:50
Solids: 0.00
QC Batch: 1201785

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-07
Prepared: 01/25/12 10:42
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	710	ug/L	280	500	1000	J	01/26/12 03:03

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-04 File ID: 1201310-04.D

Sampled: 01/23/12 12:10 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 15:13

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-04 File ID: 1201310-04.D

Sampled: 01/23/12 12:10 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 15:13

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.54	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492913	5.13	93	5.13	
Chlorobenzene-d5	466790	8.08	92	8.08	
1,4-Dichlorobenzene-d4	250499	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-13
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO W
Matrix: Ground Water
Laboratory ID: 1201310-04
File ID: A87_088-0
Sampled: 01/23/12 12:10
Prepared: 01/25/12 08:27
Analyzed: 01/26/12 23:44
Solids:
Preparation: 3510C Liquid-Liquid Ex
Initial/Final: 990 mL / 2 mL
QC Batch: 1201593
Sequence: 2B03015
Calibration: 2A20001
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.215	107	40 - 135	
Tetrachloro-m-xylene	0.202	0.203	100	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-04RE1 File ID: A87_291-0

Sampled: 01/23/12 12:10 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 06:05

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B07033 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.8	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.203	101	40 - 135	
Tetrachloro-m-xylene	0.202	0.177	88	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 12:10
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-04
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	93	ug/L	8.1	10	20		01/30/12 15:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 12:10
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-04
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:27

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 12:10
Solids: 0.00
QC Batch: 1201753

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-04
Prepared: 01/24/12 10:38
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:17

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 12:10
Solids: 0.00
QC Batch: 1201785

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-04
Prepared: 01/25/12 10:42
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	3300	ug/L	280	500	1000		01/26/12 02:56

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-02 File ID: 1201310-02.D

Sampled: 01/23/12 10:35 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 14:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201310-02 File ID: 1201310-02.D

Sampled: 01/23/12 10:35 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 14:18

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.44	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	497242	5.13	94	5.13	
Chlorobenzene-d5	472128	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254168	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-02 File ID: A87_086-0

Sampled: 01/23/12 10:35 Prepared: 01/25/12 08:27 Analyzed: 01/26/12 22:55

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.197	98	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201310-02RE1 File ID: A87 286-0

Sampled: 01/23/12 10:35 Prepared: 01/25/12 08:27 Analyzed: 02/03/12 04:04

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201593 Sequence: 2B08001 Calibration: 2B08001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.61	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 10:35
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-02
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	77	ug/L	8.1	10	20		01/30/12 15:18

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 10:35
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-02
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.2	ug/L	0.20	0.50	1.0		01/31/12 16:25

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/23/12 10:35
Solids: 0.00
QC Batch: 1201785

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-02
Prepared: 01/25/12 10:42
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1100	ug/L	280	500	1000		01/26/12 02:48

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-09 File ID: 1201244-09.D

Sampled: 01/18/12 14:50 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 12:51

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.24	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.30	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-09 File ID: 1201244-09.D

Sampled: 01/18/12 14:50 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 12:51

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.3	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.57	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.2	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523242	5.13	88	5.13	
Chlorobenzene-d5	490935	8.08	89	8.08	
1,4-Dichlorobenzene-d4	265413	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-09 File ID: A87_033-0

Sampled: 01/18/12 14:50 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 22:29

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 1000 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U
	PCB-1248	1	0.080		0.08	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.200	0.176	88	36 - 114	

* Values outside of QC limits

3-29-12
JAS

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 14:50
Solids: 0.00
QC Batch: 1201437

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-09
Prepared: 01/31/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	530	ug/L	8.1	10	20		02/01/12 10:44

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 14:50
Solids: 0.00
QC Batch: 1201436

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-09
Prepared: 01/23/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.0	ug/L	0.20	0.50	1.0		01/31/12 15:56

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-07 File ID: 1201244-07.D

Sampled: 01/18/12 12:32 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 17:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.20	0.19	0.50	5.0	J
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.23	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-07 File ID: 1201244-07.D

Sampled: 01/18/12 12:32 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 17:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.1	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	538692	5.13	89	5.13	
Chlorobenzene-d5	512513	8.08	89	8.08	
1,4-Dichlorobenzene-d4	281998	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-07 File ID: A87_029-0

Sampled: 01/18/12 12:32 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 20:52

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.185	90	40 - 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-07RE1 File ID: A87_278-0

Sampled: 01/18/12 12:32 Prepared: 01/23/12 11:04 Analyzed: 02/03/12 00:50

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2B03005 Calibration: 2B03001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.84	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.181	88	40 - 135	
Tetrachloro-m-xylene	0.206	0.145	70	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:32
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-07
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	460	ug/L	8.1	10	20		01/30/12 13:22

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:32
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-07
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	12	ug/L	0.20	0.50	1.0		01/31/12 15:50

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 12:32
Solids: 0.00
QC Batch: 1201625

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-07
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:21

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-04 File ID: 1201244-04.D

Sampled: 01/18/12 10:42 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 11:56

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201244-04 File ID: 1201244-04.D

Sampled: 01/18/12 10:42 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 11:56

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.0	105	85 - 115	
1,2-Dichloroethane-d4	40.0	41.0	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	517989	5.13	87	5.13	
Chlorobenzene-d5	489258	8.08	88	8.08	
1,4-Dichlorobenzene-d4	264473	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-04 File ID: A87_026-0

Sampled: 01/18/12 10:42 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 19:39

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.200	97	40 - 135	
Tetrachloro-m-xylene	0.206	0.162	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201244-04RE1 File ID: A87_181-0

Sampled: 01/18/12 10:42 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 18:19

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.56	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.210	102	40 - 135	
Tetrachloro-m-xylene	0.206	0.199	97	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 10:42
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-04
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	460	ug/L	8.1	10	20		01/30/12 13:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/18/12 10:42
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-04
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	13	ug/L	0.20	0.50	1.0		01/31/12 15:41

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-04 File ID: 1201218-04.D

Sampled: 01/16/12 16:05 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-04 File ID: 1201218-04.D

Sampled: 01/16/12 16:05 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 12:23

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.71	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.5	101	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	560980	5.13	93	5.13	
Chlorobenzene-d5	528535	8.08	92	8.08	
1,4-Dichlorobenzene-d4	290125	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-04 File ID: A87_013-0

Sampled: 01/16/12 16:05 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 14:24

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-04RE1 File ID: A87_169-0

Sampled: 01/16/12 16:05 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 13:28

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01038 Calibration: 2B01011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.199	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.177	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 16:05
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-04
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	150	ug/L	8.1	10	20		01/30/12 11:53

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 16:05
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-04
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:22

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-03 File ID: 1201218-03.D

Sampled: 01/16/12 14:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-03 File ID: 1201218-03.D

Sampled: 01/16/12 14:40 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:55

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.2	101	85 - 115	
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	580762	5.13	96	5.13	
Chlorobenzene-d5	546951	8.08	95	8.08	
1,4-Dichlorobenzene-d4	302793	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-03 File ID: A87 012-0

Sampled: 01/16/12 14:40 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 14:00

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.206	0.171	83	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-03RE1 File ID: A87_168-0

Sampled: 01/16/12 14:40 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 13:03

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.52	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.209	101	40 - 135	
Tetrachloro-m-xylene	0.206	0.183	89	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 14:40
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-03
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		01/30/12 11:49

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 14:40
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-03
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:21

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-02 File ID: 1201218-02.D

Sampled: 01/16/12 12:30 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.19	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201218-02 File ID: 1201218-02.D

Sampled: 01/16/12 12:30 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:27

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.70	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.7	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	572613	5.13	95	5.13	
Chlorobenzene-d5	539709	8.08	94	8.08	
1,4-Dichlorobenzene-d4	298556	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-02 File ID: A87_011-0

Sampled: 01/16/12 12:30 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 13:36

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.183	89	40 - 135	
Tetrachloro-m-xylene	0.206	0.168	82	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201218-02RE1 File ID: A87_167-0

Sampled: 01/16/12 12:30 Prepared: 01/23/12 11:04 Analyzed: 01/28/12 12:39

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 970 mL / 2 mL

QC Batch: 1201461 Sequence: 2B01016 Calibration: 2B01003 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.073	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.207	100	40 - 135	
Tetrachloro-m-xylene	0.206	0.175	85	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 12:30
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-02
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		01/30/12 11:45

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/16/12 12:30
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201218-02
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	17	ug/L	0.20	0.50	1.0		01/31/12 15:19

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201112-02 File ID: 1201112-02.D

Sampled: 01/10/12 15:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 17:25

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201112-02 File ID: 1201112-02.D

Sampled: 01/10/12 15:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 17:25

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.61	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	621343	5.13	93	5.13	
Chlorobenzene-d5	560678	8.08	93	8.08	
1,4-Dichlorobenzene-d4	302809	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201112-02 File ID: A86_336-0

Sampled: 01/10/12 15:00 Prepared: 01/12/12 08:43 Analyzed: 01/16/12 16:32

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 930 mL / 2 mL

QC Batch: 1201141 Sequence: 2A20016 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.086	0.058	0.086	0.22	U
11104-28-2	PCB-1221	1	0.086	0.049	0.086	0.22	U
11141-16-5	PCB-1232	1	0.086	0.044	0.086	0.22	U
53469-21-9	PCB-1242	1	0.086	0.067	0.086	0.22	U
11097-69-1	PCB-1254	1	0.086	0.057	0.086	0.22	U
11096-82-5	PCB-1260	1	0.086	0.031	0.086	0.22	U
37324-23-5	PCB-1262	1	0.086	0.086	0.086	0.22	U
11100-14-4	PCB-1268	1	0.086	0.043	0.086	0.22	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.197	91	40 - 135	
Tetrachloro-m-xylene	0.215	0.186	86	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201112-02RE1 File ID: A86_392-0

Sampled: 01/10/12 15:00 Prepared: 01/12/12 08:43 Analyzed: 01/17/12 15:19

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 930 mL / 2 mL

QC Batch: 1201141 Sequence: 2A20029 Calibration: 2A20009 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	1.0	0.058	0.086	0.22	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.204	95	40 - 135	
Tetrachloro-m-xylene	0.215	0.182	84	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/10/12 15:00
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201112-02
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2100	ug/L	8.1	10	20		01/30/12 11:33

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/10/12 15:00
Solids: 0.00
QC Batch: 1201439

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201112-03
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	92	ug/L	8.1	10	20		01/26/12 14:17

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/10/12 15:00
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201112-02
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	18	ug/L	0.20	0.50	1.0		01/31/12 15:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/10/12 15:00
Solids: 0.00
QC Batch: 1201438

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201112-03
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	13	ug/L	0.20	0.50	1.0		01/31/12 14:56

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201126-02 File ID: 1201126-02.D

Sampled: 01/11/12 10:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 17:52

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0:15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201126-02 File ID: 1201126-02.D

Sampled: 01/11/12 10:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 17:52

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	39.6	99	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	628762	5.13	94	5.13	
Chlorobenzene-d5	563778	8.08	94	8.08	
1,4-Dichlorobenzene-d4	304000	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201126-02 File ID: A86_341-0

Sampled: 01/11/12 10:00 Prepared: 01/13/12 08:41 Analyzed: 01/16/12 18:33

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 2 mL

QC Batch: 1201186 Sequence: 2A20016 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.141	70	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201126-02RE1 File ID: A86_386-0

Sampled: 01/11/12 10:00 Prepared: 01/13/12 08:41 Analyzed: 01/17/12 12:53

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1201186 Sequence: 2A20018 Calibration: 2A20002 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.43	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 10:00
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-02
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	130	ug/L	8.1	10	20		01/30/12 11:37

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/10/12 15:00
Solids: 0.00
QC Batch: 1201170

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201112-02
Prepared: 01/11/12 08:14
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	8.9	ug/L	0.3	1.0	1.0		01/11/12 10:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 10:00
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-02
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	49	ug/L	0.20	0.50	1.0		01/31/12 15:15

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 10:00
Solids: 0.00
QC Batch: 1201249

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-02
Prepared: 01/12/12 08:23
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	47.7	ug/L	0.6	2.0	2.0		01/12/12 09:58

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201126-03 File ID: 1201126-03.D

Sampled: 01/11/12 14:10 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 18:20

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.27	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water Laboratory ID: 1201126-03 File ID: 1201126-03.D

Sampled: 01/11/12 14:10 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 18:20

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.1	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.45	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.1	100	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	617610	5.12	92	5.13	
Chlorobenzene-d5	562579	8.08	93	8.08	
1,4-Dichlorobenzene-d4	303302	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water Laboratory ID: 1201126-03 File ID: A86_342-0

Sampled: 01/11/12 14:10 Prepared: 01/13/12 08:41 Analyzed: 01/16/12 18:58

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 940 mL / 2 mL

QC Batch: 1201186 Sequence: 2A20016 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
53469-21-9	PCB-1242	1	0.085	0.066	0.085	0.21	U
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	1	0.085	0.031	0.085	0.21	U
37324-23-5	PCB-1262	1	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268	1	0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.197	93	40 - 135	
Tetrachloro-m-xylene	0.213	0.164	77	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 14:10
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-03
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2400	ug/L	8.1	10	20		01/30/12 11:41

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 14:10
Solids: 0.00
QC Batch: 1201439

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-04
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	31	ug/L	8.1	10	20		01/26/12 14:27

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 14:10
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-03
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.5	ug/L	0.20	0.50	1.0		01/31/12 15:16

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 14:10
Solids: 0.00
QC Batch: 1201438

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-04
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.56	ug/L	0.20	0.50	1.0	J	01/31/12 14:57

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Ground Water
Sampled: 01/11/12 14:10
Solids: 0.00
QC Batch: 1201249

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201126-03
Prepared: 01/12/12 08:23
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/12/12 10:00

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water Laboratory ID: 1110398-01 File ID: 1110398-01.D

Sampled: 10/19/11 11:00 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 16:05

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water Laboratory ID: 1110398-01 File ID: 1110398-01.D

Sampled: 10/19/11 11:00 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 16:05

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.1	105	85 - 115	
1,2-Dichloroethane-d4	40.0	38.7	97	70 - 120	
Toluene-d8	40.0	39.3	98	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	650570	5.13	746237	5.13	
Chlorobenzene-d5	502992	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	258254	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Surface Water Laboratory ID: 1110398-01 File ID: A83 044-0

Sampled: 10/19/11 11:00 Prepared: 10/25/11 08:26 Analyzed: 10/27/11 08:56

Solids: Preparation: 3510C Liquid-Liquid Ex: Initial/Final: 990 mL / 2 mL

QC Batch: 1111570 Sequence: 1J31031 Calibration: 1J31007 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.173	86	40 - 135	
Tetrachloro-m-xylene	0.202	0.149	74	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Surface Water Laboratory ID: 1110398-01RE1 File ID: A83_158-0

Sampled: 10/19/11 11:00 Prepared: 10/25/11 08:26 Analyzed: 10/31/11 19:37

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 990 mL / 2 mL

QC Batch: 1111570 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.35	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	89	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:00
Solids: 0.00
QC Batch: 1112149

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-01
Prepared: 11/02/11 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		11/04/11 08:44

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:00
Solids: 0.00
QC Batch: 1112150

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-01
Prepared: 11/02/11 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		11/04/11 08:30

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:00
Solids: 0.00
QC Batch: 1112234

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-01
Prepared: 10/20/11 10:29
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:37

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water Laboratory ID: 1110398-02 File ID: 1110398-02.D

Sampled: 10/19/11 11:30 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 16:33

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water Laboratory ID: 1110398-02 File ID: 1110398-02.D

Sampled: 10/19/11 11:30 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 16:33

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.4	99	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	662424	5.13	746237	5.13	
Chlorobenzene-d5	506412	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	269627	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-9
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 6-CTO WI
Matrix: Surface Water
Laboratory ID: 1110398-02
File ID: A83_045-0
Sampled: 10/19/11 11:30
Prepared: 10/25/11 08:26
Analyzed: 10/27/11 09:20
Solids:
Preparation: 3510C Liquid-Liquid Ext
Initial/Final: 800 mL / 2 mL
QC Batch: 1111570
Sequence: 1J31031
Calibration: 1J31007
Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.10	0.067	0.10	0.25	U
11104-28-2	PCB-1221	1	0.10	0.057	0.10	0.25	U
11141-16-5	PCB-1232	1	0.10	0.051	0.10	0.25	U
53469-21-9	PCB-1242	1	0.10	0.077	0.10	0.25	U
12672-29-6	PCB-1248	1	0.10	0.068	0.10	0.25	U
11097-69-1	PCB-1254	1	0.10	0.066	0.10	0.25	U
11096-82-5	PCB-1260	1	0.10	0.036	0.10	0.25	U
37324-23-5	PCB-1262	1	0.10	0.10	0.10	0.25	U
11100-14-4	PCB-1268	1	0.10	0.050	0.10	0.25	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.250	0.216	86	40 - 135	
Tetrachloro-m-xylene	0.250	0.186	75	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:30
Solids: 0.00
QC Batch: 1112149

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-02
Prepared: 11/02/11 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	150	ug/L	8.1	10	20		11/04/11 08:48

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:30
Solids: 0.00
QC Batch: 1112150

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-02
Prepared: 11/02/11 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.84	ug/L	0.20	0.50	1.0	J	11/04/11 08:38

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Surface Water
Sampled: 10/19/11 11:30
Solids: 0.00
QC Batch: 1112234

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-02
Prepared: 10/20/11 10:29
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:39

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-06 File ID: A83_032-0

Sampled: 10/19/11 13:15 Prepared: 10/26/11 08:22 Analyzed: 10/27/11 04:05

Solids: 95.74 Preparation: 3550C Sonication Extrac Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759 Sequence: 1J31022 Calibration: 1J31005 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0298	86	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0304	88	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-06RE1 File ID: A83_163-0

Sampled: 10/19/11 13:15 Prepared: 10/26/11 08:22 Analyzed: 10/31/11 21:38

Solids: 95.74 Preparation: 3550C Sonication Extrac Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	10	1.3	0.029	0.070	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0325	94	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0280	81	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sampled: 10/19/11 13:15
Solids: 95.74
QC Batch: 1111711

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-06
Prepared: 10/25/11 12:06
Preparation: General Inorganic Prep
Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-07 File ID: A83_033-0

Sampled: 10/19/11 13:30 Prepared: 10/26/11 08:22 Analyzed: 10/27/11 04:29

Solids: 95.86 Preparation: 3550C Sonication Extrac Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759 Sequence: 1J31022 Calibration: 1J31005 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0299	84	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0319	90	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-07RE1 File ID: A83_164-0

Sampled: 10/19/11 13:30 Prepared: 10/26/11 08:22 Analyzed: 10/31/11 22:03

Solids: 95.86 Preparation: 3550C Sonication Extrac Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	5	0.72	0.015	0.035	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0362	102	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0314	88	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sampled: 10/19/11 13:30
Solids: 95.86
QC Batch: 1111711

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-07
Prepared: 10/25/11 12:06
Preparation: General Inorganic Prep
Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-05 File ID: A83_031-0

Sampled: 10/19/11 14:15 Prepared: 10/26/11 08:22 Analyzed: 10/27/11 03:40

Solids: 95.38 Preparation: 3550C Sonication Extrac Initial/Final: 29.8 g / 10 mL

QC Batch: 1111759 Sequence: 1J31022 Calibration: 1J31005 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.018	0.013	0.018	0.35	U
11104-28-2	PCB-1221	1	0.018	0.012	0.018	0.35	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.35	U
53469-21-9	PCB-1242	1	0.018	0.011	0.018	0.35	U
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.35	U
11096-82-5	PCB-1260	1	0.018	0.0051	0.018	0.35	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.35	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.35	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0352	0.0309	88	60 - 125	
Tetrachloro-m-xylene	0.0352	0.0375	106	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-05RE1 File ID: A83_162-0

Sampled: 10/19/11 14:15 Prepared: 10/26/11 08:22 Analyzed: 10/31/11 21:14

Solids: 95.38 Preparation: 3550C Sonication Extrac Initial/Final: 29.8 g / 10 mL

QC Batch: 1111759 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	50	7.0	0.15	0.35	0.68	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sampled: 10/19/11 14:15
Solids: 95.38
QC Batch: 1111711

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-05
Prepared: 10/25/11 12:06
Preparation: General Inorganic Prep
Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	95	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil Laboratory ID: 1110398-03 File ID: A83_029-0

Sampled: 10/19/11 14:00 Prepared: 10/26/11 08:22 Analyzed: 10/27/11 02:52

Solids: 96.24 Preparation: 3550C Sonication Extrac Initial/Final: 29.3 g / 10 mL

QC Batch: 1111759 Sequence: 1J31022 Calibration: 1J31005 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0324	91	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0317	89	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil Laboratory ID: 1110398-03RE1 File ID: A83_160-0

Sampled: 10/19/11 14:00 Prepared: 10/26/11 08:22 Analyzed: 10/31/11 20:26

Solids: 96.24 Preparation: 3550C Sonication Extrac Initial/Final: 29.3 g / 10 mL

QC Batch: 1111759 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	20	2.9	0.058	0.14	0.34	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sampled: 10/19/11 14:00
Solids: 96.24
QC Batch: 1111711

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-03
Prepared: 10/25/11 12:06
Preparation: General Inorganic Prep
Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-04 File ID: A83_030-0

Sampled: 10/19/11 13:45 Prepared: 10/26/11 08:22 Analyzed: 10/27/11 03:16

Solids: 96.86 Preparation: 3550C Sonication Extrac Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759 Sequence: 1J31022 Calibration: 1J31005 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0069	0.0028	0.0069	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0069	0.0035	0.0069	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0069	0.0019	0.0069	0.34	U
11100-14-4	PCB-1268	1	0.0069	0.0030	0.0069	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0327	93	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0326	93	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WI

Matrix: Soil Laboratory ID: 1110398-04RE1 File ID: A83_161-0

Sampled: 10/19/11 13:45 Prepared: 10/26/11 08:22 Analyzed: 10/31/11 20:50

Solids: 96.86 Preparation: 3550C Sonication Extrac Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759 Sequence: 1K02044 Calibration: 1K02011 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	0.46	0.0058	0.014	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0355	101	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0350	100	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sampled: 10/19/11 13:45
Solids: 96.86
QC Batch: 1111711

SDG: 50063-9
Project: NWIRP Bethpage, NY 6-CTO WE44
Laboratory ID: 1110398-04
Prepared: 10/25/11 12:06
Preparation: General Inorganic Prep
Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	97	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201244-02 File ID: 1201244-02.D

Sampled: 01/18/12 08:10 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 11:01

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.56	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
SDG: 50063-12
Client: TETRA TECH NUS - Pittsburgh
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Matrix: Water
Laboratory ID: 1201244-02
File ID: 1201244-02.D
Sampled: 01/18/12 08:10
Prepared: 01/24/12 08:00
Analyzed: 01/24/12 11:01
Solids:
Preparation: 5030B Aqueous Purge &
Initial/Final: 5 mL / 5 mL
QC Batch: 1201603
Sequence: 2A25008
Calibration: 2A18010
Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	7.0	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	505584	5.13	85	5.13	
Chlorobenzene-d5	473250	8.08	86	8.08	
1,4-Dichlorobenzene-d4	252238	10.38	78	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water Laboratory ID: 1201244-02 File ID: A87_024-0

Sampled: 01/18/12 08:10 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 18:51

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.197	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:10
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-02
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	8.2	ug/L	8.1	10	20	J	01/30/12 13:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:10
Solids: 0.00
QC Batch: 1201439

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-02
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:30

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:10
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-02
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 15:39

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:10
Solids: 0.00
QC Batch: 1201438

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-02
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:58

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:10
Solids: 0.00
QC Batch: 1201625

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-02
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:15

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-08 File ID: 1201310-08.D

Sampled: 01/23/12 14:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:59

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	16	0.66	1.0	10	
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	4.4	0.10	0.25	1.0	
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	3.1	0.094	0.25	1.0	
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-08 File ID: 1201310-08.D

Sampled: 01/23/12 14:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:59

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.51	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.4	106	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	485580	5.13	92	5.13	
Chlorobenzene-d5	463774	8.08	91	8.08	
1,4-Dichlorobenzene-d4	261261	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water Laboratory ID: 1201310-08 File ID: A87_093-0

Sampled: 01/23/12 14:30 Prepared: 01/25/12 08:27 Analyzed: 01/27/12 01:45

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 970 mL / 2 mL

QC Batch: 1201593 Sequence: 2B03015 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.176	85	40 - 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 14:30
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-08
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	320	ug/L	8.1	10	20		01/30/12 16:03

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 14:30
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-08
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.79	ug/L	0.20	0.50	1.0	J	01/31/12 16:41

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 14:30
Solids: 0.00
QC Batch: 1201753

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-08
Prepared: 01/24/12 10:38
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.5	ug/L	0.3	1.0	1.0	J	01/24/12 11:32

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201244-03 File ID: 1201244-03.D

Sampled: 01/18/12 08:20 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 11:28

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201244-03 File ID: 1201244-03.D

Sampled: 01/18/12 08:20 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 11:28

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	6.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	533503	5.13	89	5.13	
Chlorobenzene-d5	498059	8.08	90	8.08	
1,4-Dichlorobenzene-d4	268759	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water Laboratory ID: 1201244-03 File ID: A87_025-0

Sampled: 01/18/12 08:20 Prepared: 01/23/12 11:04 Analyzed: 01/25/12 19:15

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 980 mL / 2 mL

QC Batch: 1201461 Sequence: 2A31043 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.189	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	74	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:20
Solids: 0.00
QC Batch: 1201435

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-03
Prepared: 01/23/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	29	ug/L	8.1	10	20		01/30/12 13:06

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:20
Solids: 0.00
QC Batch: 1201439

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-03
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:20
Solids: 0.00
QC Batch: 1201434

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-03
Prepared: 01/20/12 05:30
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:20
Solids: 0.00
QC Batch: 1201438

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-03
Prepared: 01/24/12 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:59

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/18/12 08:20
Solids: 0.00
QC Batch: 1201625

SDG: 50063-12
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201244-03
Prepared: 01/19/12 10:34
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	01/19/12 11:19

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-06 File ID: 1201310-06.D

Sampled: 01/23/12 13:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:32

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-06 File ID: 1201310-06.D

Sampled: 01/23/12 13:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:32

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	6.5	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	503272	5.13	95	5.13	
Chlorobenzene-d5	473597	8.08	93	8.08	
1,4-Dichlorobenzene-d4	257827	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water Laboratory ID: 1201310-06 File ID: A87_089-0

Sampled: 01/23/12 13:30 Prepared: 01/25/12 08:27 Analyzed: 01/27/12 00:08

Solids: Preparation: 3510C Liquid-Liquid Ex Initial/Final: 850 mL / 2 mL

QC Batch: 1201593 Sequence: 2B06054 Calibration: 2A20001 Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.094	0.063	0.094	0.24	U
11104-28-2	PCB-1221	1	0.094	0.053	0.094	0.24	U
11141-16-5	PCB-1232	1	0.094	0.048	0.094	0.24	U
53469-21-9	PCB-1242	1	0.094	0.073	0.094	0.24	U
12672-29-6	PCB-1248	1	0.094	0.064	0.094	0.24	U
11097-69-1	PCB-1254	1	0.094	0.063	0.094	0.24	U
11096-82-5	PCB-1260	1	0.094	0.034	0.094	0.24	U
37324-23-5	PCB-1262	1	0.094	0.094	0.094	0.24	U
11100-14-4	PCB-1268	1	0.094	0.047	0.094	0.24	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.235	0.239	102	40 - 135	
Tetrachloro-m-xylene	0.235	0.175	74	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 13:30
Solids: 0.00
QC Batch: 1201621

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-06
Prepared: 01/27/12 07:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	12	ug/L	8.1	10	20	J	01/30/12 15:54

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 13:30
Solids: 0.00
QC Batch: 1201622

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-06
Prepared: 01/27/12 07:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 16:39

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 01/23/12 13:30
Solids: 0.00
QC Batch: 1201753

SDG: 50063-13
Project: NWIRP Bethpage, NY 01-CTO WE44(04)
Laboratory ID: 1201310-06
Prepared: 01/24/12 10:38
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:26

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water Laboratory ID: 1110398-08 File ID: 1110398-08.D

Sampled: 10/19/11 08:00 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 17:01

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	19	0.66	1.0	10	
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	2.3	0.28	0.50	5.0	J

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water Laboratory ID: 1110398-08 File ID: 1110398-08.D

Sampled: 10/19/11 08:00 Prepared: 10/31/11 07:00 Analyzed: 10/31/11 17:01

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1112065 Sequence: 1J31056 Calibration: 1J28012 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.070	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	38.8	97	70 - 120	
Toluene-d8	40.0	38.2	95	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	670510	5.13	746237	5.13	
Chlorobenzene-d5	492287	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	260954	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201112-01 File ID: 1201112-01.D

Sampled: 01/10/12 12:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 16:29

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB-01102012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201112-01 File ID: 1201112-01.D

Sampled: 01/10/12 12:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 16:29

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.1	100	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	
4-Bromofluorobenzene	40.0	39.5	99	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	630847	5.13	94	5.13	
Chlorobenzene-d5	566164	8.08	94	8.08	
1,4-Dichlorobenzene-d4	309320	10.38	91	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201126-01 File ID: 1201126-01.D

Sampled: 01/11/12 08:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 16:57

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB-01112012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201126-01 File ID: 1201126-01.D

Sampled: 01/11/12 08:00 Prepared: 01/18/12 13:00 Analyzed: 01/18/12 16:57

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201389 Sequence: 2A19006 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.3	101	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	100	70 - 120	
Toluene-d8	40.0	39.8	100	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	623326	5.13	93	5.13	
Chlorobenzene-d5	562862	8.08	93	8.08	
1,4-Dichlorobenzene-d4	303695	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB01-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201218-01 File ID: 1201218-01.D

Sampled: 01/16/12 09:35 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB01-01162012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201218-01 File ID: 1201218-01.D

Sampled: 01/16/12 09:35 Prepared: 01/23/12 08:00 Analyzed: 01/23/12 11:00

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201552 Sequence: 2A24017 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.8	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	593671	5.13	99	5.13	
Chlorobenzene-d5	554448	8.08	97	8.08	
1,4-Dichlorobenzene-d4	306295	10.38	90	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB02-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201244-01 File ID: 1201244-01.D

Sampled: 01/18/12 08:00 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 10:33

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.5	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.48	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB02-01182012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201244-01 File ID: 1201244-01.D

Sampled: 01/18/12 08:00 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 10:33

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	542121	5.13	91	5.13	
Chlorobenzene-d5	507994	8.08	92	8.08	
1,4-Dichlorobenzene-d4	269865	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201254-01 File ID: 1201254-01.D

Sampled: 01/19/12 07:45 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 14:14

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	3.0	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB03-01192012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201254-01 File ID: 1201254-01.D

Sampled: 01/19/12 07:45 Prepared: 01/24/12 08:00 Analyzed: 01/24/12 14:14

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201603 Sequence: 2A25008 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525118	5.13	88	5.13	
Chlorobenzene-d5	495767	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264019	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB04-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201287-01 File ID: 1201287-01.D

Sampled: 01/20/12 07:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 10:36

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.4	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB04-01202012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201287-01 File ID: 1201287-01.D

Sampled: 01/20/12 07:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 10:36

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.2	98	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	521127	5.13	98	5.13	
Chlorobenzene-d5	489374	8.08	96	8.08	
1,4-Dichlorobenzene-d4	262068	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB05-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-01 File ID: 1201310-01.D

Sampled: 01/23/12 07:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:04

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.8	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-TB05-01232012

Laboratory: TriMatrix Laboratories, Inc. SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water Laboratory ID: 1201310-01 File ID: 1201310-01.D

Sampled: 01/23/12 07:30 Prepared: 01/26/12 08:00 Analyzed: 01/26/12 11:04

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1201663 Sequence: 2A26019 Calibration: 2A18010 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	512195	5.13	97	5.13	
Chlorobenzene-d5	480926	8.08	95	8.08	
1,4-Dichlorobenzene-d4	260078	10.38	88	10.38	

* Values outside of QC limits

Appendix D

Validation Summaries

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**R. SOK**	**DATE:**	**FEBRUARY 17, 2012**
FROM:	**A. COGNETTI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / PCB / METALS / MISCELLANOUS**
NWIRP BETHPAGE CTO WE44
SAMPLE DELIVERY GROUP (SDG) – 50063-9

SAMPLES: 3/Aqueous/VOC

BPSI-SW3001 BPSI-SW3002 BPSI-TT-TB1019

5/Soil/PCB

BPSI-TT-MW309-0005 BPSI-TT-MW309-0510 BPSI-TT-MW309-1015
BPSI-TT-MW309-1520 BPSI-TT-MW309-2025

2/Aqueous/PCB/Metals

BPSI-SW3001 BPSI-SW3002

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-9 consists of two (2) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). Five (5) soil environmental samples and two (2) aqueous environmental samples were analyzed for polychlorinated biphenyls (PCBs). Two (2) aqueous environmental samples were analyzed for iron, total chromium and dissolved hexavalent chromium. The soil samples were analyzed for percent solids.

The samples were collected by Tetra Tech on October 19, 2011 and analyzed by Trimatrix Laboratories. Analyses were conducted in accordance with EPA Methods SW-846 8260B, 8082, 6010C, 6020A, 7196A and 3550B analysis and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- * Data completeness
- * Holding times
- * GC/MS Tuning
- Initial/continuing calibrations
- * Laboratory Method Blank/Field Blank Results
- * Surrogate Recoveries
- * Matrix Spike / Matrix Spike Duplicate Recoveries
- * Laboratory Control Sample Recoveries
- * Internal Standard Recoveries
- * ICP Interference Results
- * ICP Serial Dilution Results
- * Compound Quantitation
- Compound Identification
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

Volatile

In the initial and continuing calibrations on October 27, 2011 and October 31, 2011@ 8:11, 1,4-dioxane had a relative retention factor (RRF) less than the 0.05 quality control limit. The nondetected 1,4-dioxane results were qualified as rejected (UR) in the affected samples.

In the continuing calibration on October 31, 2011 @ 8:11, bromomethane and 2-hexanone had percent differences (%Ds) greater than the 20% quality control limit. The nondetected bromomethane and 2-hexanone results were qualified as estimated (UJ) in the affected samples.

Contamination was detected in the trip blank, BPSI-TT-TB1019.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
2-butanone	2.3	23
Acetone	19	190
Toluene	0.07	0.35

An action level of 10X the maximum concentration of common laboratory contaminants, acetone and 2-butanone, and 5X the maximum concentration of toluene was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. Positive results less than the action level were qualified as (U).

PCB

All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample. Method blank chromatograms did not indicate any contamination was present. The data reviewer examined the pattern and agreed with the laboratory regarding the Aroclor 1248 identification even though the pattern appears likely to contain another Aroclor mixture.

Additional Comments

Sample BPSI-TT-TB1019 was not listed on the chain of custody. The sample was added onto the chain of custody per Tetra Tech's request.

Contamination was detected in the continuing calibration blanks and method blank in the metals fraction.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Iron (1)	9.0	45.0
Chromium (2)	-0.21	1.05

(1) Maximum concentration detected in method blank associated with batch 1112149.
(2) Maximum concentration detected in continuing calibration blank 2 analyzed on November 4, 2011 @ 8:21.

An action level of 5X the maximum concentration was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. No action was taken for the negative signal drift for chromium because the negative value was greater than the negative limit of detection.

The serial dilution %Ds for iron and chromium were greater than the 10% quality control limit. No action was taken because the sample concentration was less than 50X the IDL.

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

Nondetected results are reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance Issues: 1,4-dioxane had a RRF less than the 0.05 quality control limit resulting in the rejection of nondetected results. Bromomethane and 2-hexanone had %Ds greater than the 20% quality control limit resulting in the qualification of data. All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample.

Other Factors Affecting Data Quality: BPSI-TT-TB1019 contained acetone, 2-butanone and toluene.

The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, SOP # HW-45 Revision #1, October 2006, USEPA Region II Hazardous Waste Support Branch Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A, SOP# HW-2, Revision 13, September 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on the SOW ILM05.3, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C – Region II Data Validation Forms
4. Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB1019		
SDG: 50063-9	LAB_ID	1110398-01			1110398-02			1110398-08		
FRACTION: OV	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		2.3	J	P
2-HEXANONE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U	B	19		
BENZENE		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB1019		
SDG: 50063-9	LAB_ID	1110398-01			1110398-02			1110398-08		
FRACTION: OV	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.07	J	P
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW309-0005			BPSI-TT-MW309-0005RE1			BPSI-TT-MW309-0510			BPSI-TT-MW309-0510RE1		
SDG: 50063-9	LAB_ID	1110398-06			1110398-06RE1			1110398-07			1110398-07RE1		
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	96.0			96.0			96.0			96.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.017	U					0.017	U				
AROCLOR-1221		0.017	U					0.017	U				
AROCLOR-1232		0.007	U					0.007	U				
AROCLOR-1242		0.017	U					0.017	U				
AROCLOR-1248					1.3	J	Q				0.72	J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.017	U					0.017	U				
AROCLOR-1262		0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW309-1015			BPSI-TT-MW309-1015RE1			BPSI-TT-MW309-1520			BPSI-TT-MW309-1520RE1		
SDG: 50063-9	LAB_ID	1110398-05			1110398-05RE1			1110398-03			1110398-03RE1		
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	95.0			95.0			96.0			96.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.018	U					0.017	U				
AROCLOR-1221		0.018	U					0.017	U				
AROCLOR-1232		0.007	U					0.007	U				
AROCLOR-1242		0.018	U					0.017	U				
AROCLOR-1248					7	J	Q				2.9	J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.018	U					0.017	U				
AROCLOR-1262		0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

PROJ_NO: 02230	NSAMPLE	BPSI-TT-MW309-2025			BPSI-TT-MW309-2025RE1		
SDG: 50063-9	LAB_ID	1110398-04			1110398-04RE1		
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	97.0			97.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.017	U				
AROCLOR-1221		0.017	U				
AROCLOR-1232		0.0069	U				
AROCLOR-1242		0.017	U				
AROCLOR-1248					0.46	J	Q
AROCLOR-1254		0.0069	U				
AROCLOR-1260		0.017	U				
AROCLOR-1262		0.0069	U				
AROCLOR-1268		0.0069	U				

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3001RE1			BPSI-SW3002		
SDG: 50063-9	LAB_ID	1110398-01			1110398-01RE1			1110398-02		
FRACTION: PCB	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.1	U	
AROCLOR-1221		0.08	U					0.1	U	
AROCLOR-1232		0.08	U					0.1	U	
AROCLOR-1242		0.08	U					0.1	U	
AROCLOR-1248					0.35	J	Q	0.1	U	
AROCLOR-1254		0.08	U					0.1	U	
AROCLOR-1260		0.08	U					0.1	U	
AROCLOR-1262		0.08	U					0.1	U	
AROCLOR-1268		0.08	U					0.1	U	

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002		
SDG: 50063-9	LAB_ID	1110398-01			1110398-02		
FRACTION: M	SAMP_DATE	10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		2.4			0.84	J	P
IRON		240			150		

PROJ_NO: 02230	NSAMPLE	BPSI-SW3001			BPSI-SW3002		
SDG: 50063-9	LAB_ID	1110398-01			1110398-02		
FRACTION: MISC	SAMP_DATE	10/19/2011			10/19/2011		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.4	J	P	0.4	J	P

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO: **R. SOK** **DATE:** **MARCH 28, 2012**

FROM: **JOSEPH KALINYAK** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC, PCB**
NWIRP BETHPAGE, CTO WE44
SAMPLE DELIVERY GROUP SDG 50063-12

SAMPLES: 27 / Aqueous / VOC

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TB-01102012	BPS1-TB-01112012
BPS1-TB01-01162012	BPS1-TB02-01182012	BPS1-TT-Dup02-01182012
BPS1-TT-MW301D-01172012	BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012
BPS1-TT-MW305I-01172012	BPS1-TT-MW305S-01172012	BPS1-TT-MW307D-01182012
BPS1-TT-MW307I-01182012	BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012
BPS1-TT-MW308I-01162012	BPS1-TT-MW308S-01162012	BPS1-TT-MW309D-01112012
BPS1-TT-MW309I-01112012	BPS1-TT-MW309S-01102012	BPS1-TTMW-304I2-01182012

23 / Aqueous / PCB

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TT-Dup02-01182012	BPS1-TT-MW301D-01172012
BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012	BPS1-TT-MW304I1-01182012
BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012	BPS1-TT-MW305I-01172012
BPS1-TT-MW305S-01172012	BPS1-TT-MW307D-01182012	BPS1-TT-MW307I-01182012
BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012	BPS1-TT-MW308I-01162012
BPS1-TT-MW308S-01162012	BPS1-TT-MW309D-01112012	BPS1-TT-MW309I-01112012
BPS1-TT-MW309S-01102012	BPS1-TTMW-304I2-01182012	

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-12 consisted of twenty-seven (27) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and four (4) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Twenty-three (23) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup01-01172012 / BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012 / BPS1-TTMW-304I2-01182012.

The samples were collected by Tetra Tech on January 10, 11, 16, 17, and 18, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Hold times
* • GC/MS System Tuning and Performance
  • Initial/continuing Calibrations

- Method Blank Results
- * Laboratory Control Sample Recovery
- * Matrix Spike/Matrix Spike Duplicate Recoveries
- * Surrogate Spike Recoveries
- * Internal Standard Recoveries
- * Field Duplicate Precision
- * Compound Identification
- Compound Quantitation
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

VOC

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

Analyte	Maximum Conc. µg/L	Action Level µg/L
Methyl acetate [1]	0.32	1.60

[1] Method blank for batch 1201603 affecting samples BPS1-TT-MW301I-01172012, BPS1-FW-MW02-01172012, BPS1-TB02-01182012, BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-MW307D-01182012, BPS1-TT-MW304S-01182012, and BPS1-TT-MW307S-01182012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (U). Acetone was detected in the trip blank samples BPS1-TB02-01182012. As none of the samples had positive acetone detections, no validation action for trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

Affected samples: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and 1,4-dioxane for instrument 224 on 01/23/11 @ 09:09 affecting the samples listed.

Affected samples:

BPS1-TB01-01162012	BPS1-TT-MW308D-01162012	BPS1-TT-MW308I-01162012
BPS1-TT-MW308S-01162012	BPS1-TT-MW301D-01172012	BPS1-TT-MW305S-01172012
BPS1-TT-MW301S-01172012	BPS1-TT-MW305I-01172012	BPS1-TT-MW305D-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW307I-01182012	BPS1-TTMW-304I2-01182012
BPS1-TT-Dup02-01182012	BPS1-Dup01-01172012	

Action: The non-detected bromomethane results for the samples were qualified estimated, (UJ). No validation action was necessary for the non-detected 1,4-dioxane sample results as they were qualified rejected as previously describe for an RRF quality control limit non-compliances.

The CCV %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/11 @ 08:42 affecting the samples listed.

Affected samples:

BPS1-TB02-01182012 BPS1-FB01-01182012 BPS1-RB01-01182012
BPS1-TT-MW307D-01182012 BPS1-TT-MW304S-01182012
BPS1-TT-MW307S-01182012 BPS1-TT-MW301I-01172012 BPS1-FW-MW02-01172012
BPS1-TT-MW305I-01172012RE dilution re-analysis

Action: The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ). The sample BPS1-TT-MW305I-01172012RE dilution re-analysis results were not qualified as only the trichloroethene results was reported from the sample re-analysis.

PCB

The samples BPS1-TT-MW301D-01172012 (25.2%) andBPS1-TT-MW305D-01172012 (35.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The aforementioned sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

Additional Comments

The sample BPS1-TT-MW305I-01172012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 50X dilution. Only the tetrachloroethene result was reported from the sample BPS1-TT-MW305I-01172012 50X dilution analysis.

Samples were diluted for the Aroclor-1248 analysis as listed below.

Sample	Dilution
BPS1-TT-Dup02-01182012	2X
BPS1-TT-MW301S-01172012	10X
BPS1-TT-MW305I-01172012	2X
BPS1-TTMW-304I2-01182012	2X

The rinse blank sample BPS1-RB01-01182012 and field blank sample BPS1-FB01-01182012 had positive detections for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for field or rinse blank contamination.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results.

The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

Surrogate results were diluted out in the sample BPS1-TT-MW301S-01172012 10X dilution Aroclor-1248 analysis.

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit. Sample positive Aroclor results were qualified due to analytical column RPD quality control limit non-compliances.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

TetraTech
Joseph Kalinyak
Chemist/Data Validator

TetraTech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A - Qualified Analytical Results
Appendix B - Results as Reported by the Laboratory
Appendix C – Region II Data Validation Forms
Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: OV	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.39	J	P	0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.36	J	P	0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TB01-01162012			BPS1-TB-01102012			BPS1-TB-01112012			BPS1-TB02-01182012		
SDG: 50063-12	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01		
FRACTION: OV	SAMP_DATE	1/16/2012			1/10/2012			1/11/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		2.5	J	P
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
SDG: 50063-12	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
FRACTION: OV	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.23	J	P	0.53	J	P	0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.22	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		2.8			0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1.7			0.26	J	P	0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.33	J	P
1,1-DICHLOROETHANE		1.6			0.5	U		0.5	U		0.57	J	P
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.73	J	P
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.19	J	P
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		6			2.7			0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305I-01172012RE1			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012		
SDG: 50063-12	LAB_ID	1201218-08			1201218-08RE1			1201218-06			1201244-04		
FRACTION: OV	SAMP_DATE	1/17/2012			1/17/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.28	J	P				0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1.1						0.5	U		0.5	U	
1,1-DICHLOROETHANE		2.7						0.5	U		0.5	U	
1,1-DICHLOROETHENE		1.3						0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U					0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U					0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U					0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U					0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C				25	UR	C	25	UR	C
2-BUTANONE		0.5	U					0.5	U		0.5	U	
2-HEXANONE		0.5	U					0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U					0.5	U		0.5	U	
ACETONE		1	U					1	U		1	U	
BENZENE		0.5	U					0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U					0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U					0.5	U		0.5	U	
BROMOFORM		0.25	U					0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C				0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U					0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.49	J	P				0.5	U		0.5	U	
CHLOROBENZENE		0.5	U					0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U					0.25	U		0.25	U	
CHLOROETHANE		0.5	U					0.5	U		0.5	U	
CHLOROFORM		0.27	J	P				0.5	U		0.5	U	
CHLOROMETHANE		0.5	U					0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		4.7						0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U					0.1	U		0.1	U	
CYCLOHEXANE		0.5	U					0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW307I-01182012			BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012		
SDG: 50063-12	LAB_ID	1201244-07			1201244-09			1201218-02			1201218-03		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.23	J	P	0.24	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.2	J	P	0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.19	J	P	0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW308S-01162012			BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
SDG: 50063-12	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02		
FRACTION: OV	SAMP_DATE	1/16/2012			1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.45	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.27	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: OV	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.56	U	A	0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.35	J	P	0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		21			0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		7			2.7			6.4		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TB01-01162012			BPS1-TB-01102012			BPS1-TB-01112012			BPS1-TB02-01182012		
SDG: 50063-12	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01		
FRACTION: OV	SAMP_DATE	1/16/2012			1/10/2012			1/11/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	A
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
SDG: 50063-12	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
FRACTION: OV	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		5.5			0.26	J	P	0.5	U		0.5	U	
TOLUENE		0.1	U		0.14	J	P	0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			2.6			0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		25			5.5			0.5	U		1.9		
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		4.1			1.7			0.5	U		140		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.94	J	P
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305I-01172012RE1			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012		
SDG: 50063-12	LAB_ID	1201218-08			1201218-08RE1			1201218-06			1201244-04		
FRACTION: OV	SAMP_DATE	1/17/2012			1/17/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U					0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U					0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U					0.5	U		0.5	U	
M+P-XYLENES		0.5	U					0.5	U		0.5	U	
METHYL ACETATE		0.5	U					0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U					0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U					0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U					0.5	U		0.5	U	
O-XYLENE		0.25	U					0.25	U		0.25	U	
STYRENE		0.1	U					0.1	U		0.1	U	
TETRACHLOROETHENE		3.3						0.5	U		0.5	U	
TOLUENE		0.1	U					0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U					0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U					0.25	U		0.25	U	
TRICHLOROETHENE					3900			0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.91	J	P				0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U					0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW307I-01182012			BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012		
SDG: 50063-12	LAB_ID	1201244-07			1201244-09			1201218-02			1201218-03		
FRACTION: OV	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	UJ	C	0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U	A	0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		1.1			1.3			0.7	J	P	0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			0.57	J	P	1.6			0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW308S-01162012			BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
SDG: 50063-12	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02		
FRACTION: OV	SAMP_DATE	1/16/2012			1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		1.1			0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.71	J	P	1.8			0.5	U		0.61	J	P
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: PCB	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1248		0.08	U		0.08	U		0.3			0.08	U	
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
SDG: 50063-12	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
FRACTION: PCB	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.75	J	U	0.79			0.08	U	
AROCLOR-1248		1.6			0.08	U		0.08	U		10		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: PCB	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.16	J	PU
AROCLOR-1248		0.97			1.5			0.08	U		0.08	U	
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012			BPS1-TT-MW307I-01182012		
SDG: 50063-12	LAB_ID	1201218-08			1201218-06			1201244-04			1201244-07		
FRACTION: PCB	SAMP_DATE	1/17/2012			1/17/2012			1/18/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.56			0.08	U	
AROCLOR-1248		1.3			0.08	U		0.08	U		0.84		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012			BPS1-TT-MW308S-01162012		
SDG: 50063-12	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
FRACTION: PCB	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.073	J	P	0.52			0.08	U	
AROCLOR-1248		0.08	U		0.08	U		0.08	U		0.2		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
SDG: 50063-12	LAB_ID	1201126-03			1201126-02			1201112-02		
FRACTION: PCB	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.085	U		0.08	U		0.086	U	
AROCLOR-1221		0.085	U		0.08	U		0.086	U	
AROCLOR-1232		0.085	U		0.08	U		0.086	U	
AROCLOR-1242		0.085	U		0.43			0.086	U	
AROCLOR-1248		0.085	U		0.08	U		1		
AROCLOR-1254		0.085	U		0.08	U		0.086	U	
AROCLOR-1260		0.085	U		0.08	U		0.086	U	
AROCLOR-1262		0.085	U		0.08	U		0.086	U	
AROCLOR-1268		0.085	U		0.08	U		0.086	U	

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**R. SOK**	**DATE:**	**March 28, 2012**
FROM:	**MEGAN CARSON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- TOTAL AND FILTERED IRON AND CHROMIUM, AND HEXAVALENT CHROMIUM**
NWIRP BETHPAGE, CTO WE44
SDG 50063-12

SAMPLES: 23/Water/

BPS1-Dup01-01172012	BPS1-FB01-01182012
BPS1-FW-MW02-01172012	BPS1-RB01-01182012
BPS1-TT-Dup02-01182012	BPS1-TT-MW301D-01172012
BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW304I2-01182012
BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012
BPS1-TT-MW305I-01172012	BPS1-TT-MW305S-01172012
BPS1-TT-MW307D-01182012	BPS1-TT-MW307I-01182012
BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012
BPS1-TT-MW308I-01162012	BPS1-TT-MW308S-01162012
BPS1-TT-MW309D-01112012	BPS1-TT-MW309I-01112012
BPS1-TT-MW309S-01102012	

Overview

The sample set for NWIRP Bethpage, SDG 50063-12, consists of twenty one (21) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup01-01172012/ BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012/ BPS1-TT-MW304I2-01182012.

All samples were analyzed for total chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-MW309D-01112012-F, and BPS1-TT-MW309S-01102012-F were analyzed for filtered chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-Dup02-01182012, BPS1-TT-MW301I-01172012, BPS1-TT-MW304I1-01182012, BPS1-TT-MW304I2-01182012, BPS1-TT-MW305D-01172012, BPS1-TT-MW307I-01182012, BPS1-TT-MW309D-01112012, BPS1-TT-MW309I-01112012, and BPS1-TT-MW309S-01102012 were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on January 10th, 11th, 16th, 17th, and 18th, 2012 and analyzed by Trimatrix Laboratories. Metals analyses were performed using SW-846 Methods 6010C and 6020A. Hexavalent chromium analysis was performed using SW-846 Method 7196.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
• Initial and Continuing Calibration Verification Results
* • Laboratory Method / Preparation Blank Analyses
* • ICP Interference Results
* • Matrix Spike / Matrix Spike Duplicate Recoveries
* • Field Duplicate Precision

* • Laboratory Duplicate Results
* • Laboratory Control Standard Results
* • ICP Serial Dilution Results
* • Detection Limits
* • Analyte Quantitation

Metals:

All sample results were within quality control limits.

Hexavalent Chromium:

The CRDL standard analyzed on 1/11/12 had a percent recovery > 150% for hexavalent chromium. Sample BPS1-TT-MW309S-01102012 was affected. The positive result was qualified as estimated (J).

Notes

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

Sample ID BPS1-TT-MW304I2-01182012 was incorrectly labeled on the Form 1s and the EDD. The ID was changed to match the chain of custody.

The following contaminants were detected in calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Hexavalent chromium (1)	0.0005 mg/L	2.5 ug/L
Hexavalent chromium (2)	0.0036 mg/L	18 ug/L

(1) Maximum concentration found in a calibration blank affecting samples analyzed on 1/11/12.
(2) Maximum concentration found in a calibration blank affecting samples analyzed on 1/12/12.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No validation action was warranted as sample results were either > action level or non-detected.

The total chromium concentration in sample BPS1-TT-Dup02-01182012 was slightly less than the hexavalent chromium concentration. No action was taken.

Executive Summary

Laboratory Performance: CRDL standard non-compliances resulted in the qualification of sample results. Hexavalent chromium blank contamination did not impact sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.

Megan Carson

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Region II Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
SDG: 50063-12	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
FRACTION: M	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		2.6			0.5	U		8.5			0.5	U	
IRON		650			8.2	J	P	330			29		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
SDG: 50063-12	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
FRACTION: M	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		170			92			7			2.5		
IRON		10	J	P	14	J	P	17	J	P	56		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TT-MW304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
FRACTION: M	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		38			200			1.4			22		
IRON		400			16	J	P	58			1100		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012			BPS1-TT-MW307I-01182012		
SDG: 50063-12	LAB_ID	1201218-08			1201218-06			1201244-04			1201244-07		
FRACTION: M	SAMP_DATE	1/17/2012			1/17/2012			1/18/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		3.5			2.4			13			12		
IRON		1100			560			460			460		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012			BPS1-TT-MW308S-01162012		
SDG: 50063-12	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
FRACTION: M	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		4			17			10			10		
IRON		530			240			240			150		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
SDG: 50063-12	LAB_ID	1201126-03			1201126-02			1201112-02		
FRACTION: M	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		7.5			49			18		
IRON		2400			130			2100		

PROJ_NO: 02230	NSAMPLE	BPS1-FB01-01182012			BPS1-RB01-01182012			BPS1-TT-MW309D-01112012-F			BPS1-TT-MW309S-01102012-F		
SDG: 50063-12	LAB_ID	1201244-02			1201244-03			1201126-04			1201112-03		
FRACTION: MF	SAMP_DATE	1/18/2012			1/18/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		0.5	U		0.5	U		0.56	J	P	13		
IRON		10	U		10	U		31			92		

PROJ_NO: 02230	NSAMPLE	BPS1-FB01-01182012			BPS1-RB01-01182012			BPS1-TT-Dup02-01182012			BPS1-TT-MW301I-01172012		
SDG: 50063-12	LAB_ID	1201244-02			1201244-03			1201244-10			1201218-09		
FRACTION: MISC	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							BPS1-TT-MW304I2-01182012					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		1	U		0.4	J	P	182			5.3		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TT-MW304I2-01182012			BPS1-TT-MW305D-01172012			BPS1-TT-MW307I-01182012		
SDG: 50063-12	LAB_ID	1201244-06			1201244-08			1201218-10			1201244-07		
FRACTION: MISC	SAMP_DATE	1/18/2012			1/18/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		35.5			181			1	U		1	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
SDG: 50063-12	LAB_ID	1201126-03			1201126-02			1201112-02		
FRACTION: MISC	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		1	U		47.7			8.9	J	C

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**R. SOK**	**DATE:**	**MARCH 28, 2012**
FROM:	**JOSEPH KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC, PCB**
NWIRP BETHPAGE, CTO WE44
SAMPLE DELIVERY GROUP SDG 50063-13

SAMPLES: 22 / Aqueous / VOC

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TB03-01192012	BPS1-TB04-01202012
BPS1-TB05-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

19 / Aqueous / PCB

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-13 consisted of twenty-two (22) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and three (3) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Nineteen (19) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup03-01192012 / BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012 / BPS1-TT-MW303S-01232012.

The samples were collected by Tetra Tech on January 19, 20, and 23, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Hold times
* • GC/MS System Tuning and Performance
  • Initial/continuing Calibrations
  • Method Blank Results

* • Laboratory Control Sample Recovery
• Matrix Spike/Matrix Spike Duplicate Recoveries
• Surrogate Spike Recoveries
* • Internal Standard Recoveries
* • Field Duplicate Precision
* • Compound Identification
* • Compound Quantitation
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

VOC

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

Analyte	Maximum Conc. µg/L	Action Level µg/L
Methyl acetate [1]	0.32	1.60

[1] Method blank for batch 1201603 affecting samples BPS1-TB03-01192012, BPS1-HN-MW29I-01192012, BPS1-FW-MW01-01192012, BPS1-FW-MW03-01192012, BPS1-TT-MW304D-01192012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW303I1-01192012, BPS1-TT-MW303D-01192012, and BPS1-Dup03-01192012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Acetone was detected in the field blank sample and all three (3) trip blank samples. No validation action was necessary as all samples had non-detected results for methyl acetate. As none of the samples had positive acetone detections, no validation action for field blank and trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

Affected samples: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/12 @ 08:42 affecting the samples listed.

Affected samples:

BPS1-TB03-01192012 BPS1-HN-MW29I-01192012 BPS1-FW-MW01-01192012
BPS1-FW-MW03-01192012 BPS1-TT-MW304D-01192012 BPS1-TT-MW303I2-01192012
BPS1-TT-MW303I1-01192012 BPS1-TT-MW303D-01192012 BPS1-Dup03-01192012

Action: The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ).

The CCV %Ds were greater than the 20% quality control limit for cis-1,3-dichloropropene and methyl cyclohexane for instrument 224 on 01/26/11 @ 08:46 affecting the samples listed.

Affected samples:

BPS1-TB04-01202012 BPS1-TB05-01232012 BPS1-RB02-01232012
BPS1-FB02-01232012 BPS1-TT-MW302S-01202012 BPS1-TT-MW302D-01202012
BPS1-TT-MW302I1-01202012 BPS1-TT-MW302I2-01202012
BPS1-TT-MW306D-01232012 BPS1-TT-MW303S-01232012
BPS1-TT-MW306I-01232012 BPS1-TT-MW306S-01232012
BPS1-Dup04-01232012 BPS1-FW-MW01-01192012
BPS1-FW-MW03-01192012 BPS1-HN-MW29I-01192012

Action: The non-detected cis-1,3-dichloropropene and methyl cyclohexane results for the samples were qualified estimated, (UJ).

PCB

The matrix spike (MS) and MS duplicate (MSD) percent recoveries (%Rs) were greater than the quality control limit for Aroclor-1016 both columns for spiked sample BPS1-TT-MW306I-01232012.

Action: The non-detected Aroclor-1016 result for the sample BPS1-TT-MW306I-01232012 was qualified estimated, (UJ).

The samples BPS1-TT-MW303D-01192012 (26.9%) and BPS1-TT-MW306D-01232012 (31.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

Additional Comments

The sample BPS1-FW-MW01-01192012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 2X dilution. Only the tetrachloroethene result was reported from the sample BPS1-FW-MW01-01192012 2X dilution analysis.

The Aroclor surrogate %R was greater than the quality control limit for tetrachloro-m-xylene (TCX) for the DB-XLB column for sample BPS1-FB02-01232012. No validation action was necessary as the sample had non-detected results for all Aroclors and the alternate analytical column was quality control limit compliant.

Samples were diluted for the Aroclor-1248 analysis as listed below.

Sample	Dilution
BPS1-FW-MW03-01192012	2X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW303D-01192012	2X
BPS1-TT-MW303I1-01192012	3X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW304D-01192012	4X
BPS1-TT-MW306I-01232012	2X

The rinse blank sample BPS1-RB02-01232012 had a positive detection for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for rinse blank contamination.

The field blank sample BPS1-FB02-01232012 had positive detections for acetone, bromoform, chlorodibromomethane, and toluene. Detections of trihalomethanes are indicative of potable water. Analytes detected in the field blank were not used to establish blank action levels. No blank actions were taken.

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results.
The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

TetraTech
Joseph Kalinyak
Chemist/Data Validator

TetraTech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A - Qualified Analytical Results
Appendix B - Results as Reported by the Laboratory
Appendix C – Region II Data Validation Forms
Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
SDG: 50063-13	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
FRACTION: OV	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		8.3		
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		1.2		
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		3.1		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		16			1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		4.4			0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		3.1			0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		70		
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TB03-01192012		
SDG: 50063-13	LAB_ID	1201254-04			1201254-02			1201310-06			1201254-01		
FRACTION: OV	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.25	J	P	0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		3	J	P
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.49	J	P	0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C	0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TB04-01202012			BPS1-TB05-01232012			BPS1-TT-MW302D-01202012			BPS1-TT-MW302I1-01202012		
SDG: 50063-13	LAB_ID	1201287-01			1201310-01			1201287-03			1201287-04		
FRACTION: OV	SAMP_DATE	1/20/2012			1/23/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.23	J	P	0.35	J	P
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.45	J	P
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.62	J	P	0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1.4	J	P	2.8	J	P	1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012			BPS1-TT-MW303I1-01192012		
SDG: 50063-13	LAB_ID	1201287-05			1201287-02			1201254-08			1201254-07		
FRACTION: OV	SAMP_DATE	1/20/2012			1/20/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		1.6		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		1.6		
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		2		
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012			BPS1-TT-MW306D-01232012		
SDG: 50063-13	LAB_ID	1201254-06			1201310-03			1201254-05			1201310-02		
FRACTION: OV	SAMP_DATE	1/19/2012			1/23/2012			1/19/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	UJ	C	0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	UJ	C	0.1	U		0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
SDG: 50063-13	LAB_ID	1201310-04			1201310-07		
FRACTION: OV	SAMP_DATE	1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U	
ACETONE		1	U		1	U	
BENZENE		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
SDG: 50063-13	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
FRACTION: OV	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.46	J	P	1.8			0.5	U		200		
TOLUENE		0.1	U		0.1	U		0.51	J	P	0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	J	P
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		2.7			0.5	U		21		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TB03-01192012		
SDG: 50063-13	LAB_ID	1201254-04			1201254-02			1201310-06			1201254-01		
FRACTION: OV	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		68			0.49	J	P	0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		3.7			0.5	U		6.5			0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TB04-01202012			BPS1-TB05-01232012			BPS1-TT-MW302D-01202012			BPS1-TT-MW302I1-01202012		
SDG: 50063-13	LAB_ID	1201287-01			1201310-01			1201287-03			1201287-04		
FRACTION: OV	SAMP_DATE	1/20/2012			1/23/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.33	J	P	0.29	J	P
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		3.9			1.7		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012			BPS1-TT-MW303I1-01192012		
SDG: 50063-13	LAB_ID	1201287-05			1201287-02			1201254-08			1201254-07		
FRACTION: OV	SAMP_DATE	1/20/2012			1/20/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U		83		
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			0.5	U		0.51	J	P	18		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012			BPS1-TT-MW306D-01232012		
SDG: 50063-13	LAB_ID	1201254-06			1201310-03			1201254-05			1201310-02		
FRACTION: OV	SAMP_DATE	1/19/2012			1/23/2012			1/19/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	UJ	C	0.5	U		0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.94	J	P	1.9			0.5	U		0.44	J	P
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.6			2.7			0.5	U		2.4		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
SDG: 50063-13	LAB_ID	1201310-04			1201310-07		
FRACTION: OV	SAMP_DATE	1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.4	J	P
TOLUENE		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U	
TRICHLOROETHENE		0.54	J	P	0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U	

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup03-01192012RE1			BPS1-Dup04-01232012			BPS1-Dup04-01232012RE1		
SDG: 50063-13	LAB_ID	1201254-09			1201254-09RE1			1201310-09			1201310-09RE1		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW303S-01232012		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					0.66						0.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-FB02-01232012			BPS1-FW-MW01-01192012			BPS1-FW-MW01-01192012RE1			BPS1-FW-MW03-01192012		
SDG: 50063-13	LAB_ID	1201310-08			1201254-03			1201254-03RE1			1201254-04		
FRACTION: PCB	SAMP_DATE	1/23/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U					0.08	U	
AROCLOR-1221		0.08	U		0.08	U					0.08	U	
AROCLOR-1232		0.08	U		0.08	U					0.08	U	
AROCLOR-1242		0.08	U		0.08	U					0.08	U	
AROCLOR-1248		0.08	U					0.46					
AROCLOR-1254		0.08	U		0.08	U					0.08	U	
AROCLOR-1260		0.08	U		0.08	U					0.08	U	
AROCLOR-1262		0.08	U		0.08	U					0.08	U	
AROCLOR-1268		0.08	U		0.08	U					0.08	U	

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012RE1			BPS1-HN-MW29I-01192012			BPS1-HN-MW29I-01192012RE1			BPS1-RB02-01232012		
SDG: 50063-13	LAB_ID	1201254-04RE1			1201254-02			1201254-02RE1			1201310-06		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016					0.08	U					0.094	U	
AROCLOR-1221					0.08	U					0.094	U	
AROCLOR-1232					0.08	U					0.094	U	
AROCLOR-1242					0.08	U					0.094	U	
AROCLOR-1248		1.9						0.63			0.094	U	
AROCLOR-1254					0.08	U					0.094	U	
AROCLOR-1260					0.08	U					0.094	U	
AROCLOR-1262					0.08	U					0.094	U	
AROCLOR-1268					0.08	U					0.094	U	

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302D-01202012			BPS1-TT-MW302D-01202012RE1			BPS1-TT-MW302I1-01202012			BPS1-TT-MW302I1-01202012RE1		
SDG: 50063-13	LAB_ID	1201287-03			1201287-03RE1			1201287-04			1201287-04RE1		
FRACTION: PCB	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					0.85						1.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302I2-01202012RE1			BPS1-TT-MW302S-01202012			BPS1-TT-MW302S-01202012RE1		
SDG: 50063-13	LAB_ID	1201287-05			1201287-05RE1			1201287-02			1201287-02RE1		
FRACTION: PCB	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.9						0.43		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303D-01192012			BPS1-TT-MW303D-01192012RE1			BPS1-TT-MW303I1-01192012			BPS1-TT-MW303I1-01192012RE1		
SDG: 50063-13	LAB_ID	1201254-08			1201254-08RE1			1201254-07			1201254-07RE1		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.085	U					0.08	U				
AROCLOR-1221		0.085	U					0.08	U				
AROCLOR-1232		0.085	U					0.08	U				
AROCLOR-1242					1.6	J	U				3.9		
AROCLOR-1248		0.085	U					0.08	U				
AROCLOR-1254		0.085	U					0.08	U				
AROCLOR-1260		0.085	U					0.08	U				
AROCLOR-1262		0.085	U					0.08	U				
AROCLOR-1268		0.085	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303I2-01192012RE1			BPS1-TT-MW303S-01232012			BPS1-TT-MW303S-01232012RE1		
SDG: 50063-13	LAB_ID	1201254-06			1201254-06RE1			1201310-03			1201310-03RE1		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					2.4						0.21		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW304D-01192012			BPS1-TT-MW304D-01192012RE1			BPS1-TT-MW306D-01232012			BPS1-TT-MW306D-01232012RE1		
SDG: 50063-13	LAB_ID	1201254-05			1201254-05RE1			1201310-02			1201310-02RE1		
FRACTION: PCB	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U								0.61	J	U
AROCLOR-1248					4.2			0.08	U				
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306I-01232012RE1			BPS1-TT-MW306S-01232012			BPS1-TT-MW306S-01232012RE1		
SDG: 50063-13	LAB_ID	1201310-04			1201310-04RE1			1201310-07			1201310-07RE1		
FRACTION: PCB	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	UJ	D				0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.8						0.54		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**R. SOK**	**DATE:**	**March 28, 2012**
FROM:	**MEGAN CARSON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- TOTAL CALCIUM, CHROMIUM, IRON, AND SODIUM, AND FILTERED CHROMIUM AND IRON, TOC, AND HEXAVALENT CHROMIUM**
NWIRP BETHPAGE, CTO WE44
SDG 50063-13

SAMPLES: 20/Water/

BPS1-Dup03-01192012	BPS1-Dup04-01232012
BPS1-FB02-01232012	BPS1-FW-MW01-01192012
BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TT-MW301D-01232012
BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012
BPS1-TT-MW303D-01192012	BPS1-TT-MW303I1-01192012
BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012
BPS1-TT-MW306I-01232012	BPS1-TT-MW306S-01232012

Overview

The sample set for NWIRP Bethpage, SDG 50063-13, consists of eighteen (18) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup03-01192012/BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012.

All samples (except BPS1-TT-MW301D-01232012) were analyzed for total chromium and iron. Samples BPS1-HN-MW29I-01192012 and BPS1-TT-MW302D-01202012 were analyzed for total calcium and sodium. Sample BPS1-TT-MW303I1-01192012 was analyzed for filtered chromium and iron. Samples BPS1-FB02-01232012, BPS1-RB02-01232012, BPS1-TT-MW301D-01232012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for hexavalent chromium. Samples BPS1-TT-MW306D-01232012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for total organic carbon (TOC). The samples were collected by Tetra Tech on January 19th, 20th, 23rd, 2012 and analyzed by Trimatrix Laboratories. Iron, calcium, and sodium analyses were conducted using method 6010C. Chromium analyses were conducted using method 6020A. TOC analyses were conducted using standard method 5310C. Hexavalent chromium analyses were conducted using method 7196A.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Initial and Continuing Calibration Verification Results
* • Laboratory Method / Preparation Blank Analyses
* • ICP Interference Results
* • Matrix Spike / Matrix Spike Duplicate Recoveries
  • Field Duplicate Precision

* • Laboratory Duplicate Results
* • Laboratory Control Standard Results
* • ICP Serial Dilution Results
* • Detection Limits
* • Analyte Quantitation

Metals:

Field duplicate pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012 had a difference > 4X LOQ for iron. The iron results for the sample pair were qualified as estimated (J). No further validation action was warranted as the other field duplicate pair in the SDG was within quality control limits.

Hexavalent Chromium:

All sample results were within quality control limits.

Notes

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

The matrix spike and matrix spike duplicate of sample BPS1-TT-MW306I-01232012 for hexavalent chromium for batch 1201753 had a relative percent difference (RPD) > 20%. The percent recoveries for the matrix spike and matrix spike duplicate were within quality control limits. No validation action was warranted based on the RPD non-compliances alone.

The field duplicate sample BPS1-Dup03-01192012 was not analyzed for calcium and sodium because it was not marked for analysis on the chain of custody record. The original sample BPS1-HN-MW29I-01192012 was analyzed for calcium and sodium. No action was taken but this item is noted because a comparison of the results for field duplicate precision could not be conducted.

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: Field duplicate imprecisionnon was noted for iron in the sample pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012. Iron results in the affected pair were qualified as estimated.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

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The text of this report has been formulated to address only those problem areas affecting data quality.

Megan Carson

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer
Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Region II Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
SDG: 50063-13	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
FRACTION: M	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		5.2			4.2			0.79	J	P	4.4		
IRON		93			210	J	G	320			860		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TT-MW302D-01202012		
SDG: 50063-13	LAB_ID	1201254-04			1201254-02			1201310-06			1201287-03		
FRACTION: M	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/20/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM					24000						8000		
CHROMIUM		4.6			5.5			0.5	U		2.3		
IRON		110			83			12	J	P	75		
SODIUM					7800						24000		

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW302I1-01202012			BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012		
SDG: 50063-13	LAB_ID	1201287-04			1201287-05			1201287-02			1201254-08		
FRACTION: M	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		1.4			5.1			0.63	J	P	5.3		
IRON		34			59			22			520		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I1-01192012			BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012		
SDG: 50063-13	LAB_ID	1201254-07			1201254-06			1201310-03			1201254-05		
FRACTION: M	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		5.8			2.4			2.7			4.5		
IRON		6000			69			66	J	G	160		
SODIUM													

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW306D-01232012			BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
SDG: 50063-13	LAB_ID	1201310-02			1201310-04			1201310-07		
FRACTION: M	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM										
CHROMIUM		1.2			2.3			1.3		
IRON		77			93			310		
SODIUM										

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW303I1-01192012		
SDG: 50063-13	LAB_ID	1201254-07		
FRACTION: MF	SAMP_DATE	1/19/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CHROMIUM		0.23	J	P
IRON		70		

PROJ_NO: 02230	NSAMPLE	BPS1-FB02-01232012			BPS1-RB02-01232012			BPS1-TT-MW301D-01232012			BPS1-TT-MW303I2-01192012		
SDG: 50063-13	LAB_ID	1201310-08			1201310-06			1201310-05			1201254-06		
FRACTION: MISC	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.5	J	P	1	U		86			1	U	
TOTAL ORGANIC CARBON													

PROJ_NO: 02230	NSAMPLE	BPS1-TT-MW306D-01232012			BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
SDG: 50063-13	LAB_ID	1201310-02			1201310-04			1201310-07		
FRACTION: MISC	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM					1	U		1	U	
TOTAL ORGANIC CARBON		1100			3300			710	J	P

Appendix E

SAP Addendum

SAMPLING AND ANALYSIS PLAN ADDENDUM
ADDITIONAL GROUNDWATER INVESTIGATION
SITE 1 – FORMER DRUM MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE
BETHPAGE, NEW YORK

INTRODUCTION

This Work Plan Addendum has been prepared for the Mid-Atlantic Division of the Naval Facilities Engineering Command (NAVFAC) under Contract Task Order (CTO) WE44 issued by the Mid-Atlantic Division of NAVFAC under the Comprehensive Long-Term Environmental Action Navy (CLEAN) III contract number N62470-08-D-1001. This document is an addendum to the May 2010 Sampling and Analysis Plan (SAP) PCB Investigation (herein referenced as the SAP) and the July 2011 Interim Data Summary Report at Site 1 – Former Drum Marshalling Area. This SAP addendum addresses the installation of additional monitoring wells to further investigate potential upgradient sources and the extent of PCB- and hexavalent chromium-contaminated groundwater north of Site 1.

SCOPE AND OBJECTIVE

A total of eight monitoring wells will be installed at five locations during this additional groundwater investigation. Shallow water table monitoring wells will be installed at each location and three of the five well locations will include an intermediate monitoring well (approximately 180 feet bgs.) as presented on Figure 1. Split spoon samples and gamma logging will be used to interpret lithology at each of the proposed monitoring well locations and determine actual well screen intervals. The objective is to further investigate and evaluate PCB- and hexavalent chromium-contaminated groundwater north of Site 1, the former NWIRP recharge basins, and former sludge drying beds and also assess potential upgradient sources (i.e., former Grumman recharge basins as depicted on Figure 1). After well installation, groundwater samples will be collected from the new and existing monitoring wells and analyzed for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), total chromium, and hexavalent chromium to further evaluate impacts to groundwater. Groundwater investigative activities will be conducted in accordance with the procedures outlined in the SAP. Results from these additional investigative activities will be evaluated and presented in a data summary report to support future remedy evaluations and determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

SOIL BORINGS

Soil borings will be advanced via hollow stem auger (HSA) drilling methods at each monitoring well location/cluster. Each soil boring will be advanced to a depth of approximately 70 feet below ground surface (bgs) at each shallow well location and to approximately 200 feet at each intermediate well location. Lithology will be obtained at each soil boring via split spoons at select intervals and gamma logging from the total depth to the ground surface. The split spoon samples and gamma logs will be used to determine the actual screened intervals for monitoring well installation at each location.

MONITORING WELL INSTALLATION

Eight monitoring wells will be installed via HSA drilling methods at the locations presented on Figure 1. Five monitoring wells will be installed along Aerospace Boulevard on former Navy property (BPS1-TT-MW310S, -MW311S, -MW311I, -MW312S, and –MW312I). Pending a Navy access agreement, one shallow monitoring well will be installed northeast of the recharge basins (BPS1-TT-MW313S). Two monitoring wells, shallow and intermediate, will be installed approximately 100 feet east of the southeastern recharge basin (BPS1-TT-MW314S and –MW314I). The monitoring wells will be used to further define the extent of upgradient PCB- and hexavalent chromium-contaminated groundwater and also help determine whether other upgradient sources may be contributing to contamination detected upgradient of Site 1. Table 1 provides a summary of estimated screened intervals for the monitoring well installation. Each monitoring well will be developed prior to groundwater sampling.

Soil cuttings and/or fluids generated from the soil boring and monitoring well installations will be field screened for evidence of contamination (visual staining or elevated photoionization detector [PID] readings >10 parts per million [ppm]). If contamination is suspected, those soils will be segregated and characterized for disposal. All soil cuttings will be containerized in 55-gallon drums or roll off containers, sampled, and managed as Investigation Derived Waste (IDW).

GROUNDWATER SAMPLING

Groundwater samples will be collected from each new and existing monitoring well and sampled for VOCs, PCBs, total chromium, and hexavalent chromium as presented in Table 1. Three additional monitoring wells (BPS4-AOC22-MW05, -MW06, and -MW10) from AOC22/Site 4 will be included in this sampling event to help characterize the shallow groundwater west of the

existing downgradient monitoring wells. A submersible pump (e.g. Grundfos) will be utilized for groundwater sampling and low flow procedures will be followed as outlined in the SAP. Wellhead parameters including pH, temperature, specific conductivity, oxygen reduction potential, turbidity, and dissolved oxygen will be collected during sampling and allowed to stabilize prior to sample collection. Based on the good correlation between field test kits and laboratory confirmatory samples for hexavalent chromium, field test kits will be utilized along with laboratory confirmation samples for hexavalent chromium during this sampling event.

All fluids generated during decontamination procedures and purge water obtained during well installation, development, and sampling will be containerized in a poly tank or Frac tank, sampled, and be managed as IDW.

P:\GIS_files\Bethpage\MAP DOCS\MXD\Bethpage_Site1_pcb sample_loc_040512.mxd MMC 08272012

TETRA TECH

Proposed Monitoring Well Location Map
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage,New York

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 1	REV	DATE 8/27/12

TABLE 1
SAP ADDENDUM MONITORING WELL INSTALLATION AND SAMPLING
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

Activity	Sample Point ID	Screened Interval (feet bgs)	Sample Analysis	Activity Details
Monitoring Well Sampling	TTAOC22-MW05	47-67	TCL VOCs, PCBs, Total Chromium Hexavalent Chromium	AOC22/Site 4 Wells added to sampling
	TTAOC22-MW06	52-62		AOC22/Site 4 Wells added to sampling
	TTAOC22-MW10	49-59		AOC22/Site 4 Wells added to sampling
	BPS1-FW-MW01	48.5-63.5[1]		Site 1 monitoring well network
	BPS1-FW-MW02	49-64[1]		Site 1 monitoring well network
	BPS1-FW-MW03	52-67[1]		Site 1 monitoring well network
	BPS1-HN-MW29I	120-130[2]		Site 1 monitoring well network
	BPS1-TT-MW301S	51-61		Site 1 monitoring well network
	BPS1-TT-MW301I	130-140		Site 1 monitoring well network
	BPS1-TT-MW301D	210-220		Site 1 monitoring well network
	BPS1-TT-MW302S	41-51		Site 1 monitoring well network
	BPS1-TT-MW302I1	110-120		Site 1 monitoring well network
	BPS1-TT-MW302I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW302D	203-213		Site 1 monitoring well network
	BPS1-TT-MW303S	46-56		Site 1 monitoring well network
	BPS1-TT-MW303I1	95-105		Site 1 monitoring well network
	BPS1-TT-MW303I2	146-156		Site 1 monitoring well network
	BPS1-TT-MW303D	208-218		Site 1 monitoring well network
	BPS1-TT-MW304S	43-53		Site 1 monitoring well network
	BPS1-TT-MW304I1	102-112		Site 1 monitoring well network
	BPS1-TT-MW304I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW304D	180-190		Site 1 monitoring well network
	BPS1-TT-MW305S	40-50		Site 1 monitoring well network
	BPS1-TT-MW305I	190-200		Site 1 monitoring well network
	BPS1-TT-MW305D	286-296		Site 1 monitoring well network
	BPS1-TT-MW306S	50-60		Site 1 monitoring well network
	BPS1-TT-MW306I	189-199		Site 1 monitoring well network
	BPS1-TT-MW306D	284-294		Site 1 monitoring well network
	BPS1-TT-MW307S	40.5-50.5		Site 1 monitoring well network
	BPS1-TT-MW307I	188-198		Site 1 monitoring well network
	BPS1-TT-MW307D	276-286		Site 1 monitoring well network
	BPS1-TT-MW308S	54-64		Site 1 monitoring well network
	BPS1-TT-MW308I	156-166		Site 1 monitoring well network
	BPS1-TT-MW308D	250-260		Site 1 monitoring well network
	BPS1-TT-MW309S	53-63		Site 1 monitoring well network
	BPS1-TT-MW309I	160-170		Site 1 monitoring well network
	BPS1-TT-MW309D	252-262		Site 1 monitoring well network
Proposed Monitoring Well Installation and Sampling	BPS1-TT-MW310S	60-70[1]	TCL VOCs, PCBs, Total Chromium Hexavalent Chromium	Shallow well to be screened across water table.
	BPS1-TT-MW311S	60-70[1]		Shallow well to be screened across water table.
	BPS1-TT-MW311D	160-170[1]		Intermediate well to be screened based on lithology.
	BPS1-TT-MW312S	60-70[1]		Shallow well to be screened across water table.
	BPS1-TT-MW312I	160-170[1]		Intermediate well to be screened based on lithology.
	BPS1-TT-MW313S	60-70[1]		Shallow well to be screened across water table.
	BPS1-TT-MW314S	60-70[1]		Shallow well to be screened across water table.
	BPS1-TT-MW314I	160-170[1]		Intermediate well to be screened based on lithology.

Notes:
MW - Monitoring Well
NA - Not Applicable
TCL VOCs - Target Compound List Volatile Organic Compounds
PCBs - Polychlorinated Biphenyls
bgs - below ground surface
[1] - Estimated screen intervals, actual depths to be determined based on lithology

Quality Control/Quality Assurance samples will consist of the following:
- 10% Duplicate
- 5% MS/MSD
- Field Blank
- Rinsate Blank