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Year 11 Groundwater Monitoring Report for Remedial Action Implementation Buildings C-17/20/16/50

Naval Weapons Station Earle
Colts Neck, New Jersey

August 2009

Prepared for:
Naval Facilities Engineering Command Mid-Atlantic
Environmental Business Line
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for
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Contract No. N62472-03-D-0802
Contract Task Order No. 0017

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TABLE OF CONTENTS

1.0 Introduction 1
1.1 Introduction 1
1.2 Report Organization 2

2.0 CEA Summary 3
2.1 General Information 3
2.2 Site Location and CEA Descriptions 3
2.3 CEA Monitoring Program Overview 3

3.0 Groundwater Monitoring Program 4
3.1 Groundwater Monitoring Program: Years 1 through 10 4
3.1.1 *Year 1 Monitoring Program* 5
3.1.2 *Year 2 Monitoring Program* 5
3.1.3 *Year 3 Monitoring Program* 5
3.1.4 *Year 4 Monitoring Program* 5
3.1.5 *Year 5 Monitoring Program* 5
3.1.6 *Year 6 Monitoring Program* 6
3.1.7 *Year 7 Monitoring Program* 6
3.1.8 *Year 8 Monitoring Program* 7
3.1.9 *Year 9 Monitoring Program* 7
3.1.9 *Year10 Monitoring Program* 7

4.0 Discussion of Results 8
4.1 Technical Overview 8
4.2 Field Sampling and Analytical Methods 8
4.3 Data Validations 8
4.4 Analytical Results and Groundwater Flow Direction for Year 11 8
4.5 Trend Analysis 10

5.0 Conclusions 12

6.0 References 13

FINAL

FIGURES

Figure 1-1 Site Location Map
Figure 1-2 CEA Boundary
Figure 4-1 Year 11 Groundwater Quality Map
Figure 4-2 Potentiometric Surface Map – August 2008
Figure 4-3 Potentiometric Surface Map – November 2008
Figure 4-4 Potentiometric Surface Map – February 2009
Figure 4-5 Potentiometric Surface Map – May 2009
Figure 4-6 Monitoring Well 16MW-11, Benzene Concentration Trend
Figure 4-7 Monitoring Well 16MW-15, Benzene Concentration Trend
Figure 4-8 Monitoring Well 16MW-24, Benzene Concentration Trend
Figure 4-9 Monitoring Well 16MW-11, MTBE Concentration Trend
Figure 4-10 Monitoring Well 16MW-15, MTBE Concentration Trend
Figure 4-11 Monitoring Well 16MW-24, MTBE Concentration Trend
Figure 4-12 Benzene Concentration Transect Year 11
Figure 4-13 MTBE Concentration Transect Year 11

TABLES

Table 1 Year 11 Groundwater Sampling and Analysis Summary
Table 2 Analytical Data Summary - Years 1-11
Table 3 Sample Data Summary - Year 11
Table 4 Surface Water Data Summary – Year 11
Table 5 Groundwater Level Data – Year11
Table 6 Quality Assurance/Quality Control (QA/QC) Data Summary – Year 11
Table 7 Relative Percent Differences – Year 11

APPENDICES

Appendix A Validated Data and Validation Reports
Appendix B Field Data Logs
Appendix C Chains of Custody

1.0 INTRODUCTION

1.1 Introduction

ECOR Solutions, Inc. (ECOR) prepared the Year 11 Groundwater Monitoring Report for the Remedial Action Implementation at Buildings C-17/20/16/50, for Naval Facilities Engineering Command Mid-Atlantic (NAVFAC MIDLANT) under Contract Number N62467-03-D-0802, Contract Task Order No. 0017. The purpose of this report is to present the quarterly results of the Year 11 monitoring for groundwater remediation in the vicinity of Buildings C-17/20/16/50 (Site) on the Mainside area of the Naval Weapons Station (NWS) Earle. A location map of this Site is presented in **Figure 1-1**. This report was originally adapted from the Tetra Tech NUS, Inc. (TtNUS) Year 5 Groundwater Monitoring Report for Buildings C-17/20/16/50 (TtNUS, 2003).

An underground fuel line located in the area north of Building C-19 was used to transport diesel fuel from an underground storage tank (UST) located in the northeast corner of Building C-18 to a dispensing station north of Building C-50 (**Figure 1-2**). A leak in the fuel line was discovered in 1977. All of the former USTs (**Figure 1-2**) were removed from the former gas station in 1995. Part of the former underground diesel transfer line is still in place (**Figure 1-2**). An investigation was performed between 1995 and 1997 to delineate the extent of the soil and groundwater impact. The hydrogeologic investigation and site characterization for the Remedial Action Work Plan (RAWP) were completed in 1997 (Brown & Root Environmental, 1997). The New Jersey Department of Environmental Protection (NJDEP) approved the RAWP with monitored natural attenuation selected as the remedial method in 1998 (NJDEP, 1998a). The Classification Exception Area (CEA) documents for this Area of Concern (AOC) were approved by NJDEP in 1998 (NJDEP, 1998b). The CEA, depicted in **Figure 1-2**, encompasses groundwater impact from the leaking underground fuel line used to transport diesel fuel from a UST formerly located in the vicinity of Buildings C-20 and C-17 (**Figure 1-2**).

The plume of impacted groundwater includes highly weathered free-phase diesel fuel and dissolved-phase fuel constituents of concern (COC). The horizontal extent of the light non-aqueous phase liquid (LNAPL), including benzene and MTBE, encompasses an area of approximately one acre located northwest of Buildings C-17 and C-20 and between Buildings C-16 and C-50. The Navy is currently remediating the LNAPL via a bioslurping unit (**Figure 1-2**).

Prior to the approval of the CEA, trace concentrations of dissolved-phase benzene occurring below the NJDEP Groundwater Quality Standard (GWQS) were detected in monitoring wells 16MW-02, 16MW-08, 16MW-10, and 17MW-02, all located within 150 feet outside of the northern boundary of the CEA. Concentrations of dissolved-phase benzene above the GWQS were also detected in monitoring well 16MW-06, located approximately 265 feet north of the CEA boundary. Previous investigations by Brown & Root Environmental (Brown & Root Environmental 1997 and 1998) had not confirmed a correlation between the LNAPL and the dissolved-phase impact at C-17 and the dissolved-phase benzene at well 16MW-06.

This report summarizes the results of the groundwater and the surface water sampling for dissolved-phase constituents. During Year 11, monitoring under the approved CEA was performed at monitoring wells 16MW-04, 16MW-05, 16MW-08, 16MW-10, 16MW-11,

16MW-15, 16MW-24, 16MW-25, 18MW-01, and two surface water locations, 16SW-01 and 16SW-02. In recent years, NJDEP-approved modifications have been made to the monitoring program resulting in the removal of certain monitoring wells from the program and other recommended changes. These modifications leading up to the current monitoring program are detailed in Section 3.0.

1.2 Report Organization

Section 1.0 gives an introduction to the Site. Section 2.0 summarizes the CEA documents, and Section 3.0 summarizes the groundwater monitoring program as proposed in the CEA documents and modifications to the program during Years 1 through 11. Section 4.0 provides a summary and discusses the Year 11 monitoring results.

2.0 CEA SUMMARY

2.1 General Information

The CEA documents list the following general information for the C-17/20/16/50 Site:

- **Site Name/Location:** Buildings C-17/20/16/50, Naval Weapons Station Earle; Colts Neck, New Jersey.
- **Site Identification Number**: Spill Case Number 91-5-15-0941-14
- **NJDEP Case Manager**: Ms. Erica Bergman
- **Site Contact Person**: Mr. Eric Helms
- **Lead Program:** NJDEP - Bureau of Federal Case Management
- **Aquifer/Formation Impacted:** Vincentown/Vincentown
- **Aquifer Classification:** Groundwater for the Mainside area of the NWS Earle facility is classified as Class II-A.
- **Contaminants Exceeding Applicable GWQS**: Benzene, MTBE
- **Projected Longevity of the CEA**: 23 years.

2.2 Site Location and CEA Description

The area of concern is located at the Mainside area of the NWS Earle facility (**Figure 1-2**). According to the Colts Neck Township Tax Office, the entire Mainside area is designated as Block 56, Lot 1. The area of the CEA may be described as a circular area of approximately 3,000 square feet. The area has been used in the past to store and maintain railroad cars and other heavy equipment. In general, the area is overlain by railroad tracks and paved and unpaved surfaces. The area is bordered to the south by Buildings C-17, C-20, C-18, C-19, and C-50. The area is bordered to the west by Saipan Road, to the north by monitoring wells 16MW-08 and 16MW-12, and to the east by monitoring well 16MW-02 and a small unnamed creek. The CEA boundaries and surface features are presented in **Figure 1-2**.

2.3 CEA Monitoring Program Overview

The monitoring program provided for in the CEA consists of:

- Short-term monitoring of wells 16MW-04, 16MW-05, 16MW-08, 16MW-10, 16MW-11, 16MW-15, 16MW-24, 16MW-25, 18MW-01, and two surface water locations, 16SW-01 and 16SW-02, will occur throughout the implementation of the LNAPL recovery remedial program (bioslurper activities).

- Reviewing data from installed recovery wells within the eastern portion of the CEA. If groundwater impact is identified at levels above the GWQS within this area, an additional sentry or monitoring well may be required.

- Long-term monitoring will be implemented only in the event that the GWQSs are not exceeded during the short-term monitoring and will last for a minimum of four and a maximum of eight consecutive quarters after bioslurper activities have ceased.

- Environmental Protection Agency (EPA) Methods 624 and 625 will be used to analyze groundwater samples for MTBE, benzene, ethylbenzene, toluene, xylenes (collectively BTEX) and naphthalene. All analyses are performed by a NELAC, New Jersey-certified laboratory. Recently, naphthalene analysis has been omitted from certain monitoring wells, due to repeated results showing levels are not detected above the method detection limits (MDLs). The complete sampling and analysis summary can be found in **Table 1**.

- Field chemistry measurements performed prior to sample acquisition include; dissolved oxygen, pH, conductivity, oxidation reduction potential (ORP), turbidity, and temperature. These parameters will be measured using field instruments and recorded for all groundwater samples.

Groundwater monitoring reports will be submitted to NJDEP on an annual basis. The reports will include a tabulation of all sample results received during the reporting period pursuant to New Jersey Administrative Code (N.J.A.C.) 7:26E-3.13(c)3 and will provide a brief narrative summarizing the data and presenting conclusions. In the event a non-compliance with the RAWP is identified, NJDEP will be notified as soon as possible.

3.0 GROUNDWATER MONITORING PROGRAM

3.1 Groundwater Monitoring Program: Years 1 through 10

This section presents the results of the monitoring program during each year (Years 1 through 10). Modifications to the program or additional site investigations are also given here. A summary of historic groundwater laboratory analytical results is presented in **Table 2**.

3.1.1 Year 1 Monitoring Program (August 1998 - May 1999)

The Year 1 monitoring program included the following monitoring wells: 16MW-02, 16MW-03, 16MW-04, 16MW-05, 16MW-06, 16MW-08, 16MW-10, 17MW-01 and 17MW-02, and 18MW-01. Benzene concentrations in excess of the GWQS (1 microgram per liter (µg/L) were identified in all four sampling events during Year 1 at monitoring well 16MW-06. Benzene was detected above the GWQS for at least one event in monitoring wells 16MW-08, 16MW-03, and 16MW-05. All other constituents were detected below the applicable GWQS.

3.1.2 Year 2 Monitoring Program (August 1999 - May 2000)

Based on the Year 1 sampling results, the Navy modified the monitoring program for Year 2 to include monitoring well 16MW-09, located approximately 125 feet north and downgradient from monitoring well 16MW-06. During this monitoring period, benzene levels in excess of the GWQS were again identified in all four sampling periods at monitoring well 16MW-06, and in three sampling periods at monitoring well 16MW-09.

3.1.3 Year 3 Monitoring Program (August 2000 - May 2001)

Based on the Year 2 sampling results, the Navy modified the monitoring program between the August 2000 and November 2000 sampling events to include installation and sampling of a new downgradient monitoring well (16MW-11) located approximately 280 feet north of monitoring well 16MW-09. Results indicated benzene concentrations (100 µg/L to 582 µg/L) above the GWQS for at least one sampling event in wells 16MW-08, 16MW-09, 16MW-10, 16MW-11, and 17MW-02. Monitoring well 16MW-11 also contained the highest MTBE concentration outside of the LNAPL area. Therefore, in addition to the well installation and sampling, the Navy performed a one-time expanded monitoring program, concurrent with the February 2001 sampling period, at six wells located at Installation Restoration Program (IRP) Site 1 (01MW-01, 01MW-02, 01MW-03, 01MW-04, and 01MW-05) and two wells at IRP Site 29 (29MW-01 and 29MW-02). The monitoring wells at IRP Site 1 are located approximately 1,200 feet north and downgradient from monitoring well 16MW-11. The monitoring wells at IRP Site 29 are located approximately 240 feet southwest and side gradient from monitoring well 16MW-11. During Year 3, benzene concentrations above the GWQS were detected in monitoring wells 16MW-06, 16MW-08, 16MW-09, 16MW-10, and 17MW-01.

3.1.4 Year 4 Monitoring Program (August 2001 - May 2002)

Based on the Year 3 sampling results, no changes were made to the Year 4 monitoring program. During the Year 4 monitoring program, MTBE concentrations exceeded the GWQS (70 µg/L) in at least one sampling period in monitoring wells 16MW-05 and 16MW-11. Trace MTBE concentrations were intermittently detected in monitoring wells 16MW-06, 16MW-08, and

16MW-09. Benzene exceeded the GWQS in six of seven downgradient monitoring wells throughout this monitoring period. At monitoring well 16MW-05, located in the area of LNAPL, benzene exceeded the GWQS (ranging from 180 J µg/L in August 2001 to the maximum concentration of 2,500 µg/L in November 2001). Concurrent with the Year 4 monitoring program, the Navy performed additional investigations in the area of monitoring well 16MW-11. The summary and results of these investigations were detailed in the Year 5 Groundwater Monitoring Report for Remedial Action Implementation (TtNUS, 2003). As a result of these investigations, the Navy added five new monitoring wells, 16MW-15, 16MW-16, 16MW-17, 16MW -24, 16MW -25, and two downgradient surface water sampling locations, 16SW-01 and 16SW-02, to the long-term monitoring program for the site.

3.1.5 Year 5 Monitoring Program (August 2002 - May 2003)

All five of the newly added monitoring wells were sampled during the Year 5 monitoring program. However, the surface water sample locations were only sampled in three out of the four monitoring periods. During the Year 5 monitoring program, MTBE concentrations exceeded the NJDEP GWQS during November 2002 and February 2003 in monitoring well 16MW-11. Benzene concentrations exceeded the GWQS at nine monitoring wells at various sampling periods throughout Year 5. The highest benzene concentration (132 µg/L) was indicated in monitoring well 16MW-11 during the February 2003 sampling period. In the CEA, benzene exceeded the GWQS at monitoring well 16MW-05 during the two sampling periods when LNAPL was not present. Naphthalene levels exceeded the GWQS (300 µg/L) in monitoring well 16MW-05 during the August 2002 sampling period.

3.1.6 Year 6 Monitoring Program (August 2003 - May 2004)

The Year 5 report recommended the removal of four monitoring wells from the program (16MW-02, 16MW-06, 16MW-16, and 17MW-02). These wells were sampled during the first two quarters and then removed from further sampling periods with the exception of monitoring well 17MW-02, which was sampled during all four quarters and maintained in the monitoring program. The NJDEP approval letter of the Year 5 Groundwater Monitoring Report for Remedial Action Implementation for this site and its conclusions and recommendations was presented in the Year 6 Groundwater Monitoring Report for Remedial Action (TtNUS, 2004a). After the August 2003 monitoring period, monitoring well 16MW-03 was decomissioned in accordance with NJDEP regulations on 4 December 2003. The corresponding well decomissioning report was presented in the Year 6 Annual Report (TtNUS 2004b). Monitoring well 16MW-03 was replaced by monitoring well 17MW-02 in the program. Also, as recommended by the Year 5 report because of results indicating no detection above MDLs, the naphthalene analysis was omitted for the following six wells and both surface water locations: 16MW-03, 16MW-09, 16MW-15, 16MW-17, 16MW-24, 16MW-25, 16SW-01, and 16SW-02. During the Year 6 monitoring program, MTBE concentrations exceeded the GWQS during one sampling event in monitoring well 16MW-05, which was only sampled once due to the presence of LNAPL and during three sampling quarters at monitoring well 16MW-11. Benzene concentrations exceeded the GWQS at eight monitoring wells and SW-02 during at least one sampling period during Year 6. The highest benzene concentration (2,230 µg/L) was detected in monitoring well 16MW-05 during the November 2003 sampling event. Benzene concentrations

exceeded the GWQS during all sampling events at monitoring wells 16MW-11, ranging from 54.8 µg/L to 68.2 µg/L, and 16MW-15, ranging from 8.8 µg/L to 233 J µg/L.

3.1.7 Year 7 Monitoring Program (August 2004 - May 2005)

Based on the results of the Year 6 sampling program, modifications to the Year 7 monitoring program included the renaming of monitoring well 17MW-02 to 16MW-12 and the removal of the naphthalene analysis for this monitoring well. Also, monitoring well 17MW-01 was renamed to 17MW-17.

During Year 7, LNAPL was detected in monitoring well 16MW-05 during three of the four sampling events at thicknesses ranging from 0.05 foot to 0.16 foot. A groundwater sample was collected during November 2004 when LNAPL was not present and MTBE was the only constituent detected that exceeded the GWQS.

3.1.8 Year 8 Monitoring Program (August 2005 - May 2006)

During Year 8, five additional recovery wells were installed (16MW-31, 16MW-32, 16MW-33, 16MW-34, and 16MW-35), as seen in Figure 1-2, in accordance with the Bioslurper Upgrade Work Plan (ECOR, 2005) (Figure 1-2). Since installation, all recovery wells have been added to the LNAPL recovery remedial program. All additional recovery wells have had some amount of LNAPL present thus far. Four of the five wells reached a historic maximum product thickness, ranging from 0.07 foot in 16MW-31 to 6.55 feet in 16MW-33 in January 2006. Recovery well 16MW-34 reached a historic maximum product thickness of 1.36 feet in March 2006.

3.1.9 Year 9 Monitoring Program (August 2006-May 2007)

Based on results of Year 8, no changes were made to the Year 9 monitoring program. During Year 9, LNAPL was detected in monitoring wells 16MW-04 and 16MW-05 during all four events ranging in thickness from 0.02 feet to 0.45 feet. Therefore samples were not collected from these wells. Monitoring well 16MW-08 exceeded the GWQS for benzene in all four events. Monitoring well 16MW-11 exceeded the GWQS for benzene in all four events and for MTBE in three events. Monitoring well 16MW-15 exceeded the GWQS for benzene during all four events and monitoring well 16MW-24 exceeded the GWQS for benzene during all four events and for MTBE during one event. The remaining wells (16MW-10, 16MW-25, and 18MW-01) and surface water samples (16SW-01 and 16SW-02) exhibited no GWQS exceedances during any of the four events.

3.1.10 Year 10 Monitoring Program (August 2007-May 2008)

The Year 10 monitoring program was changed to include four additional wells (16MW-02, 16MW-06, 16MW-17, and 29MW-01) during the synoptic gauging to provide additional data for potentiometric maps. This was the only modification made during the Year 10 program. No samples were collected from monitoring wells 16MW-04 and 16MW-05 during Year 10 since LNAPL was detected in these wells during all four quarters. Samples collected from monitoring wells 16MW-08, 16MW-11, and 16MW-15 exceeded the Benzene GWQS during all four quarters. Samples collected from 16MW-24 exceeded the Benzene GWQS during three quarters. Samples collected from 16MW-11 exceeded the MTBE GWQS during all four quarters. The

remaining wells (16MW-10, 16MW-25 and 18MW-01) and surface water samples (16SW-01 and 16SW-02) did not exceed the GWQS for any COC during any quarter.

The well gauging event was amended to include wells 16MW-02, 16MW-16, 16MW-17 and 29MW-01. Including these wells provides additional data points for the potentiometric maps. This change was made in September 2007.

4.0 DISCUSSION OF RESULTS

4.1 Technical Overview

The Year 11 quarterly groundwater monitoring program at Buildings C-17/20/16/50 was implemented in accordance with the CEA documents and the modifications described in the preceding sections of this report. Year 11 sampling events were performed in August 2008, November 2008, February 2009, and May 2009. See **Table 1** for a list of analyses performed.

4.2 Field Sampling and Analytical Methods

All field sampling activities were completed by ECOR during Year 11. Sampling activities were conducted in accordance with the methods described in the August 2005 NJDEP Field Sampling Procedures Manual (NJDEP, 2005).

The sample logs (Appendix E) document all sample dates, times, field analysis results, depth to groundwater, and site-specific observations during sampling.

Quality assurance/ quality control (QA/QC) samples were included during each sampling round. The QA samples included one trip blank per sample shipment group, one duplicate sample per sampling event, and one field blank per sampling event. QA/QC Data Summary can be found in **Table 6**. An equipment blank was not prepared as dedicated sampling equipment was used. Sample containers and sample holding times were maintained in accordance with NJDEP guidelines.

4.3 Data Validation

ECOR utilized an independent data validator to review the laboratory analytical results from each quarter of the Year 11 groundwater monitoring program. The data validation was performed in accordance with EPA Region 2 requirements, NJDEP guidelines, and the Navy Installation Restoration Chemical Data Quality Manual. Data validation reports are included with the validated laboratory data package presented in Appendix D.

Based on the results of the data validation, no quality issues were identified that would impact the reliability of the data or the conclusions reached based on the data.

4.4 Analytical Results and Groundwater Flow Direction for Year 11

4.4.1 Groundwater Analytical Results

Table 2 provides a summary of the historic results through Year 11 and **Table 3** provides a summary of the results for just Year 11. Surface water results can be found in **Table 4** and Groundwater Elevation Data in **Table 5**. The sample locations and the corresponding sample results for all four quarters sampled in Year 11 are depicted in Figure 4-1. Figures 4-2, 4-3, 4-4, and 4-5 present potentiometric surface maps for the August 2008, November 2008, February 2009, and May 2009 sampling periods respectively.

Year 11 analytical results indicate the following:

- No COC were detected above MDLs in upgradient monitoring well 18MW-01 or downgradient monitoring well 16MW-25 during any of the four sampling events.

- MTBE concentrations exceeded the GWQS during all four events in monitoring well 16MW-11. The highest MTBE level (278 µg/L) was observed during the August 2008 sampling event and the lowest (32.7 µg/L) during the May 2009 event.

- Benzene concentrations exceeded the GWQS at three monitoring wells (16MW-08, 16MW-11, 16MW-15) during all four sampling events. The highest benzene level (296 µg/L) was indicated in monitoring well 16MW-11 during the November 2008 sampling event. The lowest (3.0 µg/L) was indicated in 16MW-15 during February 2009.

- Total xylene concentrations did not exceed the GWQS during any of the quarterly sampling events for Year 11. Concentrations below the GWQS were detected during at least 3 out of the four sampling events at monitoring wells 16MW-08, 16MW-10, and 16MW-15 with concentrations ranging from an estimated 0.41 µg/L to 3.4 µg/L.

- Ethylbenzene concentrations did not exceed the GWQS during any of the quarterly sampling events for Year 11. Concentrations below the GWQS were detected at monitoring well 16MW-08 and 16MW-15 ranging from an estimated 0.66 µg/L to 4.4 µg/L.

- Toluene concentrations did not exceed the GWQS during any of the quarterly sampling events for Year 11. One concentration below the GWQS (estimated at 0.26 µg/L) was detected at monitoring well 16MW-15 during the May 2009 event.

- Naphthalene concentrations did not exceed the GWQS during any of the quarterly sampling events for Year 11. Concentrations below the GWQS were detected at monitoring wells 16MW-08, 16MW-10 and 16MW-11 ranging from an estimated 0.51 µg/L to 30.6 µg/L.

- 16MW-04 and 16MW-05 were not sampled during Year 9 because product was present in both wells during all four quarters.

4.4.2 Surface Water Analytical Results

- Surface water samples were collected from two sample locations during all four events and analyzed by EPA Method 624 for BTEX and MTBE. Neither sample location exceeded the SWQS for any COC. Benzene was detected at 16SW-02 during February 2009 at an estimated value of 0.50 µg/L. MTBE was detected below the SWQS during November 2008 (5.4 µg/L) and February 2009 (6.2 µg/L) at 16SW-02.

The general groundwater flow direction during Year 11 was similar to Years 1 through 10. The interpreted groundwater contours indicate that the genera; groundwater flow direction within the southern area of the CEA and north of the CEA boundary is generally from the south toward the north-northwest. Groundwater at the far northern limits of the expanded groundwater monitoring area, in the vicinity of monitoring wells 16MW-15, 16MW-24, and 16MW-25, flows generally toward the northwest, toward the wetlands and the stream adjacent to the Family Housing area. Groundwater flow direction within the central area of the CEA during all four sampling events was in a northerly direction.

The laboratory analytical data reports for each sampling event are included in Appendix D. Appendix E contains field data logs and field notes.

4.4.3 Quality Assurance / Quality Control (QA/QC) Sampling

As per the ECOR 2005 Quality Assurance Project Plan (QAPP), field and laboratory QA/QC samples were collected during the all Year 11 sampling events. Two types of field QA/QC samples were collected during this event including field blanks (FB) and trip blanks (TB). Since all sampling equipment was dedicated, no equipment blanks were necessary. TBs were sent with every shipment of samples to ensure that no cross-contamination occurred during transportation. FBs were collected to determine the ambient background VOC concentration in air during the sample collection process. FB samples were collected at a rate of one per day. TBs were prepared by Analytical Laboratory Services, Inc. (ALS) and submitted at a rate of one per sample cooler. Two types of laboratory QA/QC samples were utilized during this event including matrix spike/matrix spike duplicate (MS/MSD) samples, and blind field duplicate samples (DUP). MS/MSD and DUP samples were collected at a rate of five percent (5%) of the total samples collected per medium

No analytes were detected in either the FB or the TB samples during any sampling event during Year 11. QA/QC results can be found in **Table 6**.

For DUP samples, the precision between the original sample and its duplicate is evaluated by calculating the relative percent difference (RPD). ECOR has evaluated DUP samples using an acceptance criterion of 20 percent (20%) for detected primary COC. **Table 7** presents the RPDs for groundwater and sediment samples.

In general the RPDs reflect very good correlation between samples and duplicates as most were equal to or less than 20 percent. Of 24 RPDs, only 5 were above the 20 percent criterion. As

seen in **Table 7**, those that exceeded an RPD of 20 percent can be attributed to low and low estimated values.

4.5 Trend Analysis

Simple trend analyses, consisting of graphing the concentrations of benzene and MTBE for select monitoring wells (16MW-11, 16MW-15, and 16MW-24) over time, were prepared utilizing data collected through the fourth sampling event in Year 11. The monitoring wells selected are representative of the extent of the plume downgradient of the CEA boundary. Sufficient data was available from these three monitoring wells to accurately depict the trend analyses of the specified COC.

Benzene concentrations over time are represented in Figures 4-6, 4-7, and 4-8 for monitoring wells 16MW-11, 16MW-15, and 16MW-24, respectively. Overall there is a decreasing trend in benzene concentrations over time for both 16MW-11 and 16MW-15, though all measured concentrations were above the GWQS of 1 µg/L. In general data for 16MW-24 indicate an increasing trend over time, but samples collected during Year 11 were not detected above MDLs for benzene during all four events.

MTBE concentrations over time are represented in Figures 4-9, 4-10, and 4-11 for 16MW-11, 16MW-15, and 16MW-24, respectively. MTBE trend concentrations decrease over time in both 16MW-11 and 16MW-15. Since August 2002, all samples collected for well 16MW-15, including all collected during Year 11, have indicated MTBE concentrations are below the GWQS of 70 µg/L. During Year 11, MTBE concentrations for well 16MW-11 were above the GWQS during three events (Aug-08, Nov-08, and Feb-09). MTBE concentrations have been increasing in 16MW-24 over time and with exception of the August 2006 sampling event, remain below the NJDEP GWQS. However, for Year 11, all measured MTBE concentrations exhibited a decreasing trend and were below the GWQS.

Graphs showing contaminant distribution for benzene and MTBE along a transect from the source area to downgradient monitoring wells were prepared for the quarterly sampling events during Year 11. The southernmost upgradient monitoring well, 18MW-01, was utilized as the transect starting point and 16MW-25, the furthest downgradient, marks the end of the transect. Figure 4-12 indicates benzene concentrations above the GWQS of 1 µg/L, just outside of the CEA, in monitoring well 16MW-08. The highest benzene concentrations were detected downgradient of the CEA at monitoring well 16MW-11 during all four events. Benzene concentrations above the GWQS were also detected at 16MW-15 during all four events as well. Results for the four remaining wells (18MW-01, 16MW-10, 16MW-24 and 16MW-25 did not exceed the GWQS for benzene during Year 11.

The MTBE transect in Figure 4-13 indicates that the highest MTBE concentrations were detected during three events at monitoring well 16MW-11. In general MTBE concentrations were below the GWQS of 70 µg/L in all samples with exception of samples collected from 16MW-11 during August 2008 and November 2008.

5.0 CONCLUSIONS

5.1 Conclusions

In general, constituent trends appear to be consistent with historic data. Benzene was detected above the GWQS in the following monitoring wells; 16MW-08, 16MW-11, and 16MW-15 during all four events (**Table 3**). MTBE concentrations exceeded the GWQS during all four events in monitoring well 16MW-11. Ethylbenzene, toluene, xylene, and naphthalene were detected in at least one monitoring well during Year 11. No COC were detected in monitoring wells 16MW-25 and 18MW-01 during Year 11. LNAPL continues to be present in monitoring wells 16MW-04 and 16MW-05, ranging from a sheen (<0.01) to 0.71 feet. The thickness appears to be diminishing over time, likely as a result of continued operation of the bioslurper remediation system.

6.0 REFERENCES

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TABLES

TABLE 1
Year 11 Groundwater and Surface Water Sampling and Analysis Summary
Buildings C-16/17/20/50
NWS Earle
Colts Neck, New Jersey

MONITORING WELL NUMBER	ANALYSIS	METHOD(S)
16MW-04	BTEX, naphthalene, MTBE	624/625
16MW-05	BTEX, naphthalene, MTBE	624/625
16MW-08	BTEX, naphthalene, MTBE	624/625
16MW-10	BTEX, naphthalene, MTBE	624/625
16MW-11	BTEX, naphthalene, MTBE	624/625
16MW-15	BTEX, naphthalene, MTBE	624 only
16MW-24	BTEX, naphthalene, MTBE	624 only
16MW-25	BTEX, naphthalene, MTBE	624 only
18MW-01	BTEX, naphthalene, MTBE	624/625
16SW-01	BTEX, naphthalene, MTBE	624 only
16SW-02	BTEX, naphthalene, MTBE	624 only

Notes:
Any well with light non-aqueous phase liquid (LNAPL) present will not be sampled
BTEX = Benzene, Toulene, Ethylbenzene, and Xylenes

TABLE 2
Analytical Data Summary
Years 1 through 11 Groundwater Monitoring
Buildings C-17/20/16/50
NWS Earle, Colts Neck, New Jersey

Location/ Duplicate	Compounds						Groundwater Levels		
	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
16-MW-02[1]									
Aug-98	ND	ND	NS	ND	ND	ND	98.48	7.04	91.44
Nov-98	ND	ND	NS	ND	ND	ND	98.48	7.31	91.17
Feb-99	ND	ND	NS	ND	ND	ND	98.48	6.59	91.89
May-99	ND	ND	NS	ND	ND	ND	98.48	6.40	92.08
Aug-99	ND	ND	NS	ND	ND	ND	98.48	7.52	90.96
Nov-99	ND	ND	NS	ND	ND	ND	98.48	7.17	91.31
Feb-00	ND	ND	ND	ND	ND	ND	98.48	7.13	91.35
May-00	ND	ND	ND	ND	ND	ND	98.48	6.64	91.84
Aug-00	ND	ND	ND	ND	ND	ND	98.48	6.85	91.63
Nov-00	ND	ND	ND	ND	ND	ND	98.48	7.37	91.11
Feb-01	ND	ND	ND	ND	ND	ND	98.48	6.52	91.96
May-01	ND	ND	ND	ND	ND	ND	98.48	6.44	92.04
Aug-01	ND	ND	ND	ND	ND	ND	98.48	7.58	90.90
Nov-01	ND	ND	ND	ND	ND	ND	98.48	7.96	90.52
Feb-02	ND	ND	ND	ND	ND	ND	98.48	7.68	90.80
May-02	ND	ND	ND	ND	ND	ND	98.48	7.15	91.33
Aug-02	ND	ND	ND	ND	ND	ND	98.48	8.68	89.80
Nov-02	ND	ND	ND	ND	ND	ND	98.48	7.26	91.22
Feb-03	ND	ND	ND	ND	ND	ND	98.48	6.82	91.66
May-03	ND	ND	ND	ND	ND	ND	98.48	6.32	92.16
Aug-03	ND	ND	ND	ND	ND	ND	98.48	6.23	92.25
Nov-03	ND	ND	ND	ND	ND	ND	98.48	6.81	91.67
Aug-07[8]	NS	NS	NS	NS	NS	NS	98.48	7.10	91.38
Nov-07	NS	NS	NS	NS	NS	NS	98.48	7.12	91.36
Feb-08	NS	NS	NS	NS	NS	NS	98.48	6.26	92.22
May-08	NS	NS	NS	NS	NS	NS	98.48	6.73	91.75
Aug-08	NS	NS	NS	NS	NS	NS	98.48	7.33	91.15
Nov-08	NS	NS	NS	NS	NS	NS	98.48	6.93	91.55
Feb-09	NS	NS	NS	NS	NS	NS	98.48	6.28	92.20
May-09	NS	NS	NS	NS	NS	NS	98.48	5.88	92.60
16-MW-03[2]									
Aug-98	**3.8**	ND	NS	ND	ND	ND	99.59	7.77	91.82
Nov-98	**2.9**	ND	NS	ND	ND	ND	99.59	7.94	91.65
Feb-99	ND	ND	NS	ND	ND	ND	99.59	7.29	92.30
May-99	ND	ND	NS	ND	ND	ND	99.59	7.10	92.49
Aug-99	ND	ND	NS	ND	ND	ND	99.59	8.48	91.11
Nov-99	ND / ND	ND / ND	NS	ND / ND	ND / ND	ND / ND	99.59	7.91	91.68
Feb-00	ND	ND	ND	ND	ND	ND	99.59	7.85	91.74
May-00	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	99.59	7.51	92.08
Aug-00	ND	ND	ND	ND	ND	ND	99.59	7.57	92.02
Nov-00	NS	NS	NS	NS	NS	NS	99.59	NS	NS
Feb-01	NS	NS	NS	NS	NS	NS	99.59	NS	NS
May-01	NS	NS	NS	NS	NS	NS	99.59	NS	NS
Aug-01	NS	NS	NS	NS	NS	NS	99.59	NS	NS

All results reported in micrograms per liter (ug/L)
Data previous to August 2004 was provided by TtNUS.
Groundwater Quality Standard (GWQS) Criteria is from the New Jersey Department of Environmental Protection (NJDEP) criteria for class II-A Groundwater (N.J.A.C. 7:9-6) Unless otherwise noted, the groundwater criteria used are the Higher of the Practical Quantitation Levels (PQLs) and Groundwater Quality Criteria.
Analytes with concentrations greater than the NJDEP GWQS are highlighted in bold.
*Criterion for total xylenes was raised to the NJDEP Maximum Contaminant Level (MCL) of 1,000 ug/L as of 5 February 1997. Previous reports used a value of 40 ug/L; however, the bold highlights have been updated to correspond to the current criterion.
**GW Elevation is not corrected for LNAPL (if present).
feet msl = feet above mean sea level
feet btc = feet below top of casing
Sampling periods displaying two values for a concentration (i.e. XX/XX) indicate a duplicate sample was taken and analyzed.
J = estimated value due to exceedance of technical criteria or because results are less than the CRQL.
B = samples broken; no data
ND = not detect above method detection limit
NS: not sampled
NA: not available
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[2] Destroyed after first quarter of Year 6.
[3] Omitted from monitoring program due to active remediation (bioslurping).
[4] Omitted from monitoring program after second quarter of Year 6.
[5] Omitted from monitoring program after second quarter of Year 6.
[6] Renamed 17-MW-17 after Year 6. Omitted due to active remediation (bioslurping).
[7] Renamed 16-MW-12 after Year 6.
[8] Samples collected Aug-07, wells gauged Sept-07

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NWS Earle, Colts Neck, New Jersey

Location/ Duplicate	Compounds						Groundwater Levels		
	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Nov-01	NS	NS	NS	NS	NS	NS	99.59	NS	NS
Feb-02	ND	ND	ND	ND	ND	ND	99.59	8.38	91.21
May-02	**1.8**	ND	ND	ND	ND	ND	99.59	7.99	91.60
Aug-02	**3.7 / 3.7**	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	99.59	9.39	90.20
Nov-02	ND	ND	ND	ND	ND	ND	99.59	8.00	91.59
Feb-03	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	99.59	7.57	92.02
May-03	**1.4**	ND	ND	ND	ND	ND	99.59	6.97	92.62
Aug-03	**2.3**	ND	ND	ND	ND	2.2 J	99.59	6.90	92.69
16-MW-04[3]									
Aug-01	**110 J**	63	13	8.7	229	270	101.23	9.15	92.08
Aug-04	NS	NS	NS	NS	NS	NS	101.23	9.30	91.93
Nov-04	NS	NS	NS	NS	NS	NS	101.23	8.65	92.58
Feb-05	NS	NS	NS	NS	NS	NS	101.23	9.65	91.58
May-05	NS	NS	NS	NS	NS	NS	101.23	8.41	92.82
Aug-05	NS	NS	NS	NS	NS	NS	101.23	10.51	90.72
Nov-05	NS	NS	NS	NS	NS	NS	101.23	NS	NS
Feb-06	NS	NS	NS	NS	NS	NS	101.23	NS	NS
May-06	NS	NS	NS	NS	NS	NS	101.23	8.05	93.18
Aug-06	NS	NS	NS	NS	NS	NS	101.23	9.10	92.13
Nov-06	NS	NS	NS	NS	NS	NS	101.23	7.80	93.43
Feb-07	NS	NS	NS	NS	NS	NS	101.23	7.81	93.42
May-07	NS	NS	NS	NS	NS	NS	101.23	6.62	94.61
Aug-07[8]	NS	NS	NS	NS	NS	NS	101.23	8.13	93.10
Nov-07	NS	NS	NS	NS	NS	NS	101.23	8.87	92.36
Feb-08	NS	NS	NS	NS	NS	NS	101.23	8.19	93.04
May-08	NS	NS	NS	NS	NS	NS	101.23	8.32	92.91
Aug-08	NS	NS	NS	NS	NS	NS	101.23	9.04	92.19
Nov-08	NS	NS	NS	NS	NS	NS	101.23	8.91	92.32
Feb-09	NS	NS	NS	NS	NS	NS	101.23	8.10	93.13
May-09	NS	NS	NS	NS	NS	NS	101.23	8.06	93.17
16-MW-05									
Aug-98	NS	NS	NS	NS	NS	NS	104.14	NS	NS
Nov-98	NS	NS	NS	NS	NS	NS	104.14	NS	NS
Feb-99	**1520**	147	NS	ND	103	110	104.14	NS	NS
May-99	**1140**	75.2	NS	44.3	75.1	249	104.14	10.40	93.74
Aug-99	**2230**	273	NS	238	338	125	104.14	NS	NS
Nov-99	**135**	62.9	NS	4.8	36.8	208	104.14	NS	NS
Feb-00	**47.5**	23.1	**72**	ND	16.1	81.8	104.14	NS	NS
May-00	**328**	47.4	**218**	6	30.8	213	104.14	NS	NS
Aug-00	**1770**	61.3	**250**	113	56.7	**372**	104.14	11.44	92.70
Nov-00	**1730**	109	**279**	ND	71.9	**403**	104.14	13.24	90.90
Feb-01	**230**	27	**89**	N.D	24.5	230	104.14	11.28	92.86
May-01	**300**	45 J	ND	ND	53 J	95	104.14	10.60	93.54

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	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-01	**180J**	31	**110**	ND	57.4	200	104.14	11.89	92.25
Nov-01	**2500**	241	**278**	70.4 J	294 J	207 J	104.14	13.18	90.96
Feb-02	NA	NA	NA	NA	NA	NA	104.14	12.03	92.11
May-02	**610**	58.3	44.3	40	50J	**307**	104.14	12.50	91.64
Aug-02	**72.9 J**	59.7 J	10.6 J	4.5 J	84.6 J	**1280 J**	104.14	15.35	91.22
Nov-02	NS	NS	NS	NS	NS	NS	104.14	12.10	92.36
Feb-03	**74.5**	39.2	13.2	2.1	37.1	154	104.14	11.57	92.98
May-03	NS	NS	NS	NS	NS	NS	104.14	10.72	93.62
Aug-03	NS	NS	NS	NS	NS	NS	104.14	10.64	93.50
Nov-03	NS	88.7	**113**	84.9	86.2	75.3	104.14	11.12	93.02
Mar-04	NS	NS	NS	NS	NS	NS	104.14	10.95	93.19
May-04	NS	NS	NS	NS	NS	NS	104.14	10.07	94.07
Aug-04	NS	NS	NS	NS	NS	NS	104.14	11.55	92.59
Nov-04	NS	163 / 160	**83.5 / 88.1**	30.8 / 30.8	155 / 158	49 / 50	104.14	11.14	93.00
Feb-05	NS	NS	NS	NS	NS	NS	104.14	11.05	93.09
May-05	NS	NS	NS	NS	NS	NS	104.14	10.06	94.08
Aug-05	NS	NS	NS	NS	NS	NS	104.14	11.96	92.18
Nov-05	NS	NS	NS	NS	NS	NS	104.14	10.81	93.33
Feb-06	NS	NS	NS	NS	NS	NS	104.14	9.97	94.17
May-06	NS	NS	NS	NS	NS	NS	104.14	10.57	93.57
Aug-06	NS	NS	NS	NS	NS	NS	104.14	11.70	92.44
Nov-06	NS	NS	NS	NS	NS	NS	104.14	9.89	94.25
Feb-07	NS	NS	NS	NS	NS	NS	104.14	10.51	93.63
May-07	NS	NS	NS	NS	NS	NS	104.14	9.00	95.14
Aug-07[8]	NS	NS	NS	NS	NS	NS	104.14	10.60	93.54
Nov-07	NS	NS	NS	NS	NS	NS	104.14	11.45	92.69
Feb-08	NS	NS	NS	NS	NS	NS	104.14	10.53	93.61
May-08	NS	NS	NS	NS	NS	NS	104.14	10.82	93.32
Aug-08	NS	NS	NS	NS	NS	NS	104.14	11.59	92.55
Nov-08	NS	NS	NS	NS	NS	NS	104.14	11.46	92.68
Feb-09	NS	NS	NS	NS	NS	NS	104.14	10.73	93.41
May-09	NS	NS	NS	NS	NS	NS	104.14	9.95	94.19
16-MW-06[4]									
Aug-98	**20.8**	ND	NS	ND	0.84	0.91	98.73	8.33	90.40
Nov-98	**46.5**	ND	NS	ND	2.7	ND	98.73	9.26	89.47
Feb-99	**84.4**	ND	NS	0.99	3.8	19.8	98.73	7.61	91.12
May-99	**113**	3.7	NS	1.3	3.5	32.9	98.73	7.40	91.33
Aug-99	**43.6**	ND	NS	ND	0.62	3.6	98.73	9.17	89.56
Nov-99	**18.9**	ND	NS	ND	0.51	1.6	98.73	7.86	90.87
Feb-00	**11.5**	ND	1.1	ND	ND	1	98.73	7.82	90.91
May-00	**7.8**	ND	0.75	ND	ND	ND	98.73	7.71	91.02
Aug-00	**7.5 / 7.5**	ND / ND	1.8 / 1.9	ND / ND	ND / ND	ND / ND	98.73	7.74	90.99
Nov-00	**6.6**	ND	1.8	ND	ND	ND	98.73	8.06	90.67
Feb-01	**5.7**	ND	ND	ND	ND	ND	98.73	7.31	91.42
May-01	**7.9J**	ND	ND	ND	ND	ND	98.73	7.62	91.11

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[5] Omitted from monitoring program after second quarter of Year 6.
[6] Renamed 17-MW-17 after Year 6. Omitted due to active remediation (bioslurping).
[7] Renamed 16-MW-12 after Year 6.
[8] Samples collected Aug-07, wells gauged Sept-07

Aug-01	**13J**	ND	ND	ND	ND	3.3	98.73	8.57	90.16
Nov-01	**10.6**	ND	4.4	ND	ND	ND	98.73	8.91	89.82
Feb-02	**13.2**	ND	2.6	ND	ND	ND	98.73	8.33	90.40
May-02	**38.8**	40.5	ND	15.9	267	18.3	98.73	8.11	90.62

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	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-02	**15.1**	ND	5.5	ND	ND	5.4	98.73	9.54	89.19
Nov-02	**20**	ND	4.8	ND	ND	ND	98.73	8.05	90.68
Feb-03	**26.2**	ND	7.4	ND	ND	ND	98.73	7.87	90.86
May-03	**58**	ND	7.7	ND	ND	2.4 J	98.73	7.51	91.22
Aug-03	**7.2**	ND	3.1	ND	ND	ND	98.73	7.30	91.43
Nov-03	**37**	ND	10.5	0.58 J	ND	ND	98.73	7.70	91.03
16-MW-08									
Aug-98	0.55 / 0.54	ND / ND	NS	ND / ND	ND / ND	ND / ND	103.29	10.34	92.95
Nov-98	**1.5**	ND	NS	ND	ND	ND	103.29	12.24	91.05
Feb-99	N.D	ND	NS	ND	ND	ND	103.29	9.48	93.81
May-99	ND	ND	NS	ND	ND	ND	103.29	9.50	93.79
Aug-99	**76.9**	24.4	NS	1.6	45.4	131	103.29	12.29	91.00
Nov-99	**28**	6.2	NS	0.64	25.4	50.1	103.29	11.70	91.59
Feb-00	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.29	11.31	91.98
May-00	0.54	ND	ND	0.55	ND	ND	103.29	9.67	93.62
Aug-00	ND	ND	ND	ND	ND	ND	103.29	9.46	93.83
Nov-00	**42.8**	20.2	ND	ND	ND	1.7	103.29	10.34	92.95
Feb-01	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.29	9.29	94.00
May-01	**130**	38 J	ND	ND	130 J	200	103.29	9.56	93.73
Aug-01	**7.2J**	2.2	ND	ND	6.9	6.4	103.29	11.35	91.94
Nov-01	**68.5 / 73.6**	11.4 / 12.2	6.9 / 7.7	1.4 J / 1.5 J	11.2 / 12.1	130 / 116	103.29	12.54	90.75
Feb-02	ND	ND	ND	ND	ND	ND	103.29	12.11	91.18
May-02	ND	ND	1.2 J	ND	ND	ND	103.29	11.75	91.54
Aug-02	**7.2**	3.6	4.1	ND	ND	ND	103.29	13.25	90.04
Nov-02	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.29	10.24	93.05
Feb-03	**8**	ND	11	ND	ND	1J	103.29	9.81	93.48
May-03	**20**	0.56 J	4.5	ND	9.6	17.5	103.29	9.23	94.06
Aug-03	**1.1**	ND	0.51 J	ND	ND	ND	103.29	9.10	94.19
Nov-03	ND	ND	ND	ND	ND	ND	103.29	10.65	92.64
Mar-04	ND / N.D	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.29	9.73	93.56
May-04	ND	ND	ND	ND	ND	ND	103.29	9.71	93.58
Aug-04	**24.4 / 24.4**	7.1 / 7.9	2.2 / 2.3	ND / ND	ND / ND	4 / 2 J	103.29	11.55	91.74
Nov-04	**18.9**	4.8	3.3	ND	ND	0.80 J	103.29	11.12	92.17
Feb-05	**35**	11.5	0.51 J	ND	ND	3	103.29	11.15	92.14
May-05	**29.8**	1.5	2.6	1.0	2.0 J	17	103.29	9.41	93.88

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NWS Earle, Colts Neck, New Jersey

Location/ Duplicate	Compounds						Groundwater Levels		
	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-05	**15**	1.7	4.6	0.24 J	0.58 J	4.0 J	103.29	10.81	92.48
Nov-05	**26**	10	1.6	0.56 J	4.5	20	103.29	9.81	93.48
Feb-06	**24**	7.2	0.33 J	0.43 J	2.5	30	103.29	9.04	94.25
May-06	ND	ND	ND	ND	ND	ND	103.29	9.29	94.00
Aug-06	**1.1**	ND	0.32 J	ND	ND	ND	103.29	10.51	92.78
Nov-06	**1.4 / 1.3**	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.29	9.76	93.53
Feb-07	**34.6**	9.6	2.5	0.70 J	ND	3	103.29	9.68	93.61
May-07	**40.1 / 36.4**	15.8 / 13.3	2.8	0.33 J / 0.28 J	1.5 J / 1.3 J	15 / 17	103.29	9.78	93.51
Aug-07[8]	**108 / 112**	47.4 / 47.6	ND / ND	2.0 / 2.1	63.4 / 61.5	128 / 134	103.29	9.87	93.42
Nov-07	**90.8**	12.3	0.97 J	1.7	56.3	48	103.29	11.95	91.34
Feb-08	**26.0**	7.8	4.2	0.37 J	9.8	61	103.29	9.31	93.98
May-08	**22.3**	2.6	2.0	ND	3.5	33	103.29	11.87	91.42
Aug-08	**27.5**	3.2	9.9	ND	0.88 J	10.9	103.29	12.50	90.79
Nov-08	**11.6**	4.4	0.95 J	ND	0.50 J	5.1	103.29	12.13	91.16
Feb-09	**9.3 / 8.1**	1.1 / 0.90 J	1.9 / 1.6	ND / ND	3.0 / 2.1 J	30.6 / 26.8	103.29	11.70	91.59
May-09	**6.7 / 5.4**	ND / ND	1.0 J / ND	ND / ND	ND / ND	3.4 / 7.5	103.29	11.35	91.94
16-MW-09									
Aug-99	NS	NS	NS	NS	NS	NS	--	--	--
Nov-99	**16.2**	ND	NS	ND	ND	1.4	99.99	9.37	90.62
Feb-00	**6.7**	ND	5.7	ND	ND	ND	99.99	9.44	90.55
May-00	**2.5**	ND	4.5	ND	ND	ND	99.99	9.30	90.69
Aug-00	**3.5**	ND	3	ND	ND	4.4	99.99	8.85	91.14
Nov-00	**1.9**	ND	1.8	ND	ND	ND	99.99	9.78	90.21
Feb-01	ND	ND	ND	ND	ND	ND	99.99	8.75	91.24
May-01	ND	ND	ND	ND	ND	ND	99.99	9.34	90.65
Aug-01	**21 J**	ND	14	ND	ND	ND	99.99	10.39	89.60
Nov-01	**14**	ND	2.8	ND	ND	ND	99.99	10.45	89.54
Feb-02	**3.5**	ND	2.1	ND	ND	ND	99.99	9.83	90.16
May-02	ND	ND	ND	ND	ND	ND	99.99	9.64	90.35
Aug-02	**19.9**	ND	30.2	0.64 J	9.1	ND	99.99	11.18	88.81
Nov-02	**1.2**	ND	3.2	ND	ND	ND	99.99	9.60	90.39
Feb-03	**1.0 J**	ND	2	ND	ND	1J	99.99	9.49	90.50
May-03	**8.6**	ND	17.8	ND	ND	ND	99.99	9.22	90.77
Aug-03	**8 / 8.5**	ND / ND	6.9 / 7.5	ND / ND	ND / ND	ND / ND	99.99	8.96	91.03
Nov-03	**1.3 J / 2.3 J**	ND / ND	1.5 J / 1.5 J	ND / ND	ND / ND	ND / ND	99.99	8.27	91.72
Mar-04	0.56 J	ND	1.3 J	ND	ND	NS	99.99	9.23	90.76
May-04	ND	ND	ND	ND	ND	NS	99.99	8.90	91.09
Aug-04	**3.5**	ND	13.4	ND	ND	NS	99.99	10.06	89.93
Nov-04	0.76 J	ND	1.1	ND	ND	ND	99.99	9.40	90.59
Feb-05	**1.8**	ND	1.4	ND	ND	NS	99.99	9.31	90.68
May-05	0.65 J	ND	0.99 J	ND	ND	NS	99.99	8.60	91.39

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Location/ Duplicate	Compounds						Groundwater Levels		
	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
16-MW-10									
Aug-98	N.D	ND	NS	ND	ND	0.51	100.36	9.46	90.90
Nov-98	0.53	ND	NS	ND	ND	ND	100.36	9.56	90.80
Feb-99	ND	ND	NS	ND	0.5	1.2	100.36	8.74	91.62
May-99	N.D	ND	NS	ND	ND	0.8	100.36	7.59	92.77
Aug-99	N.D / ND	ND / ND	NS	ND / ND	1.3 / 1.4	1.9 / 2.2	100.36	9.78	90.58
Nov-99	ND	ND	NS	ND	ND	1.5	100.36	9.18	91.18
Feb-00	ND	ND	ND	ND	ND	0.68	100.36	9.11	91.25
May-00	ND	ND	ND	ND	ND	ND	100.36	8.80	91.56
Aug-00	**1.2**	ND	ND	ND	1.1	1.5	100.36	9.06	91.30
Nov-00	**2.1**	ND	ND	ND	ND	ND	100.36	9.45	90.91
Feb-01	ND	ND	ND	ND	ND	ND	100.36	8.56	91.80
May-01	**3.9J**	ND	ND	ND	2.7 J	ND	100.36	8.68	91.68
Aug-01	ND	ND	ND	ND	ND	ND	100.36	9.81	90.55
Nov-01	**5.9**	ND	ND	ND	ND	1.0 J	100.36	10.09	90.27
Feb-02	**3.9**	ND	ND	ND	ND	ND	100.36	9.63	90.73
May-02	**2.6**	ND	ND	ND	ND	ND	100.36	9.30	91.06
Aug-02	**2**	ND	ND	ND	ND	ND	100.36	10.79	89.57
Nov-02	**1.3**	ND	ND	ND	ND	ND	100.36	9.31	91.05
Feb-03	**1.3**	ND	ND	ND	ND	ND	100.36	8.95	91.41
May-03	**2.5**	ND	ND	ND	ND	ND	100.36	8.53	91.83
Aug-03	**2.2**	ND	ND	ND	ND	ND	100.36	8.41	91.95
Nov-03	**1.7**	ND	ND	ND	ND	ND	100.36	8.88	91.48
Mar-04	**3.8**	ND	ND	ND	ND	ND	100.36	8.69	91.67
May-04	**3.2**	ND	ND	ND	ND	ND	100.36	8.15	92.21
Aug-04	**2.1**	ND	ND	ND	ND	ND	100.36	9.40	90.96
Nov-04	0.67 J	ND	ND	ND	1.4 J	1.0 J	100.36	8.68	91.68
Feb-05	0.60 J / 0.65 J	ND / ND	ND / ND	ND / ND	1.4 J / 1.3 J	2 J / 2 J	100.36	8.80	91.56
May-05	0.21 J / ND	ND / ND	ND / ND	ND / ND	2.8 J / 2.7 J	2 J / 2 J	100.36	7.94	92.42
Aug-05	ND	ND	ND	ND	2.0	2.0 J	100.36	9.88	90.48
Nov-05	**2.2**	ND	ND	ND	ND	2.6 J	100.36	8.77	91.59
Feb-06	**2.1**	ND	ND	ND	0.37 J	ND	100.36	8.15	92.21
May-06	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	100.36	8.51	91.85
Aug-06	0.46 J / 0.45 J	ND / ND	ND / ND	ND / ND	0.88 J / 1.0 J	1 J / 1 J	100.36	9.66	90.70
Nov-06	ND	ND	ND	ND	ND	ND	100.36	9.05	91.31
Feb-07	ND	ND	ND	ND	0.88 J	0.9 J	100.36	8.54	91.82
May-07	ND	ND	ND	ND	0.94 J	0.6 J	100.36	7.45	92.91
Aug-07[8]	ND	ND	ND	ND	ND	ND	100.36	9.27	91.09
Nov-07	ND	ND	ND	ND	1.5 J	1 J	100.36	9.20	91.16
Feb-08	ND / ND	ND / ND	ND / ND	ND / ND	1.2 J / 1.3 J	2 J / 2 J	100.36	8.35	92.01
May-08	ND	ND	ND	ND	1.1	2 J	100.36	8.70	91.66
Aug-08	ND / ND	ND / ND	ND / ND	ND / ND	ND / 0.45 J	1.6 J / 2.2 J	100.36	9.58	90.78
Nov-08	ND	ND	ND	ND	ND	ND	100.36	8.80	91.56
Feb-09	ND	ND	ND	ND	ND	0.51 J	100.36	8.38	91.98
May-09	0.74 J	ND	ND	ND	ND	0.78 J	100.36	8.10	92.26

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	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
16-MW-11									
Aug-00	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nov-00	**566 / 564**	ND / ND	**997 / 872**	ND / ND	ND / ND	ND / ND	91.76	3.03	88.73
Feb-01	**580 / 470**	ND / ND	ND / ND	ND / ND	2.6 J / 2.6 J	12 J / 13	91.76	2.53	89.23
May-01	**99 J / 100**	ND / ND	**300 / 190**	ND / ND	ND / ND	ND / ND	91.76	3.18	88.58
Aug-01	**22 J / 21 J**	ND / ND	**110 / 100**	ND / ND	ND / ND	ND / ND	91.76	4.22	87.54
Nov-01	**18.3**	ND	**74.5**	ND	ND	ND	91.76	3.99	87.77
Feb-02	**83.5 / 95.2**	ND / ND	**89.3 / 114**	ND / ND	ND / ND	ND / ND	91.76	3.19	88.57
May-02	**5.2**	ND	ND	ND	ND	ND	91.76	2.92	88.84
Aug-02	**21.2**	ND	20.5	ND	ND	ND	91.81	4.87	86.94
Nov-02	**106**	ND	**75.9**	ND	ND	ND	91.81	3.12	88.69
Feb-03	**132**	ND	**74.5**	ND	ND	1.7 J	91.81	3.09	88.72
May-03	**37.1 / 34.3**	ND / ND	37.1 / 35.2	ND / ND	ND / ND	ND / ND	91.81	3.04	88.77
Aug-03	**56**	ND	63.1	ND	ND	ND	91.81	2.77	89.04
Nov-03	**60.9**	ND	**93.2**	ND	ND	ND	91.81	2.91	88.90
Mar-04	**66.8**	ND	**100**	ND	ND	ND	91.81	2.89	88.92
May-04	**54.8 / 68.2**	ND / ND	**172 / 164 J**	ND / ND	ND / ND	ND / ND	91.81	2.82	88.99
Aug-04	**50.9**	ND	**172**	ND	ND	ND	91.81	3.80	88.01
Nov-04	**36.2**	ND	**239**	ND	ND	ND	91.81	2.73	89.08
Feb-05	**4.5**	ND	60.1	ND	ND	ND	91.81	3.25	88.56
May-05	**5.7**	ND	47.2	ND	ND	ND	91.81	2.64	89.17
Aug-05	**2.6**	ND	24	ND	ND	ND	91.81	4.27	87.54
Nov-05	**15 / 15**	ND / ND	60 / 64	ND / ND	ND / ND	ND / ND	91.81	3.02	88.79
Feb-06	**13 / 12**	ND / ND	52 / 51	ND / ND	ND / ND	ND / ND	91.81	2.79	89.02
May-06	**6.4**	ND	36	ND	ND	ND	91.81	1.94	89.87
Aug-06	**3.8 / 3.8**	ND / ND	20.5 / 20.9	ND / ND	ND / ND	ND / ND	91.81	4.25	87.56
Nov-06	**19**	ND	**79**	ND	ND	ND	91.81	2.53	89.28
Feb-07	**81.4**	ND	**169**	ND	ND	ND	91.81	2.99	88.82
May-07	**159 / 164**	ND / ND	**288 / 301**	ND / ND	ND / ND	ND / 2	91.81	2.62	89.19
Aug-07[8]	**181**	ND	**322**	ND	ND	2	91.81	3.54	88.27
Nov-07	**67.5**	ND	**121**	ND	ND	1 J / 1 J	91.81	3.22	88.59
Feb-08	**61.2**	ND	**80.7**	ND	ND	ND	91.81	2.70	89.11
May-08	**190**	ND	**208**	ND	ND	1 J	91.81	2.97	88.84
Aug-08	**270**	ND	**278**	ND	ND	1.1 J	91.81	3.95	87.86
Nov-08	**296 / 321 J**	ND / ND	**152 / 157**	ND / ND	ND / ND	1.6 J / 1.1 J	91.81	2.73	89.08
Feb-09	**109**	ND	**70.9**	ND	ND	1.1 J	91.81	2.88	88.93
May-09	**68.4**	ND	**32.7**	ND	ND	0.55 J	91.81	2.74	89.07
16-MW-15									
Aug-02	**289**	7.4	16.5	3.3	49.5	13	91.97	5.88	86.09
Nov-02	**271**	ND	17.8	4 J	32.8	10.9	91.97	3.58	88.39
Feb-03	**21**	1 J	2 J	ND	6 J	4 J	91.97	3.65	88.32
May-03	**99.7**	2	6	ND	15.2	3.1 J	91.97	3.58	88.39
Aug-03	**233J**	10	14.1	5.2	47.9	11	91.97	3.32	88.65
Nov-03	**118**	11.8	7.5	2.3	52.6	8.4	91.97	3.38	88.59
Mar-04	**15.7**	ND	ND	ND	ND	NS	91.97	3.37	88.60
May-04	**8.8**	ND	ND	ND	ND	NS	91.97	2.32	89.65

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	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-04	**8.1**	ND	ND	ND	ND	NS	91.97	4.45	87.52
Nov-04	**20.1**	ND	0.79 J	ND	ND	NS	91.97	3.61	88.36
Feb-05	**2.7**	ND	1.1	ND	ND	NS	91.97	3.43	88.54
May-05	**12.5**	ND	0.90 J	ND	ND	NS	91.97	3.15	88.82
Aug-05	**12**	ND	ND	ND	ND	NS	91.97	5.12	86.85
Nov-05	**14**	ND	ND	ND	ND	NS	91.97	3.61	88.36
Feb-06	**7.6**	ND	0.42 J	ND	ND	NS	91.97	3.34	88.63
May-06	**13**	ND	ND	ND	ND	NS	91.97	2.72	89.25
Aug-06	**7.7**	ND	ND	ND	ND	NS	91.97	5.11	86.86
Nov-06	**6.5**	ND	ND	ND	ND	NS	91.97	3.21	88.76
Feb-07	**14.6**	ND	0.42 J	ND	ND	NS	91.97	3.90	88.07
May-07	**20.4**	ND	0.35 J	ND	ND	NS	91.97	3.51	88.46
Aug-07[8]	**25.8**	ND	0.55 J	0.21 J	1.2 J	NS	91.97	4.24	87.73
Nov-07	**43.3**	ND	2.0	0.93 J	27.4	NS	91.97	4.11	87.86
Feb-08	**6.3**	ND	1.2	ND	0.97 J	NS	91.97	3.49	88.48
May-08	**11.6**	0.99 J	4.6	ND	4.5	NS	91.97	3.85	88.12
Aug-08	**12.7**	ND	16.0	ND	1.3 J	NS	91.97	4.60	87.37
Nov-08	**8.1**	ND	6.6	ND	0.41 J	NS	91.97	3.42	88.55
Feb-09	**3.0**	ND	2.3	ND	0.71 J	NS	91.97	3.45	88.52
May-09	**30.3**	0.66 J	9.2	0.26 J	3.4	NS	91.97	3.59	88.38
16-MW-16[5]									
Aug-02	ND	ND	ND	ND	ND	ND	94.34	6.00	88.34
Nov-02	ND	ND	ND	ND	ND	ND	94.34	4.39	89.95
Feb-03	ND	ND	ND	ND	ND	ND	94.34	4.12	90.22
May-03	ND	ND	ND	ND	ND	ND	94.34	4.00	90.34
Aug-03	ND	ND	ND	ND	ND	ND	94.34	3.85	90.49
Nov-03	ND	ND	ND	ND	ND	ND	94.34	4.09	90.25
Aug-07[8]	NS	NS	NS	NS	NS	NS	94.34	4.63	89.71
Nov-07	NS	NS	NS	NS	NS	NS	94.34	4.33	90.01
Feb-08	NS	NS	NS	NS	NS	NS	94.34	NA	NA
May-08	NS	NS	NS	NS	NS	NS	94.34	4.02	90.32
Aug-08	NS	NS	NS	NS	NS	NS	94.34	4.98	89.36
Nov-08	NS	NS	NS	NS	NS	NS	94.34	3.82	90.52
Feb-09	NS	NS	NS	NS	NS	NS	94.34	3.85	90.49
May-09	NS	NS	NS	NS	NS	NS	94.34	3.70	90.64
16-MW-17									
Aug-02	ND	ND	ND	ND	ND	ND	93.94	5.86	88.08
Nov-02	ND	ND	ND	ND	ND	ND	93.94	4.30	89.64
Feb-03	ND	ND	ND	ND	ND	ND	93.94	4.03	89.91
May-03	ND	ND	ND	ND	ND	ND	93.94	3.86	90.08
Aug-03	ND	ND	ND	ND	ND	ND	93.94	3.70	90.24
Nov-03	ND	ND	ND	ND	ND	ND	93.94	3.86	90.08
Mar-04	ND	ND	ND	ND	ND	NS	93.94	3.84	90.10
May-04	ND	ND	0.55 J	ND	ND	NS	93.94	3.69	90.25

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Buildings C-17/20/16/50
NWS Earle, Colts Neck, New Jersey

Location/ Duplicate	Compounds						Groundwater Levels		
	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-04	ND	ND	N.D	ND	ND	NS	93.94	4.75	89.19
Nov-04	ND	ND	0.30 J	ND	ND	NS	93.94	3.81	90.13
Feb-05	ND	ND	ND	ND	ND	NS	93.94	3.20	90.74
May-05	ND	ND	0.31 J	ND	ND	NS	93.94	3.52	90.42
Aug-07[8]	NS	NS	NS	NS	NS	NS	93.94	4.58	89.36
Nov-07	NS	NS	NS	NS	NS	NS	93.94	4.35	89.59
Feb-08	NS	NS	NS	NS	NS	NS	93.94	3.93	90.01
May-08	NS	NS	NS	NS	NS	NS	93.94	4.14	89.80
Aug-08	NS	NS	NS	NS	NS	NS	93.94	4.94	89.00
Nov-08	NS	NS	NS	NS	NS	NS	93.94	3.82	90.12
Feb-09	NS	NS	NS	NS	NS	NS	93.94	3.83	90.11
May-09	NS	NS	NS	NS	NS	NS	93.94	3.92	90.02
16-MW-24									
Aug-02	ND	ND	3	ND	ND	ND	89.88	5.45	84.43
Nov-02	ND	ND	3.6	ND	ND	ND	89.88	4.03	85.85
Feb-03	ND	ND	1.3 J	ND	ND	ND	89.88	4.02	85.86
May-03	ND	ND	ND	ND	ND	ND	89.88	3.94	85.94
Aug-03	ND	ND	ND	ND	ND	ND	89.88	4.07	85.81
Nov-03	ND	ND	ND	ND	ND	ND	89.88	4.02	85.86
Mar-04	ND	ND	ND	ND	ND	NS	89.88	3.99	85.89
May-04	ND	ND	ND	ND	ND	NS	89.88	3.95	85.93
Aug-04	ND	ND	ND	ND	ND	NS	89.88	4.61	85.27
Nov-04	**6.2**	ND	9.2	ND	ND	NS	89.88	3.79	86.09
Feb-05	ND	ND	2.5	ND	ND	NS	89.88	3.95	85.93
May-05	ND	ND	6.1	ND	ND	NS	89.88	3.72	86.16
Aug-05	**21**	ND	28	ND	ND	NS	89.88	5.12	84.76
Nov-05	**27**	ND	33	ND	ND	NS	89.88	4.01	85.87
Feb-06	**2.8**	ND	35	0.18 J	ND	NS	89.88	3.92	85.96
May-06	**35**	ND	53	ND	ND	NS	89.88	2.38	87.50
Aug-06	**114**	ND	**90.1**	3.5	1.8 J	NS	89.88	5.12	84.76
Nov-06	**4.8**	ND	ND	ND	ND	NS	89.88	3.83	86.05
Feb-07	**6.2**	ND	13.4	ND	ND	NS	89.88	4.01	85.87
May-07	**7.6**	ND	20.9	ND	ND	NS	89.88	4.00	85.88
Aug-07[8]	**4.4**	ND	20.5 J	ND	ND	NS	89.88	4.49	85.39
Nov-07	**2.8**	ND	9.3	ND	ND	NS	89.88	4.22	85.66
Feb-08	**3.2**	ND	7.0	ND	ND	NS	89.88	4.06	85.82
May-08	ND	ND	7.2	ND	ND	NS	89.88	3.95	85.93
Aug-08	ND	ND	8.7	ND	ND	NS	89.88	4.70	85.18
Nov-08	ND	ND	5.9	ND	ND	NS	89.88	3.60	86.28
Feb-09	ND	ND	4.6	ND	ND	NS	89.88	4.02	85.86
May-09	ND	ND	2.5	ND	ND	NS	89.88	4.10	85.78

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	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
16-MW-25									
Aug-02	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	93.22	9.04	84.18
Nov-02	ND	ND	ND	ND	ND	ND	93.22	6.30	86.92
Feb-03	ND	ND	ND	ND	ND	ND	93.22	6.20	87.02
May-03	ND	ND	ND	ND	ND	ND	93.22	6.11	87.11
Aug-03	ND	ND	ND	ND	ND	ND	93.22	6.55	86.67
Nov-03	ND	ND	ND	ND	ND	ND	93.22	6.43	86.79
Mar-04	ND	ND	ND	ND	ND	NS	93.22	6.13	87.09
May-04	ND	ND	ND	ND	ND	NS	93.22	5.80	87.42
Aug-04	ND	ND	ND	ND	ND	NS	93.22	7.85	85.37
Nov-04	ND	ND	ND	ND	ND	NS	93.22	5.91	87.31
Feb-05	ND	ND	ND	ND	ND	NS	93.22	6.17	87.05
May-05	ND	ND	ND	ND	ND	NS	93.22	5.31	87.91
Aug-05	ND	ND	ND	ND	ND	NS	93.22	8.36	84.86
Nov-05	ND	ND	ND	ND	ND	NS	93.22	9.11	84.11
Feb-06	ND	ND	ND	ND	ND	NS	93.22	5.71	87.51
May-06	ND	ND	ND	ND	ND	NS	93.22	6.61	86.61
Aug-06	ND	ND	ND	ND	ND	NS	93.22	8.32	84.90
Nov-06	ND	ND	ND	ND	ND	NS	93.22	5.42	87.80
Feb-07	ND	ND	ND	ND	ND	NS	93.22	6.21	87.01
May-07	ND	ND	ND	ND	ND	NS	93.22	5.10	88.12
Aug-07[8]	ND	ND	ND	ND	ND	NS	93.22	7.88	85.34
Nov-07	2.8	ND	9.3	ND	ND	NS	93.22	7.49	85.73
Feb-08	ND	ND	ND	ND	ND	NS	93.22	6.02	87.20
May-08	ND	ND	ND	ND	ND	NS	93.22	6.68	86.54
Aug-08	ND	ND	ND	ND	ND	NS	93.22	8.10	85.12
Nov-08	ND	ND	ND	ND	ND	NS	93.22	6.64	86.58
Feb-09	ND	ND	ND	ND	ND	NS	93.22	6.00	87.22
May-09	ND	ND	ND	ND	ND	NS	93.22	6.00	87.22
17-MW-01[6]									
Aug-01	**44 J**	3.6	ND	3.6	121	220	101.50	8.82	92.68
17-MW-02[7]									
Aug-98	N.D	ND	NS	ND	ND	ND	98.38	7.08	91.30
Nov-98	0.96	ND	NS	ND	ND	ND	98.38	7.24	91.14
Feb-99	N.D	ND	NS	ND	ND	ND	98.38	6.02	92.36
May-99	ND	ND	NS	ND	ND	ND	98.38	6.64	91.74
Aug-99	**8.5**	3.7	NS	ND	15.8	76.7	98.38	7.60	90.78
Nov-99	ND	ND	NS	ND	ND	ND	98.38	7.19	91.19
Feb-00	0.64	ND	ND	ND	ND	0.71	98.38	6.98	91.40
May-00	ND	ND	ND	ND	ND	ND	98.38	6.28	92.10
Aug-00	ND	ND	ND	ND	ND	ND	98.38	--	--
Nov-00	**3**	ND	ND	ND	ND	2.6	98.38	7.32	91.06
Feb-01	ND	ND	ND	ND	ND	ND	98.38	5.78	92.60
May-01	ND	ND	ND	ND	ND	ND	98.38	5.80	92.58
Aug-01	**1.3 J**	ND	ND	ND	ND	ND	98.38	7.40	90.98
Nov-01	**3.1**	ND	ND	ND	ND	ND	98.38	7.90	90.48

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	Volatiles					Semivolatiles	Elevation Top of Casing	Depth to GW	GW Elevation**
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Feb-02	**3.5**	ND	ND	ND	ND	ND	98.38	7.47	90.91
May-02	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	98.38	7.05	91.33
Aug-02	**4.1**	ND	0.9J	ND	ND	10.6	98.38	8.60	89.78
Nov-02	ND	ND	ND	ND	ND	ND	98.38	7.13	91.25
Feb-03	ND	ND	ND	ND	ND	ND	98.38	6.54	91.84
May-03	ND	ND	ND	ND	ND	ND	98.38	5.51	92.87
Aug-03	ND	ND	ND	ND	ND	ND	98.38	5.40	92.98
Nov-03	ND	ND	ND	ND	ND	ND	98.38	6.22	92.16
Mar-04	ND	ND	ND	ND	ND	NS	98.38	6.00	92.38
May-04	ND	ND	ND	ND	ND	NS	98.38	5.01	93.37
16-MW-12 (Replaced 17-MW-02)									
Aug-04	**1.6**	ND	ND	ND	ND	NS	98.38	6.99	91.39
Nov-04	0.34 J	ND	ND	ND	ND	NS	98.38	6.65	91.73
Feb-05	**1.1**	ND	ND	ND	ND	NS	98.38	7.58	90.80
May-05	0.38 J	ND	ND	ND	ND	NS	98.38	5.07	93.31
18-MW-01									
Aug-98	N.D	ND	NS	ND	ND	ND	103.00	9.21	93.79
Nov-98	ND	ND	NS	ND	ND	ND	103.00	9.71	93.29
Feb-99	ND	ND	NS	ND	ND	ND	103.00	9.29	93.71
May-99	ND	ND	NS	ND	ND	ND	103.00	9.00	94.00
Aug-99	ND	ND	NS	ND	ND	ND	103.00	10.55	92.45
Nov-99	ND	ND	NS	ND	ND	3.0	103.00	10.19	92.81
Feb-00	ND	ND	ND	ND	ND	ND	103.00	9.88	93.12
May-00	ND	ND	ND	0.71	ND	ND	103.00	9.41	93.59
Aug-00	ND	ND	ND	ND	ND	ND	103.00	9.66	93.34
Nov-00	ND	ND	ND	ND	ND	ND	103.00	10.30	92.70
Feb-01	ND	ND	ND	ND	ND	ND	103.00	9.52	93.48
May-01	ND	ND	ND	ND	ND	ND	103.00	8.58	94.42
Aug-01	ND	ND	ND	ND	ND	2.9	103.00	9.58	93.42
Nov-01	ND	ND	ND	ND	ND	ND	103.00	10.79	92.21
Feb-02	ND	ND	ND	ND	ND	ND	103.00	10.61	92.39
May-02	ND	ND	ND	ND	ND	ND	103.00	10.18	92.82
Aug-02	ND	ND	0.55 J	ND	ND	ND	103.00	11.39	91.61
Nov-02	ND	ND	ND	ND	ND	ND	103.00	10.19	92.81
Feb-03	ND	ND	ND	ND	ND	ND	103.00	9.26	93.74
May-03	ND	ND	ND	ND	ND	ND	103.00	8.39	94.61
Aug-03	ND	ND	ND	ND	ND	ND	103.00	8.27	94.73
Nov-03	ND	ND	ND	ND	ND	ND	103.00	9.17	93.83
Mar-04	ND	ND	ND	ND	ND	ND	103.00	8.79	94.21
May-04	ND	ND	R	ND	ND	ND	103.00	8.12	94.88
Aug-04	ND	ND	0.34 J	ND	ND	ND	103.00	9.67	93.33
Nov-04	ND	ND	ND	ND	ND	ND	103.00	9.59	93.41
Feb-05	ND	ND	ND	ND	ND	ND	103.00	9.32	93.68
May-05	ND	ND	ND	ND	ND	ND	103.00	8.21	94.79

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	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene			
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000***	**300**	**ft above MSL**	**ft BGS**	**ft above MSL**
Aug-05	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.00	9.94	93.06
Nov-05	ND	ND	ND	ND	ND	ND	103.00	8.81	94.19
Feb-06	ND	ND	ND	ND	ND	ND	103.00	7.86	95.14
May-06	ND	ND	ND	ND	ND	ND	103.00	5.47	97.53
Aug-06	ND	ND	ND	ND	ND	ND	103.00	9.78	93.22
Nov-06	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.00	8.08	94.92
Feb-07	ND	ND	ND	ND	ND	ND	103.00	8.62	94.38
May-07	ND	ND	ND	ND	ND	ND	103.00	7.35	95.65
Aug-07[8]	ND	ND	ND	ND	ND	ND	103.00	9.18	93.82
Nov-07	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.00	9.99	93.01
Feb-08	ND	ND	ND	ND	ND	ND	103.00	8.73	94.27
May-08	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	ND / ND	103.00	9.03	93.97
Aug-08	ND	ND	ND	ND	ND	ND	103.00	10.09	92.91
Nov-08	B	B	B	B	B	ND	103.00	10.10	92.90
Feb-09	ND	ND	ND	ND	ND	ND	103.00	8.55	94.45
May-09	ND	ND	ND	ND	ND	ND	103.00	8.10	94.90
29-MW-01									
Aug-07[8]	NS	NS	NS	NS	NS	NS	99.42	10.39	89.03
Nov-07	NS	NS	NS	NS	NS	NS	99.42	10.11	89.31
Feb-08	NS	NS	NS	NS	NS	NS	99.42	9.25	90.17
May-08	NS	NS	NS	NS	NS	NS	99.42	9.81	89.61
Aug-08	NS	NS	NS	NS	NS	NS	99.42	10.58	88.84
Nov-08	NS	NS	NS	NS	NS	NS	99.42	9.33	90.09
Feb-09	NS	NS	NS	NS	NS	NS	99.42	9.67	89.75
May-09	NS	NS	NS	NS	NS	NS	99.42	9.30	90.12

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Data previous to August 2004 was provided by TtNUS.
Groundwater Quality Standard (GWQS) Criteria is from the New Jersey Department of Environmental Protection (NJDEP) criteria for class II-A Groundwater (N.J.A.C. 7:9-6) Unless otherwise noted, the groundwater criteria used are the Higher of the Practical Quantitation Levels (PQLs) and Groundwater Quality Criteria.
Analytes with concentrations greater than the NJDEP GWQS are highlighted in bold.
*Criterion for total xylenes was raised to the NJDEP Maximum Contaminant Level (MCL) of 1,000 ug/L as of 5 February 1997. Previous reports used a value of 40 ug/L; however, the bold highlights have been updated to correspond to the current criterion.
**GW Elevation is not corrected for LNAPL (if present).
feet msl = feet above mean sea level
feet btc = feet below top of casing
Sampling periods displaying two values for a concentration (i.e. XX/XX) indicate a duplicate sample was taken and analyzed.
J = estimated value due to exceedance of technical criteria or because results are less than the CRQL.
B = samples broken; no data
ND = not detect above method detection limit
NS: not sampled
NA: not available
[1] Omitted from monitoring program after second quarter of Year 6.
[2] Destroyed after first quarter of Year 6.
[3] Omitted from monitoring program due to active remediation (bioslurping).
[4] Omitted from monitoring program after second quarter of Year 6.
[5] Omitted from monitoring program after second quarter of Year 6.
[6] Renamed 17-MW-17 after Year 6. Omitted due to active remediation (bioslurping).
[7] Renamed 16-MW-12 after Year 6.
[8] Samples collected Aug-07, wells gauged Sept-07

TABLE 3
Sample Data Summary
Year 11 Groundwater Monitoring
Naval Weapons Station Earle
Colts Neck, NJ

Location/ Duplicate	Compounds					
	Volatiles					Semivolatiles
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000**	**300**
16MW-04	**(Not Sampled - Product Found in Well)**					
Aug-08	NS	NS	NS	NS	NS	NS
Nov-08	NS	NS	NS	NS	NS	NS
Feb-08	NS	NS	NS	NS	NS	NS
May-09	NS	NS	NS	NS	NS	NS
16MW-08						
Aug-08	**27.5**	3.2	9.9	ND	0.88 J	10.9
Nov-08	**11.6**	4.4	0.95 J	ND	0.50 J	5.1
Feb-09	**9.3**	1.1	1.9	ND	3.0	30.6
Feb-09 (DUP-1)	**8.1**	0.90 J	1.6	ND	2.1 J	26.8
May-09	**6.7**	ND	1.0 J	ND	ND	3.4
16MW-10						
Aug-08	ND	ND	ND	ND	ND	1.6 J
Aug-08 (DUP-1)	ND	ND	ND	ND	0.45 J	2.2 J
Nov-08	ND	ND	ND	ND	ND	ND
Feb-09	ND	ND	ND	ND	ND	0.51 J
May-09	0.74 J	ND	ND	ND	ND	0.78 J
May-09 (DUP-1)	5.4	ND	ND	ND	ND	7.5
16MW-11						
Aug-08	**270**	ND	**278**	ND	ND	1.1 J
Nov-08	**296**	ND	**152**	ND	ND	1.6 J
Nov-08 (DUP-2)	**321 J**	ND	**157**	ND	ND	1.1 J
Feb-09	**109**	ND	**70.9**	ND	ND	1.1 J
May-09	**68.4**	ND	**32.7**	ND	ND	0.55 J
16MW-15						
Aug-08	**12.7**	ND	16.0	ND	1.3 J	NS
Nov-08	**8.1**	ND	6.6	ND	0.41 J	NS
Feb-09	**3.0**	ND	2.3	ND	0.71 J	NS
May-09	**30.3**	0.66 J	9.2	0.26 J	3.4	NS

All results reported in micrograms per liter (ug/L)
J = estimated value, result is less than the reporting limit
ND = not detect above method detection limit
NS = not sampled
Bold value indicates that results exceed NJDEP GWQS.

TABLE 3
Sample Data Summary
Year 11 Groundwater Monitoring
Naval Weapons Station Earle
Colts Neck, NJ

Location/ Duplicate	Compounds					
	Volatiles					Semivolatiles
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene
NJDEP GWQS	**1.0**	**700**	**70**	**1,000**	**1,000**	**300**
16MW-24						
Aug-08	ND	ND	8.7	ND	ND	NS
Nov-08	ND	ND	5.9	ND	ND	NS
Feb-09	ND	ND	4.6	ND	ND	NS
May-09	ND	ND	2.5	ND	ND	NS
16MW-25						
Aug-08	ND	ND	ND	ND	ND	NS
Nov-08	ND	ND	ND	ND	ND	NS
Feb-09	ND	ND	ND	ND	ND	NS
May-09	ND	ND	ND	ND	ND	NS
18MW-01						
Aug-08	ND	ND	ND	ND	ND	ND
Nov-08	*	*	*	*	*	ND
Feb-09	ND	ND	ND	ND	ND	ND
May-09	ND	ND	ND	ND	ND	ND
16SW-01						
Aug-08	ND	ND	ND	ND	ND	NS
Nov-08	ND	ND	ND	ND	ND	NS
Feb-09	ND	ND	ND	ND	ND	NS
May-09	ND	ND	ND	ND	ND	NS
16SW-02						
Aug-08	ND	ND	ND	ND	ND	NS
Nov-08	ND	ND	5.4	ND	ND	NS
Feb-09	0.50 J	ND	6.2	ND	ND	NS
May-09	ND	ND	ND	ND	ND	NS

All results reported in micrograms per liter (ug/L)
J = estimated value, result is less than the reporting limit
ND = not detect above method detection limit
NS = not sampled
Bold value indicates that results exceed NJDEP GWQS.
* Sample broken in transit, no results

TABLE 4
Surface Water Data Summary
Year 11
NWS Earle
Site C-17/20/16/50

Location/ Duplicate	Compounds					
	Volatiles					Semivolatiles
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene
SWQS	**0.15**	**3,030**	**NA**	**7,440**	**NA**	**NA**
16-SW-01						
May-02	ND	ND	3	ND	ND	ND
Aug-02	NS	NS	NS	NS	NS	NS
Nov-02	ND	ND	ND	ND	ND	ND
Feb-03	ND	ND	0.56 J	ND	ND	ND
May-03	ND	ND	ND	ND	ND	ND
Aug-03	ND	ND	0.53 J	ND	ND	ND
Nov-03	ND	ND	ND	ND	ND	ND
Mar-04	ND	ND	ND	ND	ND	NS
May-04	ND	ND	ND	ND	ND	NS
Aug-04	ND	ND	2.4 J	ND	ND	NS
Nov-04	ND	ND	ND	ND	ND	NS
Feb-05	ND	ND	ND	ND	ND	NS
May-05	ND	ND	8	ND	ND	NS
Aug-05	NS	NS	NS	NS	NS	NS
Nov-05	ND	ND	ND	ND	ND	NS
Feb-06	ND	ND	ND	ND	ND	NS
May-06	ND	ND	ND	ND	ND	NS
Aug-06	NS	NS	NS	NS	NS	NS
Nov-06	ND	ND	ND	ND	ND	NS
Feb-07	ND	ND	ND	ND	ND	NS
May-07	ND	ND	ND	ND	ND	NS
Aug-07	ND	ND	ND	0.59 J	ND	NS
Feb-08	ND	ND	ND	ND	ND	NS
May-08	ND	ND	ND	ND	ND	NS
Aug-08	ND	ND	ND	ND	ND	NS
Nov-08	ND	ND	ND	ND	ND	NS
Feb-09	ND	ND	ND	ND	ND	NS
May-09	ND	ND	ND	ND	ND	NS

All results reported in micrograms per liter (ug/L)

Groundwater Quality Standard (GQS) and Surface Water Quality Standard (SWQS) Criteria is from the New Jersey Department of Environmental Protection (NJDEP) criteria for class II-A Groundwater (N.J.A.C. 7:9-6) and class FW2 Surface Water (N.J.A.C. 7:9B). Unless otherwise noted, the groundwater criteria used are the Higher of the Practical Quantitation Levels (PQLs) and Groundwater Quality Criteria.

ND = not detect above method detection limit

NS = not sampled

J = estimated value due to exceedance of technical criteria or because results are less than the CRQL.

TABLE 4
Surface Water Data Summary
Year 11
NWS Earle
Site C-17/20/16/50

Location/ Duplicate	Compounds					
	Volatiles					Semivolatiles
	Benzene	Ethylbenzene	MTBE	Toluene	Xylenes	Naphthalene
SWQS	**0.15**	**3,030**	**NA**	**7,440**	**NA**	**NA**
16-SW-02						
May-02	ND / ND	ND / ND	3.8 / 4.4	ND / ND	ND / ND	ND / ND
Aug-02	NS	NS	NS	NS	NS	NS
Nov-02	ND / ND	ND / ND	3.8 J / 5.5 J	ND / ND	ND / ND	ND / ND
Feb-03	ND	ND	7.7	ND	ND	ND
May-03	ND / ND	ND / ND	3.9 / 4.4	ND / ND	ND / ND	ND / ND
Aug-03	ND / ND	ND / ND	28.4 / 33.9	ND / ND	ND / ND	ND / ND
Nov-03	ND / ND	ND / ND	26.4 / 23.3	ND / ND	ND / ND	ND / ND
Mar-04	**1.4 / 1.2**	ND / ND	11.3 / 12	0.87 J / 2.2 J	ND / ND	NS / NS
May-04	ND / ND	ND / ND	7.7 J / R	0.6 J / ND	ND / ND	NS / NS
Aug-04	0.66 J	ND	58.6	ND	ND	NS
Nov-04	0.20 J	ND	9.7	ND	ND	NS
Feb-05	ND	ND	0.79 J	ND	ND	NS
May-05	ND	ND	ND	ND	ND	NS
Aug-05	ND	ND	21	1.2	ND	NS
Nov-05	ND	ND	0.52J	ND	ND	NS
Feb-06	ND	ND	2.0	ND	ND	NS
May-06	ND	ND	ND	ND	ND	NS
Aug-06	NS	NS	NS	NS	NS	NS
Nov-06	ND	ND	ND	ND	ND	NS
Feb-07	ND	ND	19.2	ND	ND	NS
May-07	ND	ND	0.76 J	ND	ND	NS
Aug-07	ND	ND	11.0 J	4.2	ND	NS
Feb-08	ND	ND	0.99 J	ND	ND	NS
May-08	ND	ND	3.0	ND	ND	NS
Aug-08	ND	ND	ND	ND	ND	NS
Nov-08	ND	ND	5.4	ND	ND	NS
Feb-09	0.50 J	ND	6.2	ND	ND	NS
May-09	ND	ND	ND	ND	ND	NS

All results reported in micrograms per liter (ug/L)
Groundwater Quality Standard (GQS) and Surface Water Quality Standard (SWQS) Criteria is from the New Jersey Department of Environmental Protection (NJDEP) criteria for class II-A Groundwater (N.J.A.C. 7:9-6) and class FW2 Surface Water (N.J.A.C. 7:9B). Unless otherwise noted, the groundwater criteria used are the Higher of the Practical Quantitation Levels (PQLs) and Groundwater Quality Criteria.
ND = not detect above method detection limit
NS = not sampled
J = estimated value due to exceedance of technical criteria or because results are less than the CRQL.

TABLE 5
Groundwater Elevation Data
Year 11
NWS Earle
Buildings C-17/20/16/50
Colts Neck, New Jersey

Location/ Duplicate	Groundwater Levels				
	Elevation Top of Casing	Depth to Product	Depth to GW	Product Thickness	Elevation GW*
	ft above MSL	feet BTC	feet BTC	ft	ft above MSL
16MW-02					
Aug-08	98.48	NA	7.33	NA	91.15
Nov-08	98.48	NA	6.93	NA	91.55
Feb-09	98.48	NA	6.28	NA	92.20
May-09	98.48	NA	5.88	NA	92.60
16MW-04					
Aug-08	101.23	9.03	9.04	0.01	92.20
Nov-08	101.23	8.90	8.91	0.01	92.33
Feb-08	101.23	7.90	8.10	0.20	93.30
May-09	101.23	7.35	8.06	0.71	93.77
16MW-05					
Aug-08	104.14	11.52	11.59	0.07	92.61
Nov-08	104.14	**	11.46	<0.01	92.68
Feb-09	104.14	**	10.73	<0.01	93.41
May-09	104.14	9.94	9.95	0.01	94.19
16MW-08					
Aug-08	103.29	NA	12.50	NA	90.79
Nov-08	103.29	NA	12.13	NA	91.16
Feb-09	103.29	NA	11.70	NA	91.59
Feb-09 (DUP-1)	103.29	NA	11.70	NA	91.59
May-09	103.29	NA	11.35	NA	91.94
16MW-10					
Aug-08	100.36	NA	9.58	NA	90.78
Aug-08 (DUP-1)	101.36	NA	9.58	NA	91.78
Nov-08	100.36	NA	8.80	NA	91.56
Feb-09	100.36	NA	8.38	NA	91.98
May-09	100.36	NA	8.10	NA	92.26
May-09 (DUP-1)	101.36	NA	9.10	NA	92.26
16MW-11					
Aug-08	91.81	NA	3.95	NA	87.86
Nov-08	91.81	NA	2.73	NA	89.08
Nov-08 (DUP-2)	91.81	NA	2.73	NA	89.08
Feb-09	91.81	NA	2.88	NA	88.93
May-09	91.81	NA	2.74	NA	89.07

MSL = mean sea level.
BTC = below top of casing
NA = not applicable
*For wells with product present, groudwater elevations were calculated and corrected
**Sheen of product present; product thickness <0.01 foot

TABLE 5
Groundwater Elevation Data
Year 11
NWS Earle
Buildings C-17/20/16/50
Colts Neck, New Jersey

Location/ Duplicate	Groundwater Levels				
	Elevation Top of Casing	Depth to Product	Depth to GW	Product Thickness	Elevation GW*
	ft above MSL	feet BTC	feet BTC	ft	ft above MSL
16MW-15					
Aug-08	91.97	NA	4.60	NA	87.37
Nov-08	91.97	NA	3.42	NA	88.55
Feb-09	91.97	NA	3.45	NA	88.52
May-09	91.97	NA	3.59	NA	88.38
16MW-16					
Aug-08	94.34	NA	4.98	NA	89.36
Nov-08	94.34	NA	3.82	NA	90.52
Feb-08	94.34	NA	3.85	NA	90.49
May-09	94.34	NA	3.70	NA	90.64
16MW-17					
Aug-08	93.94	NA	4.94	NA	89.00
Nov-08	93.94	NA	3.82	NA	90.12
Feb-09	93.94	NA	3.83	NA	90.11
May-09	93.94	NA	3.92	NA	90.02
16MW-24					
Aug-08	89.88	NA	4.70	NA	85.18
Nov-08	89.88	NA	3.60	NA	86.28
Feb-09	89.88	NA	4.02	NA	85.86
May-09	89.88	NA	4.10	NA	85.78
16MW-25					
Aug-08	93.22	NA	8.10	NA	85.12
Nov-08	93.22	NA	6.64	NA	86.58
Feb-09	93.22	NA	6.00	NA	87.22
May-09	93.22	NA	6.00	NA	87.22
18MW-01					
Aug-08	103	NA	10.09	NA	92.91
Nov-08	103	NA	10.10	NA	92.90
Feb-09	103	NA	8.55	NA	94.45
May-09	103	NA	8.10	NA	94.90

MSL = mean sea level.
BTC = below top of casing
NA = not applicable
*For wells with product present, groudwater elevations were calculated and corrected
**Sheen of product present; product thickness <0.01 foot

TABLE 5
Groundwater Elevation Data
Year 11
NWS Earle
Buildings C-17/20/16/50
Colts Neck, New Jersey

Location/ Duplicate	Groundwater Levels				
	Elevation Top of Casing	Depth to Product	Depth to GW	Product Thickness	Elevation GW*
	ft above MSL	feet BTC	feet BTC	ft	ft above MSL
29MW-01					
Aug-08	99.42	NA	10.58	NA	88.84
Nov-08	99.42	NA	9.33	NA	90.09
Feb-08	99.42	NA	9.67	NA	89.75
May-09	99.42	NA	9.30	NA	90.12
16SW-01					
Aug-08	NA	NA	NA	NA	NA
Nov-08	NA	NA	NA	NA	NA
Feb-09	NA	NA	NA	NA	NA
May-09	NA	NA	NA	NA	NA
16SW-02					
Aug-08	NA	NA	NA	NA	NA
Nov-08	NA	NA	NA	NA	NA
Feb-09	NA	NA	NA	NA	NA
May-09	NA	NA	NA	NA	NA

MSL = mean sea level.
BTC = below top of casing
NA = not applicable
*For wells with product present, groudwater elevations were calculated and corrected
**Sheen of product present; product thickness <0.01 foot

TABLE 6
Quality Assurance/Quality Control (QA/QC) Data Summary
Year 11
NWS Earle
Site C-17/20/16/50

Year 11 Sampling Event	Date Collected	Sample ID	Benzene	Ethylbenzene	Toulene	Total Xylenes	MTBE	Naphthalene
NJDEP GWQS			1.0	700	70	1,000	1,000*	300
August 2008	8/21/2008	FB-1	ND	ND	ND	ND	ND	ND
	8/22/2008	FB-2	ND	ND	ND	ND	ND	ND
	8/21/2008	TB-1	ND	ND	ND	ND	ND	NA
	8/22/2008	TB-2	ND	ND	ND	ND	ND	NA
November 2008	11/7/2008	FB-2	ND	ND	ND	ND	ND	ND
	11/7/2008	TB-1	ND	ND	ND	ND	ND	NA
February 2009	2/5/2009	FB-1	ND	ND	ND	ND	ND	ND
	2/5/2009	FB-2	ND	ND	ND	ND	ND	ND
	2/5/2009	TB-1	ND	ND	ND	ND	ND	NA
May 2009	5/11/2009	FB-1	ND	ND	ND	ND	ND	ND
	5/12/2009	FB-2	ND	ND	ND	ND	ND	ND
	5/12/2009	TB-1	ND	ND	ND	ND	ND	NA

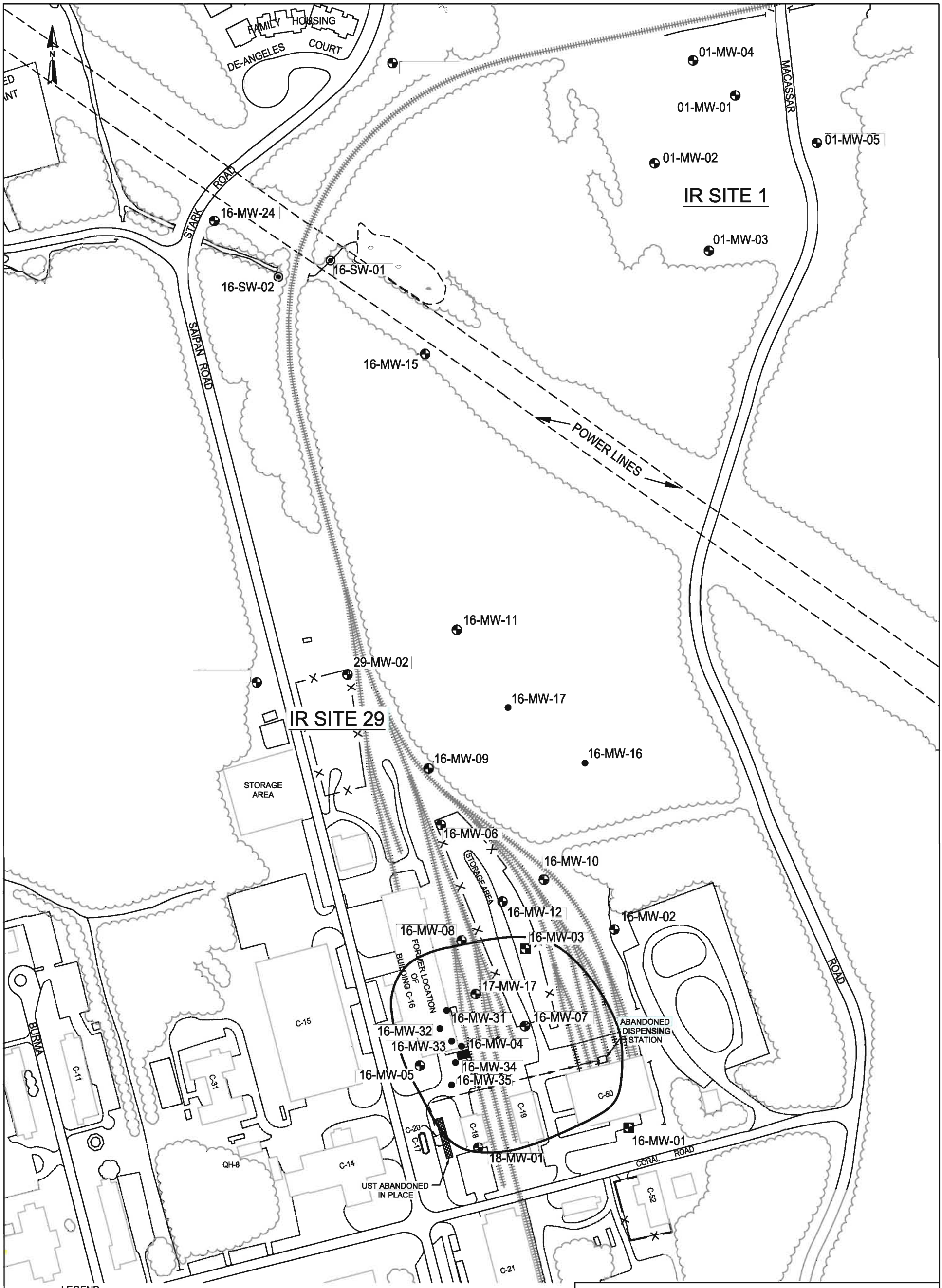
All results reported in micrograms per liter (ug/L)
ND = not detect above method detection limit
NA = not applicable; not analyzed

TABLE 7
Relative Percent Differences
Year 11
NWS Earle
C-17/20/16/50

COC	Benzene			Ethylbenzene			MTBE			Toluene			Xylenes			Naphthalene		
Sampling Event	Sample	Duplicate	RPD	Sample	Duplicate	RPD	Sample	Duplicate	RPD	Sample	Duplicate	RPD	Sample	Duplicate	RPD	Sample	Duplicate	RPD
August 2008	ND	ND	**NA**	ND	ND	**NA**	ND	ND	**NA**	ND	ND	**NA**	ND	0.45	**NA**	1.6	2.2	**32**
November 2008	296	321	**8**	ND	ND	**NA**	152	157	**3**	ND	ND	**NA**	ND	ND	**NA**	1.6	1.1	**37**
February 2009	9.3	8.1	**14**	1.1	0.9	**20**	1.9	1.6	**17**	ND	ND	**NA**	3	2.1	**35**	30.6	26.8	**13**
May 2009	0.74	5.4	**152**	ND	ND	**NA**	ND	ND	**NA**	ND	ND	**NA**	ND	ND	**NA**	0.78	7.5	**162**

All results reported in micrograms per liter (ug/L)
ND = not detect above method detection limit
NA = not applicable

FIGURES



LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY
- ABANDONED DIESEL PIPE LINE
- BIOSLURPING UNIT

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 1-2.dwg

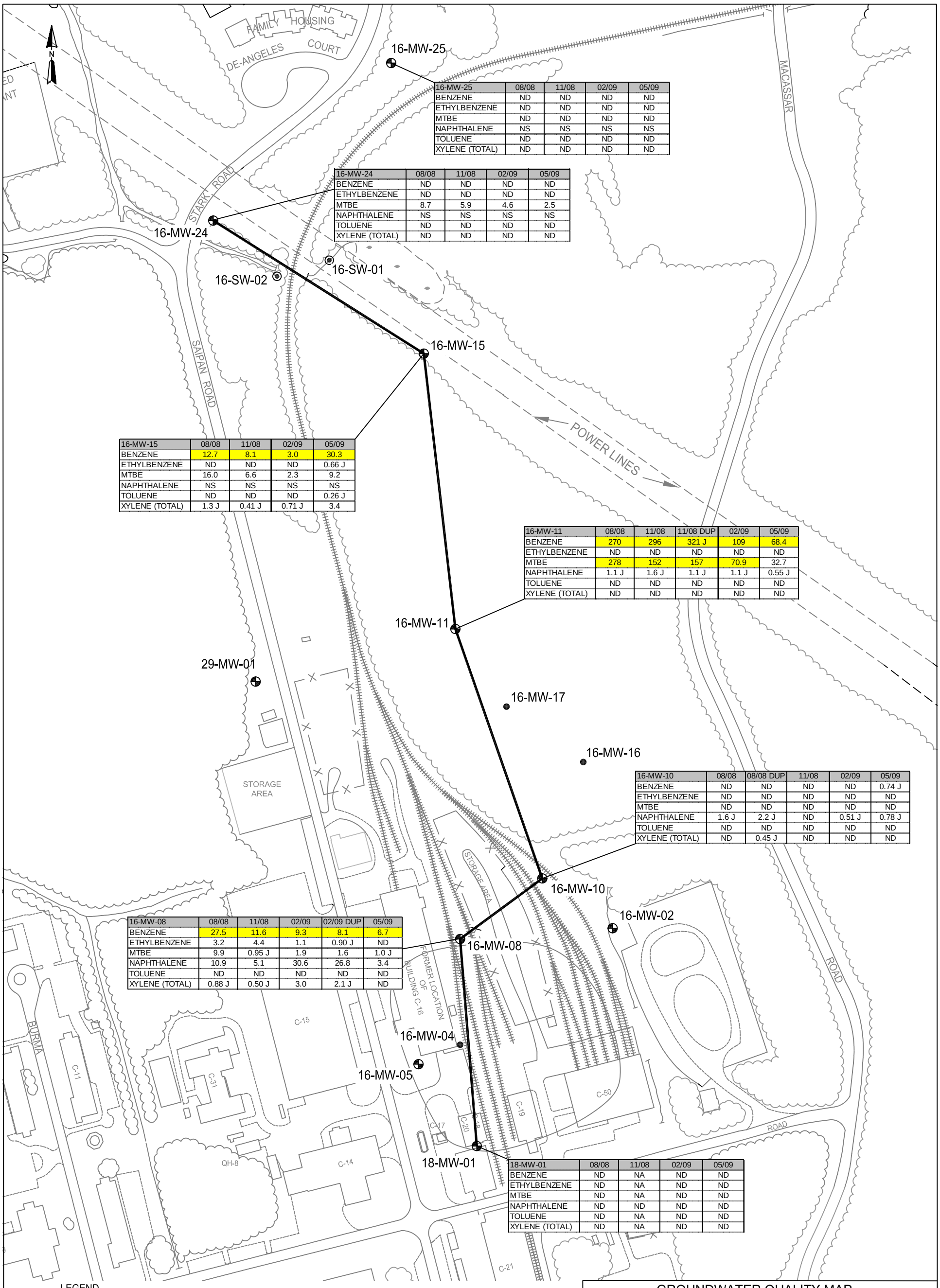
CEA BOUNDARY

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 — 200	06-26-09	1-2

ECOR Solutions, Inc.



16-MW-25	08/08	11/08	02/09	05/09
BENZENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
MTBE	ND	ND	ND	ND
NAPHTHALENE	NS	NS	NS	NS
TOLUENE	ND	ND	ND	ND
XYLENE (TOTAL)	ND	ND	ND	ND

16-MW-24	08/08	11/08	02/09	05/09
BENZENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
MTBE	8.7	5.9	4.6	2.5
NAPHTHALENE	NS	NS	NS	NS
TOLUENE	ND	ND	ND	ND
XYLENE (TOTAL)	ND	ND	ND	ND

16-MW-15	08/08	11/08	02/09	05/09
BENZENE	12.7	8.1	3.0	30.3
ETHYLBENZENE	ND	ND	ND	0.66 J
MTBE	16.0	6.6	2.3	9.2
NAPHTHALENE	NS	NS	NS	NS
TOLUENE	ND	ND	ND	0.26 J
XYLENE (TOTAL)	1.3 J	0.41 J	0.71 J	3.4

16-MW-11	08/08	11/08	11/08 DUP	02/09	05/09
BENZENE	270	296	321 J	109	68.4
ETHYLBENZENE	ND	ND	ND	ND	ND
MTBE	278	152	157	70.9	32.7
NAPHTHALENE	1.1 J	1.6 J	1.1 J	1.1 J	0.55 J
TOLUENE	ND	ND	ND	ND	ND
XYLENE (TOTAL)	ND	ND	ND	ND	ND

16-MW-10	08/08	08/08 DUP	11/08	02/09	05/09
BENZENE	ND	ND	ND	ND	0.74 J
ETHYLBENZENE	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND
NAPHTHALENE	1.6 J	2.2 J	ND	0.51 J	0.78 J
TOLUENE	ND	ND	ND	ND	ND
XYLENE (TOTAL)	ND	0.45 J	ND	ND	ND

16-MW-08	08/08	11/08	02/09	02/09 DUP	05/09
BENZENE	27.5	11.6	9.3	8.1	6.7
ETHYLBENZENE	3.2	4.4	1.1	0.90 J	ND
MTBE	9.9	0.95 J	1.9	1.6	1.0 J
NAPHTHALENE	10.9	5.1	30.6	26.8	3.4
TOLUENE	ND	ND	ND	ND	ND
XYLENE (TOTAL)	0.88 J	0.50 J	3.0	2.1 J	ND

18-MW-01	08/08	11/08	02/09	05/09
BENZENE	ND	NA	ND	ND
ETHYLBENZENE	ND	NA	ND	ND
MTBE	ND	NA	ND	ND
NAPHTHALENE	ND	ND	ND	ND
TOLUENE	ND	NA	ND	ND
XYLENE (TOTAL)	ND	NA	ND	ND

LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY

- *J* ESTIMATED VALUE
- *ND* NOT DETECTED
- *NA* NOT ANALYZED (SAMPLE BROKEN)
- RESULT EXCEEDS NJDEP GWQS
- CROSS-SECTION LINE

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 4-1.dwg

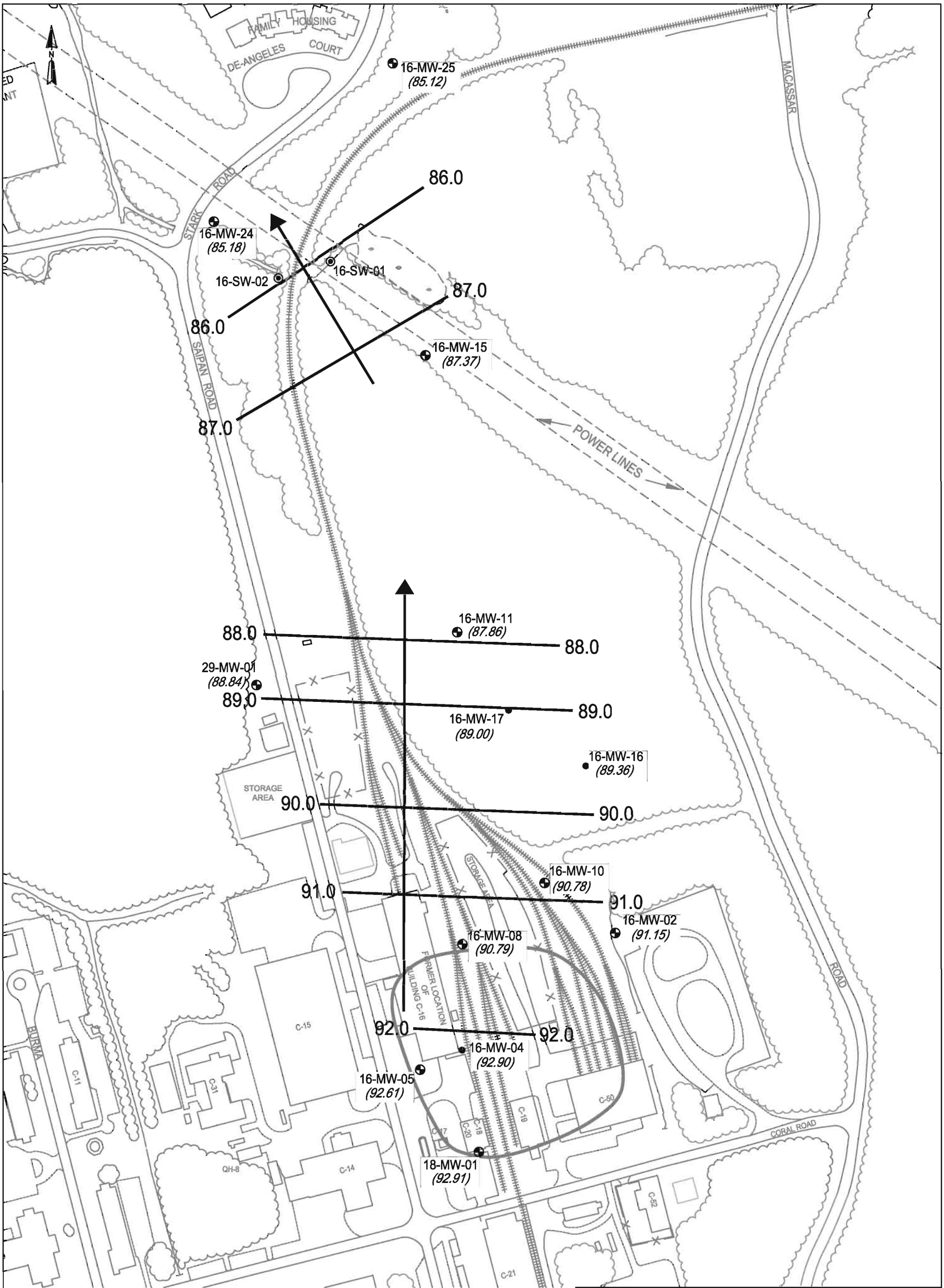
GROUNDWATER QUALITY MAP
MAY 2009

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 — 200	06-17-09	4-1

ECOR Solutions, Inc.



LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY
- GROUNDWATER CONTOUR (ft amsl)
- (92.91) GROUNDWATER ELEVATION (ft amsl)
- GENERAL GROUNDWATER FLOW DIRECTION

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 4-2.dwg

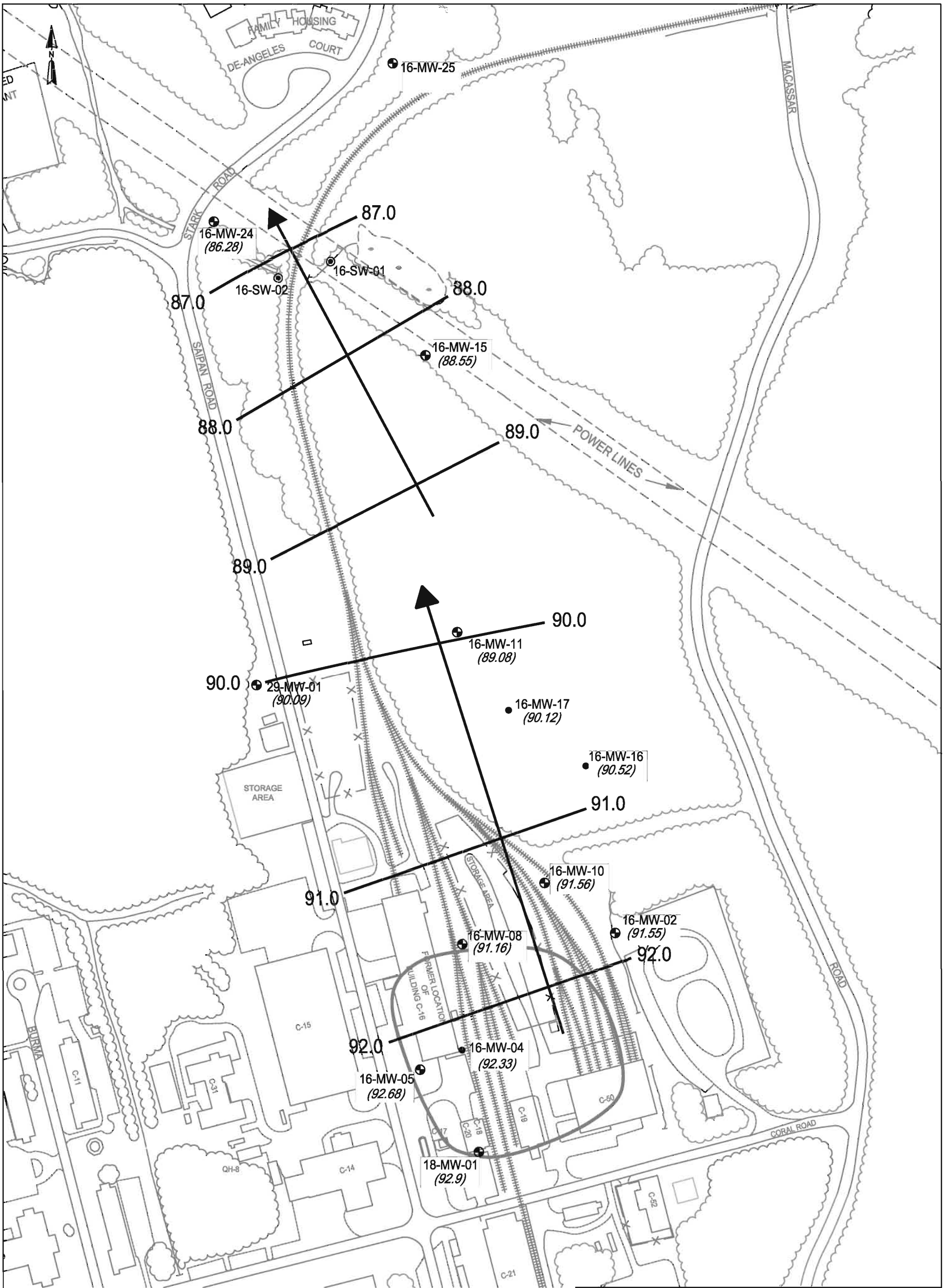
POTENTIOMETRIC SURFACE MAP
AUGUST 2008

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 — 200	06-17-09	4-2

ECOR Solutions, Inc.



LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY
- GROUNDWATER CONTOUR (ft amsl)
- (90.52) GROUNDWATER ELEVATION (ft amsl)
- GENERAL GROUNDWATER FLOW DIRECTION

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 4-2.dwg

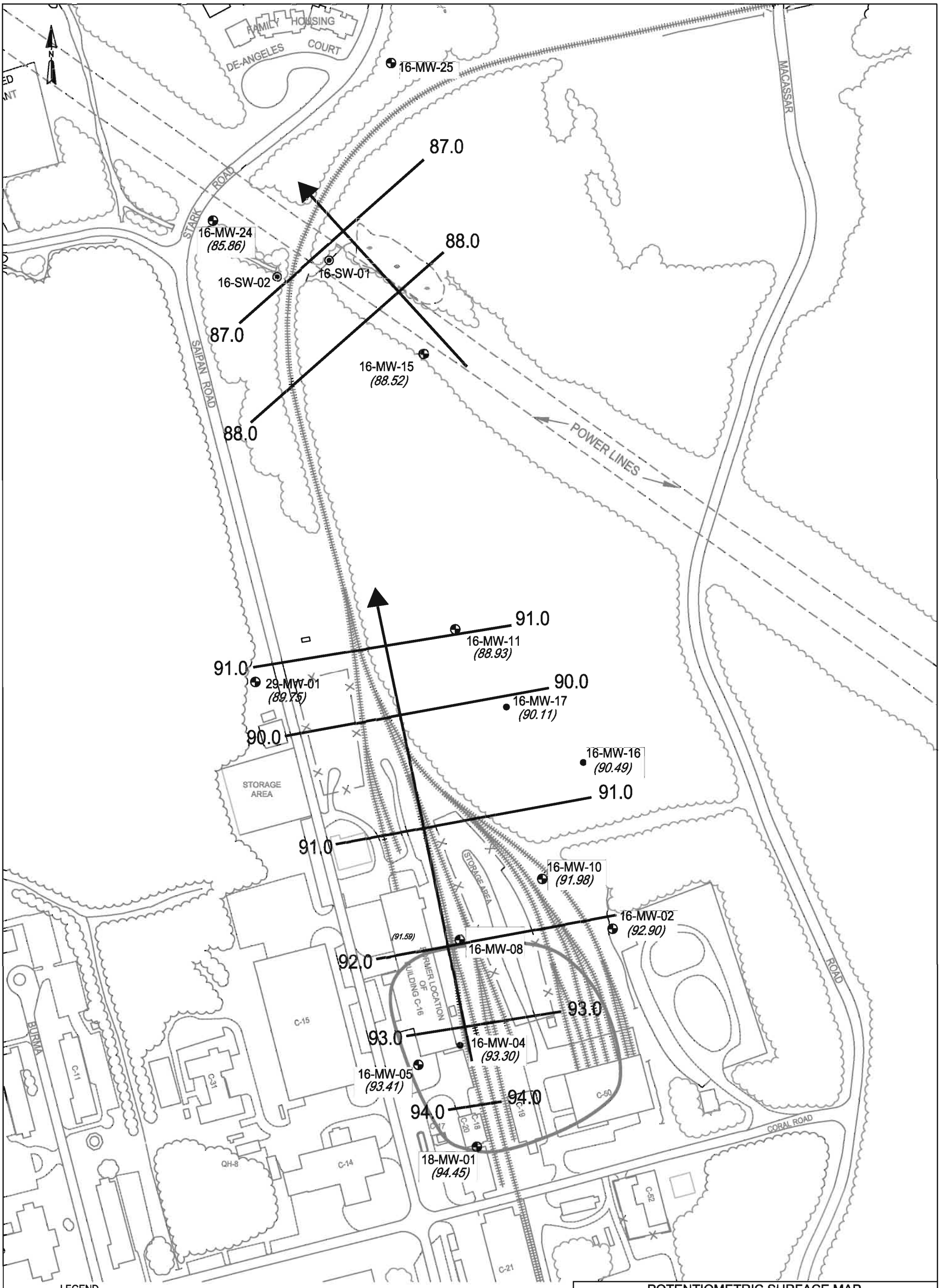
POTENTIOMETRIC SURFACE MAP
NOVEMBER 2008

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 — 200	06-19-09	4-3

ECOR Solutions, Inc.



LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY
- GROUNDWATER CONTOUR (ft amsl)
- (90.11) GROUNDWATER ELEVATION (ft amsl)
- GENERAL GROUNDWATER FLOW DIRECTION

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 4-2.dwg

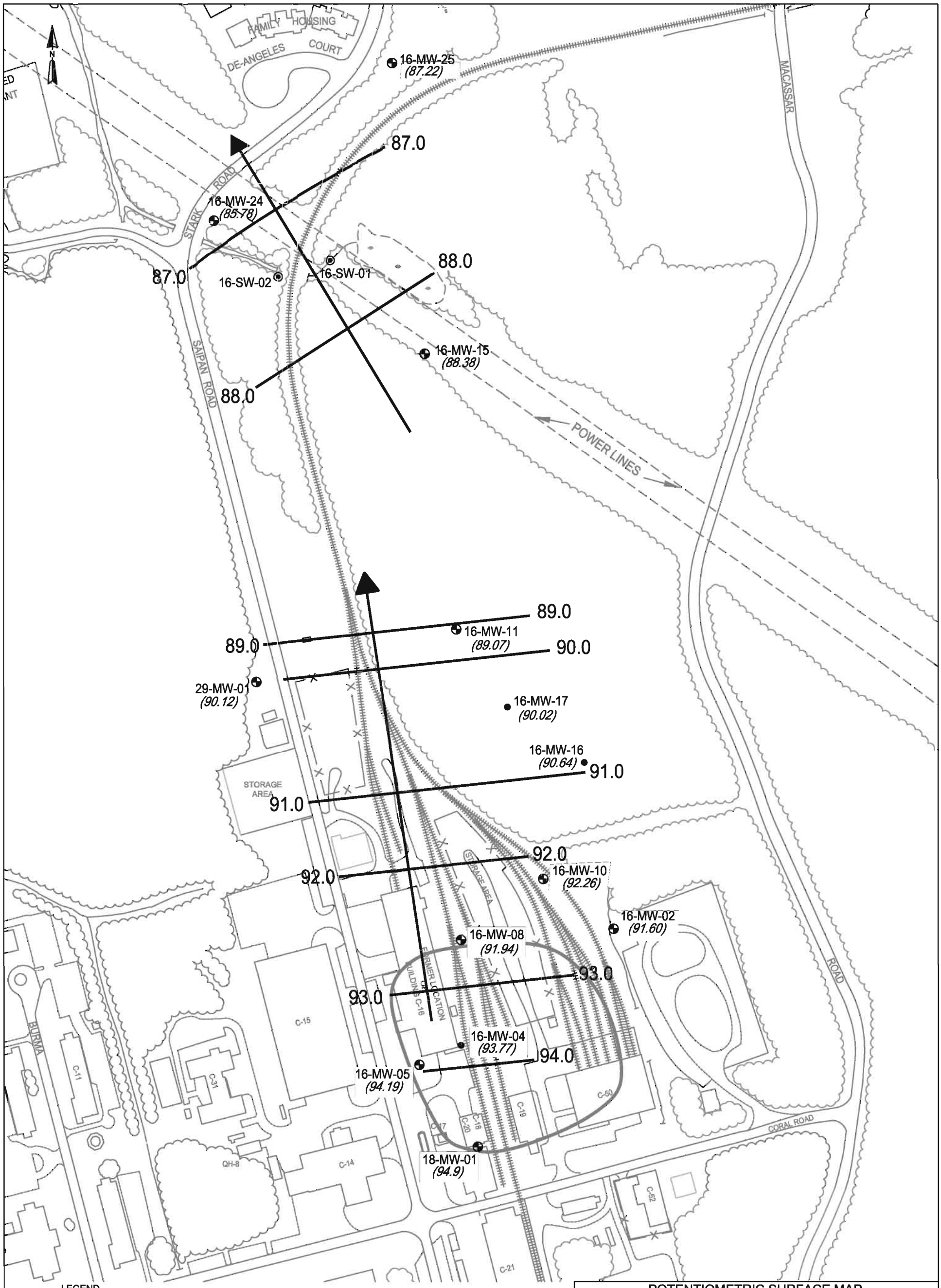
POTENTIOMETRIC SURFACE MAP
FEBRUARY 2009

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 — 200	06-19-09	4-4

ECOR Solutions, Inc.



LEGEND

- FENCE
- TREELINE
- RAILROAD
- ACTIVE MONITORING WELL
- DECOMMISSIONED MONITORING WELL
- ACTIVE RECOVERY WELL
- SURFACE WATER SAMPLING LOCATIONS
- CEA BOUNDARY
- GROUNDWATER CONTOUR (ft amsl)
- (90.02) GROUNDWATER ELEVATION (ft amsl)
- GENERAL GROUNDWATER FLOW DIRECTION

NOTE: 16-MW-25 NOT USED IN CONTOURING

SOURCE: TETRATECH NUS

Pointmap/Building C17-FIG 4-2.dwg

POTENTIOMETRIC SURFACE MAP
MAY 2009

BUILDINGS C-17/20/16/50
U.S. NAVY NWS- EARLE
COLTS NECK, NJ

ECOR Solutions
1075 Andrew Drive, Suite I, West Chester, PA 19380

SCALE IN FEET	DATE	FIGURE
0 200	06-19-09	4-5

Figure 4-6
Monitoring Well 16MW-11
Benzene Concentration Trend
NWS Earle, New Jersey

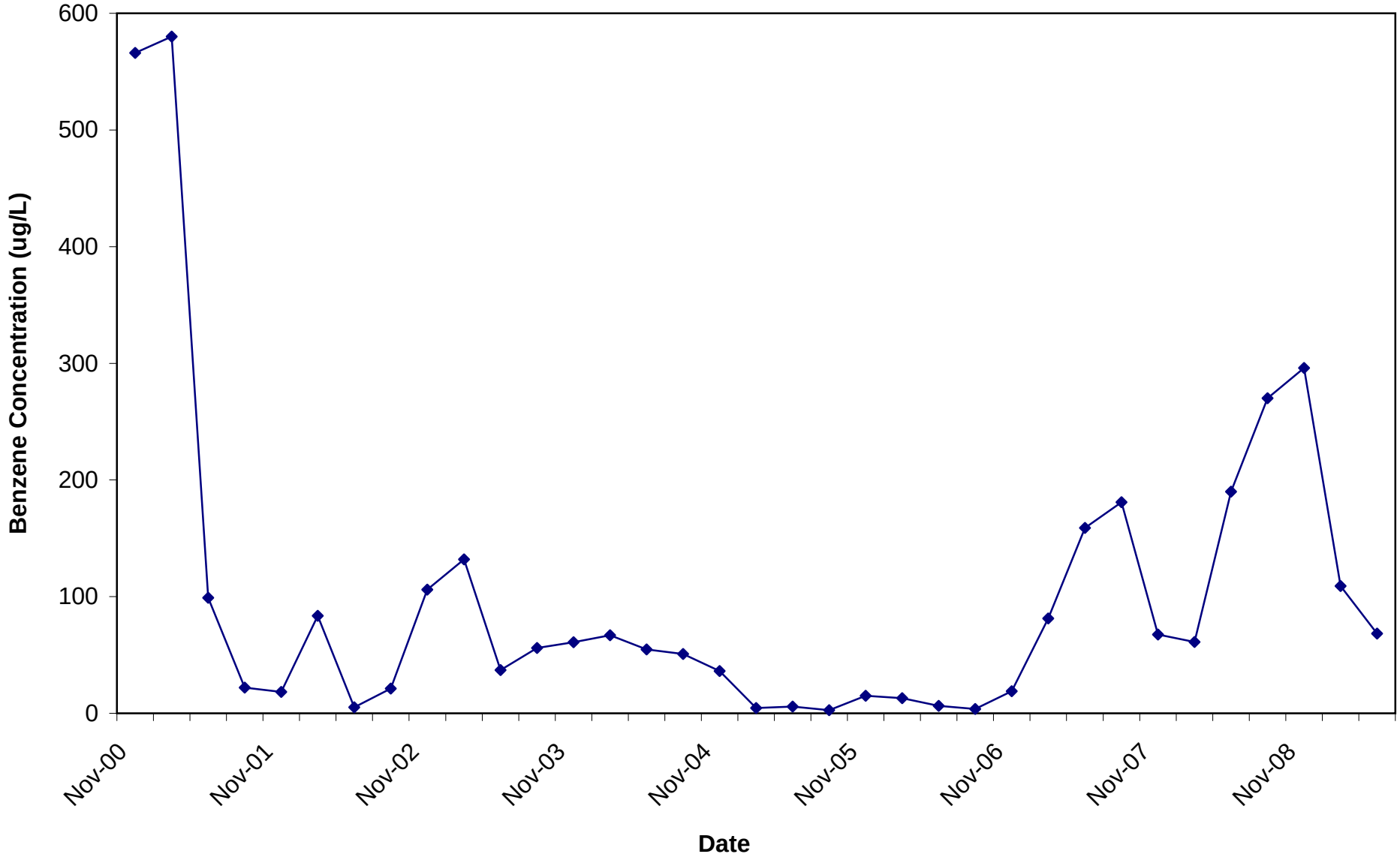


Figure 4-7
Monitoring Well 16MW-15
Benzene Concentration Trend
NWS Earle, New Jersey

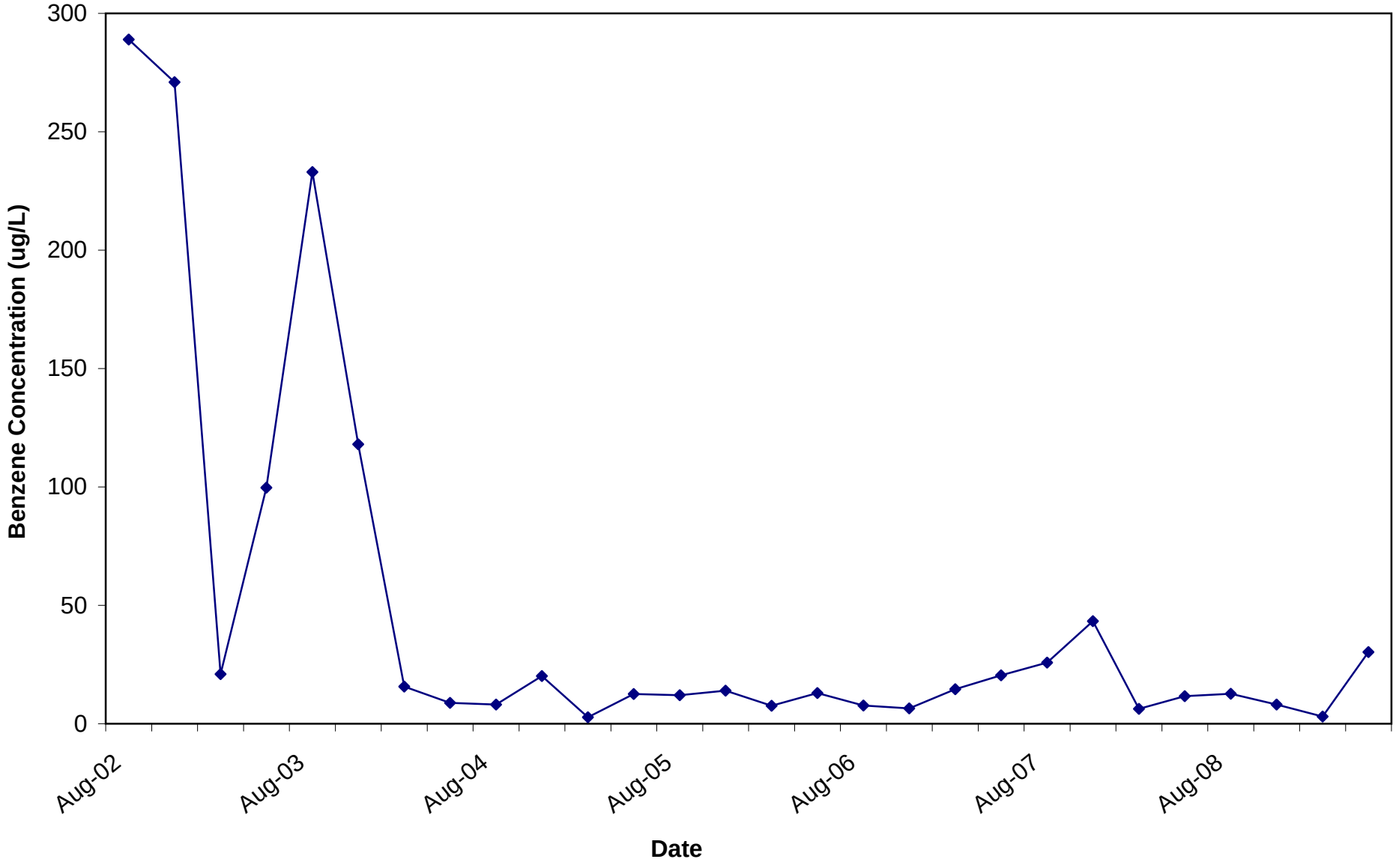


Figure 4-8
Monitoring Well 16MW-24
Benzene Concentration Trend
NWS Earle, New Jersey

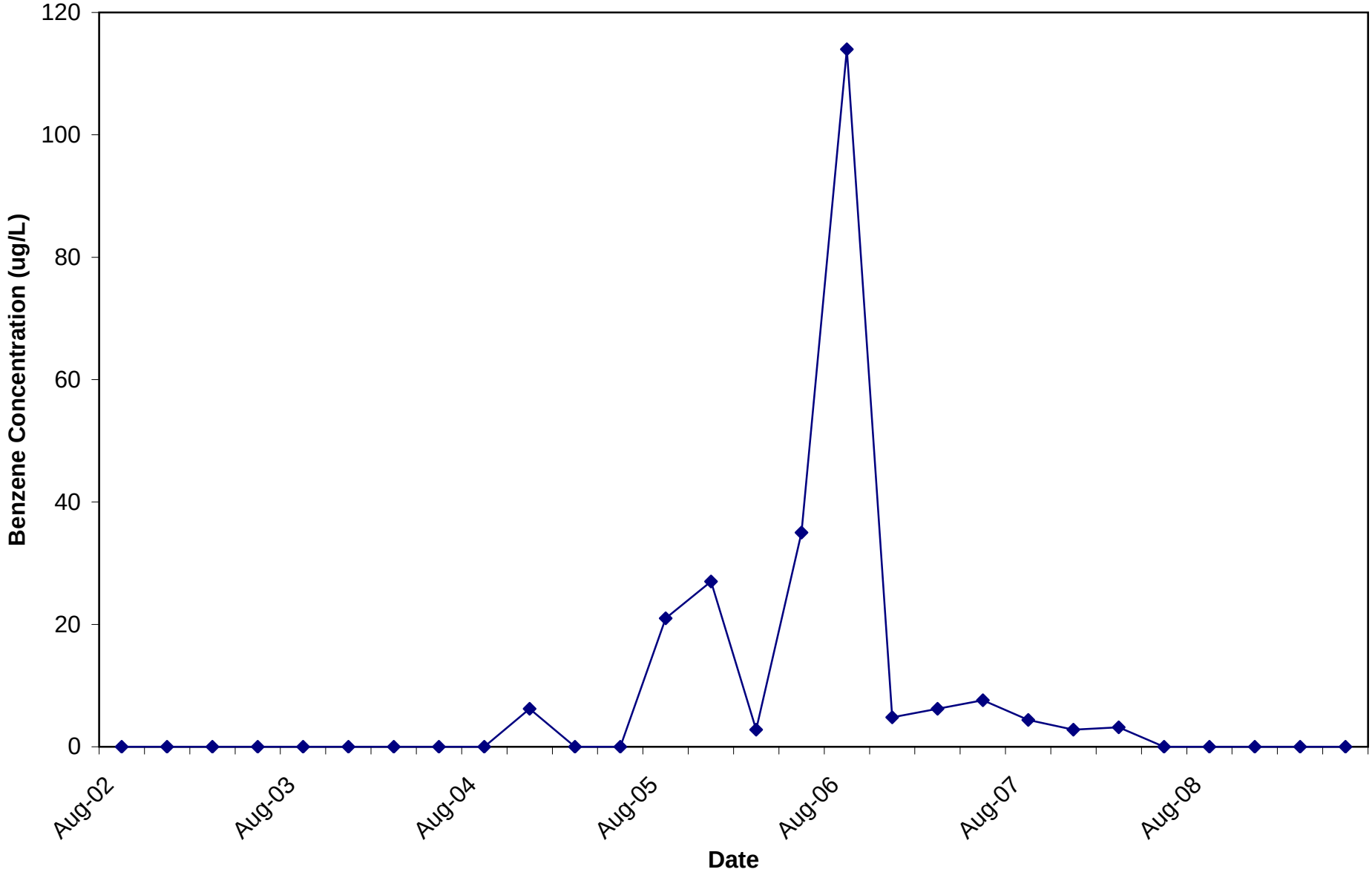


Figure 4-9
Monitoring Well 16MW-11
MTBE Concentration Trend
NWS Earle, New Jersey

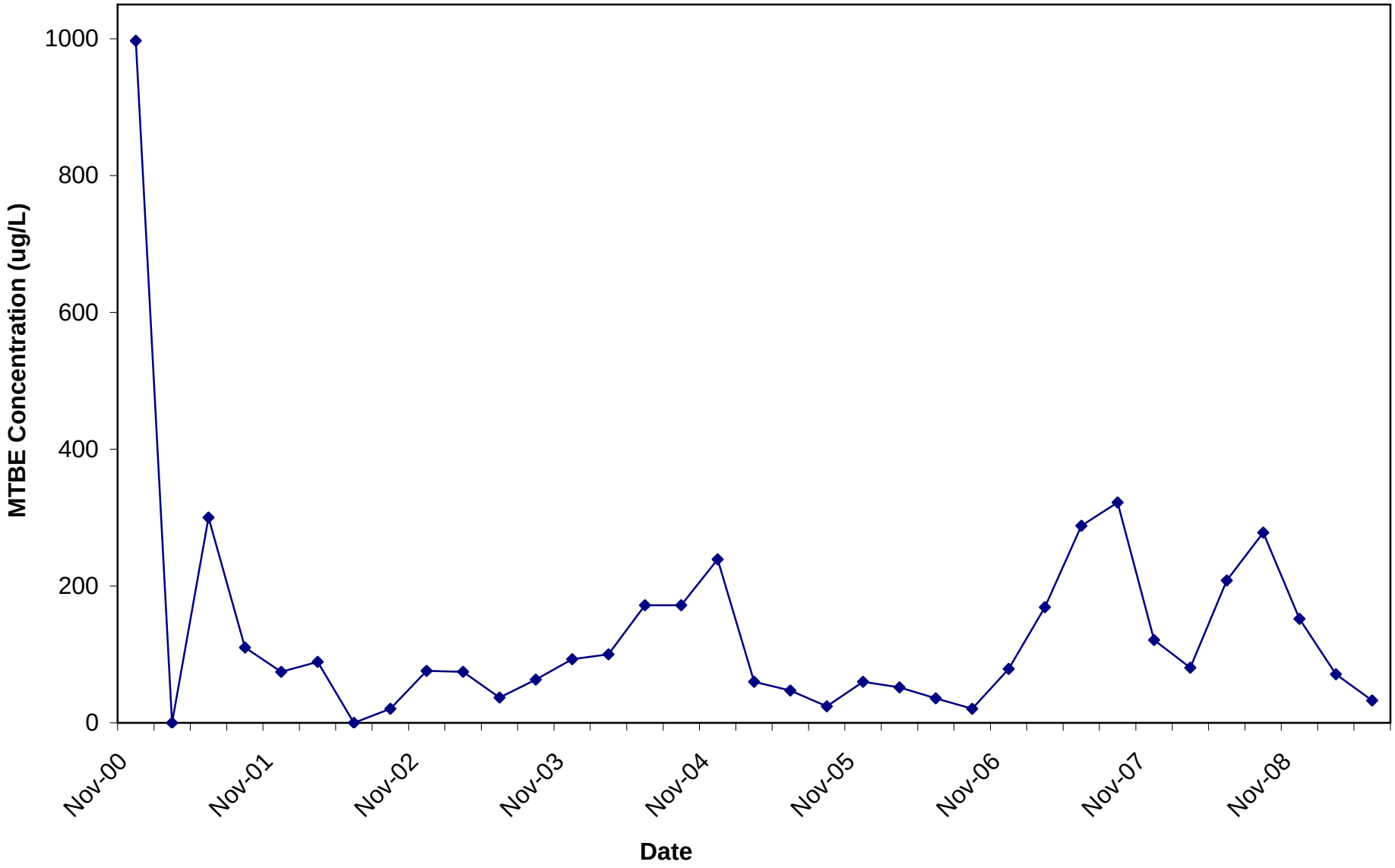


Figure 4-10
Monitoring Well 16MW-15
MTBE Concentration Trend
NWS Earle, New Jersey

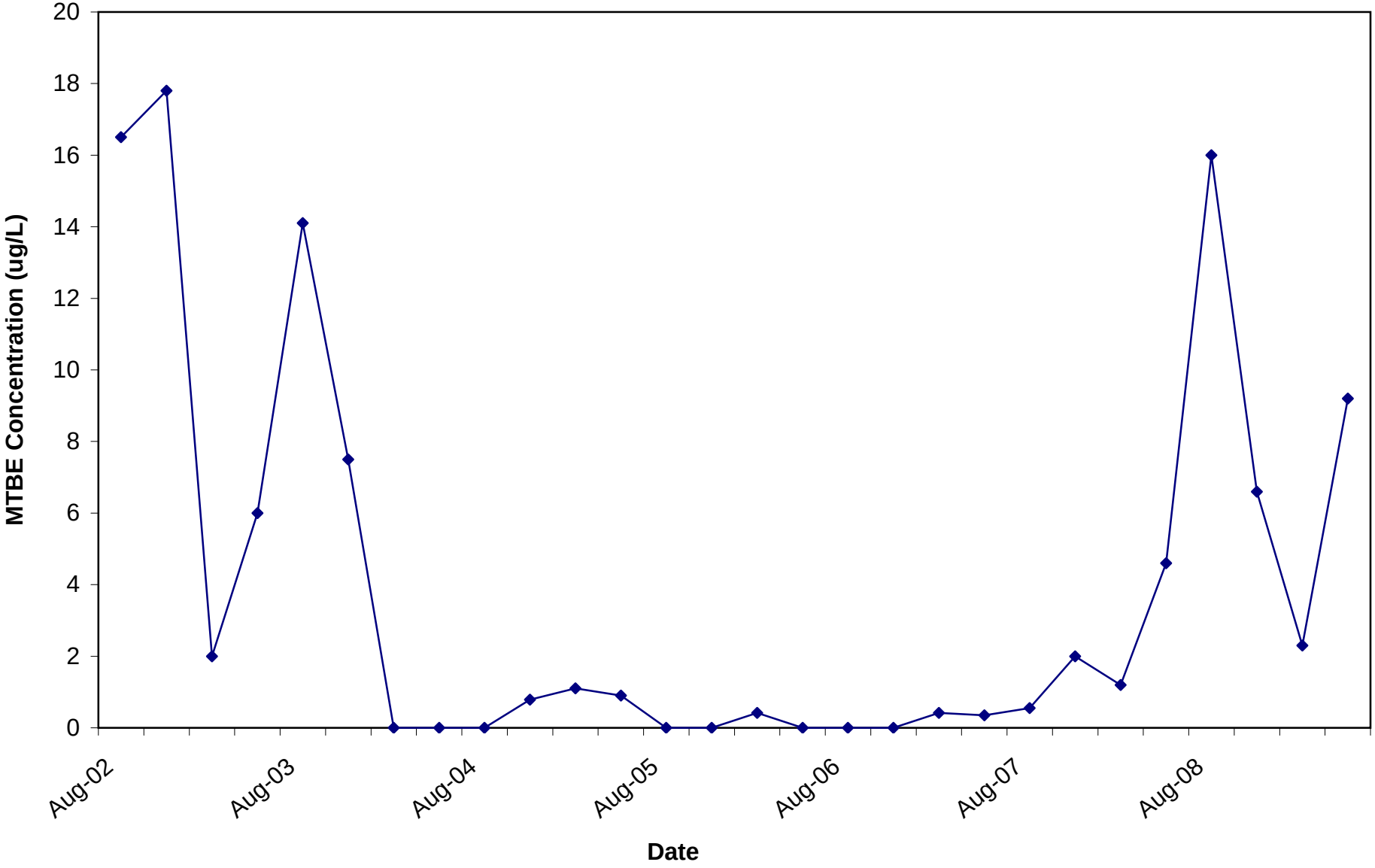


Figure 4-11
Monitoring Well 16MW-24
MTBE Concentration Trend
NWS Earle, New Jersey

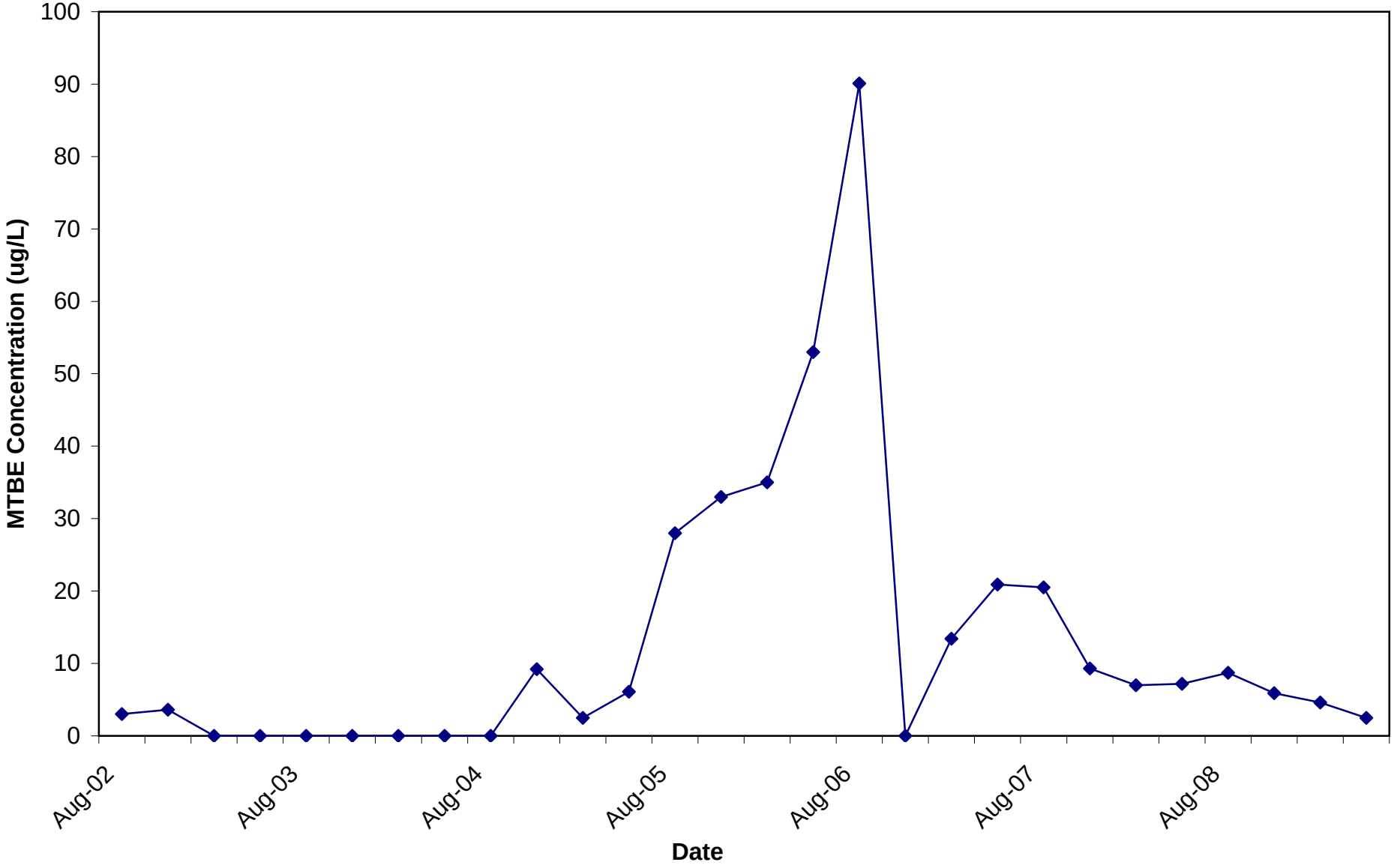


Figure 4-12
Benzene Concentration Transect
Year 11
NWS Earle, New Jersey

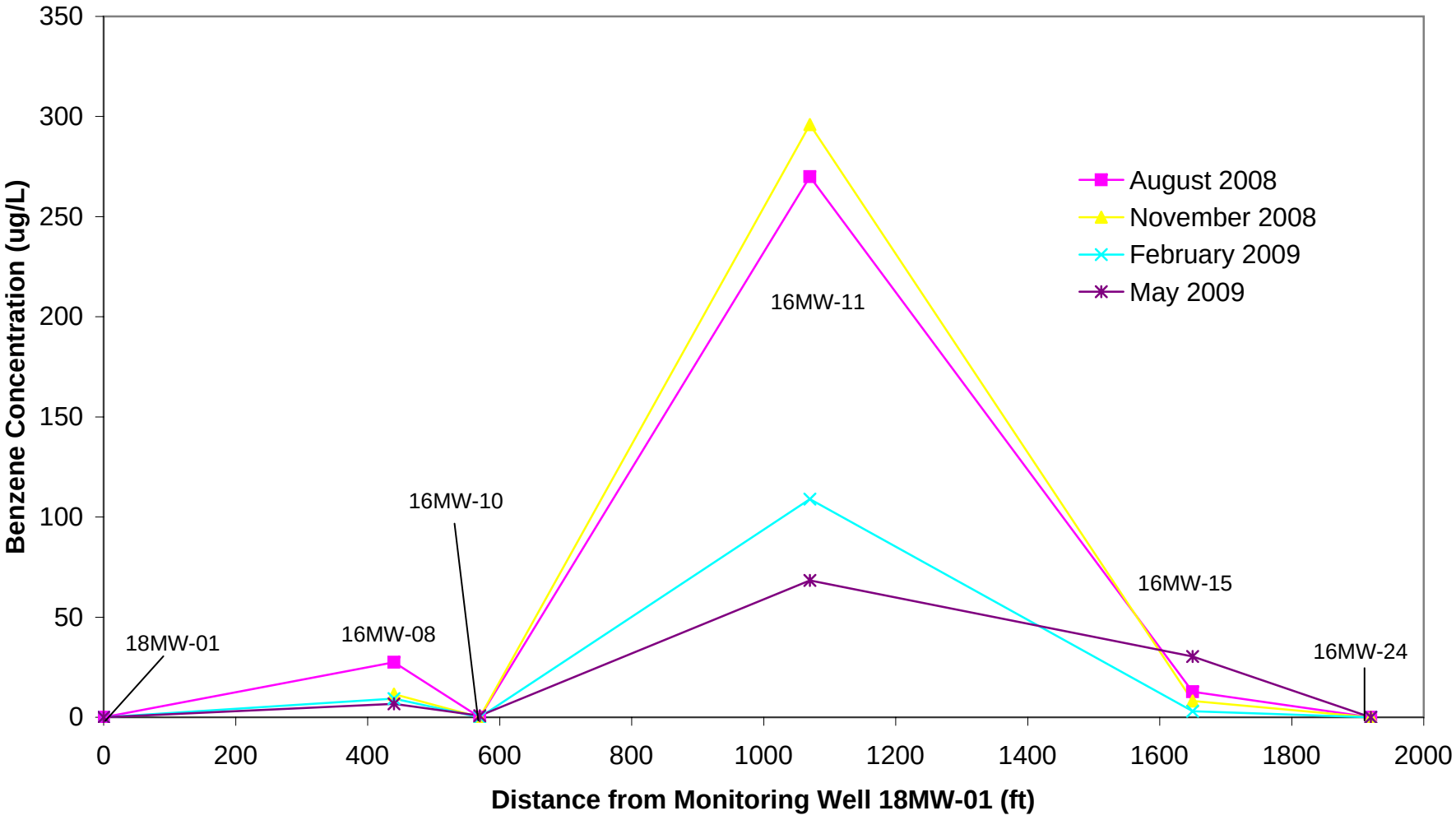
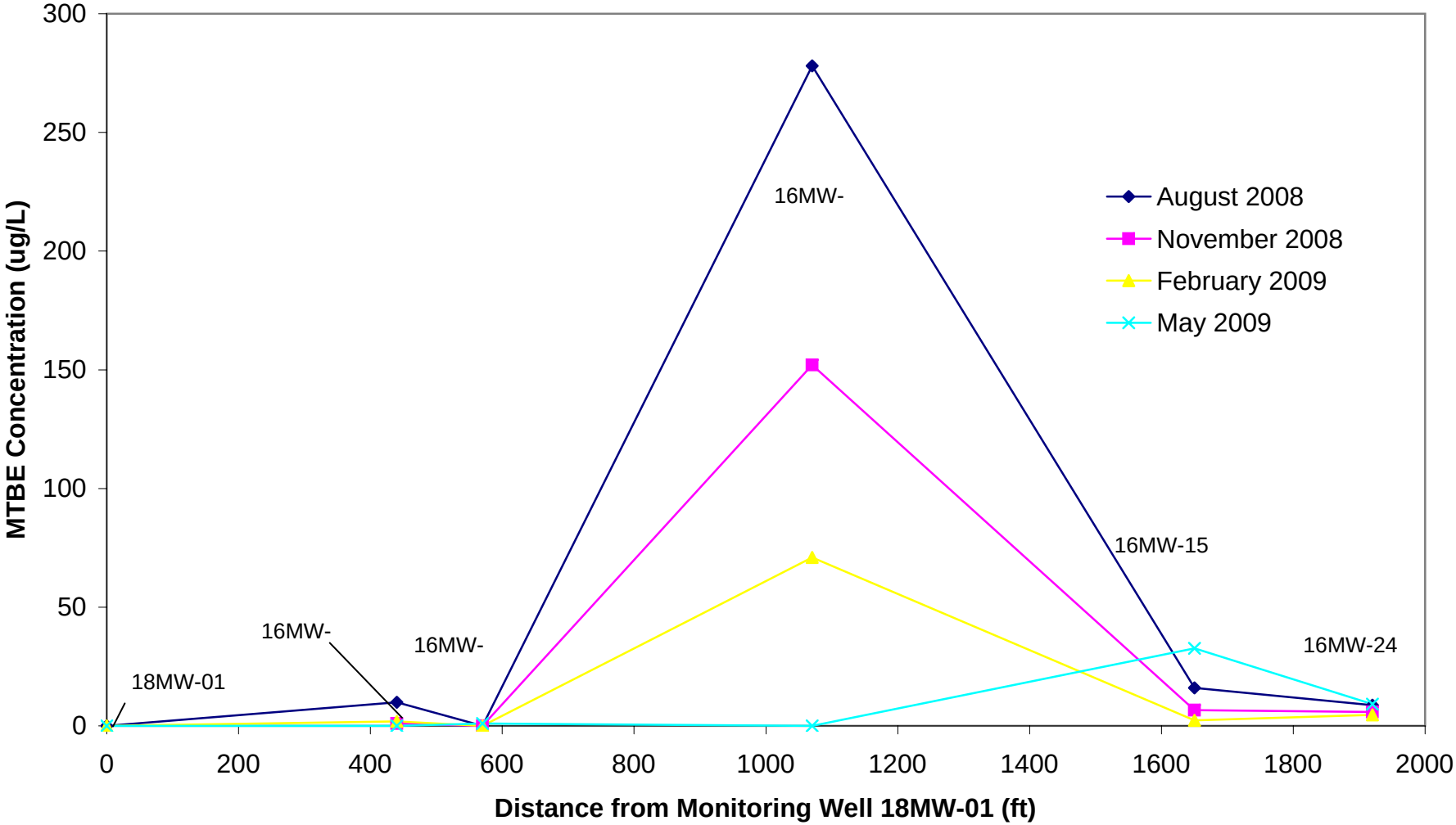


Figure 4-13
MTBE Concentration Transect
Year 11



APPENDICES

APPENDIX A

VALIDATED DATA AND VALIDATION REPORTS

Project: Earle Long Term Monitoring
Laboratory: Analytical Laboratory Services, Inc.
Sample Delivery Group: EWN016/EWN017
Fraction: Organic
Matrix: Aqueous
Report Date: 10/18/2008

This analytical quality assurance report is based upon a review of analytical data generated for groundwater samples. The sample locations, laboratory identification numbers, sample collection dates, sample matrix, and analyses performed are presented in Table 1.

The samples were analyzed for volatile organic compounds: benzene toluene, ethylbenzene, xylene, and methyl-tert-butyl ether and semivolatile organic compound, naphthalene. The sample analyses were performed in accordance with the procedures outlined in "40 CFR Part 136".

All sample analyses have undergone an analytical quality assurance review to ensure adherence to the required protocols. Results have been validated or qualified according to general guidance provided in the Region III modifications to "Laboratory Data Validation Functional Guidelines for Validating Organic Analyses", USEPA 9/94. This document specifies procedures for validating data generated for CLP analyses. Therefore, the quality control requirements specified in the methods and associated acceptance criteria were also used to evaluate the non-CLP data. The parameters presented on the following page were evaluated.

X	•	Data Completeness
X	•	Chain of Custody Documentation
X	•	Holding Times
X	•	Instrument Performance
X	•	Initial and Continuing Calibration Summaries
X	•	Laboratory and Field Blank Analysis Results
X	•	Surrogate Compound Recoveries
X	•	Matrix Spike/Matrix Spike Duplicate Recoveries and Reproducibility
X	•	Field Duplicate Analysis Results
X	•	Laboratory Control Sample Results
X	•	Internal Standard Performance
X	•	Qualitative Identification
X	•	Quantitation/Reporting Limits

X - Denotes parameter evaluated.

It is recommended that the data only be used according to the qualifiers presented, and discussed in this report. All other data should be considered qualitatively and quantitatively valid as reported by the laboratory, based on the items evaluated.

Report Approved By:

Shawne M. Rodgers
President

10/18/2008
Date

1.0 *DATA COMPLETENESS*

The data package was complete.

2.0 *CHAIN OF CUSTODY DOCUMENTATION*

The chain of custody documentation was complete.

3.0 *HOLDING TIMES*

All criteria were met. No qualifiers were applied.

4.0 *INSTRUMENT PERFORMANCE*

All criteria were met. No qualifiers were applied.

5.0 *INITIAL AND CONTINUING CALIBRATIONS*

All criteria were met. No qualifiers were applied.

6.0 *LABORATORY AND FIELD BLANK ANALYSIS RESULTS*

All criteria were met. No qualifiers were applied.

7.0 *SURROGATE COMPOUNDS*

All criteria were met. No qualifiers were applied.

8.0 *MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND REPRODUCIBILITY*

All criteria were met. No qualifiers were applied.

9.0 *FIELD DUPLICATE RESULTS*

Duplicate samples 16-MW-10 and DUP-1 were submitted to the laboratory to evaluate sampling and analytical precision for those organic compounds determined to be present. Results for the duplicate samples are presented in Table 2. Precision is evaluated by calculating the relative percent difference (%RPD) between duplicate pair results. There are no USEPA-established acceptance criteria for field duplicate samples. EDQ uses internal acceptance criteria of twenty percent for volatile detected compounds (and 25 percent for extractable compounds) to evaluate field duplicate samples.

10.0 *LABORATORY CONTROL SAMPLE RESULTS*

All criteria were met. No qualifiers were applied.

11.0 *INTERNAL STANDARD PERFORMANCE*

All criteria were met. No qualifiers were applied.

12.0 *QUALITATIVE IDENTIFICATION*

All criteria were met. No qualifiers were applied.

13.0 *QUANTITATION/REPORTING LIMITS*

As required by USEPA protocol, all compounds, which were qualitatively identified at concentrations below their respective Quantitation Limits (QLs), have been marked with "J" qualifiers to indicate that they are quantitative estimates.

METHODOLOGY REFERENCES

Analysis	Reference
Volatile Organic Compounds	Method 624, "40 CFR Part 136
Semivolatile Organic Compounds	Method 625, "40 CFR Part 136

Table 1 Samples For Data Validation Review
Earle Long Term Monitoring
Groundwater Samples Collected August 2008
Analytical Laboratory Services Sample Delivery Group EWN 016

Sample Location	Laboratory ID		Date Collected	Matrix	Analyses Performed	
					VOC	SVOC
16-MW-15	9751122	001	8/20/2008	Groundwater	X	
16-MW-25	9751122	002	8/20/2008	Groundwater	X	
16-MW-24	9751122	003	8/20/2008	Groundwater	X	
FB-1	9751122	004	8/20/2008	Field Blank	X	X
16-MW-11	9751122	005	8/20/2008	Groundwater	X	X
TB-1	9751122	006	8/21/2008	Trip Blank	X	
16-SW-01	9751122	007	8/20/2008	Groundwater	X	
16-SW-02	9751122	008	8/20/2008	Groundwater	X	

VOC Methyl tert-butyl Ether, Benzene, Toluene, Ethylbenzene, Total Xylenes
SVOC Naphthalene

Table 2 **Field Duplicate Sample Results for Organic Analyses**
Duplicate Samples 16-MW-10 and DUP-1

	16-MW-10 (µg/L)		DUP-1 (µg/L)		RPD	Comments
m/p-Xylenes	0.3	J	0.5	J	28	
Naphthalene	1.6	J	2.2	J	32	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

FB-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082952

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMI 10/24/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-15

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082953

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	12.7	
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	0.62	J
108383/106423	mp-Xylene	0.73	J
1330-20-7	Total Xylenes	1.3	J
1634-04-4	Methyl t-Butyl Ether	16.0	

FORM I VOA

SMM 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-25

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082954

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

| 16-MW-24 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082955

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	8.7	

FORM I VOA

SMM 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082956

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	270	
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	278	

FORM I VOA

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-SW-01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082957

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	5.0	U

FORM I VOA

SMY 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-SW-02

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3082958

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: not dec. _____ Date Analyzed: 08/30/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	5.0	U

FORM I VOA

SMJ 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122004

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 6082729

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/25/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 08/27/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	3.2	U

FORM I SV

SMM 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN016

Matrix: (soil/water) WATER Lab Sample ID: 9751122005

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 6082730

Level: (low/med) LOW Date Received: 08/21/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/25/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 08/27/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.1	J

FORM I SV

SMM 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090229

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

0050

SMM 10/17/2008

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

| FB-2 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090230

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SM 10/17/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-08

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090231

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	27.5	
100-41-4	Ethylbenzene	3.2	
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	0.88	J
1330-20-7	Total Xylenes	0.88	J
1634-04-4	Methyl t-Butyl Ether	9.9	

FORM I VOA

SMM 10/17/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

| 16-MW-10 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090232

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	0.34	J
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 10/17/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

18-MW-01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090233

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 09/17/2008

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3090234

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: not dec. _____ Date Analyzed: 09/03/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	0.45	J
1330-20-7	Total Xylenes	0.45	J
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

Smith 10/17/2008

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

DUP-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384005

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 6082707

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/26/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 08/27/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	2.2	J

FORM I SV

SMM 10/17/2008

0084

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| 16-MW-08 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 60903A26

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/28/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/04/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	10.9	

FORM I SV

SMK 10/14/2008

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-10

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384002

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 60903A27

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/28/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/04/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.6	J

FORM I SV

SMM 10/17/2008

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384003

Sample wt/vol: 920.0 (g/mL) ML Lab File ID: 60903A30

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/28/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/04/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	3.3	U

FORM I SV

smk 10/17/08

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

18-MW-01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN017

Matrix: (soil/water) WATER Lab Sample ID: 9751384004

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 60903A31

Level: (low/med) LOW Date Received: 08/22/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/28/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/04/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	2.9	U

FORM I SV

Smk 10/17/2008

Project: Earle Long Term Monitoring
Laboratory: Analytical Laboratory Services, Inc.
Sample Delivery Group: EWN019
Fraction: Organic
Matrix: Aqueous
Report Date: 2/11/2009

This analytical quality assurance report is based upon a review of analytical data generated for groundwater samples. The sample locations, laboratory identification numbers, sample collection dates, sample matrix, and analyses performed are presented in Table 1.

The samples were analyzed for volatile organic compounds: benzene toluene, ethylbenzene, xylene, and methyl-tert-butyl ether and semivolatile organic compound, naphthalene. The sample analyses were performed in accordance with the procedures outlined in "40 CFR Part 136".

All sample analyses have undergone an analytical quality assurance review to ensure adherence to the required protocols. Results have been validated or qualified according to general guidance provided in the Region III modifications to "Laboratory Data Validation Functional Guidelines for Validating Organic Analyses", USEPA 9/94. This document specifies procedures for validating data generated for CLP analyses. Therefore, the quality control requirements specified in the methods and associated acceptance criteria were also used to evaluate the non-CLP data. The parameters presented on the following page were evaluated.

X	•	Data Completeness
X	•	Chain of Custody Documentation
X	•	Holding Times
X	•	Instrument Performance
X	•	Initial and Continuing Calibration Summaries
X	•	Laboratory and Field Blank Analysis Results
X	•	Surrogate Compound Recoveries
X	•	Matrix Spike/Matrix Spike Duplicate Recoveries and Reproducibility
X	•	Field Duplicate Analysis Results
X	•	Laboratory Control Sample Results
X	•	Internal Standard Performance
X	•	Qualitative Identification
X	•	Quantitation/Reporting Limits

X - Denotes parameter evaluated.

It is recommended that the data only be used according to the qualifiers presented, and discussed in this report. All other data should be considered qualitatively and quantitatively valid as reported by the laboratory, based on the items evaluated.

Report Approved By:

Shawne M. Rodgers
President

2/11/2009
Date

1.0 DATA COMPLETENESS

The data package was complete.

2.0 CHAIN OF CUSTODY DOCUMENTATION

The chain of custody documentation was complete.

3.0 HOLDING TIMES

All criteria were met. No qualifiers were applied.

4.0 INSTRUMENT PERFORMANCE

All criteria were met. No qualifiers were applied.

5.0 INITIAL AND CONTINUING CALIBRATIONS

All criteria were met. No qualifiers were applied.

6.0 LABORATORY AND FIELD BLANK ANALYSIS RESULTS

All criteria were met. No qualifiers were applied.

7.0 SURROGATE COMPOUNDS

All criteria were met. No qualifiers were applied.

8.0 *MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND REPRODUCIBILITY*

All criteria were met. No qualifiers were applied.

9.0 *FIELD DUPLICATE RESULTS*

Duplicate samples 16-MW-11 and DUP-2 were submitted to the laboratory to evaluate sampling and analytical precision for those organic compounds determined to be present. Results for the duplicate samples are presented in Table 2. Precision is evaluated by calculating the relative percent difference (%RPD) between duplicate pair results. There are no USEPA-established acceptance criteria for field duplicate samples. EDQ uses internal acceptance criteria of twenty percent for volatile detected compounds (and 25 percent for extractable compounds) to evaluate field duplicate samples.

10.0 *LABORATORY CONTROL SAMPLE RESULTS*

All criteria were met. No qualifiers were applied.

11.0 *INTERNAL STANDARD PERFORMANCE*

All criteria were met. No qualifiers were applied.

12.0 *QUALITATIVE IDENTIFICATION*

The benzene result for sample DUP-2 should be considered a quantitative estimate. The response for this compound exceeded the linear range of the GC/MS instrument for the initial undiluted analysis. The laboratory re-analyzed the sample at a five-fold dilution. The dilutions resulted in responses for affected compound below detectable levels. The affected compound result has been marked with a "J" qualifier to indicate that it is a quantitative estimate.

The following samples dilutions for volatile organic compounds. The dilution analysis was performed because of suspected high concentrations of target compounds and/or interferences. Quantitation limits elevated by the dilution factor have resulted for those compounds that were not detected. This should be noted when assessing the data.

Sample	Dilution Factor
16-SW-01	5.0
16-SW-02	5.0
16-MW-11	5.0

13.0 QUANTITATION/REPORTING LIMITS

As required by USEPA protocol, all compounds, which were qualitatively identified at concentrations below their respective Quantitation Limits (QLs), have been marked with "J" qualifiers to indicate that they are quantitative estimates.

METHODOLOGY REFERENCES

Analysis	Reference
Volatile Organic Compounds	Method 624, "40 CFR Part 136
Semivolatile Organic Compounds	Method 625, "40 CFR Part 136

Table 2 **Field Duplicate Sample Results for Organic Analyses**
Duplicate Samples 16-MW-11 and DUP-2

	16-MW-11 (µg/L)		DUP-2 (µg/L)		RPD	Comments
Benzene	296		321	J	8	
Methyl tert-Butyl Ether	152		157		3	
Naphthalene	1.6	j	1.1	J	37	

Table 1 Samples For Data Validation Review
Earle Landfill Monitoring
Groundwater and Surface Water Samples Collected November 2008
Analytical Laboratory Services, Inc. Sample Delivery Group EWN 019

Sample Location	Laboratory ID		Date Collected	Matrix	Analyses Performed	
					VOC	SVOC
16-MW-08	9764554	1	11/6/2008	Groundwater	X	X
16-MW-10	9764554	2	11/6/2008	Groundwater	X	X
16-MW-11	9764554	3	11/6/2008	Groundwater	X	X
16-MW-15	9764554	4	11/6/2008	Groundwater	X	
16-MW-24	9764554	5	11/6/2008	Groundwater	X	
16-MW-25	9764554	6	11/6/2008	Groundwater	X	
18-MW-01	9764554	7	11/6/2008	Groundwater		X
DUP-2	9764554	8	11/6/2008	Groundwater	X	X
16-SW-01	9764554	9	11/6/2008	Surface Water	X	
16-SW-02	9764554	10	11/6/2008	Surface Water	X	
FB-2	9764554	11	11/6/2008	Field Blank	X	X

VOC Methyl tert-butyl Ether, Benzene, Toluene, Ethylbenzene, total Xylenes
SVOC Naphthalene

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FB-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111024

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/11/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

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FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-08

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111032

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/11/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	11.6	
100-41-4	Ethylbenzene	4.4	
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	0.50	J
1330-20-7	Total Xylenes	0.50	J
1634-04-4	Methyl t-Butyl Ether	0.95	J

FORM I VOA

SMM 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

| 16-MW-15 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111033

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/11/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	8.1	
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	0.41	J
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	0.41	J
1634-04-4	Methyl t-Butyl Ether	6.6	

FORM I VOA

SMT 2/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-24

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111034

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	5.9	

SMM 5/9/2008

FORM I VOA

0049

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-SW-02

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111036

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	5.4	

FORM I VOA

SMM 3/9/2009

FORM 1

VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

16-SW-01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111037

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	5.0	U

FORM I VOA

SMM 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111038

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	296	
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	152	

FORM I VOA

SMM 3/19/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-25

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111127

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 5/9/2009

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

| 16-MW-10 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111128

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

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SMM 5/9/2009

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

| DUP-2 |

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111035

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	321	~~E~~ J
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	157	

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Report

FORM I VOA

SMM 6/9/2009

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

DUP-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3111131

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: not dec. _____ Date Analyzed: 11/12/08

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	5.0	U

FORM I VOA

SMM 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554008

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 6111309

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/13/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.1	J

FORM I SV

SMM 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554003

Sample wt/vol: 920.0 (g/mL) ML Lab File ID: 6111310

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/14/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.6	J

FORM I SV

5/19/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554011

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 6111313

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/14/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.6	U

FORM I SV

5mm 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

18-MW-01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554007

Sample wt/vol: 1030 (g/mL) ML Lab File ID: 6111314

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/14/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.5	U

FORM I SV

SMM 5/9/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-10

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554002

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 6111315

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/14/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	0.84	J

FORM I SV

SMM 5/19/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-08

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: EWN019

Matrix: (soil/water) WATER Lab Sample ID: 9762554001

Sample wt/vol: 860.0 (g/mL) ML Lab File ID: 6111316

Level: (low/med) LOW Date Received: 11/07/08

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/10/08

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/14/08

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.1	

FORM I SV

Project: Earle Long Term Monitoring
Laboratory: Analytical Laboratory Services, Inc.
Sample Delivery Group: EWN021
Fraction: Organic
Matrix: Aqueous
Report Date: 4/22/2009

This analytical quality assurance report is based upon a review of analytical data generated for groundwater samples. The sample locations, laboratory identification numbers, sample collection dates, sample matrix, and analyses performed are presented in Table 1.

The samples were analyzed for volatile organic compounds: benzene toluene, ethylbenzene, xylene, and methyl-tert-butyl ether, and semivolatile organic compound: naphthalene. The sample analyses were performed in accordance with the procedures outlined in "40 CFR Part 136".

All sample analyses have undergone an analytical quality assurance review to ensure adherence to the required protocols. Results have been validated or qualified according to general guidance provided in the Region III modifications to "Laboratory Data Validation Functional Guidelines for Validating Organic Analyses", USEPA 9/94. This document specifies procedures for validating data generated for CLP analyses. Therefore, the quality control requirements specified in the methods and associated acceptance criteria were also used to evaluate the non-CLP data. The parameters presented on the following page were evaluated.

X	•	Data Completeness
X	•	Chain of Custody Documentation
X	•	Holding Times
X	•	Instrument Performance
X	•	Initial and Continuing Calibration Summaries
X	•	Laboratory and Field Blank Analysis Results
X	•	Surrogate Compound Recoveries
X	•	Matrix Spike/Matrix Spike Duplicate Recoveries and Reproducibility
X	•	Field Duplicate Analysis Results
X	•	Laboratory Control Sample Results
X	•	Internal Standard Performance
X	•	Qualitative Identification
X	•	Quantitation/Reporting Limits

X - Denotes parameter evaluated.

It is recommended that the data only be used according to the qualifiers presented, and discussed in this report. All other data should be considered qualitatively and quantitatively valid as reported by the laboratory, based on the items evaluated.

Report Approved By:

Shawne M. Rodgers
President

4/22/2009
Date

1.0 DATA COMPLETENESS

The data package was complete.

2.0 CHAIN OF CUSTODY DOCUMENTATION

The chain of custody documentation was complete.

3.0 HOLDING TIMES

All criteria were met. No qualifiers were applied.

4.0 INSTRUMENT PERFORMANCE

All criteria were met. No qualifiers were applied.

5.0 INITIAL AND CONTINUING CALIBRATIONS

All criteria were met. No qualifiers were applied.

6.0 LABORATORY AND FIELD BLANK ANALYSIS RESULTS

All criteria were met. No qualifiers were applied.

7.0 SURROGATE COMPOUNDS

All criteria were met. No qualifiers were applied.

8.0 *MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND REPRODUCIBILITY*

All criteria were met. No qualifiers were applied.

9.0 *FIELD DUPLICATE RESULTS*

Duplicate samples 16-MW-08 and DUP-1 were submitted to the laboratory to evaluate sampling and analytical precision for those organic compounds determined to be present. Results for the duplicate samples are presented in Table 2. Precision is evaluated by calculating the relative percent difference (%RPD) between duplicate pair results. There are no USEPA-established acceptance criteria for field duplicate samples. EDQ uses internal acceptance criteria of twenty percent for volatile detected compounds (and 25 percent for extractable compounds) to evaluate field duplicate samples.

10.0 *LABORATORY CONTROL SAMPLE RESULTS*

All criteria were met. No qualifiers were applied.

11.0 *INTERNAL STANDARD PERFORMANCE*

All criteria were met. No qualifiers were applied.

12.0 *QUALITATIVE IDENTIFICATION*

The following samples dilutions for volatile organic compounds. The dilution analysis was performed because of suspected high concentrations of target compounds and/or interferences. Quantitation limits elevated by the dilution factor have resulted for those compounds that were not detected. This should be noted when assessing the data.

Sample	Dilution Factor
16-MW-11	5.0

13.0 *QUANTITATION/REPORTING LIMITS*

As required by USEPA protocol, all compounds, which were qualitatively identified at concentrations below their respective Quantitation Limits have been marked with "J" qualifiers to indicate that they are quantitative estimates.

METHODOLOGY REFERENCES

Analysis	Reference
Volatile Organic Compounds	Method 624, "40 CFR Part 136
Semivolatile Organic Compounds	Method 625, "40 CFR Part 136

Table 1 Samples For Data Validation Review
Earle Long Term Monitoring
Groundwater and Surface Water Samples Collected February 2009
Analytical Laboratory Services, Inc. Sample Delivery Group EWN 021

Sample Location	Laboratory ID	Date Collected	Matrix	Analyses Performed	
				VOC	SVOC
16-MW-08	9774471001	2/4/2009	Groundwater	X	X
16-MW-10	9774471002	2/4/2009	Groundwater	X	X
16-MW-11	9774471003	2/3/2009	Groundwater	X	X
16-MW-15	9774471004	2/3/2009	Groundwater	X	
16-MW-24	9774471005	2/4/2009	Groundwater	X	
16-MW-25	9774471006	2/4/2009	Groundwater	X	
18-MW-01	9774471007	2/4/2009	Groundwater	X	X
DUP-1	9774471008	2/4/2009	Groundwater	X	X
16-SW-01	9774471009	2/3/2009	Surface Water	X	
16-SW-02	9774471010	2/3/2009	Surface Water	X	
FB-1	9774471011	2/3/2009	Field Blank	X	X
FB-2	9774471012	2/4/2009	Field Blank	X	X
TB-1	9774471013	2/5/2009	Trip Blank	X	

VOC Methyl tert-butyl Ether, Benzene, Toluene, Ethylbenzene, total Xylenes
SVOC Naphthalene

Table 2 **Field Duplicate Sample Results for Organic Analyses**
Groundwater Duplicate Samples 16-MW-08 and DUP-1

Analyte	Sample Result (µg/L)	Field Duplicate Result (µg/L)		RPD	ACTION
	16-MW-08	DUP-1			
Benzene	9.3	8.1		14	
Ethylbenzene	1.1	0.9	J	20	
mp-Xylene	3	2.1		35	
Total Xylenes	3	2.1	J	35	
Methyl t-Butyl Ether	1.9	1.6		17	
Naphthalene	30.6	26.8		13	

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-08

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020924

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	9.3	
100-41-4	Ethylbenzene	1.1	
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	3.0	
1330-20-7	Total Xylenes	3.0	
1634-04-4	Methyl t-Butyl Ether	1.9	

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SM 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-10

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020926

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	0.40	J
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

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SMM 11/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020933

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	90.3	
100-41-4	Ethylbenzene	5.0	U
108-88-3	Toluene	5.0	U
95-47-6	o-Xylene	5.0	U
108383/106423	mp-Xylene	10.0	U
1330-20-7	Total Xylenes	15.0	U
1634-04-4	Methyl t-Butyl Ether	59.0	

FORM I VOA

SMM 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-15

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020927

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	3.0	
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	0.71	J
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	0.71	J
1634-04-4	Methyl t-Butyl Ether	2.3	

FORM I VOA

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-24

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020928

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	4.6	

FORM I VOA

SMB 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-25

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020929

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

18-MW-01

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020930

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 4/20/2009

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

DUP-1

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020931

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	8.1	
100-41-4	Ethylbenzene	0.90	J
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.1	
1330-20-7	Total Xylenes	2.1	J
1634-04-4	Methyl t-Butyl Ether	1.6	

FORM I VOA

SWM 4/23/2009

FORM 1

VOLATILE ORGANICS ANALYSIS DATA SHEET

ECOR Solutions SAMPLE NO.

16-SW-01

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3020932

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/09/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMF 4/28/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-SW-02

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3021033

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/11/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.50	J
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	6.2	

FORM I VOA

SMK 2/12/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FB-1

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3021025

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/10/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

SMM 4/28/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FB-2

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3021026

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/10/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

0050

4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-1

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3021027

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/10/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	1.0	U

FORM I VOA

0035

FORM 1 ECOR Solutions SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3021119

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: not dec. _____ Date Analyzed: 02/11/09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	109	
107-06-2	1,2-Dichloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-88-3	Toluene	1.0	U
95-47-6	o-Xylene	1.0	U
108383/106423	mp-Xylene	2.0	U
91-20-3	Naphthalene	1.6	J
1330-20-7	Total Xylenes	3.0	U
1634-04-4	Methyl t-Butyl Ether	70.9	
98-82-8	Isopropylbenzene	0.52	J
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	2.0	U
104-51-8	n-Butylbenzene	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
75-65-0	tert.- Butyl Alcohol	4.8	J

FORM I VOA

SMG 02/12/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-1

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471011

Sample wt/vol: 920.0 (g/mL) ML Lab File ID: 60211A37

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/09/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/12/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.6	U

FORM I SV

SMM 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-1

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471008

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 6021322

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	26.8	

FORM I SV

SMM 12/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| 16-MW-08 |

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471001

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 6021323

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	30.6	

FORM I SV

SMK 1/28/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-10

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471002

Sample wt/vol: 1050 (g/mL) ML Lab File ID: 6021326

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	0.51	J

FORM I SV

SMH 1/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

18-MW-01

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471007

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 6021327

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.4	U

FORM I SV -

SMM 4/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

16-MW-11

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471003

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 6021328

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.1	J

FORM I SV

SMK 1/20/2009

FORM 1 ECOR Solutions SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-2

Lab Name: ALSI Contract:

Lab Code: PA-010 Case No.: SAS No.: SDG No.: EWN021

Matrix: (soil/water) WATER Lab Sample ID: 9774471012

Sample wt/vol: 860.0 (g/mL) ML Lab File ID: 6021329

Level: (low/med) LOW Date Received: 02/05/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:02/11/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/09

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	1.7	U

FORM I SV

SMM 4/20/2009

APPENDIX B

FIELD DATA LOGS

ECOR Solutions Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWS Earle
Location: Earle, NJ
Weather Conditions: Cool, clear, ~ 68°F
Tidally Influenced: Yes ___ No X

Project No.: N0150.502
Personnel: GF, JG
Measuring Device: Interface Probe Solinist
Remarks:

Monitoring Well ID	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Depth to Water (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
29-MW-01	8/20/08	0940			10.58			
16-MW-17		0925			4.94			
16-MW-16		0930			4.98			
16-MW-02		0903			7.33			
16-MW-24		0840			4.70			
16-MW-15		0950			4.60			
16-MW-25		0845			8.10			
16-MW-11		0945			3.95			
16-MW-04		0915			9.04	9.03		
16-MW-05	0850	0850			11.59	11.52		
18-MW-01		0908			10.09			
16-MW-08		0855			12.50			
16-MW-10		0900			9.58			

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

page ___ of ___

Project Site Name: NWS Earle
Project No.: N0150.502

Sample ID No.: 16-MW-15
Sample Location: Earle, NJ
Sampled By: GE, JEG

SAMPLING DATA:	FINAL VALUES:						
Date: 8/20/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1110							
Purge Method: low flow;	clear	~~7.95~~	0.192	25.2	0.27	18.05	28.2

PURGE DATA: micropurge coloness 4.67

Date: 8/20/08
Purge Method: micropurge
PID Reading (ppm): ——
Well Casing Diameter & Material: 1" PVC
Total Well Depth (TD):
Static Water Level (DTW): 4.60
Static Product Level (DTP) ——
One Casing Volume (gal): ——
Start Purge (hrs): ~~0845~~ 0950
End Purge (hrs): 1110
Total Purge Time (min): 1hr 20min
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624+MTBE	HCl	40 ml CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Grace Fitch

PURGE DATA SHEET

Date: 8/20/08

Sample ID No.: 16-MW-15

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
~~0755~~ ~~0855~~	0955	50	4.92	0.208	81.2	16.42	20.17	158.7	
~~0955~~	1000		4.76	0.202	104.2	7.91	19.44	158.4	
1005			4.68	0.195	221	3.40	18.55	147.2	
1010			4.66	0.196	219	2.02	18.36	131.0	
1015 ~~1010~~			4.64	0.194	183	1.47	18.30	113.6	
1020 ~~1015~~			4.63	0.194	165	1.02	18.28	95.5	
1025			4.62	0.193	147	0.96	18.24	84.7	
1030			4.59	0.194	92.9	0.69	18.00	59.4	
1035			4.59	0.192	73.2	0.55	17.81	50.6	
1040			4.62	0.191	53.6	0.44	17.71	39.7	
1045			4.64	0.192	44.2	0.39	17.80	36.9	
1050			4.68	0.190	38.3	0.35	17.71	33.9	
1055			4.70	0.192	32.8	0.31	17.76	34.2	
1100			4.66	0.190	27.2	0.27	17.76	33.8	
1105			4.66	0.190	25.4	0.26	17.85	31.7	
1110			4.67	0.192	25.2	0.27	18.05	28.2	

Signature(s): Grace Fitch

ECOR Solutions Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Nwos Earle
Project No.: N0150.502

Sample ID No.: 16-MW-25
Sample Location: Earle, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 8/20/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1200							
Purge Method: micropurge	clear colorless	4.08	0.063	17.4	3.90	14.19	118.3

PURGE DATA:

Date: 8/20/08
Purge Method: micropurge
PID Reading (ppm): —
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD):
Static Water Level (DTW): 8.10
Static Product Level (DTP) —
One Casing Volume (gal): —
Start Purge (hrs): 1025
End Purge (hrs): 1200
Total Purge Time (min): 35
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624 + MTBE	HCl	40 mL CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/20/08

Sample ID No.: 16-MW-25

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1030	8.10	355	4.14	0.065	36.5	7.13	14.44	138.7	
1035			4.06	0.063	33.0	3.75	14.34	125.7	
1040			4.05	0.063	22.0	3.61	14.23	119.0	
1045			4.05	0.062	25.7	3.74	14.14	116.7	
1050			4.06	0.063	18.4	3.80	14.17	115.0	
1155			4.07	0.063	18.9	3.95	14.23	116.9	
1200			4.08	0.063	17.4	3.90	14.19	118.3	

Signature(s): Grace Fitch

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle
Project No.: N0150.502

Sample ID No.: 16-MW-24
Sample Location: Earle, NJ
Sampled By: GF, JG

SAMPLING DATA:	FINAL VALUES:						
Date: 8/20/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1305							
Purge Method: micropurge	clear colorless	5.20	0.124	11.0	0.17	15.94	-187.7

PURGE DATA:

Date: 8/20/08
Purge Method: micropurge
PID Reading (ppm): —
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD):
Static Water Level (DTW): 4.70
Static Product Level (DTP) —
One Casing Volume (gal): —
Start Purge (hrs): 1240
End Purge (hrs): 1305
Total Purge Time (min): 55 min
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624 + MTBE	HCl	40mL CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/20/08

Sample ID No.: 16-MW-24

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1215	4.70	350	4.70	0.122	21.8	14.10	16.44	119.0	
1220			4.85	0.125	15.3	0.54	16.10	-48.8	
1225			4.94	0.123	11.8	0.41	15.85	-95.1	
1230			4.91	0.123	12.6	0.30	15.85	-119.8	
1235			4.97	0.124	11.4	0.23	16.02	-142.1	
1240			5.02	0.124	12.0	0.22	15.91	-155.4	
1245			5.03	0.125	12.3	0.20	15.91	-164.4	
1250			5.08	0.123	12.0	0.18	15.92	-173.3	
1255			5.13	0.125	11.8	0.17	15.72	-180.6	
1300			5.15	0.125	11.5	0.17	15.75	-185.2	
1305			5.20	0.124	11.0	0.17	15.94	-187.7	

Signature(s): Drew Fitch

ECOR Solutions Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle
Project No.: N0150.502

Sample ID No.: 16-MW-11
Sample Location: Earle, NJ
Sampled By: GF, JG

SAMPLING DATA:	FINAL VALUES:						
Date: 8/20/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1435							
Purge Method: micropurge	clear, colorless	3.79	0.576	56.7	0.56	17.19	-106.8

PURGE DATA:

Date: 8/20/08
Purge Method: micropurge
PID Reading (ppm):
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD):
Static Water Level (DTW): 3.95
Static Product Level (DTP)
One Casing Volume (gal):
Start Purge (hrs): 1320
End Purge (hrs): 1435
Total Purge Time (min): 1hr 15 min
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624 + MTBE	HCl	40mL CG	2
625	Ø	1L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/20/08

Sample ID No.: 16-MW-11

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1320		240	4.11	0.399	586	3.90	15.64	54.3	
1325			3.96	0.492	604	1.26	15.32	-13.4	
1330			3.89	0.499	591	0.84	15.21	-56.2	
1335			3.88	0.504	489	0.35	15.00	-85.3	
1340			3.85	0.506	411	0.23	14.84	-107.5	
1345									
1350									change tank
1355		400	3.85	0.495	220	0.29	14.68	-132.4	
1400			3.83	0.498	159	0.15	14.52	-146.9	
1405			3.80	0.513	93.1	0.18	14.64	-148.3	
1410			3.80	0.534	72.6	0.29	15.26	-140.2	
1415			3.79	0.551	63.9	0.43	15.88	-126.4	
1420			3.79	0.556	65.3	0.44	16.19	-117.7	
1425			3.80	0.569	60.5	0.57	16.81	-110.0	
1430			3.80	0.573	55.8	0.54	17.00	-107.8	
1435			3.79	0.576	56.7	0.56	17.19	-106.8	

Signature(s): Grace Fitch

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle
Project No.: N0150.502

Sample ID No.: 16-MW-08
Sample Location: Earle, NJ
Sampled By: GF, JG

SAMPLING DATA:

Date: 8/21/08
Time: 1017
Purge Method: micropurge

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
slightly cloudy	5.39	0.253	35.4	0.06	16.94	-200.4

PURGE DATA:

Date: 8/21/08
Purge Method: micropurge
PID Reading (ppm): ——
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): ——
Static Water Level (DTW): 12.50
Static Product Level (DTP) ——
One Casing Volume (gal): ——
Start Purge (hrs): 0812
End Purge (hrs): 1017
Total Purge Time (min): 2hr 5min
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
6024 + MTBE	HCl	40 mL CG	2
6025	Ø	1L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/21/08

Sample ID No.: 116-MW-08

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0817		410	4.35	0.083	>1200	0.45	18.01	125.1	
0822			4.27	0.066	943	0.22	17.33	88.2	
0827			4.65	0.061	817	0.19	17.13	4.0	
0832			4.75	0.063	443	0.16	17.04	-44.6	
0837			4.79	0.066	330	0.27	16.99	-15.8	
0842			4.78	0.066	304	0.14	16.98	-61.4	
0847			4.81	0.067	268	0.13	16.93	-81.8	
0852			4.86	0.074	170	0.12	16.95	-105.1	
0857			4.79	0.086	102.3	0.09	16.90	-119.4	
0902			4.79	0.096	92.2	0.09	16.89	-128.4	
0907			4.87	0.108	70.5	0.09	16.86	-139.2	
0912			4.92	0.124	75.0	0.07	16.86	-153.8	
0917			4.97	0.138	59.9	0.07	16.84	-163.9	
0922			4.99	0.148	50.2	0.07	16.85	-169.2	
0927			5.07	0.165	62.4	0.06	16.85	-178.4	
0932			5.10	0.175	56.6	0.06	16.86	-183.5	
0937			5.13	0.187	47.7	0.06	16.89	-184.7	
0942			5.16	0.198	42.4	0.06	16.91	-187.4	
0947			5.22	0.210	42.5	0.06	16.89	-190.7	
0952			5.25	0.223	38.0	0.06	16.88	-194.8	
0957			5.29	0.232	36.3	0.07	16.93	-194.7	
1002			5.33	0.238	35.1	0.05	16.95	-197.0	
1007			5.37	0.246	34.8	0.04	16.93	-199.7	
1012			5.38	0.249	35.9	0.05	16.94	-202.1	
1017			5.39	0.253	35.4	0.06	16.94	-200.4	

Signature(s): [illegible]

ECOR Solutions Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Qtrly LTM
Project No.: NJ152.502

Sample ID No.: 16 MW1D
Sample Location: Earle, NJ
Sampled By: GF, JCG

SAMPLING DATA:	FINAL VALUES:						
Date: 8/21/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time: 1120							
Purge Method: micropurge	clear	5.46	0.553	24.9	2.21	17.42	-185.9

PURGE DATA: color

Date: 8/21/08
Purge Method:
PID Reading (ppm): —
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): —
Static Water Level (DTW):
Static Product Level (DTP) —
One Casing Volume (gal): —
Start Purge (hrs): 0925
End Purge (hrs): 1120
Total Purge Time (min): 55 min
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624 + MTBE	HCl	40mL CG	2 × 4 = 8
625	Ø	1L AG	2 × 4 = 8

OBSERVATIONS/NOTES:

DUP-1 and MS/MSD collected

Circle if Applicable: MS/MSD

Duplicate ID No.: DUP-1

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/21/08

Sample ID No.: 16MW10

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1030	9.62	525	5.36	0.590	137	1.63	17.74	-40.9	
1035			5.50	0.586	202	1.95	17.58	-82.3	
1040			5.42	0.573	120	2.01	17.46	-124.6	
1045			5.40	0.556	66.4	2.15	17.51	-144.5	
1050			5.49	0.542	34.7	2.18	17.48	-158.8	
1055			5.49	0.540	35.6	2.19	17.41	-168.3	
1100			5.49	0.553	30.9	1.93	17.42	-175.1	
1105	9.55		5.44	0.551	28.9	2.07	17.35	-177.1	
1110			5.46	0.551	25.9	2.25	17.43	-182.6	
1115			5.46	0.552	25.0	2.10	17.46	-184.2	
1120			5.46	0.553	24.9	2.21	17.42	-185.9	

Signature(s): Grace Fitch

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle
Project No.: N0150.502

Sample ID No.: 18-MW-01
Sample Location: Earle, NJ
Sampled By: GF, JG

SAMPLING DATA:	FINAL VALUES:						
Date: 8/21/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/l)	Temp (°C)	ORP (MV)
Time:							
Purge Method: micropurge							

PURGE DATA:

Date: 8/21/08
Purge Method: micropurge
PID Reading (ppm): ——
Well Casing Diameter & Material: 4" Steel
Total Well Depth (TD):
Static Water Level (DTW): 10.09
Static Product Level (DTP) ——
One Casing Volume (gal): ——
Start Purge (hrs): 1148
End Purge (hrs):
Total Purge Time (min):
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
624+MTBE	HCl	40 mL CG	2
625	Ø	1L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Grace Fitch

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 8/21/08

Sample ID No.: 18-MW-01

Time (hrs)	Water Level (ft. below TOC)	Flow (mL/min)	pH (SU)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1153		440	5.40	0.222	32.6	4.90	16.08	4.5	
1158			5.33	0.201	20.4	1.49	15.82	-81.7	
1203			5.30	0.207	18.9	1.02	15.88	-94.6	
1208			5.28	0.209	14.6	0.40	15.90	-131.8	
1213			5.30	0.216	15.1	2.55	15.82	-143.2	
1218			5.31	0.215	14.3	2.51	15.82	-155.9	
1223			5.31	0.217	14.4	2.88	15.81	-158.6	
1228			5.33	0.218	13.9	3.09	15.83	-157.4	
1233			5.30	0.223	13.4	3.12	15.80	-155.7	
1238			5.29	0.221	13.5	3.09	15.79	-153.5	

Signature(s): Grace Fitch

ECOR Solutions Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	NWS Earle Quarterly LTM	Project No.:	N0150.502
Location:	Colts Neck, NJ	Personnel:	JG
Weather Conditions:		Measuring Device:	Solinst Interface Probe
Tidally Influenced:	Yes ___ No ___	Remarks:	

Monitoring Well ID	Date	Time	Total Well Depth (feet)*	Depth to Water (feet)*	Depth to Free Product (feet)*	PID (ppm)	Comments
16-MW-04	11/6/08	0730	16.30	8.91	8.90		
16-MW-05		0735	20.13	11.46			
16-MW-08		1125	19.30	12.13	—		
16-MW-10		1055	18.92	8.80	—		
16-MW-11		0745	15.31	2.73	—		
16-MW-15		0905	11.21	3.42	—		
16-MW-24		0755	16.80	3.60	—		
16-MW-25		0910	18.65	6.64	—		
18-MW-01		1015	19.80	10.10	—		
					—		
16-MW-02		1130	16.90	6.93	—		
16-MW-16		1015	19.69	3.82	—		
16-MW-17		0900	12.80	3.82	—		
29-MW-01		1005	17.73	9.33	—		

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-24
Sample Location: Along edge of marsh/woods
Sampled By: MM

SAMPLING DATA:

Date: 11/6/08
Time: 0840
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (%) ~~(mg/L)~~	Temp (°C)	ORP (MV)
Clear	4.29	0.130	1.13	2.6	14.27	46.7

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ——
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 16.80
Static Water Level (DTW): 3.60
Static Product Level (DTP) ——
One Casing Volume (gal): —— ---
Start Purge (hrs): 0800
End Purge (hrs): 0840
Total Purge Time (min): 40 min
Total Vol. Purged (gal/L): ~5 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16-MW-24

Time	Water Level	Flow	pH	Cond.	Turb.	DO (%) ~~(mg/L)~~	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)		(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0805	3.6	530	4.17	0.200	1.3	10.0	14.22	88.7	
0810	3.5		4.25	0.138	13.8	15.1	14.23	79.[illegible]	
0815	3.55		4.50	0.173	12.5	18.5	14.23	80.6	
0820	3.65		4.27	0.111	6.38	9.4	14.24	65.0	
0825	3.5		4.44	0.135	3.58	3.5	14.24	56.7	
0830	3.54		4.20	0.142	2.10	3.1	14.25	46.7	
0835	3.6		4.21	0.128	1.42	2.5	14.26	46.7	
0840	3.5		4.29	0.130	1.13	2.6	14.27	46.7	

Signature(s): [illegible]

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-11
Sample Location: In woods
Sampled By: JG

SAMPLING DATA:	FINAL VALUES:						
Date: 11/6/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 0915							
Purge Method: Low Flow	clear	3.89	0.550	17.8	0.30	14.14	318.7

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ——
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 15.31
Static Water Level (DTW): 2.73
Static Product Level (DTP) ——
One Casing Volume (gal): —— ---
Start Purge (hrs): 0745
End Purge (hrs): 0915
Total Purge Time (min): 90
Total Vol. Purged (gal/L): ~10 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2 x 4 = 8
Naphthalene (Method 625)	---	1 L AG	2 x 4 = 8

OBSERVATIONS/NOTES:

Collect 16-SW-01 @ 0845
16-SW-02 @ 0850

Circle if Applicable:
MS/MSD
Duplicate ID No.: DUP-2

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16-MW-11

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0730		440	3.50	0.54	>1200	3.68	15.03	290.6	
0735	1.36		3.52	0.532	>1200	1.26	14.12	298.9	
0740			3.67	0.527	>1200	0.96	14.13	300.0	
0745			3.67	0.536	589	0.57	14.14	303.0	
0810			3.70	0.543	369	0.50	14.13	311.6	
0815			3.73	0.550	242	0.44	14.12	314.3	
0820			3.74	0.550	187	0.42	14.12	315.3	
0825			3.77	0.552	127	0.39	14.11	317.4	
0830			3.78	0.551	110.6	0.37	14.11	318.9	
0835			3.80	0.552	80.2	0.36	14.11	320.1	
0840			3.82	0.552	56.7	0.35	14.12	321.8	
0845			3.84	0.552	34.7	0.34	14.12	323.3	
0850			3.84	0.552	34.4	0.35	14.13	298.7	VSI shut off & restarted
0855			3.86	0.551	25.1	0.35	14.13	305.0	
0900			3.87	0.550	22.6	0.33	14.13	311.6	
0905			3.89	0.549	18.4	0.31	14.14	316.6	
0910			3.89	0.550	16.5	0.30	14.14	318.4	
0915			3.89	0.550	17.8	0.30	14.14	318.7	

Signature(s): [illegible]

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-25
Sample Location: Access st. from Lewis
Sampled By: MM, RG

SAMPLING DATA:	FINAL VALUES:						
Date: 11/6/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1008							
Purge Method: Low Flow	Clear	3.38	0.055	17.5	3.78	14.16	-8.0

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): —
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 13.65
Static Water Level (DTW): 6.64
Static Product Level (DTP) —
One Casing Volume (gal): —
Start Purge (hrs): 0913
End Purge (hrs): ~~08~~ 1008
Total Purge Time (min): 55
Total Vol. Purged (gal/L): ~7 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16-MW-25

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0918	6.64	500	3.18	0.053	45.1	2.84	14.19	-72.04	
0923	6.6		3.35	0.059	43.8	2.81	14.12	-98.0	
0928	6.55		3.34	0.047	39.6	2.91	14.08	-83.0	
0933	6.6		3.27	0.051	34.6	3.19	14.04	-33.8	
0938	6.5		3.30	0.041	27.3	3.30	14.03	-38.1	
0943	6.5		3.38	0.051	29.3	3.50	14.04	-16.5	
0948	6.6		3.32	0.059	25.7	3.63	14.05	-12.7	
0953	6.6		3.33	0.059	23.7	3.63	14.05	-0.0	
0958	6.5		3.36	0.056	21.6	3.73	14.06	-8.2	
1003	6.55		3.34	0.054	19.2	3.77	14.07	-4.1	
1008	6.6		3.32	0.055	17.5	3.78	14.06	-3.0	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-15
Sample Location: Marsh under electric line
Sampled By: RG

SAMPLING DATA:

Date: 11/6/08
Time: 1018
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	4.51	0.195	5.50	0.55	14.52	265.1

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): 2" PVC
Well Casing Diameter & Material: —
Total Well Depth (TD): 11.21
Static Water Level (DTW): 3.43
Static Product Level (DTP) —
One Casing Volume (gal): —
Start Purge (hrs): 0918
End Purge (hrs): ~~1020~~ 1018
Total Purge Time (min): 60
Total Vol. Purged (gal/L): ~1½ gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16 - MW-15

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0923	3.45	70	4.71	[illegible]	14.8	[illegible]	14.11	193.2	
0928	3.44		4.53	[illegible]	14.8	[illegible]	[illegible]	198.6	
0933	[illegible]		[illegible]	0.205	32.2	[illegible]	[illegible]	[illegible]	
0938	3.42		[illegible]	0.201	28.7	2.54	13.99	216.7	
0943	3.42		[illegible]	[illegible]	22.2	[illegible]	[illegible]	[illegible]	
0948	3.44		[illegible]	[illegible]	19.2	[illegible]	[illegible]	[illegible]	
0953	3.45		[illegible]	0.197	14.1	0.97	14.01	244.3	
0958	3.46		4.47	0.197	11.4	0.76	14.01	246.8	
1003	3.46		4.48	0.197	9.76	0.68	14.01	253.6	
1008	3.47		4.49	0.196	8.51	0.63	14.01	258.1	
1013	3.47		4.50	0.195	6.26	0.56	14.00	263.0	
1018	3.47		4.51	0.195	5.50	0.55	14.02	265.1	

Signature(s): [illegible]

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 18-MW-01
Sample Location: Sin park
Sampled By: JV

SAMPLING DATA:

Date: 11/6/08
Time: 1115
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	5.54	0.354	10.14	1.13	16.38	184.1

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ——
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 19.80
Static Water Level (DTW): 10.10
Static Product Level (DTP) ——
One Casing Volume (gal): —— ---
Start Purge (hrs): 1020
End Purge (hrs): 1115
Total Purge Time (min): 55
Total Vol. Purged (gal/L): 28 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	Ø	1 L AG	2

OBSERVATIONS/NOTES:

Pump setting 2 cycles/min (25:5) = 600 mL/min
Field Blank (FB-2) collected @ 1120

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 18-MW-01

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1025		600	5.38	0.315	32.8	0.67	16.42	250.4	
1030	10.12		5.46	0.303	27.7	0.56	16.42	233.5	
1035			5.48	0.304	17.0	2.95	16.38	226.0	
1040			5.50	0.300	16.5	1.24	16.38	212.5	
1045	10.07		5.51	0.300	16.2	1.20	16.39	209.5	
1050			5.53	0.300	14.5	3.33	16.38	195.5	
1055			5.55	0.301	13.5	2.45	16.38	192.2	
1100	10.07		5.54	0.302	12.1	1.16	16.38	190.2	
1105			5.54	0.300	10.40	1.08	16.38	186.0	
1110			5.56	0.301	10.26	1.10	16.38	185.1	
1115			5.54	0.301	10.14	1.13	16.38	184.1	
~~1120~~									

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-10
Sample Location: Between RR tracks
Sampled By: MM

SAMPLING DATA:	FINAL VALUES:						
Date: 11/6/08	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1145							
Purge Method: Low Flow	Cl. brown	5.54	0.450	132	6.07	16.99	42.6

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 13.92
Static Water Level (DTW): 8.30
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 1100
End Purge (hrs): 1145
Total Purge Time (min): 45
Total Vol. Purged (gal/L): ~7 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16-MW-10

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1105	8.8	650	5.48	0.469	1165	1.34	17.02	61.9	
1110	8.7		5.37	0.468	794	2.66	16.98	51.4	
1115	8.8		5.39	0.462	253	6.11	16.98	61.0	
1120	8.75		5.42	0.458	206	6.15	16.97	52.0	
1125	8.7		5.49	0.455	191	5.85	16.98	48.4	
1130	8.8		5.51	0.455	155	5.62	16.98	43.0	
1135	8.85		5.51	0.453	134	6.01	16.97	43.1	
1140	8.7		5.55	0.450	138	6.17	16.98	43.5	
1145	8.7		5.54	0.450	132	6.07	16.99	42.6	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16-MW-08
Sample Location: Between KR tracks
Sampled By: RG

SAMPLING DATA:

Date: 11/6/08
Time: 1238
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Cl. brown	4.83	0.0105	40.2	0.51	16.53	186.2

PURGE DATA:

Date: 11/6/08
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ——
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): 19.30
Static Water Level (DTW): 12.13
Static Product Level (DTP) ——
One Casing Volume (gal): —— ---
Start Purge (hrs): 1128
End Purge (hrs): 1238
Total Purge Time (min): 70
Total Vol. Purged (gal/L): ~8 1/2 gal

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 11/6/08

Sample ID No.: 16-MW-08

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1133	12.21	480	4.69	0.062	166	1.03	16.55	242.8	
1138	11.80		4.86	0.058	144	0.63	16.54	215.7	
1143	12.15		4.80	0.060	119	0.56	16.51	216.0	
1148	12.10		4.80	0.058	82.9	0.49	16.49	210.0	
1153	12.12		4.82	0.059	78.9	0.50	16.50	210.6	
1158	12.13		4.81	0.059	76.2	0.47	16.50	209.4	
1203	12.15		4.78	0.059	71.9	0.51	16.51	208.2	
1208	12.09		4.80	0.059	66.0	0.47	16.52	205.4	
1213	12.15		4.81	0.059	54.0	0.47	16.51	201.4	
1218	12.14		4.84	0.060	48.2	0.46	16.52	194.8	
1223	12.15		4.84	0.061	44.4	0.47	16.51	192.1	
1228	12.15		4.86	0.063	41.8	0.46	16.51	186.7	
1233	12.17		4.91	0.063	39.9	0.48	16.51	182.4	
1238									~~Didn't take reading~~
~~1245~~	~~12.18~~		~~4.83~~	~~0.065~~	~~44.2~~	~~0.51~~	~~16.53~~	~~186.2~~	

Signature(s): [signature]

ECOR Solutions Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	NWS Earle Quarterly LTM	Project No.:	N0150.502
Location:	Colts Neck, NJ	Personnel:	JG, GF
Weather Conditions:	lt snow ~28°F	Measuring Device:	Solinst Interface Probe
Tidally Influenced:	Yes ___ No X	Remarks:	

Monitoring Well ID	Date	Time	Total Well Depth (feet)*	Depth to Water (feet)*	Depth to Free Product	PID (ppm)	Comments
16-MW-04	2/3/09	0925	—	8.10	7.90		
16-MW-05		0920	—	10.73	10.73	SHEN	
16-MW-08		0915	19.45	11.70			
16-MW-10		0955		8.38			
16-MW-11		1040		2.88			
16-MW-15		1000	11.45	3.45			
16-MW-24				4.02			
16-MW-25		1100		~~4.07~~	6.00		
18-MW-01		0918	20.18	8.55			
16-MW-02		0930	—	10.28			
16-MW-16		1045		3.85			
16-MW-17		1030		3.83			
29-MW-01		1022		7.67			

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	16 - MW - 15
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:

Date: 2/3/09

Time: 1240

Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
clear	4.99	0.171	27.8	5.40	4.59	215.0

PURGE DATA:

Date:	2/3/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	11.45
Static Water Level (DTW):	3.45
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	1140
End Purge (hrs):	1240
Total Purge Time (min):	60
Total Vol. Purged (gal/L):	---

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2 x 3=6
~~Naphthalene (Method 625)~~	~~---~~	~~1 L AG~~	~~2~~

OBSERVATIONS/NOTES:

16-MW-01 collected @ 1205
16-MW-02 collected @ [illegible]

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/3/09

Sample ID No.: 16 - MW - 15

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1150		500	5.22	0.167	21.0	17.33	4.07	172.3	
1200	3.46		5.11	0.169	32.6	10.34	4.16	185.3	
1210			5.02	0.170	45.0	7.17	4.52	189.5	
1220			4.95	0.171	42.4	5.94	5.04	215.8	
1230			4.90	0.172	28.2	5.12	4.67	217.6	
1235	3.46		4.88	0.172	28.9	5.37	4.67	215.3	
1240			4.99	0.171	32.8	5.40	4.59	215.0	

Signature(s): [illegible]

Geoxx 2/4/09 [illegible] @ 1500

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 11
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 2/3/09	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1428							
Purge Method: Low Flow	Cloudy	4.18	0.350	63.7	1.03	8.57	295.4

PURGE DATA:

Date: 2/2/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): ---
Static Water Level (DTW): 2.88
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 1248
End Purge (hrs): 1428
Total Purge Time (min): 35
Total Vol. Purged (gal/L): ---

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/3/09

Sample ID No.: 16 - MW -

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1253		330	4.25	0.374	344	4.98	8.76	248.3	
1258			4.27	0.452	656	1.29	9.01	248.3	
1303			4.22	0.417	453	0.93	9.89	253.6	
1308	Pumping stopped	- valve	on MP15	minutes	turbidity	- 330	to meet	IP;	Still not working -
1313	initial	hoses	... -	Flow	pumping	@ 1404			
1318			4.20	0.372	77.4	1.34	9.70	256.6	
1323			4.22	0.352	69.4	1.09	8.40	271.4	
1328			4.23	0.357	65.5	1.11	8.38	291.7	
			4.18	0.350	63.7	1.03	8.07	295.4	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	16 - MW - 25
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:

Date: 2/4/09

Time: 0810

Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	4.32	0.571	18.8	2.72	9.02	265.0

PURGE DATA:

Date:	2/4/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	---
Static Water Level (DTW):	6.00
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	0746
End Purge (hrs):	0810
Total Purge Time (min):	25
Total Vol. Purged (gal/L):	—

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/4/09

Sample ID No.: 16 - MW - 25

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0750		600	3.92	0.070	48.2	9.46	7.09	267.4	
0755	4.25		4.19	0.074	31.6	3.16	8.35	236.5	
0800			4.23	0.072	20.7	2.90	8.90	242.5	
0805			4.30	0.071	19.2	2.82	8.96	254.6	
0810			4.32	0.071	18.8	2.72	9.02	265.0	
~~0815~~									
~~0820~~									

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	16 - MW - 24
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:

Date: 2/4/09

Time: 0915

Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Cl. BN 30	4.64	0.142	220	0.55	8.69	182.1

PURGE DATA:

Date:	2/4/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	---
Static Water Level (DTW):	4.42
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	0835
End Purge (hrs):	0915
Total Purge Time (min):	40
Total Vol. Purged (gal/L):	—

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)		1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/19/09

Sample ID No.: 16 - MW - 24

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0840		600	4.810	0.134	12.0	1.39	8.29	205.7	
0845	3.92		4.78	0.130	154	1.24	8.07	193.9	
0850			4.80	0.135	254	0.81	8.11	185.1	
0855			4.73	0.142	298	0.74	8.57	183.2	
0900			4.67	0.142	261	0.67	8.48	182.9	
0905			4.67	0.143	241	0.60	8.47	182.5	
0910			4.63	0.147	231	0.56	8.69	182.2	
0915			4.64	0.142	220	0.55	8.69	182.1	

Signature(s): [illegible]

ECOR Solutions Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 08
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 2/4/09	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1045							
Purge Method: Low Flow	slcly	5.35	0.116	49.9	0.25	11.30	127.7

PURGE DATA:

Date: 2/4/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): 19.45
Static Water Level (DTW): 11.70
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 0925
End Purge (hrs): 1045
Total Purge Time (min): 80
Total Vol. Purged (gal/L): —

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2 x 4/08
Naphthalene (Method 625)	---	1 L AG	2 x 4/08

OBSERVATIONS/NOTES:

Circle If Applicable:
MS/MSD
Duplicate ID No.: DUP-1

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/4/09

Sample ID No.: 16 - MW - 08

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0930		500	5.24	0.065	>1200	2.29	8.82	151.7	
0935			5.30	0.055	>1200	0.98	10.45	155.8	
0940	11.40		5.40	0.055	>1200	0.50	11.15	153.4	
0945			5.40	0.056	255	0.36	11.28	150.6	
0950			5.35	0.059	237	0.35	11.24	152.5	
0955			5.20	0.063	164	0.36	11.16	160.0	
1000			5.22	0.065	148	0.33	11.20	157.6	
1005			5.16	0.067	121	0.36	10.57	158.5	(changed out tank)
1010			4.98	0.076	107.6	0.37	10.94	164.4	
1015			5.20	0.076	73.9	0.29	11.00	150.5	
1020			5.15	0.059	75.9	0.25	11.10	147.6	
1025			5.21	0.058	65.8	0.27	11.21	142.0	
1030			5.24	0.100	56.2	0.27	11.22	141.6	
1035			5.32	0.112	49.2	0.25	11.3[illegible]	130.2	
1040			5.34	0.114	51.4	0.25	11.28	128.4	
1045			5.35	0.116	44.4	0.25	11.30	122.7	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

ECOR Solutions Inc.

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	16 - MW - 10
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:

Date: 2/4/09

Time: 1210

Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	6.05	0.397	19.5	0.23	12.64	22.2

PURGE DATA:

Date:	2/4/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	---
Static Water Level (DTW):	8.38
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	1110
End Purge (hrs):	1210
Total Purge Time (min):	60
Total Vol. Purged (gal/L):	---

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/4/09

Sample ID No.: 16 - MW - 10

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1115		1060	5.87	0.348	888	1.03	12.12	61.8	
1120	8.60		5.96	0.384	620	0.48	12.47	46.3	
1125			5.97	0.389	204	0.35	12.54	43.0	
1130	8.56		5.99	0.391	105.8	0.29	12.63	38.7	
1135			6.00	0.395	77.6	0.27	12.62	35.7	
1140			6.01	0.396	55.4	0.26	12.62	32.2	
1145			6.02	0.398	38.2	0.25	12.63	29.2	
1150			6.04	0.399	31.7	0.25	12.70	26.6	
1155			6.04	0.397	25.2	0.26	12.67	23.9	
1200			6.04	0.398	22.1	0.23	12.61	22.2	
1205			6.05	0.400	20.4	0.23	12.67	20.2	
1210			6.05	0.397	19.5	0.23	12.64	20.2	

Signature(s):

ECOR Solutions Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 18 - MW - 01
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:

Date: 2/4/09
Time: 1370
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	5.97	0.223	11.5	2.09	12.80	119.4

PURGE DATA:

Date: 2/4/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 4" PVC
Total Well Depth (TD): 20.18
Static Water Level (DTW): 8.55
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 1270
End Purge (hrs): 1370
Total Purge Time (min): 60
Total Vol. Purged (gal/L): —

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2 12 :4
Naphthalene (Method 625)	---	1 L AG	2 12 :4

OBSERVATIONS/NOTES:

Field blank (FB-2) collected @ 1600

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 2/4/09

Sample ID No.: 18 - MW - 01

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1225		700	6.05	0.117	27.8	3.47	12.46	77.2	
1230	9.27		6.04	0.130	23.3	3.11	12.40	81.6	
1235			6.02	0.128	19.7	2.56	12.53	98.4	
1240	9.45		6.02	0.141	18.6	2.29	12.54	103.1	
1245			6.00	0.152	16.4	1.93	12.60	108.2	
1250			6.00	0.168	15.1	1.92	12.60	109.2	
1255			6.00	0.195	13.7	1.76	12.78	112.7	
1300			5.99	0.208	12.8	1.83	12.94	114.5	
1305			5.99	0.220	12.9	1.98	12.74	116.5	
1310			5.98	0.236	11.9	2.01	12.77	118.5	
1315			5.98	0.237	12.1	2.15	12.77	118.8	
1320			5.97	0.243	11.5	2.09	12.80	119.4	

Signature(s):

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	NWS Earle Quarterly LTM	Project No.:	N0150.502
Location:	Colts Neck, NJ	Personnel:	JG, GF
Weather Conditions:	clear, breezy, ~60°F	Measuring Device:	Solinst Interface Probe
Tidally Influenced:	Yes ___ No ___	Remarks:	—

Monitoring Well ID	Date	Time	Total Well Depth (feet)*	Depth to Water (feet)*	Depth to Free Product	PID (ppm)	Comments
16-MW-04	5/11/09	0850					
16-MW-05		0900		9.95	9.94		
16-MW-08		0907		11.35			
16-MW-10		0911		8.10			
16-MW-11		1300		2.74			
16-MW-15		0938		3.59			
16-MW-24		1120		4.10			
16-MW-25		1045		6.00			
18-MW-01		0919		8.10			
16-MW-02		0915		5.88			
16-MW-16		1440		3.70			
16-MW-17		1444		3.92			
29-MW-01		1255		9.30			

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 13
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 5/1/09	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1018							
Purge Method: Low Flow	Clear	4.57	0.210	27.7	1.54	12.33	251.5

PURGE DATA:

Date: 5/1/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): —
Static Water Level (DTW): 3.59
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 0918
End Purge (hrs): 1018
Total Purge Time (min): 60
Total Vol. Purged (gal/L): —

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
~~Naphthalene (Method 625)~~	---	~~1 L AG~~	~~2~~

OBSERVATIONS/NOTES:

16-SW-01 collected @ 0950
16-SW-02 collected @ 1000

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

PURGE DATA SHEET

ECOR Solutions Inc.

Date: 5/11/09

Sample ID No.: 16 - MW - 15

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0923									
0928		55	4.85	0.265	27.5	6.32	12.58	191.7	
0933	3.52		4.68	0.259	24.3	5.68	12.37	202.2	
0938			4.46	0.249	19.1	4.31	12.20	215.7	
0943			4.45	0.246	19.7	3.89	11.99	223.9	
0948	3.52		4.46	0.238	22.6	3.40	11.99	229.0	
0953			4.47	0.232	29.6	3.18	11.98	236.7	
0958			4.48	0.225	33.1	3.01	11.97	243.5	
1003			4.57	0.221	32.2	2.08	11.99	247.0	
1008			4.54	0.217	29.6	1.70	12.06	251.0	
1013			4.54	0.211	27.7	1.59	12.27	253.0	
1018			4.57	0.210	27.7	1.54	12.33	251.5	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 25
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 5/11/09	Color	Ph	S.C.	Turbidity	DO	Temp	ORP
Time: 1120	(Visual)	(Standard)	(mS/cm)	(NTU)	(mg/L)	(°C)	(MV)
Purge Method: Low Flow	Clear	3.92	0.057	23.7	3.85	10.52	325.7

PURGE DATA:

Date:	5/11/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	~~6.00~~
Static Water Level (DTW):	6.00
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	1030
End Purge (hrs):	1120
Total Purge Time (min):	50
Total Vol. Purged (gal/L):	—

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
~~Naphthalene (Method 625)~~	~~---~~	~~1 L AG~~	~~2~~

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 5/1/09

Sample ID No.: 16 - MW - 25

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1035		270	3.65	0.056	115	5.84	10.78	263.7	
1040	5.85		3.56	0.054	88.0	5.15	10.49	280.7	
1045			3.69	0.054	56.3	4.53	10.44	286.5	
1050	5.80		3.82	0.055	43.0	4.22	10.45	294.5	
1055			3.89	0.056	32.4	4.06	10.50	307.0	
1100			3.89	0.056	31.0	3.99	10.48	309.7	
1105			3.91	0.056	28.7	3.98	10.48	315.0	
1110			3.91	0.056	24.7	3.94	10.52	320.2	
1115			3.92	0.057	23.9	3.87	10.53	324.3	
1120			3.92	0.057	23.2	3.85	10.52	325.7	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	16 - MW - 24
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 5/11/09	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1215							
Purge Method: Low Flow	clear	4.80	0.113	23.2	2.62	9.65	148.0

PURGE DATA:

Date:	5/11/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	2" PVC
Total Well Depth (TD):	—
Static Water Level (DTW):	4.10
Static Product Level (DTP)	— ---
One Casing Volume (gal):	— ---
Start Purge (hrs):	1130
End Purge (hrs):	1215
Total Purge Time (min):	45
Total Vol. Purged (gal/L):	—

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
~~Naphthalene (Method 625)~~	---	1 L AG	~~2~~

OBSERVATIONS/NOTES:

Field Blank (FB-1) collected @ 1200 for both parameters

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 5/1/09

Sample ID No.: 16 - MW - 24

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1135		660	4.57	0.108	123	1.49	9.75	222.8	
1140			4.69	0.108	47.4	1.41	9.69	196.0	
1145	4.05		4.76	0.104	33.2	1.19	9.68	180.3	
1150			4.80	0.105	31.6	1.01	9.67	170.9	
1155			4.83	0.105	27.0	0.84	9.65	160.3	
1200	4.10		4.76	0.113	26.0	0.80	9.65	158.5	
1205			4.83	0.108	25.1	0.69	9.64	151.4	
1210			4.82	0.109	24.0	0.64	9.63	148.3	
1215			4.80	0.110	23.2	0.62	9.65	148.0	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 11
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:

Date: 5/11/09
Time: 1358
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Clear	4.16	0.306	20.0	1.16	12.86	186.6

PURGE DATA:

Date: 5/11/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): — ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): —
Static Water Level (DTW): 2.74
Static Product Level (DTP) — ---
One Casing Volume (gal): — ---
Start Purge (hrs): 1253
End Purge (hrs): 1358
Total Purge Time (min): 65
Total Vol. Purged (gal/L): —

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 5/11/09

Sample ID No.: 16 - MW - 11

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1258		600	4.00	0.349	>1200	3.10	11.18	184.0	
1303			4.01	0.326	723	2.27	11.13	185.6	
1308			4.08	0.328	420	1.89	11.05	186.3	
1313	2.75		4.15	0.323	170	1.63	10.99	184.3	
1318			4.17	0.322	115	1.56	10.98	184.5	
1323			4.16	0.318	68.9	1.48	10.95	185.2	
1328			4.16	0.314	45.8	1.36	10.94	186.2	
1333	2.75		4.17	0.312	36.0	1.35	10.90	186.2	
1338			4.16	0.312	30.5	1.26	10.87	186.4	
1343			4.16	0.311	26.7	1.20	10.95	186.5	
1348			4.16	0.313	21.2	1.14	11.06	186.6	
1353			4.16	0.309	19.7	1.16	10.87	186.7	
1358			4.16	0.306	20.0	1.16	10.86	186.6	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 10
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:	FINAL VALUES:						
Date: 5/11/09	Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Time: 1510							
Purge Method: Low Flow	Sl. tan	5.39	0.401	30.9	0.86	12.16	666

PURGE DATA:

Date: 5/11/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): ---
Static Water Level (DTW): 8.10
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 1410
End Purge (hrs): 1510
Total Purge Time (min): 60
Total Vol. Purged (gal/L): ---

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

ECOR Solutions Inc.

PURGE DATA SHEET

Date: 5/1/09

Sample ID No.: 16 - MW - 10

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
1415		600	5.40	0.378	108.5	2.72	12.14	98.6	
1420	8.05		5.37	0.381	261	2.03	12.14	90.5	
1425			5.31	0.390	156	1.37	12.10	85.2	
1430			5.35	0.391	114	1.32	12.14	83.5	
1435	8.05		5.35	0.392	97.6	1.15	12.10	79.0	
1440			5.33	0.394	58.2	1.13	12.09	78.0	
1445			5.37	0.397	45.7	1.15	12.13	73.5	
1450			5.38	0.397	42.6	1.06	12.12	72.7	
1455			5.39	0.399	35.8	0.89	12.06	69.6	
1500			5.37	0.400	34.3	0.87	12.06	68.5	
1505			5.38	0.401	32.2	0.84	12.17	66.8	
1510			5.39	0.401	30.9	0.86	12.16	66.6	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NWS Earle Quarterly LTM
Project No.: N0150.502

Sample ID No.: 16 - MW - 08
Sample Location: Colts Neck, NJ
Sampled By: JG, GF

SAMPLING DATA:

Date: 5/12/09
Time: 0835
Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Light tan	4.52	0.576	67.8	0.46	11.61	172.2

PURGE DATA:

Date: 5/12/09
Purge Method: Low Flow - bladder pump
PID Reading (ppm): ---
Well Casing Diameter & Material: 2" PVC
Total Well Depth (TD): ---
Static Water Level (DTW): 11.35
Static Product Level (DTP) ---
One Casing Volume (gal): ---
Start Purge (hrs): 0730
End Purge (hrs): 0835
Total Purge Time (min): 65
Total Vol. Purged (gal/L):

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2 x 4 = 8
Naphthalene (Method 625)	---	1 L AG	2 x 4 = 8

OBSERVATIONS/NOTES:

Field Blank (FB-2) collected @ 0815

Circle if Applicable:

MS/MSD

Duplicate ID No.: DUP-1

Signature(s):

PURGE DATA SHEET

ECOR Solutions Inc.

Date: 5/12/09

Sample ID No.: 16 - MW - 08

Time	Water Level	Flow	pH	Cond.	Turb.	DO	Temp.	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0735		400	3.94	0.057	758	1.82	11.44	192.1	
0740	10.85		4.11	0.055	668	1.33	11.45	184.7	
0745			4.29	0.054	420	0.95	11.41	175.1	
0750			4.48	0.053	492	0.67	11.47	169.2	
0755	10.92		4.40	0.054	194	0.67	11.47	171.9	
0800			4.38	0.055	143	0.62	11.50	173.5	
0805			4.38	0.057	110.3	0.58	11.53	175.0	
0810			4.39	0.058	93.6	0.54	11.56	177.4	
0815	10.95		4.37	0.060	75.9	0.53	11.57	177.9	
0820			4.40	0.062	80.6	0.52	11.60	177.7	
0825			4.45	0.066	71.0	0.49	11.62	176.8	
0830			4.51	0.070	65.8	0.47	11.64	175.1	
0835			4.52	0.070	67.8	0.46	11.61	171.2	

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

~~Sample ID No.: 18-MW-~~

Project Site Name:	NWS Earle Quarterly LTM	Sample ID No.:	18 - MW - 01
Project No.:	N0150.502	Sample Location:	Colts Neck, NJ
		Sampled By:	JG, GF

SAMPLING DATA:

Date: 5/12/09

Time: 0945

Purge Method: Low Flow

FINAL VALUES:

Color (Visual)	Ph (Standard)	S.C. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (MV)
Sl. cloudy tan	5.48	0.075	61.1	6.31	12.11	147.4

PURGE DATA:

Date:	5/12/09
Purge Method:	Low Flow - bladder pump
PID Reading (ppm):	---
Well Casing Diameter & Material:	4" steel
Total Well Depth (TD):	---
Static Water Level (DTW):	8.10
Static Product Level (DTP)	---
One Casing Volume (gal):	---
Start Purge (hrs):	0900
End Purge (hrs):	0940
Total Purge Time (min):	40
Total Vol. Purged (gal/L):	---

Purge Calculations:

1": 0.04080	6": 1.46869
2": 0.16319	8": 2.61101
3": 0.36717	10": 4.07970
4": 0.65275	12": 5.87477

Purge Vol = 3 × PF × (DTW - TD)

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
BTEX + MTBE (Method 624)	HCl	40 mL CG	2
Naphthalene (Method 625)	---	1 L AG	2

OBSERVATIONS/NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

PURGE DATA SHEET

ECOR Solutions Inc.

Date: 5/12/09

Sample ID No.: 18 - MW - 01

Time	Water Level	Flow	pH	Cond.	Turb.	DO	~~18 - MW - 01~~ TEMP	ORP	Comments
(hrs)	(ft. below TOC)	(mL/min)	(SU)	(mS/cm)	(NTU)	(mg/L)	(Celsius)	(mV)	
	Target drawdown ≤0.3'	*≤500*	*±0.1 unit*	*±3%*	*±10%*	*±10%*	*±3%*	*±10 mV*	*Stability reached when 3 consecutive readings are within this range*
0905		290	5.30	0.578	100.1	4.71	12.34	149.9	
0910	8.35		5.44	0.576	81.5	5.23	12.44	150.8	
0915		500	5.43	0.575	76.5	5.81	12.03	151.6	
0920			5.42	0.575	66.3	6.01	11.97	151.6	
0925	8.52		5.46	0.575	70.5	6.09	11.95	150.0	
0930			5.48	0.575	64.6	6.13	11.93	148.1	
0935			5.46	0.575	62.8	6.15	12.03	147.6	
0940			5.48	0.575	61.1	6.31	12.11	147.4	

Signature(s):

APPENDIX C

CHAINS OF CUSTODY

Analytical Laboratory Services, Inc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

Co. Name: ECOR Solutions, Inc.

Contact (Report to): Grace Fitch **Phone:** 484-887-7510

Address: 215 High St., 2nd Floor West Chester, PA 19382

Bill to (if different than Report to): **PO#:** N0150.502

Project Name/#: NWS Ewe Chrly LTM/N0150.502 **ALSI Quote #:**

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:

[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [ ] -Y

Fax? [ ] -Y No.:

***Container Type	CG	AG														
***Container Size	40mL	1L														
*** Preservative	HCl	∅														
ANALYSES/METHOD REQUESTED			624+ MTBE	625												

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	624+ MTBE	625														
1	16-MW-15		8/20/18	1110	G	GW	2															
2	16-MW-25		↓	1200	↓	↓	↓															
3	16-MW-24		↓	1305	↓	↓	↓															
4	FB-1		↓	1730	↓	↓	↓	2														
5	16-MW-11		↓	1435	↓	↓	↓	2														
6	TB-1																					
7	16-SW-01		8/20/18	1020	G	↓	↓															
8	16-SW-02		↓	1030	↓	↓	↓															

Receipt Information (completed by Sample Receiving)

Performed by: INITIAL HERE

Cooler Temp:

Therm. ID:

No. of Coolers:

Notes:

Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.	
N	N	N	N		
Y	Y	Y	Y		
Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?	
N	N	N	N	N	
Y	Y	Y	Y	Y	

SAMPLED BY (Please Print): J. Good, G. Fitch

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Grace Fitch / ECOR	8/20/18	1600	2		
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard; [ ] CLP-like; [ ] NJ-Reduced; [ ] NJ-Full; [ ] (other)

EDDs Required? [ ] If yes, format type:

SDWA Forms?: yes [ ]; yes [ ]; yes [ ]; yes [ ]

State Samples Collected In?: MD [ ]; NJ [X]; NY [ ]; PA [ ]; Other

DOD Criteria Required?

ALSI FIELD SERVICES: [ ] Pickup; [ ] Labor; [ ] Composite Sampling; [ ] Rental Equipment; [ ] Other:

* G=Grab; C=Composite

**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

Co. Name: ECOR Solutions, Inc.

Contact (Report to): Grace Fitch

Phone: 484-887-7510

Address: 21 S. High St. West Chester, 19382

Bill to (if different than Report to):

PO#: N0150.502

Project Name/#: Earle LTM/ N0150.502

ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.

Date Required:

Approved By:

Email? [ ] -Y

Fax? [ ] -Y No.:

					***Container Type	CG	AG																
					***Container Size	40mL	1L																
					*** Preservative	HCl	Ø																
					ANALYSES/METHOD REQUESTED	624+MTBE	625																
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis																	
1 16-MW-08		8/21/08	1017	G	GW	2	2																
2 16-MW-1D	MS/MSD collected		1120			6	6																
3 FB-2			1230			2	2																
4 18-MW-01			1238			2	2																
5 DUP-1			0000			2	2																
6 TB-2						2																	
7																							
8																							

Receipt Information (completed by Sample Receiving)

Performed by: INITIAL HERE

Cooler Temp:

Therm. ID:

No. of Coolers:

Notes:

Circle appropriate Y or N.				
Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	
Y	Y	Y	Y	
N	N	N	N	
Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
Y	Y	Y	Y	Y
N	N	N	N	N

SAMPLED BY (Please Print): G. Fitch, J. Good

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Grace Fitch / ECOR	8/21/08	1400	2		
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard; [ ] CLP-like; [ ] NJ-Reduced; [ ] NJ-Full; [ ] (other)

SDWA Forms?⇒ yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [ ] NJ [X] NY [ ] PA [ ]

EDDs Required? [ ] If yes, format type: Other

DOD Criteria Required?

ALSI FIELD SERVICES

[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2
Courier: UPS
Tracking #: J21 38953133

* 9 7 6 2 5 5 4 *

Co. Name: ECOR Solutions, Inc.
Contact (Report to): G. Fitch   Phone: 484-887-7510
Address: 21 S. High St., 2nd Floor
West Chester, PA 19382

Bill to (if different than Report to):   PO#: N0150.502

Project Name/#: NWS Earle Annual LTM   ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:

Email? [ ] -Y
Fax? [ ] -Y No.:

	Container Type	Container Size	Preservative
Method 624, MTBE	CG	40ml	HCl
Method 625	AG	1L	Ø

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

#	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Method 624, MTBE	Method 625									
1	16-MW-08		11/6/08	1238	G	GW	2	2									
2	16-MN-10			1145			2	~~2~~ 1	MTD 11/7								
3	16-MW-11	MS/MSD		0915			6	6									
4	16-MW-15			1018			2										
5	16-MW-24			0840			2										
6	16-MW-25			1008			2										
7	18-MW-01			1115			~~2~~ 0 MTD	2									
8	DUP-2			000			12	2									

(completed by Sample Receipt)
Referred to:
Cooler Temp: 1.5
Therm. ID: 91083554
No. of Coolers:
Notes:

Circle appropriate Y or N: Correct containers? Correct sample volume? Correct preservation? Headspace/Volatiles? — Custody seals Present? (If present) Seals intact? Received on ice? COC/Labels complete/accurate? Container in good condition?

SAMPLED BY (Please Print): M. [signature] / ECOR
LOGGED BY (signature): [signature] Date: 11/7/08 Time: 1131
REVIEWED BY (signature): [signature] Date: 11/14/05 Time: 8854

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	D. Good, R. Green, M. McCulloch	11/6/08	1600	2	Morgan Bowen ALSI	11/7	0935
3				4			
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [X] NY [ ] PA [ ]
DOD Criteria Required?

ALSI FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc. Rev 6/07

ANALYTICAL LABORATORY SERVICES, INC.
www.analyticallab.com
NELAP Accredited PA 22-293 NJ PA010
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430
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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 2 of 2
Courier: UPS
Tracking #: 52138853131

979825554

Co. Name: ECOR Solutions, Inc.
Contact (Report to): G. Fitch
Phone: 484-887-7510
Address: 21 S. High St., 2nd Flr
West Chester, PA 19382

Bill to (if different than Report to):
PO#: NOK50.502

Project Name/#: NWS Earle Annual LTM
ALSI Quote #:

TAT: ☐ Normal-Standard TAT is 10-12 business days. ☒ Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:
Email? ☐ -Y
Fax? ☐ -Y No.:

**Container Type	CG	AG
**Container Size	40ml	1L
***Preservative	HCl	✓

ANALYSES/METHOD REQUESTED: Method 624 + MTBE; Method 625

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Method 624 + MTBE	Method 625
1	16-SW-01		11/6/08	0845	G	SW	2	MS 11/7
2	16-SW-02		↓	0850	↓	SW	2	
3	FB-2		↓	1100	↓	GW	2	2
4								
5								
6								
7								
8								

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receipt)
Performed by: MMB
Cooler Temp: 5°
Therm. ID: 1023539
No. of Coolers:
Notes:

Circle appropriate Y or N.
Correct containers? Y
Correct sample volumes? Y
Correct preservation? Y
Headspace/Volatiles? N
Custody seals Present? N
(If present) Seals intact?
Received on Ice? Y
COC/Labels complete/accurate? Y
Container in good condition? N

SAMPLED BY (Please Print): J. Good, R. Green, M. McCullah
LOGGED BY (signature): | Date: | Time:
REVIEWED BY (signature): [signature] | Date: 11/14/08 | Time: 0854

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] / ECOR	11/6/08	1400	2	Monique Bowen ALSI	11/7	0935
3				4			
5				6			
7				8			
9				10			

Data Deliverables: ☐ Standard ☐ CLP-like ☐ NJ-Reduced ☐ NJ-Full ☐
EDDs Required? ☐ If yes, format type:
SDWA Forms?: yes ☐ yes ☐ yes ☐ yes ☐ Other
State Samples Collected In?: MD ☐ NJ ☒ NY ☐ PA ☐
DOD Criteria Required?

ALSI FIELD SERVICES: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other:

* G=Grab; C=Composite
**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
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NELAP Accredited PA 22-293 NJ PA010
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430
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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2

Courier:

Tracking #:

Co. Name: ECOR Solutions, Inc.

Contact (Report to): D. Sweetsmith **Phone:** 484-857-7512

Address: 21 S. High St. 2nd Floor West Chester, PA 19382

Bill to (if different than Report to): **PO#:** 00150.502

Project Name/#: NWS Earle QWLY LTM **ALSI Quote #:**

TAT: [X] Normal-Standard TAT is 10-12 business days. **Date Required:**

[ ] Rush-Subject to ALSI approval and surcharges. **Approved By:**

Email? [ ] -Y

Fax? [ ] -Y No.:

***Container Type	CG	AG																					
***Container Size	40mL	1L																					
*** Preservative	HCl	∅																					

ANALYSES/METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Method 624 + MTBE	Method 625															
1	116-MW-08	MS/MSD	2/4/09	1045	G	GW	6	6															
2	116-MW-10		↓	1210			2	2															
3	116-MW-11		2/3/09	1428				↓															
4	116-MW-15		↓	1243																			
5	116-MW-24		2/4/09	0915																			
6	116-MW-25			0810																			
7	18-MW-01			1322				2															
8	DUP-1		↓	0000	↓	↓	↓	↓															

Enter Number of Containers Per Analysis

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y N	Y N	Y N	Y N	
1	Y	Y	Y	Y	
2	N	N	N	N	N
3	Y	Y	Y	Y	Y
4					
5					
6					
7					
8					

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
1					
2					
3					
4					
5					
6					
7					
8					

Receipt Information (completed by Sample Receiving)

Performed by: INITIAL HERE

Cooler Temp:

Therm. ID:

No. of Coolers:

Notes:

SAMPLED BY (Please Print): S. Gill, G. Fitch

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [illegible] / ECOR	2/4/09	1530	2 [illegible]	[illegible]	[illegible]
3 "			4		
5 "			6		
7			8		
9			10		

Data Deliverables

- [ ] Standard
- [ ] CLP-like
- [ ] NJ-Reduced
- [ ] NJ-Full
- [ ] (other)

EDDs Required? [ ] If yes, format type:

DOD Criteria Required?

SDWA Forms?⇨ yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [ ] NJ [X] NY [ ] PA [ ] Other

ALSI FIELD SERVICES

- [ ] Pickup
- [ ] Labor
- [ ] Composite Sampling
- [ ] Rental Equipment
- [ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

Co. Name: ECOR Solutions, Inc.

Contact (Report to): D. Swartsmith **Phone:** 484-882-3510

Address: 21 S. High St., 2nd Floor West Chester, PA 19382

Bill to (if different than Report to): **PO#:** N0150, 502

Project Name/#: NWS Earle Army LTM **ALSI Quote #:**

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: Approved By:

Email? Y

Fax? Y No.:

***Container Type													CG	AG									
***Container Size													40ml	1L									
*** Preservative													HCl	0									
ANALYSES/METHOD REQUESTED													NEMI 624+MTBE	NEMI 625									
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis																	
1 16-SW-01		2/11/19	1200	G	SW	2																	
2 16-SW-02			1210																				
3 FB-1			1600		SW		2																
4 FB-2		2/11/19	1600																				
5 TB-1																							
6																							
7																							
8																							

Correct containers? Y N
Correct sample volume? Y N
Correct preservation? Y N
Headspace/Volatiles? Y N
Circle appropriate Y or N.

Custody seals Present? Y N
(if present) Seals intact? Y N
Received on ice? Y N
COC/Labels complete/accurate? Y N
Container in good condition? Y N

Receipt Information (completed by Sample Receiving)

Performed by: INITIAL HERE

Cooler Temp:

Therm. ID:

No. of Coolers:

Notes:

SAMPLED BY (Please Print): J. Good, G. Fitch

LOGGED BY(signature): DATE TIME

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [illegible] ECOR	2/11/19	1830	2 [illegible]	[illegible]	[illegible]
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)

EDDs Required? [ ] If yes, format type:

DOD Criteria Required?

SDWA Forms?→ yes yes yes yes

State Samples Collected In? MD NJ [X] NY PA Other

ALSI FIELD SERVICES

[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:
Tracking #:
COC#

Co. Name: ECOR Solutions, Inc.
Contact (Report to): D. Sweetsmith **Phone:** 610-431-8731
Address: 1075 Andrew Dr., Suite I, West Chester, PA 19380

Bill to (if different than Report to): **PO#:** N0150, 502

Project Name/#: NWS Earle QMW LTM / N0150, 502 **ALSI Quote #:**

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: Approved By:

Email? [ ] -Y
Fax? [ ] -Y No.:

						***Container Type	CG	AG														
						***Container Size	40mL	1L														
						*** Preservative	HCl															
						ANALYSES/METHOD REQUESTED																
									VOCs (624)	Naphthalene (625)												
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis																
1 16-MW-08	MS/MSD	5/11/19	0855	G	GW				6	6												
2 16-MW-10		5/11/19	1510						2	2												
3 16-MW-11			1358																			
4 16-MW-15			1018																			
5 16-MW-24			1215																			
6 16-MW-25			1120																			
7 18-MW-01		5/10/19	0940							2												
8 DUP-1			0000																			

Receipt Information (completed by Sample Receiving)
Performed by: INITIAL HERE
Cooler Temp:
Therm. ID:
No. of Coolers:
Notes:

Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.	
N	N	N	N		
Y	Y	Y	Y		
Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?	
N	N	N	N	N	
Y	Y	Y	Y	Y	

SAMPLED BY (Please Print): J. Good, C. Fitch
LOGGED BY(signature): DATE: TIME:
REVIEWED BY(signature): DATE: TIME:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [illegible] / ECOR	5/10/19	1600	2 [illegible]	5/12	1623
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
DOD Criteria Required?
SDWA Forms?→ yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [ ] NJ [X] NY [ ] PA [ ]
Other
→Enter PWSID No.

ALSI FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Analytical Laboratory Services, Inc.
Environmental • Industrial Hygiene • Field Services
34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 2 of 2
Courier:
Tracking #:
COC#

Co. Name: ECOR Solutions, Inc.
Contact (Report to): D. Sweetsmith **Phone:** 610-431-8731
Address: 1075 Andrew Dr., Suite I, West Chester, PA 19380

Bill to (if different than Report to): **PO#:** N0150.502

Project Name/#: NWS Earle Qtrly GM / N150.502 **ALSI Quote #:**

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [ ] -Y
Fax? [ ] -Y No.:

***Container Type	CG	AG																					
***Container Size	40mL	1L																					
*** Preservative	HCl	Ø																					

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOCs (624)	Naphthalene (625)																
						Enter Number of Containers Per Analysis																	
1 16-SW-01		5/11/09	0950	G	GW	2																	
2 16-SW-02		↓	1000	↓	↓	↓																	
3 FB-1		↓	1200	↓	↓	↓	2																
4 FB-2		5/12/09	0815	↓	↓	↓	↓																
5 TB-1						↓																	
6																							
7																							
8																							

Receipt Information (completed by Sample Receiving)
Performed by: INITIAL HERE
Cooler Temp:
Therm. ID:
No. of Coolers:
Notes:

Circle appropriate Y or N.									
Correct containers?	Y	N	Correct sample volume?	Y	N	Correct preservation?	Y	N	Headspace/Volatiles? Y N
Custody seals Present?	Y	N	(if present) Seals intact?	Y	N	Received on ice?	Y	N	COC/Labels complete/accurate? Y N
Container in good condition?	Y	N							

SAMPLED BY (Please Print): J. Gold, G. Fitch
LOGGED BY(signature): DATE TIME
REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [illegible] / ECOR	5/12/09	1600	2 [illegible]	5/12	1625
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
SDWA Forms?⇒ yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [ ] NJ [X] NY [ ] PA [ ]
Other
⇒Enter PWSID No.
EDDs Required? [ ] If yes, format type:
DOD Criteria Required?

ALSI FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc. Rev 6/07