# Quarterly Monitoring Report
# 3rd Quarter 2004

## L.E. Carpenter & Company
## Wharton, New Jersey

*USEPA ID No. NJD002168748*

**November 2004**

354540

RMT, Inc., Michigan ("RMT")
2025 E. Beltline Avenue SE, Suite 402
Grand Rapids, MI 49546
Tel. (616) 975-5415
Fax (616) 975-1098

# Quarterly Monitoring Report
# 3rd Quarter 2004

## L.E. Carpenter & Company
## Wharton, New Jersey

*USEPA ID No. NJD002168748*

**November 2004**

Nicholas J. Clevett
Project Manager

James J. Dexter
Senior Hydrogeologist



© 2003 RMT, Inc.
*All Rights Reserved*

# Table of Contents


1. Introduction ..... 1-1
   1.1 Response to Regulatory Review of the 2nd Quarter 2004 Monitoring Report ..... 1-1

2. Monthly EFR Activities ..... 2-1
   2.1 Summary of Activities ..... 2-1
   2.2 Apparent Free Product Trends ..... 2-2
      2.2.1 Western Region of Free Product ..... 2-3
      2.2.2 West-Central Region of Free Product ..... 2-3
      2.2.3 East-Central Region of Free Product ..... 2-3
      2.2.4 Eastern Region of Free Product ..... 2-3
      2.2.5 Site Total Apparent Free Product Area ..... 2-4
   2.3 Recovered Free Product Volume Estimates ..... 2-4

3. Quarterly Groundwater Monitoring ..... 3-1
   3.1 Implementation of Monitored Natural Attenuation Work Plan ..... 3-1
   3.2 Methods ..... 3-1
   3.3 Groundwater Elevations and Flow Direction ..... 3-2
   3.4 Testing Results ..... 3-3
   3.5 MNA Parameters ..... 3-4

4. MW19/Hot Spot 1 Groundwater Monitoring ..... 4-1
   4.1 Monitoring Well Locations ..... 4-1
   4.2 Groundwater Flow ..... 4-1
   4.3 Delineation of Groundwater Contamination ..... 4-1
      4.3.1 Contaminants of Concern ..... 4-1
      4.3.2 MNA Parameters ..... 4-3

5. Drainage Channel Surface Water Sampling ..... 5-1

6. Upcoming Sampling Activities and Remedial Actions ..... 6-1
   6.1 Free Product Source Reduction ..... 6-1
   6.2 Excavation and Disposal of Lead Soils ..... 6-2
   6.3 Rapid Response ..... 6-2

## List of Tables


| | |
|---|---|
| Table 1 | Free Product Recovery |
| Table 2 | Regional Apparent Free Product Trends |
| Table 3 | Monthly Free Product Gauging Logs and Volumetric Extraction Calculations |
| Table 4 | Current Quarterly Groundwater Monitoring Protocol |
| Table 5 | Quarterly Groundwater Elevations |
| Table 6 | Quarterly Groundwater Monitoring Data |
| Table 7 | Quarterly Groundwater Monitoring MNA Analytical Data |
| Table 8 | Quarterly Groundwater Monitoring MNA Field Data |
| Table 9 | MW19/Hot Spot 1 Groundwater Monitoring Data |
| Table 10 | Surface Water Monitoring Data |


## List of Figures


| | |
|---|---|
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan with Well Locations |
| Figure 3 | Free Product Thickness Map |
| Figure 4 | Site Wide Shallow Aquifer Potentiometric Surface Map |
| Figure 5 | MW19/Hot Spot 1 Shallow Aquifer Potentiometric Surface Map |
| Figure 6 | MW19/Hot Spot 1 Isoconcentration Map, 3rd Quarter 2004 |
| Figure 7 | MW14 Well Cluster Vertical Gradient Trend Chart |
| Figure 8 | MW11 Well Cluster Vertical Gradient Trend Chart |


## List of Appendices


| | |
|---|---|
| Appendix A | Report Certification |
| Appendix B | Apparent Free Product Volume Trend Charts |
| Appendix C | 3rd Quarter 2004 Monitoring Well Sampling Data |
| Appendix D | Groundwater Concentration Trend Analysis |
| Appendix E | 3rd Quarter 2004 Laboratory Analytical Report |

# Section 1
# Introduction

RMT, Inc. (RMT), on behalf of our client, has prepared this Quarterly Monitoring Report for the L.E. Carpenter and Company (LEC) ("site") located at 170 North Main Street, Wharton, New Jersey (Figure 1). Quarterly monitoring events are performed at the site to comply with paragraph 35 of the 1986 Administrative Consent Order (ACO) issued to LEC by the New Jersey Department of Environmental Protection (NJDEP). We provide a summary of activities completed during the third quarter of 2004 (3Q04), including but not limited to, routine quarterly Monitored Natural Attenuation (MNA) groundwater monitoring, surface water monitoring, and monthly free product recovery activities.

We have certified this report in accordance with requirements outlined in N.J.A.C 7:26E-1.5 (Appendix A).

RMT conducted the following tasks during the 3Q04:

- Monthly mobile free product recovery using enhanced fluid recovery (EFR) techniques in accordance with the NJDEP approval letter dated August 20, 1997 (Reference Section 2, and Figures 2 and 3).
- Quarterly groundwater monitoring as required under the ACO (Reference Sections 3 and 4 and Figures 4, 5, and 6).
- Various follow-up activities associated with both the lead and free product investigations, and the proposed conceptual remediation plan. (Reference Section 6).
- Maintenance of absorbent booms to prevent migration of free-product sheen to the river and the ditch (Reference Section 6).

We provide a discussion of these activities in the referenced sections.

## 1.1 Response to Regulatory Review of the 2nd Quarter 2004 Monitoring Report

LEC has, to date, not received a NJDEP comment letter regarding the 2nd Quarter 2004 (2Q04) Monitoring Report. Once received, LEC will prepare a response to comment document and submit it under separate cover.

# Section 2
# Monthly EFR Activities

## 2.1 Summary of Activities

In August 1997, the NJDEP approved the Remedial Action Plan (RAP), which described free product removal using EFR for the eastern portion of the subject site (east of the railroad right-of-way). EFR is conducted by applying a vacuum to product recovery wells to primarily remove free-phase product in addition to limited volumes of contaminated groundwater and contaminant vapors within vadose zone and capillary fringe soils. As the result of increased aeration, this procedure enhances any natural biodegradation that may be occurring in the soil and groundwater. The locations of the 28 EFR wells purged during each monthly EFR event and all groundwater monitoring wells are shown in Figure 2.

RMT arranged performance of three EFR events during the 3Q04 on July 8th, August 12th, and Sept. 17th. RMT coordinated measurement of the free product thickness in each recovery well (where applicable), followed by EFR. The free-product thickness measured inside well casings and volumes of free product calculated based on the measured thicknesses and the well diameter are referred to herein as "apparent free-product" because free-product in a well is not a measure of actual product thickness or recoverable volumes in the soils adjacent to each well. Tracking total apparent free-product volume and comparing that number to the total volume recovered during an EFR event (as determined by above ground storage tank (AST) gauging with the interface probe) is also a method to determine how much free product was drawn out of the soils surrounding the EFR well casings. RMT observed measurable free product within 15 of the 74 wells monitored on August 9, 2004 (Table 5). Table 1 lists apparent free product thickness measurements recorded during 3Q04.

RMT's subcontractor, CEMCO, used the recorded free product measurements to determine the placement of the drop pipe that maximized free product recovery volumes produced during each EFR event. Table 1 also provides a cumulative breakdown of EFR specific information such as minimum and maximum free product thickness levels (in feet), associated waste management costs, extracted product (liquid and vapor phase) and groundwater volumes (in gallons) to date.

During 3Q04, EFR activities were conducted utilizing a Nortech, Inc. 55B vacuum head apparatus capable of producing a vacuum of 17-inches of mercury (in Hg) at 100 cubic feet per minute (cfm). This unit is connected to a fitted 55-gallon drum, and braced to a mobile 4-wheel drive vehicle. When compared to the previously utilized vacuum trucks, use of this system has

enabled CEMCO to get closer to each individual EFR well head, minimizing potential losses in the system previously experienced due to the use of greater lengths of extraction hose, while maximizing the maneuverability of the drop pipe. Use of this system has also resulted in a more efficient EFR event, minimizing the volume of groundwater extracted. The average ratio of extracted groundwater to free product during the 3Q04 was approximately 0.32 gallons/gallon. Between November 1997 to December 1999 (before use of the current extraction method), the ratio of extracted groundwater to free product was 4.7 gallons/gallon.

Once the extraction apparatus is full (approximately 55-gallons), the free product and limited volume of groundwater are transferred to the on-site 550-gallon AST equipped with secondary containment for satellite storage. The fluids generated during EFR events, including purged groundwater generated during groundwater monitoring activities, are transported off-site by Clean Venture, Inc. (US EPA ID No. NJ0000027193) and managed by Cycle Chem, Inc. (USEPA ID No. NJD002200046) at their facility located in Elizabeth, New Jersey. Waste fluids were transported off-site following the August 2004 EFR event (State Manifest Document No. NJA 5209068).

## 2.2 Apparent Free Product Trends

The following sections describe apparent product trends in the western, west central, east central, and eastern portions of the free product area. In this section, apparent product refers to the volume (in gallons) of free product occupying the casing of each EFR well. As described in the following sections, "total volume of apparent free product" represents the sum of product volumes from each EFR well within each of the four segregated regions. This data is summarized on Table 2.

The apparent product thickness is not representative of the actual free product thickness or volume that exists within the formation outside of the well casing. RMT previously evaluated actual or "true" free product thickness and volume in our report entitled *Free Product Volume Analysis* (May 2000). That report estimated a total volume of recoverable (using *in-situ* methods) free product actually present in the subsurface to be between 8,000 and 13,000 gallons. In addition, the light non-aqueous phase liquid (LNAPL) "true" thickness calculated in the May 2000 report (using the Van Genuchten method) for the area comprising all of the regions discussed below averaged 0.265 feet. The calculated "true" thickness also was very similar to the apparent free-product thicknesses in terms of defining four separate regions or sub-areas with the most significant amounts of free product. Similarly in this report, to facilitate description of the current distribution of free product, the zone of free product occurrence has been divided into the same four sub-areas. These four areas, discussed from west to east, are summarized below:

### 2.2.1 Western Region of Free Product

In the western portion of the free product area (EFR wells 1, 2, 3, 17, 18, 20, 21, and 28), there was an increase in the total volume of apparent free product measured in EFR wells during the 3Q04 compared to 2Q04 (7.84 gallons in 3Q04 up from 5.48 gallons in 2Q04). Free product thickness increased at EFR wells 1, 2, 3, 18, and 21, decreased at EFR well 20, and remained the same at EFR well 17. Levels of free product, which are now being measured in WP-A2, WP-A4, WP-A6, and WP-A9 had also decreased in comparison with 2Q04. EFR well 28 was destroyed during test pit activities in early spring and so was not measured during 3Q04. In general, the overall apparent free product volume in the western region continues to decrease since LEC initiated EFR in November 1997 (Figure 3 and Appendix B).

### 2.2.2 West-Central Region of Free Product

In the western-central portion of the free product area (EFR wells 4, 5, 6, 7, 19, 22, 23, 24, 25, 26, and 27), the total volume of apparent free product increased from 1.35 gallons in 2Q04 to 2.62 gallons in 3Q04. Free product thickness decreased at EFR well 23, increased at EFR wells 5, 6, 19, 25, and 26, and remained the same at EFR wells 4, 7, 22, 24, and 27. There were also decreased levels of free product in WP-A7 and WP-A8 from 2Q04. The overall apparent free product volume in the western region continues to decrease since LEC initiated EFR in November 1997 (Figure 3 and Appendix B).

### 2.2.3 East-Central Region of Free Product

In the east-central portion of the free product area (EFR wells 8, 9, 10, 11, 12, and 13), there was an increase in the total volume of apparent free product measured during the 3Q04 compared to the previous quarter (1.17 gallons in 2Q04 up to 4.2 gallons in 3Q04). Free product thickness increased at all east-central EFR wells (8, 9, 10, 11, and 12) with the exception of EFR well 12 where no free product has been measured in over 6 months. The overall apparent free product volume in the eastern-central region continues to decrease since LEC initiated EFR in November 1997 (Figure 3 and Appendix B).

### 2.2.4 Eastern Region of Free Product

Similar to previous events, no free product was detected in EFR wells 14, 15, and 16 during 3Q04. However, a free product thickness 0.27 feet (.16 gallons) was measured in nearby monitoring well MW-3 during the 3Q04 monitoring event. This represents a decrease in the apparent free product for that well* compared to the 2Q04 results. (Refer to Figure 3 and Appendix B)

### 2.2.5 Site Total Apparent Free Product Area

In general, the total apparent free product trend chart indicates a general decrease in the apparent free product volumes existing within on-site wells. A cumulative breakdown of free product thickness and apparent free product volumes specific to each region is presented in Table 2. Additionally, trend charts for each of the four free product regions, and for the site as a whole, graphically display apparent free product volume fluctuations over time are presented in Appendix B. Figure 3 shows apparent thickness contours and the lateral extent of apparent free product on-site during 3Q04. This figure incorporates the apparent free product thickness measurements from the groundwater monitoring event conducted by RMT on August 9, 2004 and the pre-EFR event measurements from the EFR wells obtained by CEMCO on August 12, 2004.

## 2.3 Recovered Free Product Volume Estimates

After the completion of each EFR event, the total volume of extracted fluid was determined by gauging the 55-gallon vacuum head drum previously mentioned in Section 2.1 with an oil/water interface probe. The drum was allowed to stabilize for one hour prior to gauging to allow for separation of emulsified product resulting from aggressive recovery prior to gauging. Gauging was conducted on a level surface and recorded thickness was converted to volumes based on a conversion of 1.65 gallons per inch of fluid thickness in the 55-gallon drum. Recovered liquid free product volume was determined by subtracting the volume of water from the total fluid volume collected in the 55-gallon drum. Vapor phase product volume was estimated based on vacuum head airflow (in cfm) and vented contaminant concentrations (in ppm) obtained during extraction at each EFR well. The volume (combined liquid and vapor phase) of free product extracted during each month's EFR event is presented in Table 3.

The total extraction volume (measurable free product, product vapor, and groundwater) during 3Q04 was 55.29 gallons. Approximately 46.21 gallons of that amount were measurable free product as determined by vacuum head drum gauging and vapor phase volume calculations, and 9.08 gallons were groundwater. Since initiation in December 1997, on-site EFR activities have removed approximately 15,277 gallons of total fluids, of which, approximately 4,053 gallons were measurable free phase product. Based on historical modeling data (Ref. Section 2.2), approximately 3,954 to 8,954 gallons of recoverable free product remains in the ground. Tables 1, 2, and 3 contain a complete breakdown of EFR related information.

# Section 3
# Quarterly Groundwater Monitoring

## 3.1 Implementation of Monitored Natural Attenuation Work Plan

In a letter dated January 15, 2004, USEPA requested LEC to implement the remainder of the May 2001 MNA workplan. Prior to that time, LEC implemented only the low-flow sampling protocols as outlined in the MNA workplan. LEC began implementing the additional portions of the MNA workplan during the 2Q04 sampling event. Sampling and testing of the wells coded in red color on Figure 4 took place per the approved workplan.

## 3.2 Methods

RMT conducted groundwater monitoring activities in the 3Q04 on August 9th - 14th. In the past, we performed groundwater monitoring in accordance with the procedures contained in the NJDEP's *Field Sampling Procedures Manual* dated May 1992. However, in second quarter 2002 (2Q02) we initiated groundwater monitoring using the low-flow methodology outlined in our May 2001 MNA workplan. The MNA workplan was approved by NJDEP on January 24, 2002. Although the sampling was performed using low-flow methods, the remaining parts of the MNA workplan had not yet been initiated, although a QED bladder pump system with disposable Teflon bladders (as described in the approved MNA workplan Quality Assurance Project Plan (QAPP)) was used to collect groundwater samples at LEC. However, per the comments received from USEPA on January 15, 2004 regarding their review of the third quarter 2003 (3Q03) monitoring report, LEC began implementing the additional portions of the MNA workplan during the 2Q04 sampling event. RMT performed the 3Q04 groundwater monitoring event in accordance with the fully implemented MNA workplan. Locations of the quarterly MNA monitoring wells are shown on Figure 2.

Quarterly MNA monitoring wells MW-4, MW-14S, MW-14I, MW-15S, MW-15I, MW-17S, MW-21, MW-22(R), and MW-25(R) were sampled utilizing the low-flow methodology outlined in the QAPP, presented in Appendix A of the approved MNA workplan. Specifically, RMT used a QED bladder pump to remove groundwater at a low rate (average of 0.3 L/minute). Before sampling the wells we measured field parameters until they stabilized to obtain a representative sample of the formation water for laboratory testing. Monitoring well sampling data for the 3Q04 is presented in Appendix C. Once the field parameters in each well stabilized, or following adequate purging if stabilization could not be achieved, samples were collected

from the Teflon-lined polyethylene tubing of the bladder pump. Monitoring wells MW-3 and MW-6R could not be sampled because free product was measured in the well.

A sample duplicate, a trip blank, field (atmosphere) blank, and a rinsate blank were collected to satisfy Quality Assurance/Quality Control (QA/QC) requirements. A summary of the quarterly groundwater monitoring QA/QC requirements for the LEC site is also outlined in Table 4. The trip blank was prepared by the laboratory and remained with the sample containers until the samples were returned to the laboratory where they were analyzed for benzene, toluene, ethyl benzene, and xylenes (BTEX). The duplicates were collected from monitoring well MW-19-10 (duplicate sample No. Dupe-01) and MW-25(R) (duplicate sample No. Dupe-02) and analyzed for BTEX, bis (2-ethylhexyl) phthalate (DEHP), and MNA parameters. The rinsate blank was collected by circulating triple distilled water through the cleaned bladder pump assembly to verify that the decontamination procedures were adequate. Any sampling equipment used at each well was decontaminated prior to each use utilizing an environmental detergent (Alconox) and clean water wash followed by a distilled water rinse. The field (atmosphere) blank was taken by opening a bottle of unpreserved de-ionized water provided by the laboratory, leaving the bottle open during the sampling of one well, and pouring that water directly into clean sample bottles with added preservative also provided by the laboratory. RMT submitted the samples to Lancaster Laboratories, Inc. (Lancaster), located in Lancaster, Pennsylvania for BTEX and DEHP, analysis per the current MNA groundwater monitoring protocol outlined in Table 4.

## 3.3 Groundwater Elevations and Flow Direction

On August 9, 2004, RMT measured static groundwater levels from 74 different locations throughout the site (Table 5). RMT used these data to calculate groundwater elevations and evaluate the groundwater flow pattern in the shallow aquifer system.

Figure 4 displays the site-wide shallow groundwater elevation contours, and indicates groundwater flow direction in the shallow aquifer east of the rail spur is similar to that observed historically (generally toward the east). Washington Forge Pond acts as a constant head boundary that provides the driving head for both shallow and deep groundwater flow. As a result, areas of the site exhibit upward vertical gradients, while the drainage ditch acts as a discharge zone, as does the downstream portion of the Rockaway River. The portion of the Rockaway River south of and immediately adjacent to the site is a losing reach, particularly in drought periods when the groundwater levels beneath the site are depressed a few feet and a gradient from the River into the site occurs. As one moves downstream the River transitions to a gaining stream, but the location of the transition oscillates due to changes in recharge events. Also exhibited in Figure 4 are the effects caused by the presence of the drainage ditch. The drainage ditch acts as a local groundwater "sink", and shallow groundwater flow direction from a large portion of the site is towards the drainage ditch.

The regional groundwater "sink" for this area is the Rockaway River, as exhibited by the strong upward vertical gradients observed for all of the on-site well clusters. For example, the water elevation in MW-11D(R) is 2.45 feet higher than the corrected water elevation for its' shallow counterpart MW-11S (Table 5). Similarly, data collected during the 3Q04 sampling event shows the water elevation in MW-14I is 0.14 feet higher than the water elevation for its' shallow counterpart MW-14S. Historical water level data for this and other locations of well clusters confirms the predominant upward vertical gradients across the site (Figures 7, and 8).

Shallow groundwater at the southern edge of the LEC site is generally recharged directly by the Rockaway River and first flows northwards towards the site and then toward the east. All flow from the site is ultimately to the drainage ditch and/or the Rockaway River (Figure 4). Furthermore, data continues to show that shallow groundwater on the Air Products property flows southeast, south, and southwest towards the drainage ditch.

The potentiometric surface contours were generated using the measured fluid level elevations in site shallow wells. We also used surface water elevations from points in the Rockaway River, the drainage ditch, 6 and the Washington Forge Reservoir to control and interpret the groundwater elevation contours.

As described above in Section 1.2, we reexamined the groundwater contours in light of NJDEP comments regarding certain groundwater elevation points that were not in agreement with elevation contours. The contours presented on Figure 4 have been developed using a contouring protocol that strictly agrees with corrected elevations for the wells within the free-product zone. The resulting contours show a depressed water table that matches closely with the area of greatest apparent free product thicknesses shown on Figure 3.

## 3.4 Testing Results

A comparison of the results of the chemical analyses to New Jersey Class IIa Groundwater Quality Standards (NJGWQS) is outlined in Table 6. The presence of BTEX and/or DEHP was not detected at concentrations above NJGWQS in samples collected from MW-11D(R), MW-14S, MW-14I, MW-15S, MW-15I, MW-21, and MW-25(R). Following the approved MNA sampling protocol, MW-17S was only sampled for MNA parameters and not BTEX or DEHP. The presence of DEHP was detected in WP-B6, WP-B7, MW-2(R), MW-4, and MW-22(R) at concentrations of 64,000, 63,000 µg/L, 15,000 µg/L, 2,500 µg/L, and 99 µg/L respectively. These concentrations exceed the NJGWQS for DEHP of 30 µg/L. In addition, total xylene concentrations were detected above the NJGWQS of 40 µg/L in MW-22(R) (410 µg/L).

Concentrations of total xylenes and DEHP at MW-22(R) have consistently exceeded NJGWQS; concentrations of these constituents at downgradient monitoring location MW-14S have never

exceeded NJGWQS. In addition, contaminant concentrations at monitoring location MW-25(R) (also located downgradient from MW-22R at certain times of the year) have not exceeded NJGWQS since second quarter 1997.

There is no discernable trend of DEHP concentrations in MW-11D(R) when the data are viewed in total from 1999 through 2004 (Table 6; Appendix D). In addition, as we have described in previous reports, the reliability of low-level detections of DEHP have been questionable because DEHP is ubiquitous in the environment, and it is also a common laboratory contaminant. In summary, sporadic past DEHP detections in MW-11D(R) are false positives based on the following: 1.) DEHP has often been found in laboratory blanks, 2.) past field decontamination of sampling equipment has at times likely been inadequate, and 3.) the very strong upward vertical hydraulic gradient (Table 5 and Figure 8). LEC has performed a variety of tasks in order to eliminate or minimize production of false positive data. The first steps we took were to institute more rigid field decontamination procedures in order to minimize potential field cross-contamination, as well as changing to in-field use of triple-distilled decontamination water. This was followed by initiation of low-flow sampling methodology (March 2002) in order to minimize amounts of contaminated suspended particulate matter (*e.g.* clay particles) and purging of stagnant water within the well riser.

Despite these actions, laboratory cross-contamination of DEHP had still proved to be a concern in certain monitoring events through fourth quarter of 2002 (4Q02). As a result RMT evaluated several laboratories in terms of their in-house program to minimize DEHP as a common lab contaminant. As was mentioned in the 4Q02 monitoring report, beginning with first quarter 2003 (1Q03) Lancaster performed all laboratory analyses. As shown in the 3Q04 analytical results provided by Lancaster, DEHP was not detected above the method detection limit (MDL) of 1.0 µg/L in either the laboratory blanks nor in any of the QA/QC samples taken during this event.

LEC will continue to sample groundwater from MW-11D(R) and test it for the presence of DEHP. However, MW-11I(R) and MW-11D(R) will be properly abandoned prior to initiation of the free product remediation, currently scheduled to begin in the fourth quarter 2004 (4Q04). This should satisfy the concerns of potential future upward trends in concentrations for the deep well expressed in the NJDEP letter received on June 30, 2004.

## 3.5 MNA Parameters

Tables 7 and 8 summarize the MNA field and analytical data respectively. The sampling and testing was done in accordance with the parameters outlined in the May 2001 MNA workplan that was revised on October 23, 2001 and approved by NJDEP on January 24, 2002. These data will be examined closely in the future with respect to post-remediation evaluation of MNA.

# Section 4
# MW19/Hot Spot 1 Groundwater Monitoring

This section summarizes the results of a groundwater monitoring event conducted in the MW-19/Hot Spot 1 area on August 9-14, 2004. In their January 15, 2004 letter, the USEPA commented on their desire to begin MNA sampling. LEC began implementing the MNA workplan during the 2Q04 sampling event. Quarterly MNA monitoring wells MW-19, MW-19-1, MW-19-2, MW-19-5, MW-19-6, MW-19-7, MW-19-8, MW-19-9D, and MW-19-10 were sampled utilizing the low-flow methodology outlined in the QAPP, presented in Appendix A of the approved MNA workplan.

## 4.1 Monitoring Well Locations

The site was flown on February 14, 2002 and a site-wide topographic map was constructed from that aerial photograph. Figure 2 incorporates all of the MW-19/Hot Spot 1 area monitoring wells, and nearby buildings, utilities, fences, and streets.

## 4.2 Groundwater Flow

As in previous quarters, groundwater flow in the MW-19/Hot Spot 1 area is generally northwards and bends northeast (Figure 5). In addition, the localized flow of shallow groundwater in this area is also likely influenced by the presence of the 24-inch Rockaway River Regional Interceptor Sewer, which is encased in a gravel-lined trench running parallel to Ross Street.

From a regional flow standpoint, overall flow is controlled by the Washington Forge Pond and the Rockaway River. The Rockaway River eventually captures groundwater from MW-19/Hot Spot 1 area, even though it is locally influenced by the Regional Interceptor Sewer.

## 4.3 Delineation of Groundwater Contamination

### 4.3.1 Contaminants of Concern

Table 9 summarizes concentrations of BTEX and DEHP for all of the MW-19/Hot Spot 1 area MNA groundwater monitoring wells. RMT sampled groundwater from the MW-

19/Hot Spot 1 area wells on August 9-14, 2004. Corresponding analytical laboratory reports are presented in Appendix E. Lancaster performed all laboratory analyses.

The NJGWQS for DEHP is not exceeded in any monitoring wells. Benzene, toluene, ehylbenzene, and total xylenes exceed the NJGWQS in groundwater collected from MW-19 and MW19-5. MW-19 is located close to the former 10,000-gallon underground storage tanks (UST's E-3 and E-4) that likely were responsible for releasing some of the waste DEHP and BTEX constituents. However, these former UST's are no longer a source for DEHP and BTEX contamination in this area because LEC removed them in 1991 along with nearby impacted soils. In addition, the LEC printing processes and material storage practices that occurred in Building 9 may have resulted in releases of both DEHP and BTEX were stopped in 1987. The NJGWQS for total xylenes and benzene were exceeded in MW19-2 and MW19-7, respectively. The cause of the increasing concentrations in certain MW19 area wells is currently unknown.

No BTEX or DEHP were detected in the newly installed MW19-10. However, this well appears to be not immediately downgradient from MW-19-7 based on the first two measured groundwater elevations from this newly installed well (Figure 5). LEC will continue to monitor the MW-19 area wells to further evaluate flow directions and the potential for a MNA remedy for addressing the dissolved contaminates of concern (COC's) in groundwater.

RMT constructed Figure 6 to show isoconcentration contours for total BTEX levels in parts per million (ppm) (mg/L) with respect to the groundwater elevation contours. The distribution of total BTEX defined by the isoconcentration contours is consistent with the groundwater flow direction defined by the groundwater elevation contours.

No BTEX or DEHP were detected in MW19-9D (Table 9). This shows that there is no migration of these constituents downward and to the north under Ross Street and the regional interceptor sewer. In addition, the lack of downward migration of contaminants is evidenced by the hydraulic data we discuss below.

Table 5 lists monitoring well surveyed reference elevations, water level measurements, and groundwater elevations. Although NJDEP/USEPA retracted their earlier requirement to pair a shallow well with MW19-9D, we installed MW19-9D only about 12 feet north of MW19-6 because of access issues. The driller had to conform to OSHA requirements and maintain a safe distance from the overhead power lines that overhang the north side of Ross Street. As previously stated the on-site NJDEP representative approved the well location in the field before drilling commenced.

The closeness of MW19-6 and MW19-9D allows a general comparison between groundwater elevations versus screened interval and to evaluate the vertical gradient. The hydraulic head at MW19-9D is 0.55 feet higher than at MW19-6, indicating a significant upward vertical gradient. The vertical distance between the middle of the MW19-6 and the MW19-9D well screens is 15 feet. Given the difference in hydraulic head between the two wells, the upward vertical hydraulic gradient is about an order of magnitude greater than the horizontal hydraulic gradient measured for this area.

This upward vertical gradient is consistent with all other deep/shallow well clusters across the site and is probably influenced by the hydraulic head induced by the Washington Pond Reservoir, and regional discharge to the Rockaway River. These findings are consistent with an earlier RMT prediction of an upward vertical gradient for this location based on nearby piezometers GEI-2I and GEI-2S, and other upward vertical gradients observed across the site. The Washington Forge Pond (at an elevation of approximately 640 feet), the Rockaway River, acts as constant head boundaries comprising a regional aquifer discharge area.

LEC will continue to conduct groundwater monitoring in this area as part of the site-wide MNA quarterly groundwater-monitoring program.

### 4.3.2 MNA Parameters

Tables 7 and 8 summarize the MNA field and analytical data respectively. The sampling and testing was done in accordance with the parameters outlined in the May 2001 MNA workplan that was revised on October 23, 2001 and approved by NJDEP on January 24, 2002. These data will be examined closely in the future with respect to post-remediation evaluation of MNA.

# Section 5
# Drainage Channel Surface Water Sampling

As part of the 3Q04 event, RMT sampled the eastern drainage channel that separates the adjacent Air Products facility from the LEC site and the adjacent Wharton Enterprises property. This sampling was conducted at the request of NJDEP as outlined in their letter dated May 31, 2002. The NJDEP requested, in a letter dated November 4, 2002, that surface water samples be collected at the three locations along this channel (SW-5, SW-7, & SW-8). During the third quarter sampling event, only two of the three locations (SW-5 & SW-7) were sampled due to sampler error. Sample SW-5 is located at the bend in the ditch (Figure 2), closest to the down gradient edge of the area of free product (Figure 3). Sample SW-7 is located at the upstream end (head) of the ditch.

The surface water samples collected at SW-5 and SW-7 contained very low levels of toluene (1.50 µg/L and 1.4 µg/L respectively). Both SW-5 and SW-7 also contained very low levels of DEHP (2.0 µg/L and 4.0 µg/L respectively). DEHP detections are "J-qualified" meaning they were estimated values falling between the MDL and the Limit of Quantitation (LOQ). These concentrations are below the surface water quality criteria for toxic substances outlined in N.J.A.C 7:9B-1.14 and NJGWQS. Historical and current surface water sampling results are summarized in Table 10.

These data suggest that BTEX and DEHP constituents dissolved in groundwater are naturally attenuating, and that migration of the these primary constituents of concern is not taking place at levels above applicable standards in surface water within the drainage channel nor in groundwater beyond MW-25(R) located on the Wharton Enterprises property. In other words, the area of on-site free product results in an aerially limited downgradient "halo" of dissolved phase contaminants in groundwater that make up a stable (non-expanding) plume. Future site monitoring activities will include surface water sample collection at all three surface locations.

# Section 6
# Upcoming Sampling Activities and Remedial Actions

The following section briefly outlines activities anticipated for completion during 3Q04 and 4Q04. LEC completed the 3Q04 groundwater sampling event in August 2004. The 4Q04 sampling activities are scheduled to be completed in early November 2004; however, assuming the source reduction remediation is approved and starts up in 4Q04 all further groundwater monitoring events will be postponed until approval and installation of the post-remediation groundwater monitoring well network.

## 6.1 Free Product Source Reduction

In December 2001, RMT conducted a subsurface investigation to further investigate methods to expedite removal of free product as outlined in the NJDEP approved workplan and amendment entitled *Workplan to Evaluate Free Product Remedial Strategies* (RMT, November 2001), and *Amendment to Workplan to Evaluate Free Product Remedial Strategies* (RMT, November 2001). Results of this investigation were submitted to USEPA and NJDEP in the document entitled *Findings & Recommendations Regarding a Conceptual Free-Product Remediation Strategy* in March 2002. NJDEP and USEPA comments were provided in the NJDEP letter dated July 26, 2002. Written responses to the comments outlined in the July 26, 2002 letter were provided to NJDEP and USEPA in the RMT response letter dated October 22, 2002. All of the issues described in the comments and response letters were addressed at the meeting held in Edison New Jersey on September 19, 2002. Both the NJDEP and USEPA verbally approved the conceptual approach to free product remediation during that meeting. Per NJDEP's request in their letter dated January 22, 2003, RMT submitted on March 4, 2003 a detailed schedule of all activities anticipated through remedial mobilization that was tentatively set at August 31, 2004. The schedule was revised and re-submitted on January 14, 2004. RMT, on behalf of LEC, prepared and submitted a Remedial Action Work Plan (RAWP) dated April 2004 that outlines both the engineering and design of the conceptual approach, and the various requirements (*i.e.*, plans, permits and approvals) needed to implement the remedy on-site.

Comments resulting from review of the RAWP were received from NJDEP and USEPA on July 21, 2004. Implementation of the source removal strategy presented in the RAWP will take place after the RAWP review comments have been addressed. Remediation of free product via

source reduction through excavation (per the RAWP) is still tentatively scheduled to start in 4Q04.

## 6.2 Excavation and Disposal of Lead Soils

In November 2001, RMT conducted a subsurface investigation as outlined in the *Revised Workplan for Delineating and Characterizing Elevated Lead Concentrations in Soil* (RMT, May 2001) to delineate the extent of on-site lead contamination in soils. Results of this investigation were submitted to USEPA and NJDEP in the document entitled *Nature and Extent of Lead in Soils and Groundwater* in March 2002. NJDEP and USEPA comments were provided in the NJDEP letter dated July 26, 2002. Written responses to the comments outlined in the July 26, 2002 letter were discussed at the September 19, 2002 meeting and also provided to NJDEP and USEPA in the RMT response letter dated October 22, 2002. As was required in the NJDEP letter dated January 22, 2003, RMT on behalf of LEC, submitted the report entitled *Focused Feasibility Study Lead-Impacted Soil Remediation* (FFS)(RMT, February 2003) so that an Explanation of Significant Difference (ESD) could be prepared by NJDEP and USEPA documenting and approving this change in the current Record of Decision (ROD) remedial approach for lead soils from excavation and off-site disposal to excavation and on-site beneficial reuse. NJDEP and USEPA comments were received on July 3, 2003. On behalf of LEC, RMT attended a meeting with NJDEP and USEPA on October 7, 2003 to discuss the draft FFS comments. Based on the results of that meeting, LEC submitted a letter formally requesting withdrawal of the FFS on December 9, 2003. That letter stated lead contaminated soils would be remediated by implementing the original ROD alternative of removal and off-site disposal, except soils would be removed down to a level of 400 ppm (residential cleanup criterion) instead of the ROD-mandated cleanup level of 600 ppm (industrial cleanup criterion). The withdrawal of the lead FFS was approved by NJDEP and USEPA in a letter dated December 23, 2003. Procedures for staging and removal of the lead-contaminated soils to an off-site disposal facility are detailed in the RAWP and this remediation will take place immediately prior to remediation of the LNAPL source area.

## 6.3 Rapid Response

Maintenance of the absorbent materials (*i.e.*, booms and sweeps) at the two seep areas continued throughout 3Q04. Absorbent material maintenance events took place on July 15th and 28th, August 11th and 25th, and September 8th and 22nd. Waste booms and sweeps and associated PPE were accumulated in 55-gallon drums and staged on-site pending appropriate management. On September 24, 2004, 17 55-gallon drums of non-hazardous absorbent materials and PPE were transported by Environmental Waste Minimization, Inc. (EWMI) to Michigan Disposal Waste Treatment Plant located in Belleville, Michigan. Biweekly absorbent material maintenance events will continue throughout 4Q04.

# Tables

# Table 1
## L.E. CARPENTER - Wharton, New Jersey
### Free Product Recovery - EFR Well # 1 - 28

| EFR Event Date / Well No. | EFR #26 30-Nov-99 Feet of Product | EFR #27 16-Dec-99 Feet of Product | EFR #28 26-Jan-00 Feet of Product | EFR #29 18-Feb-00 Feet of Product | EFR #30 24-Mar-00 Feet of Product | EFR #31 19-Apr-00 Feet of Product | EFR #32 18-May-00 Feet of Product | EFR #33 16-Jun-00 Feet of Product | EFR #34 18-Jul-00 Feet of Product | EFR #35 17-Aug-00 Feet of Product | EFR #36 18-Sep-00 Feet of Product | EFR #37 25-Oct-00 Feet of Product | EFR #38 17-Nov-00 Feet of Product | EFR #39 15-Dec-00 Feet of Product | EFR #40[10] 15-Mar-01 Feet of Product | EFR #41 23-Apr-01 Feet of Product | EFR #42 25-May-01 Feet of Product | EFR #43 13-Jun-01 Feet of Product | EFR #44 27-Jul-01 Feet of Product | EFR #45 24-Aug-01 Feet of Product | EFR #46 25-Sep-01 Feet of Product | EFR #47 25-Oct-01 Feet of Product | EFR #48 20-Nov-01 Feet of Product | EFR #49 31-Dec-01 Feet of Product | EFR #50 29-Jan-02 Feet of Product | EFR #51 20-Feb-02 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 1.47 | 1.20 | 1.22 | 0.65 | 1.88 | 1.59 | 1.54 | 2.10 | 1.51 | 1.26 | 1.63 | 1.00 | 1.07 | 1.14 | 2.91 | 1.25 | 1.02 | 1.14 | 0.57 | 0.60 | 1.29 | 1.60 | 1.51 | 1.57 | 2.07 | 1.98 |
| EFR-2 | 1.28 | 1.40 | 0.05 | 1.04 | 2.25 | 2.00 | 1.84 | 1.69 | 1.40 | 0.66 | 1.08 | 0.97 | 1.09 | 0.76 | 2.92 | 2.66 | 1.75 | 2.26 | 1.22 | 1.17 | 1.22 | 1.14 | 1.15 | 1.19 | 1.67 | 1.83 |
| EFR-3 | 0.47 | 0.02 | 0.51 | 0.07 | 0.09 | 0.09 | 0.62 | 1.02 | 0.25 | 0.02 | 0.08 | 0.44 | 0.49 | 0.46 | 0.88 | 0.29 | 0.49 | 0.70 | 0.40 | 0.66 | 0.51 | 0.81 | 0.76 | 0.80 | 0.70 | 0.78 |
| EFR-4 | 0.03 | 0.58 | 0.51 | 0.48 | 0.11 | 0.11 | 0.41 | 0.22 | 0.05 | 0.02 | 0.02 | 0.02 | 0.05 | 0.21 | 0.59 | 1.65 | 0.01 | 0.44 | 0.02 | 1.86 | 0.11 | 0.57 | 0.68 | 0.54 | 0.26 | 1.18 |
| EFR-5 | 2.99 | 1.27 | 2.95 | 2.46 | 2.91 | 2.54 | 1.84 | 2.84 | 1.99 | 1.69 | 1.57 | 2.74 | 2.47 | 2.76 | 5.55 | 1.75 | 1.80 | 0.62 | 2.24 | 2.05 | 2.25 | 2.55 | 2.10 | 2.67 | 2.68 | 2.89 |
| EFR-6 | 0.63 | 0.83 | 1.07 | 0.77 | 0.29 | 0.81 | 0.49 | 0.27 | 0.54 | 0.29 | 0.55 | 0.83 | 0.79 | 0.66 | 2.05 | 0.62 | 0.49 | 0.16 | 0.46 | 0.49 | 0.67 | 1.19 | 1.56 | 1.23 | 0.71 | 2.21 |
| EFR-7 | 0.04 | 0.47 | 0.15 | 0.02 | 0.65 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.29 | 0.02 | 0.02 | 0.00 | 0.00 | 0.16 | 0.00 | 0.05 | 0.09 | 0.24 | 0.00 | 0.00 |
| EFR-8 | 0.05 | 0.11 | 0.05 | 0.05 | 0.09 | 0.03 | 0.05 | 0.03 | 0.02 | 0.01 | 0.01 | 4.26 | 0.02 | 0.06 | 0.03 | 0.05 | 0.04 | 0.09 | 0.01 | 0.16 | 0.00 | 0.19 | 0.16 | 0.22 | 0.01 | 0.04 |
| EFR-9 | 0.10 | 0.16 | 0.19 | 0.08 | 0.19 | 0.02 | 0.06 | 0.06 | 0.12 | 0.16 | 0.09 | 0.02 | 0.50 | 0.77 | 0.67 | 0.07 | 0.56 | 0.07 | 0.14 | 0.27 | 0.39 | 0.56 | 0.65 | 0.62 | 0.29 | 0.45 |
| EFR-10 | 8.95 | 8.07 | 4.50 | 8.55 | 8.50 | 4.50 | 1.86 | 2.50 | 8.09 | 0.75 | 2.78 | 8.89 | 8.27 | 4.05 | 5.64 | 8.17 | 8.52 | 8.82 | 8.78 | 2.60 | 2.62 | 2.70 | 2.61 | 2.91 | 2.02 | 8.82 |
| EFR-11 | 8.11 | 1.07 | 8.44 | 4.95 | 2.41 | 2.95 | 2.99 | 2.49 | 4.12 | 0.79 | 4.78 | 0.16 | 4.00 | 8.78 | 2.82 | 2.41 | 8.56 | 2.60 | 8.91 | 2.67 | 8.86 | 8.22 | 2.44 | 2.80 | 2.89 | 2.58 |
| EFR-12 | 0.67 | 0.01 | 0.09 | 0.49 | 0.46 | 0.10 | 0.19 | 0.01 | 0.01 | 0.00 | 0.08 | 0.11 | 0.04 | 0.02 | 0.07 | 0.02 | 0.25 | 0.01 | 0.01 | 0.29 | 0.00 | 0.00 | 0.84 | 0.21 | 0.26 | 0.11 |
| EFR-13 | 0.57 | 0.26 | 0.86 | 0.94 | 0.48 | 0.47 | 0.69 | 0.55 | 0.78 | 0.49 | 0.22 | 0.25 | 0.09 | 0.15 | 1.14 | 0.27 | 0.78 | 0.26 | 0.69 | 0.47 | 0.86 | 0.46 | 0.89 | 0.44 | 0.84 | 0.44 |
| EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-15 | 0.08 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-17 | 0.84 | 0.25 | 0.11 | 0.82 | 0.04 | 0.16 | 0.65 | 0.04 | 0.01 | 0.02 | 0.09 | 0.06 | 0.86 | 0.01 | 0.41 | 0.81 | 0.51 | 0.28 | 0.02 | 0.49 | 0.84 | 0.65 | 0.97 | 1.57 | 1.48 | 2.23 |
| EFR-18 | 0.77 | 0.05 | 0.20 | 0.05 | 0.12 | 0.04 | 0.62 | 0.01 | 0.06 | 0.16 | 0.08 | 0.61 | 0.81 | 0.20 | 8.27 | 1.65 | 0.49 | 0.61 | 0.01 | 0.18 | 0.41 | 0.69 | 0.75 | 1.22 | 1.90 | 1.00 |
| EFR-19 | 0.84 | 0.69 | 1.67 | 1.73 | 0.25 | 0.60 | 0.98 | 0.17 | 0.63 | 0.84 | 0.22 | 0.87 | 0.59 | 1.42 | 2.82 | 0.65 | 1.98 | 1.01 | 0.44 | 1.19 | 0.54 | 2.15 | 2.86 | 2.38 | 2.26 | 8.22 |
| EFR-20 | 1.86 | 0.75 | 1.08 | 2.58 | 0.64 | 0.42 | 0.54 | 0.63 | 0.60 | 0.89 | 0.45 | 0.54 | 0.11 | 0.87 | 0.84 | 0.97 | 0.62 | 0.61 | 0.08 | 0.82 | 0.24 | 0.73 | 1.10 | 1.29 | 1.78 | 0.46 |
| EFR-21 | 1.40 | 1.70 | 1.92 | 1.84 | 8.04 | 2.66 | 2.47 | 8.02 | 2.09 | 1.62 | 2.75 | 1.79 | 1.65 | 1.87 | 4.09 | 8.51 | 2.96 | 2.61 | 1.98 | 1.61 | 1.87 | 1.56 | 1.88 | 1.54 | 1.51 | 1.50 |
| EFR-22 | 1.78 | 0.58 | 0.82 | 0.58 | 0.09 | 0.16 | 0.05 | 0.05 | 0.01 | 0.18 | 0.08 | 0.58 | 2.14 | 1.50 | 0.61 | 0.08 | 0.49 | 0.00 | 0.00 | 0.47 | 0.57 | 1.22 | 1.58 | 1.89 | 0.98 | 0.63 |
| EFR-23 | 0.64 | 0.24 | 0.89 | 0.81 | 0.46 | 0.06 | 0.06 | 0.01 | 0.18 | 0.08 | 0.07 | 0.07 | 0.08 | 0.89 | 0.07 | 0.08 | 0.89 | 0.28 | 0.05 | 0.84 | 0.07 | 0.65 | 2.67 | 0.75 | 0.98 | 1.18 |
| EFR-24 | 0.04 | 0.18 | 0.11 | 0.07 | 0.58 | 0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.04 | 2.27 | 0.05 | 0.84 | 0.01 | 0.01 | 0.27 | 0.14 | 0.65 | 0.88 | 0.94 | 0.47 | 2.65 |
| EFR-25 | 0.19 | 0.05 | 0.81 | 0.89 | 0.58 | 0.21 | 0.10 | 0.09 | 0.10 | 0.09 | 0.10 | 0.19 | 0.12 | 0.10 | 0.04 | 0.89 | 0.28 | 0.14 | 0.08 | 0.47 | 0.09 | 0.49 | 0.63 | 0.64 | 0.82 | 0.99 |
| EFR-26 | 0.94 | 0.59 | 1.54 | 1.10 | 1.88 | 1.63 | 2.02 | 1.44 | 2.25 | 1.98 | 2.01 | 2.05 | 1.78 | 1.10 | 2.64 | 2.56 | 2.68 | 1.48 | 2.24 | 1.07 | 1.20 | 1.45 | 1.22 | 1.19 | 1.14 | 0.87 |
| EFR-27 | 0.01 | 0.01 | 0.02 | 0.14 | 0.20 | 0.01 | 0.08 | 0.04 | 0.01 | 0.01 | 0.15 | 0.01 | 0.01 | 0.01 | 0.48 | 0.05 | 0.04 | 0.00 | 0.01 | 0.04 | 0.00 | 0.52 | 0.49 | 0.19 | 0.59 | 0.82 |
| EFR-28 | 0.98 | 1.42 | 1.63 | 1.00 | 2.80 | 2.42 | 1.81 | 2.69 | 1.72 | 2.48 | 2.02 | 1.89 | 1.86 | 0.64 | 2.81 | 2.75 | 1.85 | 2.84 | 1.86 | 1.67 | 1.05 | 1.50 | 1.98 | 1.51 | 1.67 | 1.66 |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MAX (ft) | 8.95 | 8.07 | 4.50 | 4.95 | 8.50 | 4.50 | 2.99 | 8.02 | 4.12 | 2.48 | 4.78 | 4.26 | 4.00 | 4.05 | 5.55 | 8.51 | 8.56 | 8.82 | 8.91 | 2.67 | 8.86 | 8.22 | 2.67 | 2.91 | 2.89 | 8.82 |
| Average (ft) | 0.98 | 0.59 | 0.87 | 0.89 | 0.88 | 0.84 | 0.75 | 0.76 | 0.76 | 0.45 | 0.74 | 0.80 | 0.80 | 0.79 | 1.60 | 0.95 | 0.97 | 0.73 | 0.69 | 0.75 | 0.70 | 0.97 | 1.07 | 1.06 | 1.06 | 1.21 |
| Total Free Product (ft) | 24.59 | 16.67 | 24.84 | 24.79 | 24.62 | 23.88 | 20.91 | 21.80 | 21.14 | 12.49 | 20.67 | 22.51 | 22.65 | 22.28 | 44.76 | 26.62 | 27.24 | 20.88 | 19.98 | 21.08 | 19.52 | 27.29 | 30.01 | 29.67 | 29.55 | 33.86 |
| Total Standing Free Product Volume (gal) | 15.98 | 10.64 | 15.62 | 16.11 | 16.00 | 15.20 | 18.59 | 18.85 | 18.74 | 8.12 | 18.44 | 14.63 | 14.58 | 14.45 | 29.09 | 17.90 | 17.71 | 18.25 | 12.56 | 18.70 | 12.69 | 17.74 | 19.51 | 19.29 | 19.21 | 22.01 |
| Estimated Total Free Product Removed (gal) [1] *(Liquid and Vapor Phase Free Product Volume)* | 44.79 | 49.84 | 48.52 | 51.66 | 48.14 | 45.46 | 45.50 | 48.66 | 46.88 | 22.05 | 25.07 | 44.12 | 65.86 | 49.82 | 79.06 | 46.44 | 56.75 | 87.50 | 40.86 | 87.70 | 27.96 | 29.54 | 81.09 | 29.86 | 82.48 | 88.28 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | | | 40.98 | 46.21 | 52.80 | 41.26 | 40.18 | 89.44 | 40.43 | 20.18 | 21.05 | 68.78 | 81.86 | 48.78 | 74.01 | 40.01 | 51.15 | 81.28 | 86.60 | 88.00 | 25.58 | 25.16 | 26.40 | 28.98 | 24.75 | 26.40 |
| Vapor Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | 6.55 | 7.98 | 10.19 | 5.65 | 6.81 | 5.05 | 7.60 | 5.22 | 5.25 | 6.58 | 5.65 | 6.42 | 11.06 | 6.49 | 8.90 | 7.50 | 6.59 | 6.65 | 4.76 | 6.26 | 7.99 | 7.91 | 9.98 | 8.53 |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | 86.97 | 48.79 | 87.95 | 89.61 | 89.19 | 88.61 | 88.78 | 16.68 | 19.81 | 87.54 | 29.71 | 42.90 | 68.00 | 87.95 | 47.85 | 80.00 | 83.88 | 81.85 | 26.10 | 22.28 | 28.10 | 21.45 | 26.10 | 24.75 |
| Groundwater Extraction Volume (gal) per each EFR Event [7] *as of Jan 2000* | | | 8.96 | 2.48 | 14.85 | 1.65 | 0.99 | 0.83 | 1.65 | 8.80 | 1.24 | 1.24 | 1.65 | 0.63 | 6.01 | 2.06 | 8.60 | 1.24 | 2.48 | 1.65 | 2.48 | 2.89 | 8.80 | 2.48 | 1.65 | 1.65 |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 248.07 | 850.00 | 47.48 | 54.14 | 62.99 | 47.11 | 46.49 | 44.49 | 48.09 | 25.85 | 26.81 | 45.86 | 87.01 | 50.15 | 85.07 | 49.50 | 60.05 | 88.78 | 42.84 | 89.85 | 80.84 | 81.42 | 84.89 | 81.84 | 84.18 | 84.99 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* [8] | 82 | - | 857 | | | | 110 | | | | 184 | | | 149 | | | 295 | | | 90 | | | | 0 | | |
| Total Volume Removed from Site (gal) *(Manifested volume)* [8] | 691 | 850 | 589 | | | | 250 | | | | 225 | | | 905 | | | 415 | | | 200 | | | | 100 | | |
| Cumulative Total Free Product Removed (gal) | 2,316 | 2,362 | 2,406 | 2,457 | 2,506 | 2,551 | 2,597 | 2,640 | 2,687 | 2,709 | 2,734 | 2,778 | 2,819 | 2,869 | 2,942 | 2,988 | 3,045 | 3,092 | 3,129 | 3,160 | 3,199 | 3,217 | 3,249 | 3,277 | 3,310 | 3,349 |
| Extraction, Transportation & Disposal Cost [2] | $ 1,028.93 | $ 968.67 | $ 1,045.62 | | | | $ 795.18 | | | | $ 762.81 | | | $ 998.18 | | | $ 1,175.19 | | | $ 1,089.50 | | | | $ | | |
| Unit Cost per gal[3] | $ 3.11 | $ 2.77 | $ 1.94 | | | | $ 3.18 | | | | $ 3.39 | | | $ 3.26 | | | $ 2.83 | | | $ 5.45 | | | | $ | | |
| State Manifest Document Number | NJA9090027 | NJA9074974 | NJA9114860 | | | | NJA9115697 | | | | NJA9101196 | | | NJA9289189 | | | NJA9288898 | | | NJA4096830 | | | | NJA4095884 | | |

# Table 1
## L.E. CARPENTER - Wharton, New Jersey
### Free Product Recovery - EFR Well # 1 - 28

| EFR Event Date / Well No. | EFR #52 26-Mar-02 Feet of Product | EFR #53 10-Apr-02 Feet of Product | EFR #54 06-May-02 Feet of Product | EFR #55 13-Jun-02 Feet of Product | EFR #56 15-Jul-02 Feet of Product | EFR #57 08-Aug-02 Feet of Product | EFR #58 13-Sep-02 Feet of Product | EFR #59 09-Oct-02 Feet of Product | EFR #60 07-Nov-02 Feet of Product | EFR #61 17-Dec-02 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 0.90 | 0.77 | 1.60 | 1.92 | 0.65 | 0.81 | 1.14 | 0.68 | 1.62 | 1.93 |
| EFR-2 | 1.40 | 1.20 | 2.89 | 2.15 | 1.68 | 1.02 | 0.09 | 1.27 | 2.86 | 8.07 |
| EFR-3 | 1.05 | 1.09 | 1.28 | 1.58 | 0.25 | 0.89 | 0.81 | 0.91 | 0.98 | 0.88 |
| EFR-4 | 0.97 | 0.89 | 0.93 | 1.07 | 1 | 0.26 | 0.11 | 0.43 | 2.86 | 0.62 |
| EFR-5 | 8.50 | 8.07 | 8.25 | 2.17 | 2.01 | 2.00 | 2.05 | 1.67 | 1.69 | 0.87 |
| EFR-6 | 2.90 | 0.77 | 0.43 | 0.27 | 0.54 | 0.45 | 0.62 | 0.88 | 8.14 | 1.63 |
| EFR-7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 |
| EFR-8 | 0.07 | 0.10 | 0.05 | 0.07 | 0 | 0.14 | 0.28 | 0.18 | 0.1 | 0.25 |
| EFR-9 | 0.82 | 0.82 | 0.28 | 0.11 | 0.65 | 0.80 | 0.19 | 0.82 | 0.83 | 0.25 |
| EFR-10 | 8.48 | 2.77 | 2.64 | 8.89 | 8.15 | 2.81 | 2.83 | 1.95 | 2.70 | 2.76 |
| EFR-11 | 2.12 | 0.99 | 0.87 | 1.01 | 1.54 | 2.08 | 8.91 | 2.05 | 1.69 | 1.67 |
| EFR-12 | 0.10 | 0.15 | 0.00 | 0.08 | 0.80 | 0.08 | 0.83 | 0.25 | 0.24 | 0.64 |
| EFR-13 | 0.87 | 0.68 | 1.71 | 1.11 | 0.55 | 0.26 | 0.61 | 0.80 | 0.55 | 0.69 |
| EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-15 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.09 | 0.00 | 0.29 | 0.00 |
| EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-17 | 1.90 | 0.77 | 0.75 | 0.60 | 0.49 | 0.67 | 1.50 | 0.71 | 1.10 | 1.07 |
| EFR-18 | 1.07 | 0.81 | 0.60 | 0.05 | 0.62 | 0.02 | 1.56 | 0.21 | 0.04 | 0.84 |
| EFR-19 | 2.90 | 2.69 | 1.94 | 0.95 | 1.82 | 1.55 | 2.55 | 0.85 | 1.80 | 1.03 |
| EFR-20 | 1.24 | 1.24 | 1.74 | 2.03 | 1.62 | 1.58 | 1.65 | 1.47 | 1.77 | 2.45 |
| EFR-21 | 2.25 | 1.65 | 2.11 | 2.51 | 1.98 | 1.46 | 0.02 | 0.44 | 0.00 | 0.00 |
| EFR-22 | 0.80 | 0.89 | 0.16 | 0.19 | 0.82 | 0.11 | 0.22 | 1.89 | 1.09 | 0.76 |
| EFR-23 | 0.01 | 0.70 | 0.57 | 0.52 | 0.60 | 0.68 | 0.77 | 0.59 | 0.81 | 0.67 |
| EFR-24 | 0.80 | 1.85 | 0.88 | 0.84 | 1.18 | 0.19 | 0.18 | 0.16 | 0.01 | 0.00 |
| EFR-25 | 0.75 | 1.21 | 0.89 | 0.29 | 0.86 | 0.25 | 0.65 | 0.28 | 0.88 | 0.69 |
| EFR-26 | 1.55 | 1.67 | 1.63 | 1.92 | 2.42 | 1.69 | 1.24 | 0.59 | 0.28 | 0.40 |
| EFR-27 | 0.00 | 0.00 | 0.88 | 1.81 | 1.10 | 0.04 | 1.43 | 2.53 | 1.77 | 8.10 |
| EFR-28 | 0.21 | 0.69 | 0.29 | 0.85 | 1.09 | 0.66 | 1.22 | 0.22 | 0.14 | 0.28 |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MAX (ft) | 8.50 | 8.07 | 8.25 | 8.89 | 8.16 | 2.81 | 8.91 | 2.58 | 8.14 | 8.10 |
| Average (ft) | 1.06 | 0.98 | 0.93 | 0.92 | 0.90 | 0.69 | 0.98 | 0.69 | 1.00 | 0.91 |
| Total Free Product (ft) | 29.61 | 25.91 | 26.11 | 25.62 | 25.11 | 19.01 | 25.91 | 19.48 | 27.86 | 25.54 |
| Total Standing Free Product Volume (gal) | 19.88 | 16.94 | 16.97 | 16.79 | 16.82 | 12.86 | 16.94 | 12.68 | 18.11 | 16.60 |
| Estimated Total Free Product Removed (gal) (1) (Liquid and Vapor Phase Free Product Volume) | 29.78 | 81.72 | 28.10 | 29.15 | 25.59 | 26.19 | 89.55 | 28.67 | 25.66 | 27.22 |
| Estimated Total Fluids Removed (gal) (Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000 | 25.16 | 28.05 | 26.40 | 28.05 | 25.58 | 24.75 | 87.18 | 81.02 | 28.05 | 28.05 |
| Vapor Phase Free Product Extraction Volume (gal) as of Jan 2000 | 6.63 | 6.15 | 5.00 | 6.05 | 2.49 | 8.51 | 6.55 | 1.98 | 1.74 | 1.64 |
| Liquid Phase Free Product Extraction Volume (gal) as of Jan 2000 | 28.10 | 25.58 | 28.10 | 28.10 | 28.10 | 22.69 | 88.00 | 26.79 | 28.98 | 25.58 |
| Groundwater Extraction Volume (gal) per each EFR Event (7) as of Jan 2000 | 2.06 | 2.48 | 8.60 | 4.95 | 2.48 | 2.06 | 4.19 | 4.29 | 4.18 | 2.48 |
| EFR Extraction Volume (gal) (Total Volume: free product + groundwater + product vapor) | 81.79 | 84.21 | 81.40 | 84.10 | 28.07 | 28.26 | 48.69 | 82.95 | 29.80 | 29.70 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) if applicable (8) | | 142 | | | | 0 | | | | |
| Total Volume Removed from Site (gal) (Manifested volume) (8) | | 250 | | | | 105 | | | | |
| Cumulative Total Free Product Removed (gal) | 8,378 | 8,404 | 8,438 | 8,462 | 8,487 | 8,519 | 8,559 | 8,582 | 8,607 | 8,635 |
| Extraction, Transportation & Disposal Cost (2) | 788.25 | $ 965.12 | | | | $ 851.00 | | | | |
| Unit Cost per gal (3) | 7.68 | $ 8.86 | | | | $ 8.10 | | | | |
| State Manifest Document Number | | NJA4095962 | | | | NJA4068029 (11) | | | | |

| EFR Event Date / Well No. | EFR #62 11-Mar-03 Feet of Product | EFR #63 17-Mar-03 Feet of Product | EFR #64 21-Mar-03 Feet of Product | EFR #65 10-Apr-03 Feet of Product | EFR #66 08-May-03 Feet of Product | EFR #67 10-Jun-03 Feet of Product | EFR #68 (10) 08-Jul-03 Feet of Product | EFR #69 07-Aug-03 Feet of Product | EFR #70 09-Sep-03 Feet of Product | EFR #71 09-Oct-03 Feet of Product | EFR #72 06-Nov-03 Feet of Product | EFR #73 31-Dec-03 Feet of Product | EFR #74 13-Jan-04 Feet of Product | EFR #75 25-Feb-04 Feet of Product | EFR #76 30-Mar-04 Feet of Product | EFR #77 16-Apr-04 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 0.68 | 0.22 | 0.41 | 0.46 | 0.19 | 0.48 | 0.18 | 0.49 | 0.69 | 0.63 | 0.26 | 0.09 | 0.05 | 0.28 | 0.19 | 0.12 |
| EFR-2 | 1.96 | 0.84 | 1.02 | 1.40 | 1.54 | 2.84 | 1.61 | 1.82 | 1.41 | 1.75 | 1.22 | 1.10 | 0.59 | 0.45 | 0.47 | 0.82 |
| EFR-3 | 0.70 | 0.80 | 0.20 | 0.07 | 0.14 | 0.05 | 0.08 | 0.10 | 0.19 | 0.18 | 0.09 | 0.05 | 0.01 | 0.01 | 0.14 | 0.02 |
| EFR-4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-5 | 2.91 | 1.19 | 0.16 | 0.79 | 0.49 | 0.81 | 0.29 | 0.29 | 0.72 | 0.78 | 0.51 | 0.42 | 0.11 | 0.22 | 0.29 | 0.09 |
| EFR-6 | 0.27 | 0.29 | 0.27 | 0.69 | 0.14 | 0.48 | 0.12 | 0.00 | 0.16 | 0.07 | 0.00 | 0.22 | 0.06 | 0.01 | 0.02 | 0.05 |
| EFR-7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-8 | 0.87 | 0.27 | 0.83 | 0.88 | 0.05 | 0.11 | 0.00 | 0.00 | 0 | 0.02 | 0.03 | 0.08 | 0.02 | 0.07 | 0.02 | 0.05 |
| EFR-9 | 0.84 | 0.02 | 0.92 | 0.54 | 0.17 | 0.10 | 1.09 | 0.00 | 0.02 | 0.07 | 0.06 | 0.08 | 0.06 | 0.04 | 0.26 | 0.14 |
| EFR-10 | 2.45 | 0.84 | 0.28 | 0.84 | 0.79 | 1.89 | 0.54 | 0.00 | 2.21 | 0.92 | 0.98 | 0.76 | 0.16 | 0.87 | 0.15 | 0.19 |
| EFR-11 | 2.62 | 4.69 | 8.83 | 1.19 | 0.89 | 1.01 | 0.66 | 0.19 | 8.57 | 1.52 | 0.70 | 0.69 | 0.21 | 0.29 | 1.18 | 0.00 |
| EFR-12 | 0.56 | 0.49 | 0.52 | 0.45 | 0.18 | 0.24 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 |
| EFR-13 | 0.09 | 0.11 | 0.26 | 0.25 | 0.12 | 0.27 | 0.09 | 0.12 | 0.18 | 0.09 | 0.09 | 0.07 | 0.00 | 0.01 | 0.03 | 0.08 |
| EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-17 | 0.18 | 0.09 | 0.00 | 0.00 | 0.69 | 0.61 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-18 | 1.82 | 1.61 | 0.04 | 0.00 | 0.65 | 0.01 | 0.00 | 0.00 | 0.09 | 0.11 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 |
| EFR-19 | 0.40 | 0.80 | 0.81 | 1.51 | 0.82 | 0.09 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-20 | 2.80 | 1.88 | 1.88 | 2.42 | 1.00 | 8.18 | 2.41 | 0.00 | 1.78 | 2.40 | 2.59 | 2.51 | 1.20 | 1.18 | 1.49 | 0.96 |
| EFR-21 | 0.01 | 2.48 | 1.95 | 1.46 | 2.44 | 2.89 | 2.08 | 2.55 | 2.19 | 2.45 | 1.29 | 1.08 | 0.75 | 1.95 | 1.85 | 0.99 |
| EFR-22 | 2.60 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-23 | 0.82 | 0.06 | 0.50 | 2.84 | 0.05 | 0.86 | 0.04 | 0.00 | 0.11 | 0.10 | 0.10 | 0.26 | 0.02 | 0.17 | 0.02 | 0.09 |
| EFR-24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-25 | 0.14 | 0.09 | 0.05 | 0.21 | 0.82 | 0.00 | 0.00 | 0.00 | 0.08 | 0.09 | 0.11 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 |
| EFR-26 | 0.69 | 0.27 | 0.80 | 0.18 | 0.51 | 0.20 | 0.15 | 0.00 | 0.89 | 0.59 | 0.69 | 0.24 | 0.25 | 0.45 | 0.66 | 0.67 |
| EFR-27 | 2.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-28 | 1.04 | 0.80 | 0.61 | 0.44 | 0.88 | 0.80 | 0.09 | 0.08 | 0.08 | 0.11 | 0.14 | 0.15 | 0.00 | NM | NM | NM |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MAX (ft) | 2.91 | 4.69 | 8.83 | 2.42 | 2.44 | 8.18 | 2.41 | 2.55 | 8.57 | 2.45 | 2.59 | 2.61 | 1.20 | 1.95 | 1.85 | 0.99 |
| Average (ft) | 0.87 | 0.61 | 0.45 | 0.54 | 0.89 | 0.50 | 0.83 | 0.18 | 0.51 | 0.43 | 0.60 | 0.28 | 0.12 | 0.22 | 0.25 | 0.14 |
| Total Free Product (ft) | 24.47 | 17.07 | 12.59 | 15.15 | 11.02 | 14.11 | 9.29 | 5.14 | 14.69 | 11.98 | 8.67 | 7.90 | 8.49 | 5.98 | 6.70 | 8.65 |
| Total Standing Free Product Volume (gal) | 15.91 | 11.10 | 8.18 | 9.65 | 7.16 | 9.17 | 6.00 | 8.84 | 9.65 | 7.75 | 5.44 | 5.14 | 2.27 | 8.61 | 4.86 | 2.67 |
| Estimated Total Free Product Removed (gal) (1) (Liquid and Vapor Phase Free Product Volume) | 98.50 | 60.89 | 17.21 | 27.84 | 19.05 | 25.45 | 21.45 | 12.02 | 17.46 | 22.29 | 25.49 | 14.91 | 14.17 | 14.58 | 14.77 | 14.11 |
| Estimated Total Fluids Removed (gal) (Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000 | 68.76 | 61.85 | 17.98 | 90.58 | 19.89 | 26.40 | 22.28 | 14.85 | 20.69 | 24.84 | 29.70 | 16.50 | 15.67 | 28.88 | 15.69 | 14.08 |
| Vapor Phase Free Product Extraction Volume (gal) as of Jan 2000 | 1.88 | 1.51 | 0.71 | 0.94 | 0.90 | 2.65 | 0.00 | 1.90 | 0.96 | 0.84 | 0.74 | 0.69 | 0.56 | 0.50 | 1.57 | 0.91 |
| Liquid Phase Free Product Extraction Volume (gal) as of Jan 2000 | 67.18 | 29.88 | 16.50 | 26.40 | 18.15 | 28.10 | 21.45 | 10.78 | 16.50 | 21.45 | 24.75 | 14.08 | 18.61 | 14.09 | 18.20 | 18.20 |
| Groundwater Extraction Volume (gal) per each EFR Event (7) as of Jan 2000 | 1.65 | 2.48 | 0.63 | 4.19 | 1.24 | 8.60 | 0.68 | 4.18 | 4.18 | 2.69 | 4.65 | 2.48 | 2.06 | 14.85 | 2.48 | 0.63 |
| EFR Extraction Volume (gal) (Total Volume: free product + groundwater + product vapor) | 40.16 | 82.87 | 18.04 | 81.47 | 20.29 | 28.75 | 22.28 | 16.16 | 21.59 | 25.18 | 80.44 | 17.69 | 16.29 | 29.89 | 17.25 | 14.94 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) if applicable (8) | 828.09 | | | | | | | | | | | | | | | |
| Total Volume Removed from Site (gal) (Manifested volume) (8) | 529 | | | | | | | | 125 | | | | | | | |
| Cumulative Total Free Product Removed (gal) | 8,679 | 8,709 | 8,721 | 8,748 | 8,767 | 8,792 | 8,814 | 8,826 | 8,848 | 8,856 | 8,891 | 8,906 | 8,920 | 8,935 | 8,950 | 8,949 |
| Extraction, Transportation & Disposal Cost (2) | $ 1,844.86 | | | | | | | | $ 718.94 | | | | | | | |
| Unit Cost per gal (3) | $ 2.54 | | | | | | | | $ 5.78 | | | | | | | |
| State Manifest Document Number | NJA5010142 (10) | | | | | | | | NJA5075995 | | | | | | | |

# Table 1
## L.E. CARPENTER - Wharton, New Jersey
### Free Product Recovery - EFR Well # 1 - 28

| EFR Event Date<br>Well No. | EFR 678<br>20-May-04<br>Feet of Product | EFR 679<br>17-Jun-04<br>Feet of Product | EFR 680<br>8-Jul-04<br>Feet of Product | EFR 681<br>12-Aug-04<br>Feet of Product | EFR 682<br>17-Sep-04<br>Feet of Product | | |
|---|---|---|---|---|---|---|---|
| EFR-1 | 0.09 | 0.12 | 0.44 | 1.01 | 0.91 | | |
| EFR-2 | 0.04 | 0.58 | 0.67 | 1.16 | 1.80 | | |
| EFR-3 | 0.04 | 0.17 | 0.91 | 0.28 | 0.01 | | |
| EFR-4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-5 | 0.01 | 0.50 | 0.00 | 1.91 | 0.00 | | |
| EFR-6 | 0.00 | 0.02 | 0.00 | 0.04 | 0.01 | | |
| EFR-7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-8 | 0.00 | 0.02 | 0.09 | 0.01 | 0.00 | | |
| EFR-9 | 0.00 | 0.02 | 0.18 | 0.02 | 0.01 | | |
| EFR-10 | 0.02 | 0.27 | 0.26 | 0.69 | 0.90 | | |
| EFR-11 | 0.01 | 0.92 | 1.25 | 2.02 | 0.00 | | |
| EFR-12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-13 | 0.05 | 0.02 | 0.19 | 1.21 | 0.00 | | |
| EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-18 | 0.00 | 0.00 | 0.18 | 0.09 | 0.05 | | |
| EFR-19 | 0.00 | 0.00 | 0.00 | 0.04 | 0.12 | | |
| EFR-20 | 1.20 | 1.14 | 1.02 | 1.40 | 0.04 | | |
| EFR-21 | 0.01 | 1.96 | 1.66 | 1.63 | 0.08 | | |
| EFR-22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-23 | 0.00 | 0.02 | 0.00 | 0.02 | 0.08 | | |
| EFR-24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-25 | 0.00 | 0.02 | 0.00 | 0.10 | 0.00 | | |
| EFR-26 | 0.04 | 0.59 | 0.72 | 0.78 | 0.65 | | |
| EFR-27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-28 | NM | NM | NM | NM | NM | | |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| MAX (ft) | 1.20 | 1.96 | 1.66 | 2.02 | 1.80 | | |
| Average (ft) | 0.09 | 0.69 | 0.25 | 0.48 | 0.15 | | |
| Total Free Product (ft) | 2.41 | 6.94 | 6.60 | 11.69 | 4.07 | 3.00 | EFR TOTALS |
| Total Standing Free Product Volume (gal) | 1.57 | 4.05 | 4.42 | 7.55 | 2.65 | | |
| Estimated Total Free Product Removed (gal) [1] *(Liquid and Vapor Phase Free Product Volume)* | 17.59 | 25.21 | 14.14 | 24.92 | 7.75 | 49 | 4,053 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | 21.46 | 27.29 | 14.66 | 23.10 | 12.69 | 29 | 1,622 |
| Vapor Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 0.25 | 2.11 | 1.76 | 2.67 | 0.92 | 4 | 237 |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 17.99 | 29.10 | 12.88 | 21.45 | 7.43 | 26 | 1,453 |
| Groundwater Extraction Volume (gal) per each EFR Event [1] *as of Jan 2000* | 4.19 | 4.19 | 2.49 | 1.65 | 4.95 | 3 | 169 |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 21.72 | 29.94 | 16.62 | 25.97 | 12.70 | 184 | 15,277 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *If applicable* [1] | 147.77 | | | | | 181 | 4,341 |
| Total Volume Removed from Site (gal) *(Manifested volume)* [2] | 299 | | | | | 480 | 19,195 |
| Cumulative Total Free Product Removed (gal) | 6,957 | 6,974 | 6,991 | 6,998 | 6,999 | 2,788 | 231,397 |
| Extraction, Transportation & Disposal Cost [3] | | | | $928.74 | | $ 1,256.27 | $ 54,188.48 |
| Unit Cost per gal[3] | | | | $8.03 | | $ 3.72 | N/A |
| State Manifest Document Number | | | | NJA5820058 | | N/A | N/A |

# TABLE 2
## L.E. CARPENTER - WHARTON, NEW JERSEY
### REGIONAL APPARENT FREE PRODUCT TRENDS

| | EFR Event Date | 21-Nov-97 | 9-Dec-97 | 7-Jan-98 | 16-Feb-98 | 16-Mar-98 | 27-Mar-98 | 24-Apr-98 | 29-May-98 | 30-Jun-98 | 31-Jul-98 | 24-Aug-98 | 17-Sep-98 | 22-Oct-98 | 20-Nov-98 | 18-Dec-98 | 13-Jan-99 | 17-Feb-99 | 23-Mar-99 | 19-Apr-99 | 18-May-99 | 22-Jun-99 | 28-Jul-99 | 27-Aug-99 | 22-Sep-99 | 27-Oct-99 | 30-Nov-99 | 16-Dec-99 | 28-Jan-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Western Region of Free Product | EFR-1 | 1.64 | 1.53 | 1.94 | 2.48 | 0.93 | 0.94 | 1.42 | 1.55 | 2.11 | 1.28 | 1.22 | 1.71 | 1.59 | 1.71 | 1.57 | 0.53 | 1.79 | 3.68 | 1.13 | 1.09 | 1.15 | 1.49 | 1.27 | 1.94 | 1.63 | 1.47 | 1.20 | 1.22 |
| | EFR-2 | 1.55 | 1.50 | 1.86 | 2.20 | 2.96 | 2.92 | 2.65 | 2.44 | 1.78 | 1.12 | 1.09 | 1.21 | 1.29 | 1.51 | 1.41 | 0.95 | 1.40 | 2.42 | 1.46 | 1.22 | 0.92 | 1.21 | 1.00 | 0.63 | 1.35 | 1.28 | 1.40 | 0.06 |
| | EFR-3 | 0.85 | 1.02 | 1.27 | 1.58 | 1.19 | 0.03 | 0.24 | 0.19 | 0.77 | 0.72 | 0.93 | 1.03 | 1.01 | 1.19 | 1.18 | 1.14 | 1.01 | 1.63 | 0.36 | 0.25 | 0.86 | 0.88 | 1.03 | 0.74 | 0.69 | 0.47 | 0.02 | 0.51 |
| | EFR-17 | 0.04 | 0.17 | 1.56 | 0.17 | 0.08 | 0.00 | 0.09 | 0.00 | 0.02 | 0.37 | 0.29 | 0.46 | 0.56 | 0.71 | 0.53 | 0.26 | 0.08 | 0.06 | 0.06 | 0.08 | 0.12 | 0.39 | 0.36 | 0.10 | 0.06 | 0.24 | 0.25 | 0.11 |
| | EFR-18 | 0.10 | 0.10 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.08 | 0.14 | 0.48 | 0.68 | 0.98 | 1.08 | 0.56 | 0.11 | 0.00 | 0.06 | 0.16 | 0.46 | 0.96 | 1.37 | 0.61 | 0.36 | 0.77 | 0.05 | 0.20 |
| | EFR-20 | 0.40 | 0.34 | 0.95 | 0.27 | 0.00 | 0.00 | 0.04 | 0.24 | 0.37 | 0.65 | 0.63 | 0.79 | 1.24 | 1.85 | 2.11 | 0.65 | 1.33 | 0.88 | 0.43 | 0.89 | 0.87 | 1.59 | 1.86 | 0.47 | 1.92 | 1.36 | 0.75 | 1.08 |
| | EFR-21 | 2.36 | 2.40 | 2.71 | 2.74 | 4.14 | 3.97 | 4.23 | 3.98 | 3.29 | 1.97 | 1.87 | 1.86 | 1.77 | 1.67 | 1.62 | 1.21 | 1.43 | 2.62 | 2.35 | 1.49 | 1.46 | 1.57 | 1.04 | 1.01 | 2.32 | 1.40 | 1.70 | 1.92 |
| | EFR-28 | 2.20 | 2.30 | 1.78 | 2.60 | 3.20 | 3.48 | 4.40 | 3.16 | 2.61 | 1.47 | 1.73 | 1.69 | 1.83 | 1.79 | 1.74 | 1.03 | 1.29 | 1.71 | 1.65 | 1.48 | 1.25 | 1.67 | 1.78 | 0.38 | 2.19 | 0.96 | 1.42 | 1.33 |
| | Total Free Product (ft) | 9.14 | 9.36 | 12.16 | 12.04 | 12.50 | 11.34 | 13.07 | 11.56 | 10.96 | 7.66 | 7.90 | 9.23 | 9.97 | 11.41 | 11.24 | 6.33 | 8.44 | 13.00 | 7.50 | 6.64 | 7.09 | 9.76 | 9.71 | 5.88 | 10.52 | 7.95 | 6.79 | 6.43 |
| | Total Free Product (gal) | 5.86 | 6.00 | 7.79 | 7.72 | 8.01 | 7.27 | 8.38 | 7.41 | 7.03 | 4.91 | 5.06 | 6.00 | 6.48 | 7.42 | 7.31 | 4.11 | 5.49 | 8.45 | 4.88 | 4.32 | 4.61 | 6.34 | 6.31 | 3.82 | 6.84 | 5.17 | 4.41 | 4.18 |
| West-Central Region of Free Product | EFR-4 | 1.03 | 2.27 | 0.54 | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.38 | 1.23 | 2.40 | 2.17 | 1.75 | 1.79 | 0.73 | 0.10 | 0.14 | 0.08 | 0.05 | 0.03 | 0.44 | 0.99 | 0.51 | 0.11 | 0.03 | 0.58 | 0.51 |
| | EFR-5 | 4.03 | 3.74 | 4.25 | 3.29 | 3.39 | 1.71 | 2.71 | 2.02 | 1.86 | 2.38 | 2.52 | 2.33 | 2.52 | 2.19 | 2.28 | 2.88 | 3.47 | 6.15 | 2.65 | 2.61 | 2.66 | 2.66 | 1.57 | 1.77 | 3.23 | 2.99 | 1.27 | 2.95 |
| | EFR-6 | 0.72 | 1.00 | 1.24 | 2.27 | 1.71 | 1.17 | 2.23 | 1.55 | 1.56 | 1.96 | 1.56 | 1.42 | 1.25 | 1.29 | 1.38 | 0.49 | 0.84 | 0.88 | 0.61 | 1.07 | 1.16 | 1.51 | 0.91 | 0.15 | 0.86 | 0.83 | 0.33 | 1.07 |
| | EFR-7 | 0.17 | 0.09 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.07 | 0.05 | 0.20 | 0.16 | 0.02 | 0.04 | 0.04 | 0.07 | 0.02 | 0.08 | 0.28 | 0.05 | 0.01 | 0.07 | 0.04 | 0.47 | 0.15 |
| | EFR-19 | 0.54 | 2.80 | 1.89 | 1.95 | 1.63 | 1.44 | 0.88 | 0.65 | 0.42 | 0.90 | 1.26 | 1.68 | 1.95 | 2.31 | 2.44 | 1.83 | 1.68 | 0.52 | 0.44 | 0.52 | 1.10 | 2.05 | 2.02 | 0.51 | 1.54 | 0.84 | 0.69 | 1.67 |
| | EFR-22 | 3.78 | 4.10 | 0.05 | 3.40 | 4.69 | 3.42 | 1.82 | 1.22 | 0.96 | 2.86 | 2.87 | 2.97 | 2.83 | 2.58 | 2.27 | 2.06 | 0.84 | 0.34 | 0.95 | 1.39 | 1.93 | 1.47 | 1.41 | 0.17 | 2.22 | 1.76 | 0.53 | 0.82 |
| | EFR-23 | 0.00 | 0.06 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.11 | 0.08 | 0.27 | 1.03 | 3.07 | 2.29 | 1.55 | 0.91 | 0.47 | 0.22 | 0.25 | 0.45 | 2.13 | 1.03 | 0.12 | 0.53 | 0.84 | 0.24 | 0.23 |
| | EFR-24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.03 | 0.12 | 0.14 | 0.38 | 0.06 | 0.00 | 0.00 | 0.00 | 0.08 | 0.08 | 0.05 | 0.00 | 0.00 | 0.04 | 0.13 | 0.11 |
| | EFR-25 | 2.95 | 3.00 | 3.55 | 4.15 | 3.11 | 0.72 | 0.82 | 0.79 | 0.78 | 0.60 | 0.41 | 0.29 | 0.41 | 1.33 | 1.58 | 1.05 | 1.75 | 1.19 | 1.08 | 0.76 | 0.54 | 1.74 | 1.48 | 0.21 | 0.39 | 0.19 | 0.05 | 0.31 |
| | EFR-26 | 2.20 | 2.05 | 2.66 | 2.30 | 2.12 | 1.43 | 1.32 | 1.95 | 1.21 | 2.06 | 1.58 | 1.17 | 1.24 | 1.08 | 1.09 | 0.73 | 0.55 | 0.45 | 0.75 | 1.29 | 1.28 | 1.23 | 0.72 | 0.29 | 0.52 | 0.94 | 0.59 | 1.54 |
| | EFR-27 | 0.15 | 0.02 | 2.71 | 0.74 | 0.00 | 0.00 | 0.03 | 0.00 | 0.02 | 0.33 | 0.45 | 1.49 | 0.54 | 0.47 | 0.51 | 0.09 | 0.12 | 0.00 | 0.00 | 0.02 | 0.03 | 0.17 | 0.21 | 0.06 | 0.01 | 0.01 | 0.01 | 0.02 |
| | Total Free Product (ft) | 15.57 | 19.13 | 17.11 | 18.42 | 16.65 | 9.89 | 9.81 | 8.18 | 6.91 | 11.60 | 11.99 | 14.09 | 14.02 | 16.39 | 15.93 | 11.61 | 10.36 | 10.18 | 6.85 | 7.98 | 9.34 | 13.76 | 10.44 | 3.80 | 9.48 | 8.11 | 4.89 | 9.38 |
| | Total Free Product (gal) | 9.98 | 12.26 | 10.97 | 11.81 | 10.67 | 6.34 | 6.29 | 5.24 | 4.43 | 7.44 | 7.69 | 9.16 | 9.11 | 10.65 | 10.35 | 7.55 | 6.73 | 6.62 | 4.45 | 5.19 | 6.07 | 8.94 | 6.79 | 2.47 | 6.16 | 5.27 | 3.18 | 6.10 |
| East-Central Region of Free Product | EFR-8 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.04 | 0.08 | 0.13 | 0.09 | 0.07 | 0.03 | 0.12 | 0.00 | 0.03 | 0.03 | 0.03 | 0.09 | 0.39 | 0.27 | 0.09 | 0.13 | 0.05 | 0.11 | 0.05 |
| | EFR-9 | 0.00 | 1.10 | 1.79 | 0.16 | 3.08 | 0.08 | 0.07 | 0.11 | 0.29 | 0.61 | 0.98 | 1.23 | 1.31 | 1.26 | 1.86 | 0.74 | 0.49 | 0.06 | 0.11 | 0.32 | 0.49 | 1.16 | 0.56 | 0.41 | 0.28 | 0.10 | 0.15 | 0.13 |
| | EFR-10 | 5.20 | 5.80 | 6.42 | 7.47 | 7.06 | 6.05 | 6.71 | 5.47 | 5.68 | 4.94 | 4.52 | 4.34 | 4.38 | 3.98 | 3.99 | 3.68 | 5.79 | 5.52 | 4.97 | 4.23 | 3.71 | 3.83 | 2.47 | 3.02 | 5.18 | 3.95 | 3.07 | 4.50 |
| | EFR-11 | 3.07 | 4.04 | 4.28 | 4.47 | 4.32 | 4.67 | 5.91 | 5.73 | 6.08 | 4.73 | 4.47 | 3.95 | 4.06 | 3.65 | 3.52 | 2.42 | 4.69 | 2.84 | 2.02 | 2.48 | 3.28 | 2.78 | 1.57 | 1.93 | 3.20 | 3.11 | 1.07 | 3.44 |
| | EFR-12 | 0.04 | 0.03 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.02 | 0.28 | 0.22 | 0.28 | 0.24 | 0.15 | 0.29 | 0.17 | 0.04 | 0.11 | 0.05 | 0.02 | 0.02 | 0.10 | 0.30 | 0.20 | 0.03 | 0.09 | 0.67 | 0.01 | 0.03 |
| | EFR-13 | 0.48 | 0.56 | 1.33 | 1.28 | 1.07 | 1.07 | 0.67 | 0.00 | 0.90 | 0.56 | 0.48 | 0.66 | 0.82 | 1.13 | 1.30 | 0.22 | 1.19 | 0.15 | 0.49 | 0.50 | 0.44 | 1.33 | 1.01 | 0.74 | 0.78 | 0.57 | 0.26 | 0.36 |
| | Total Free Product (ft) | 8.79 | 11.53 | 13.82 | 13.53 | 15.53 | 11.87 | 13.36 | 11.33 | 13.26 | 11.10 | 10.81 | 10.55 | 10.81 | 10.38 | 10.87 | 7.22 | 12.27 | 8.65 | 7.64 | 7.58 | 8.11 | 9.59 | 6.08 | 6.22 | 9.66 | 8.45 | 4.67 | 8.51 |
| | Total Free Product (gal) | 5.63 | 7.39 | 8.86 | 8.67 | 9.95 | 7.61 | 8.56 | 7.26 | 8.50 | 7.12 | 6.93 | 6.88 | 7.03 | 6.75 | 7.07 | 4.69 | 7.98 | 5.62 | 4.97 | 4.93 | 5.27 | 6.23 | 3.95 | 4.04 | 6.28 | 5.49 | 3.04 | 5.53 |
| Eastern Region of Free Product | EFR-14 | 0.10 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-15 | 0.09 | 0.12 | 0.27 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.03 | 0.03 | 0.12 | 0.12 | 0.32 | 0.11 | 0.07 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.13 | 0.04 | 0.02 | 0.08 | 0.02 | 0.02 |
| | EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Free Product (ft) | 0.19 | 0.28 | 0.27 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.03 | 0.03 | 0.12 | 0.12 | 0.32 | 0.11 | 0.07 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.13 | 0.04 | 0.02 | 0.08 | 0.02 | 0.02 |
| | Total Free Product (gal) | 0.12 | 0.18 | 0.17 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.02 | 0.08 | 0.08 | 0.21 | 0.07 | 0.04 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.08 | 0.03 | 0.01 | 0.05 | 0.01 | 0.01 |
| TOTAL APPARENT FREE PRODUCT VOLUME (GAL) | | 21.60 | 25.83 | 27.79 | 28.24 | 28.64 | 21.22 | 23.23 | 19.92 | 19.97 | 19.47 | 19.70 | 22.03 | 22.70 | 24.89 | 24.93 | 16.42 | 20.24 | 20.70 | 14.30 | 14.43 | 15.95 | 21.52 | 17.13 | 10.36 | 19.29 | 15.98 | 10.64 | 15.82 |

# TABLE 2
## L.E. CARPENTER - WHARTON, NEW JERSEY
### REGIONAL APPARENT FREE PRODUCT TRENDS

| | EFR Event Date | 18-Feb-00 | 24-Mar-00 | 19-Apr-00 | 18-May-00 | 16-Jun-00 | 18-Jul-00 | 17-Aug-00 | 18-Sep-00 | 25-Oct-00 | 17-Nov-00 | 15-Dec-00 | 15-Mar-01 | 23-Apr-01 | 25-May-01 | 13-Jun-01 | 27-Jul-01 | 24-Aug-01 | 25-Sep-01 | 25-Oct-01 | 20-Nov-01 | 31-Dec-01 | 29-Jan-02 | 20-Feb-02 | 26-Mar-02 | 10-Apr-02 | 6-May-02 | 13-Jun-02 | 15-Jul-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Western Region of Free Product | EFR-1 | 0.85 | 1.86 | 1.59 | 1.54 | 2.10 | 1.51 | 1.26 | 1.53 | 1.00 | 1.07 | 1.14 | 2.91 | 1.25 | 1.02 | 1.14 | 0.57 | 0.80 | 1.29 | 1.60 | 1.51 | 1.57 | 2.07 | 1.93 | 0.90 | 0.77 | 1.60 | 1.92 | 0.65 |
| | EFR-2 | 1.04 | 2.25 | 2.00 | 1.64 | 1.89 | 1.40 | 0.36 | 1.08 | 0.97 | 1.09 | 0.76 | 2.92 | 2.66 | 1.75 | 2.26 | 1.22 | 1.17 | 1.22 | 1.14 | 1.15 | 1.19 | 1.37 | 1.33 | 1.40 | 1.20 | 2.39 | 2.15 | 1.33 |
| | EFR-3 | 0.07 | 0.08 | 0.09 | 0.62 | 1.02 | 0.25 | 0.02 | 0.08 | 0.44 | 0.43 | 0.46 | 0.33 | 0.29 | 0.49 | 0.70 | 0.40 | 0.66 | 0.51 | 0.81 | 0.76 | 0.80 | 0.70 | 0.78 | 1.05 | 1.09 | 1.28 | 1.53 | 0.25 |
| | EFR-17 | 0.32 | 0.04 | 0.16 | 0.65 | 0.04 | 0.01 | 0.02 | 0.09 | 0.06 | 0.36 | 0.01 | 0.41 | 0.31 | 0.51 | 0.28 | 0.02 | 0.49 | 0.34 | 0.85 | 0.97 | 1.57 | 1.43 | 2.23 | 1.90 | 0.77 | 0.75 | 0.60 | 0.43 |
| | EFR-18 | 0.05 | 0.12 | 0.04 | 0.32 | 0.01 | 0.06 | 0.16 | 0.08 | 0.31 | 0.31 | 0.20 | 3.27 | 1.35 | 0.43 | 0.31 | 0.01 | 0.13 | 0.41 | 0.69 | 0.75 | 1.22 | 1.90 | 1.00 | 1.07 | 0.81 | 0.80 | 0.05 | 0.32 |
| | EFR-20 | 2.58 | 0.64 | 0.42 | 0.54 | 0.33 | 0.30 | 0.39 | 0.45 | 0.54 | 0.11 | 0.37 | 0.24 | 0.97 | 0.52 | 0.31 | 0.08 | 0.32 | 0.24 | 0.73 | 1.10 | 1.29 | 1.78 | 0.46 | 1.24 | 1.24 | 1.74 | 2.03 | 1.62 |
| | EFR-21 | 1.34 | 3.04 | 2.86 | 2.47 | 3.02 | 2.09 | 1.62 | 2.75 | 1.79 | 1.65 | 1.37 | 4.09 | 3.51 | 2.96 | 2.61 | 1.98 | 1.61 | 1.67 | 1.58 | 1.38 | 1.54 | 1.51 | 1.50 | 2.25 | 1.65 | 2.11 | 2.51 | 1.98 |
| | EFR-28 | 1.00 | 2.30 | 2.42 | 1.81 | 2.68 | 1.72 | 2.48 | 2.02 | 1.39 | 1.36 | 0.64 | 2.81 | 2.75 | 1.86 | 2.34 | 1.36 | 1.67 | 1.05 | 1.50 | 1.38 | 1.51 | 1.67 | 1.86 | 0.21 | 0.63 | 0.29 | 0.35 | 1.08 |
| | Total Free Product (ft) | 7.25 | 10.33 | 9.58 | 9.59 | 11.09 | 7.34 | 6.31 | 8.08 | 6.50 | 6.38 | 4.95 | 16.98 | 13.09 | 9.54 | 9.95 | 5.64 | 6.85 | 6.93 | 8.90 | 9.00 | 10.69 | 12.43 | 11.09 | 10.02 | 8.16 | 10.96 | 11.14 | 7.66 |
| | Total Free Product (gal) | 4.71 | 6.71 | 6.23 | 6.23 | 7.21 | 4.77 | 4.10 | 5.25 | 4.23 | 4.15 | 3.22 | 11.04 | 8.51 | 6.20 | 6.47 | 3.67 | 4.45 | 4.50 | 5.79 | 5.85 | 6.95 | 8.08 | 7.21 | 6.51 | 5.30 | 7.12 | 7.24 | 4.98 |
| West-Central Region of Free Product | EFR-4 | 0.48 | 0.11 | 0.11 | 0.41 | 0.22 | 0.05 | 0.02 | 0.02 | 0.02 | 0.05 | 0.21 | 0.59 | 1.65 | 0.01 | 0.44 | 0.02 | 1.86 | 0.11 | 0.57 | 0.68 | 0.54 | 0.26 | 1.13 | 0.37 | 0.89 | 0.98 | 1.07 | 1.00 |
| | EFR-5 | 2.46 | 2.91 | 2.54 | 1.84 | 2.34 | 1.99 | 1.69 | 1.57 | 2.74 | 2.47 | 2.76 | 5.95 | 1.75 | 1.90 | 0.62 | 2.24 | 2.05 | 2.25 | 2.55 | 2.10 | 2.67 | 2.66 | 2.68 | 3.50 | 3.07 | 3.25 | 2.17 | 2.01 |
| | EFR-6 | 0.77 | 0.29 | 0.31 | 0.49 | 0.27 | 0.54 | 0.29 | 0.55 | 0.83 | 0.79 | 0.96 | 2.05 | 0.32 | 0.43 | 0.16 | 0.46 | 0.49 | 0.37 | 1.13 | 1.56 | 1.23 | 0.71 | 2.21 | 2.30 | 0.77 | 0.43 | 0.27 | 0.54 |
| | EFR-7 | 0.02 | 0.35 | 0.01 | 0.02 | - | - | 0.01 | - | 0.01 | 0.01 | 0.01 | 0.28 | 0.02 | 0.02 | 0.00 | 0.00 | 0.16 | 0.00 | 0.05 | 0.08 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-19 | 1.73 | 0.25 | 0.60 | 0.98 | 0.17 | 0.63 | 0.34 | 0.22 | 0.87 | 0.59 | 1.42 | 2.32 | 0.65 | 1.98 | 1.01 | 0.44 | 1.19 | 0.54 | 2.15 | 2.36 | 2.38 | 2.26 | 3.22 | 2.90 | 2.69 | 1.34 | 0.95 | 1.82 |
| | EFR-22 | 0.58 | 0.09 | 0.16 | 0.05 | 0.05 | 0.01 | 0.18 | 0.06 | 0.53 | 2.14 | 1.50 | 0.81 | 0.06 | 0.43 | 0.00 | 0.00 | 0.47 | 0.57 | 1.22 | 1.53 | 1.93 | 0.98 | 0.63 | 0.80 | 0.39 | 0.16 | 0.19 | 0.32 |
| | EFR-23 | 0.31 | 0.46 | 0.06 | 0.06 | 0.01 | 0.13 | 0.03 | 0.07 | 0.07 | 0.08 | 0.39 | 0.07 | 0.03 | 0.88 | 0.28 | 0.05 | 0.34 | 0.07 | 0.85 | 2.67 | 0.75 | 0.98 | 1.13 | 0.01 | 0.70 | 0.57 | 0.52 | 0.60 |
| | EFR-24 | 0.07 | 0.58 | 0.02 | 0.03 | - | - | - | 0.01 | 0.01 | 0.01 | 0.04 | 2.27 | 0.05 | 0.34 | 0.01 | 0.01 | 0.27 | 0.14 | 0.35 | 0.38 | 0.34 | 0.47 | 2.65 | 0.60 | 1.35 | 0.33 | 0.24 | 1.18 |
| | EFR-25 | 0.39 | 0.58 | 0.21 | 0.10 | 0.03 | 0.10 | 0.03 | 0.10 | 0.19 | 0.12 | 0.10 | 0.04 | 0.39 | 0.28 | 0.14 | 0.03 | 0.47 | 0.09 | 0.43 | 0.63 | 0.64 | 0.82 | 0.99 | 0.75 | 1.21 | 0.33 | 0.29 | 0.36 |
| | EFR-26 | 1.10 | 1.33 | 1.68 | 2.02 | 1.44 | 2.25 | 1.38 | 2.01 | 2.05 | 1.78 | 1.10 | 2.64 | 2.56 | 2.68 | 1.48 | 2.24 | 1.07 | 1.20 | 1.45 | 1.22 | 1.13 | 1.14 | 0.87 | 1.55 | 1.67 | 1.83 | 1.92 | 2.42 |
| | EFR-27 | 0.14 | 0.20 | 0.01 | 0.03 | 0.04 | 0.01 | 0.01 | 0.15 | 0.01 | 0.01 | 0.01 | 0.48 | 0.05 | 0.04 | 0.00 | 0.01 | 0.04 | 0.00 | 0.52 | 0.49 | 0.13 | 0.53 | 0.32 | 0.00 | 0.00 | 0.38 | 1.31 | 1.10 |
| | Total Free Product (ft) | 8.05 | 7.15 | 5.71 | 6.03 | 4.57 | 5.71 | 3.98 | 4.76 | 7.33 | 8.05 | 8.50 | 17.50 | 7.53 | 8.99 | 4.14 | 5.50 | 8.41 | 5.34 | 11.27 | 13.70 | 11.98 | 10.81 | 15.83 | 12.78 | 12.74 | 9.60 | 8.93 | 11.35 |
| | Total Free Product (gal) | 5.23 | 4.65 | 3.71 | 3.92 | 2.97 | 3.71 | 2.59 | 3.09 | 4.76 | 5.23 | 5.53 | 11.38 | 4.89 | 5.84 | 2.69 | 3.58 | 5.47 | 3.47 | 7.33 | 8.91 | 7.79 | 7.03 | 10.29 | 8.31 | 8.28 | 6.24 | 5.80 | 7.38 |
| East-Central Region of Free Product | EFR-8 | 0.06 | 0.08 | 0.03 | 0.05 | 0.03 | 0.02 | 0.01 | 0.01 | 0.16 | 0.02 | 0.06 | 0.03 | 0.05 | 0.04 | 0.03 | 0.01 | 0.18 | 0.00 | 0.18 | 0.16 | 0.22 | 0.01 | 0.04 | 0.07 | 0.10 | 0.05 | 0.07 | 0.00 |
| | EFR-9 | 0.08 | 0.19 | 0.02 | 0.06 | 0.08 | 0.12 | 0.16 | 0.08 | 0.02 | 0.50 | 0.77 | 0.57 | 0.07 | 0.56 | 0.07 | 0.14 | 0.27 | 0.39 | 0.56 | 0.85 | 0.32 | 0.29 | 0.45 | 0.32 | 0.32 | 0.28 | 0.11 | 0.35 |
| | EFR-10 | 3.55 | 3.50 | 4.50 | 1.36 | 2.50 | 3.09 | 0.75 | 2.76 | 3.88 | 3.27 | 4.05 | 5.64 | 3.17 | 3.52 | 3.32 | 3.73 | 2.30 | 2.62 | 2.70 | 2.61 | 2.91 | 2.02 | 3.32 | 3.48 | 2.77 | 2.64 | 3.39 | 3.16 |
| | EFR-11 | 4.95 | 2.41 | 2.95 | 2.93 | 2.49 | 4.12 | 0.79 | 4.73 | 4.26 | 4.00 | 3.73 | 2.82 | 2.41 | 3.58 | 2.60 | 3.91 | 2.37 | 3.86 | 3.22 | 2.44 | 2.90 | 2.89 | 2.58 | 2.12 | 0.99 | 0.87 | 1.01 | 1.54 |
| | EFR-12 | 0.49 | 0.46 | 0.10 | 0.19 | 0.01 | 0.01 | 0.00 | 0.03 | 0.11 | 0.04 | 0.02 | 0.07 | 0.02 | 0.25 | 0.01 | 0.01 | 0.23 | 0.00 | 0.00 | 0.34 | 0.21 | 0.26 | 0.11 | 0.10 | 0.15 | 0.00 | 0.06 | 0.30 |
| | EFR-13 | 0.34 | 0.48 | 0.47 | 0.69 | 0.55 | 0.73 | 0.49 | 0.22 | 0.25 | 0.09 | 0.15 | 1.14 | 0.27 | 0.78 | 0.26 | 0.39 | 0.47 | 0.38 | 0.46 | 0.88 | 0.44 | 0.84 | 0.44 | 0.87 | 0.68 | 1.71 | 1.11 | 0.55 |
| | Total Free Product (ft) | 9.47 | 7.12 | 8.07 | 5.28 | 5.64 | 8.09 | 2.20 | 7.83 | 8.68 | 7.92 | 8.78 | 10.27 | 5.99 | 8.71 | 6.29 | 8.19 | 5.82 | 7.25 | 7.12 | 7.28 | 7.00 | 6.31 | 6.94 | 6.96 | 5.01 | 5.55 | 5.75 | 5.90 |
| | Total Free Product (gal) | 6.16 | 4.63 | 5.25 | 3.43 | 3.67 | 5.26 | 1.43 | 5.09 | 5.64 | 5.15 | 5.71 | 6.68 | 3.89 | 5.66 | 4.09 | 5.32 | 3.78 | 4.71 | 4.63 | 4.73 | 4.55 | 4.10 | 4.51 | 4.52 | 3.26 | 3.61 | 3.74 | 3.84 |
| Eastern Region of Free Product | EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-15 | 0.02 | 0.02 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 |
| | EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Free Product (ft) | 0.02 | 0.02 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 |
| | Total Free Product (gal) | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.13 |
| TOTAL APPARENT FREE PRODUCT VOLUME (GAL) | | 16.11 | 16.00 | 15.20 | 13.59 | 13.85 | 13.74 | 8.12 | 13.44 | 14.63 | 14.53 | 14.45 | 29.09 | 17.30 | 17.71 | 13.25 | 12.56 | 13.70 | 12.69 | 17.74 | 19.51 | 19.29 | 19.21 | 22.01 | 19.38 | 16.84 | 16.97 | 16.78 | 16.32 |

# TABLE 2
## L.E. CARPENTER - WHARTON, NEW JERSEY
### REGIONAL APPARENT FREE PRODUCT TRENDS

| | EFR Event Date | 9-Aug-02 | 13-Sep-02 | 8-Oct-02 | 7-Nov-02 | 17-Dec-02 | 11-Mar-03 | 17-Mar-03 | 24-Mar-03 | 10-Apr-03 | 8-May-03 | 10-Jun-03 | 8-Jul-03 | 7-Aug-03 | 9-Sep-03 | 9-Oct-03 | 6-Nov-03 | 31-Dec-03 | 13-Jan-04 | 25-Feb-04 | 30-Mar-04 | 16-Apr-04 | 20-May-04 | 17-Jun-04 | 8-Jul-04 | 12-Aug-04 | 17-Sep-04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 3 EFR events in March of 1Q03 due to snow and ice cover in Jan and Feb 03 | | | | | | | | | | | | | | | | | | | | |
| Western Region of Free Product | EFR-1 | 0.81 | 1.14 | 0.83 | 1.62 | 1.33 | 0.68 | 0.22 | 0.41 | 0.45 | 0.19 | 0.48 | 0.13 | 0.49 | 0.69 | 0.83 | 0.26 | 0.09 | 0.05 | 0.28 | 0.19 | 0.12 | 0.08 | 0.12 | 0.44 | 1.01 | 0.91 |
| | EFR-2 | 1.02 | 0.09 | 1.27 | 2.86 | 3.07 | 1.96 | 0.94 | 1.02 | 1.40 | 1.54 | 2.34 | 1.61 | 1.32 | 1.41 | 1.75 | 1.22 | 1.10 | 0.59 | 0.45 | 0.47 | 0.52 | 0.64 | 0.58 | 0.87 | 1.16 | 1.30 |
| | EFR-3 | 0.89 | 0.81 | 0.91 | 0.98 | 0.88 | 0.70 | 0.30 | 0.20 | 0.07 | 0.14 | 0.05 | 0.08 | 0.10 | 0.19 | 0.13 | 0.08 | 0.05 | 0.01 | 0.01 | 0.14 | 0.02 | 0.04 | 0.17 | 0.31 | 0.28 | 0.01 |
| | EFR-17 | 0.67 | 1.50 | 0.71 | 1.10 | 1.07 | 0.18 | 0.03 | 0.00 | 0.00 | 0.39 | 0.51 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-18 | 0.02 | 1.56 | 0.21 | 0.04 | 0.84 | 1.32 | 1.31 | 0.04 | 0.00 | 0.66 | 0.01 | 0.00 | 0.00 | 0.08 | 0.11 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.03 | 0.05 |
| | EFR-20 | 1.58 | 1.85 | 1.47 | 1.77 | 2.45 | 2.30 | 1.88 | 1.33 | 2.42 | 1.00 | 3.18 | 2.41 | 0.00 | 1.78 | 2.40 | 2.59 | 2.51 | 1.20 | 1.13 | 1.43 | 0.96 | 1.20 | 1.14 | 1.02 | 1.43 | 0.04 |
| | EFR-21 | 1.46 | 0.02 | 0.44 | 0.00 | 0.00 | 0.01 | 2.43 | 1.95 | 1.45 | 2.44 | 2.39 | 2.03 | 2.55 | 2.19 | 2.45 | 1.23 | 1.08 | 0.75 | 1.95 | 1.85 | 0.99 | 0.01 | 1.84 | 1.36 | 1.63 | 0.03 |
| | EFR-28 | 0.38 | 1.22 | 0.22 | 0.14 | 0.28 | 1.04 | 0.30 | 0.61 | 0.44 | 0.38 | 0.30 | 0.09 | 0.08 | 0.06 | 0.11 | 0.14 | 0.15 | 0.00 | 0.00 | NM | NM | NM | NM | NM | NM | NM |
| | Total Free Product (ft) | 6.83 | 8.19 | 6.06 | 8.51 | 9.92 | 8.19 | 7.41 | 5.56 | 6.23 | 6.74 | 9.26 | 6.36 | 4.54 | 6.40 | 7.78 | 5.52 | 4.98 | 2.60 | 3.93 | 4.08 | 2.61 | 1.97 | 3.85 | 4.18 | 5.54 | 2.34 |
| | Total Free Product (gal) | 4.44 | 5.32 | 3.94 | 5.53 | 6.45 | 5.32 | 4.82 | 3.61 | 4.05 | 4.38 | 6.02 | 4.13 | 2.95 | 4.16 | 5.06 | 3.59 | 3.24 | 1.69 | 2.55 | 2.65 | 1.70 | 1.28 | 2.50 | 2.72 | 3.60 | 1.52 |
| West-Central Region of Free Product | EFR-4 | 0.26 | 0.11 | 0.43 | 2.86 | 0.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-5 | 2.00 | 2.05 | 1.67 | 1.68 | 0.37 | 2.91 | 1.19 | 0.16 | 0.79 | 0.49 | 0.81 | 0.29 | 0.29 | 0.72 | 0.73 | 0.51 | 0.42 | 0.11 | 0.22 | 0.28 | 0.08 | 0.01 | 0.50 | 0.00 | 1.31 | 0.00 |
| | EFR-6 | 0.45 | 0.62 | 0.38 | 3.14 | 1.63 | 0.27 | 0.29 | 0.27 | 0.39 | 0.14 | 0.43 | 0.12 | 0.00 | 0.18 | 0.07 | 0.00 | 0.22 | 0.06 | 0.01 | 0.02 | 0.05 | 0.00 | 0.02 | 0.00 | 0.24 | 0.01 |
| | EFR-7 | 0.11 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-19 | 1.55 | 2.55 | 0.35 | 1.30 | 1.03 | 0.40 | 0.80 | 0.31 | 1.51 | 0.52 | 0.09 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.12 |
| | EFR-22 | 0.11 | 0.22 | 1.39 | 1.09 | 0.76 | 2.60 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-23 | 0.38 | 0.77 | 0.53 | 0.81 | 0.67 | 0.82 | 0.06 | 0.50 | 2.24 | 0.05 | 0.26 | 0.04 | 0.00 | 0.11 | 0.10 | 0.10 | 0.26 | 0.02 | 0.17 | 0.02 | 0.08 | 0.00 | 0.02 | 0.00 | 0.02 | 0.03 |
| | EFR-24 | 0.19 | 0.13 | 0.16 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-25 | 0.25 | 0.35 | 0.28 | 0.33 | 0.69 | 0.14 | 0.09 | 0.05 | 0.21 | 0.32 | 0.00 | 0.00 | 0.00 | 0.06 | 0.03 | 0.11 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.10 | 0.00 |
| | EFR-26 | 1.69 | 1.24 | 0.59 | 0.28 | 0.40 | 0.33 | 0.27 | 0.30 | 0.18 | 0.51 | 0.20 | 0.15 | 0.00 | 0.93 | 0.58 | 0.33 | 0.24 | 0.25 | 0.45 | 0.66 | 0.37 | 0.34 | 0.58 | 0.72 | 0.73 | 0.66 |
| | EFR-27 | 0.04 | 1.43 | 2.53 | 1.77 | 3.10 | 2.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Free Product (ft) | 7.03 | 9.48 | 8.31 | 13.27 | 9.17 | 9.96 | 3.24 | 1.59 | 5.32 | 2.03 | 1.79 | 0.60 | 0.29 | 2.01 | 1.53 | 1.05 | 1.14 | 0.44 | 0.99 | 0.98 | 0.58 | 0.35 | 1.14 | 0.72 | 2.44 | 0.82 |
| | Total Free Product (gal) | 4.57 | 6.16 | 5.40 | 8.63 | 5.96 | 6.47 | 2.11 | 1.03 | 3.46 | 1.32 | 1.16 | 0.39 | 0.19 | 1.31 | 0.99 | 0.68 | 0.74 | 0.29 | 0.64 | 0.64 | 0.38 | 0.23 | 0.74 | 0.47 | 1.59 | 0.53 |
| East-Central Region of Free Product | EFR-8 | 0.14 | 0.28 | 0.18 | 0.10 | 0.25 | 0.37 | 0.27 | 0.23 | 0.33 | 0.05 | 0.11 | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 | 0.03 | 0.02 | 0.07 | 0.02 | 0.05 | 0.00 | 0.02 | 0.08 | 0.01 | 0.00 |
| | EFR-9 | 0.30 | 0.19 | 0.32 | 0.33 | 0.25 | 0.24 | 0.02 | 0.32 | 0.54 | 0.17 | 0.10 | 1.03 | 0.00 | 0.02 | 0.07 | 0.06 | 0.03 | 0.06 | 0.04 | 0.26 | 0.14 | 0.00 | 0.02 | 0.18 | 0.02 | 0.01 |
| | EFR-10 | 2.31 | 2.83 | 1.95 | 2.70 | 2.76 | 2.45 | 0.84 | 0.28 | 0.84 | 0.79 | 1.33 | 0.54 | 0.00 | 2.21 | 0.92 | 0.93 | 0.76 | 0.16 | 0.37 | 0.15 | 0.19 | 0.02 | 0.27 | 0.26 | 0.39 | 0.90 |
| | EFR-11 | 2.08 | 3.91 | 2.06 | 1.88 | 1.87 | 2.62 | 4.69 | 3.83 | 1.19 | 0.99 | 1.01 | 0.66 | 0.19 | 3.57 | 1.52 | 0.70 | 0.89 | 0.21 | 0.29 | 1.18 | 0.00 | 0.01 | 0.92 | 1.25 | 2.02 | 0.00 |
| | EFR-12 | 0.06 | 0.33 | 0.25 | 0.24 | 0.64 | 0.56 | 0.49 | 0.52 | 0.45 | 0.13 | 0.24 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-13 | 0.26 | 0.61 | 0.30 | 0.55 | 0.68 | 0.08 | 0.11 | 0.26 | 0.25 | 0.12 | 0.27 | 0.03 | 0.12 | 0.18 | 0.09 | 0.08 | 0.07 | 0.00 | 0.01 | 0.03 | 0.08 | 0.06 | 0.02 | 0.13 | 1.21 | 0.00 |
| | Total Free Product (ft) | 5.15 | 8.15 | 5.06 | 5.80 | 6.45 | 6.32 | 6.42 | 5.44 | 3.60 | 2.25 | 3.06 | 2.27 | 0.31 | 5.98 | 2.62 | 1.80 | 1.78 | 0.45 | 0.94 | 1.64 | 0.46 | 0.09 | 1.25 | 1.90 | 3.65 | 0.91 |
| | Total Free Product (gal) | 3.35 | 5.30 | 3.29 | 3.77 | 4.19 | 4.11 | 4.17 | 3.54 | 2.34 | 1.46 | 1.99 | 1.48 | 0.20 | 3.89 | 1.70 | 1.17 | 1.16 | 0.29 | 0.61 | 1.07 | 0.30 | 0.06 | 0.81 | 1.24 | 2.37 | 0.59 |
| Eastern Region of Free Product | EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-15 | 0.00 | 0.09 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | EFR-16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Free Product (ft) | 0.00 | 0.09 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Free Product (gal) | 0.00 | 0.06 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL APPARENT FREE PRODUCT VOLUME (GAL) | | 12.36 | 16.84 | 12.63 | 18.11 | 16.60 | 15.91 | 11.10 | 8.18 | 9.85 | 7.16 | 9.17 | 6.00 | 3.34 | 9.35 | 7.75 | 5.44 | 5.14 | 2.27 | 3.81 | 4.36 | 2.37 | 1.57 | 4.06 | 4.42 | 7.56 | 2.65 |

TABLE 3
L. E. CARPENTER - WHARTON, NEW JERSEY

MONTHLY EFR WELL GAUGING LOG

EFR #80 DATE 8-Jul-04

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| EFR-1 | 10.93 | 11.37 | 0.44 |
| EFR-2 | 11.45 | 12.32 | 0.87 |
| EFR-3 | 11.43 | 11.74 | 0.31 |
| EFR-4 | 12.79 | 12.79 | 0.00 |
| EFR-5 | 11.23 | 11.23 | 0.00 |
| EFR-6 | 10.55 | 10.55 | 0.00 |
| EFR-7 | 7.78 | 7.78 | 0.00 |
| EFR-8 | 6.8 | 6.88 | 0.08 |
| EFR-9 | 7.07 | 7.25 | 0.18 |
| EFR-10 | 7.23 | 7.49 | 0.26 |
| EFR-11 | 7.36 | 8.61 | 1.25 |
| EFR-12 | 6.3 | 6.3 | 0.00 |
| EFR-13 | 5.92 | 6.05 | 0.13 |
| EFR-14 | 5.65 | 5.65 | 0.00 |
| EFR-15 | 5.04 | 5.04 | 0.00 |
| EFR-16 | 5.59 | 5.59 | 0.00 |
| EFR-17 | 9.64 | 9.64 | 0.00 |
| EFR-18 | 10.2 | 10.38 | 0.18 |
| EFR-19 | 13.06 | 13.06 | 0.00 |
| EFR-20 | 10.88 | 11.9 | 1.02 |
| EFR-21 | 9.79 | 11.15 | 1.36 |
| EFR-22 | 13.18 | 13.18 | 0.00 |
| EFR-23 | 9.52 | 9.52 | 0.00 |
| EFR-24 | 12.5 | 12.5 | 0.00 |
| EFR-25 | 12.25 | 12.25 | 0.00 |
| EFR-26 | 13.95 | 14.67 | 0.72 |
| EFR-27 | 10.13 | 10.13 | 0.00 |
| EFR-28 | EFR Well Destroyed during RAWP Pilot Test | | |

Total Volume Of Free Standing Product (gal) 4.42

CEMCO FIELD TECHNICIAN: G. Pizzuti

# TABLE 3
# L. E. CARPENTER - WHARTON, NEW JERSEY

## MONTHLY EFR
## VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

**EFR #80** **8-Jul-04**

| WELLHEAD | EXTRACTION TIME | | VAPOR PHASE CONCENTRATION | | SYSTEM RECOVERY DATA | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL TIME (min) | TOTAL TIME (hrs) | PPM | LEL (%) | VACUUM In Hg | CFM | lbs/hr | Total lbs |
| EFR-1 | 3.0 | 0.0500 | 5,058 | 77 | 17 | 100 | 23.38 | 1.1690 |
| EFR-2 | 5.0 | 0.0833 | 4,776 | 73 | 17 | 100 | 22.08 | 1.8397 |
| EFR-3 | 2.0 | 0.0333 | 2,952 | 45 | 17 | 100 | 13.65 | 0.4549 |
| EFR-4 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-5 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-6 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-7 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-8 | 2.0 | 0.0333 | 4,605 | 70 | 17 | 100 | 21.29 | 0.7096 |
| EFR-9 | 2.0 | 0.0333 | 2,768 | 42 | 17 | 100 | 12.80 | 0.4266 |
| EFR-10 | 2.0 | 0.0333 | 4,559 | 70 | 17 | 100 | 21.08 | 0.7025 |
| EFR-11 | 7.0 | 0.1167 | 5,248 | 80 | 17 | 100 | 24.26 | 2.8303 |
| EFR-12 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 2.0 | 0.0333 | 3,365 | 51 | 17 | 100 | 15.56 | 0.5186 |
| EFR-14 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-15 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-16 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-17 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-18 | 1.0 | 0.0167 | 2,309 | 35 | 17 | 100 | 10.67 | 0.1779 |
| EFR-19 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-20 | 6.0 | 0.1000 | 2,775 | 42 | 17 | 100 | 12.83 | 1.2827 |
| EFR-21 | 8.0 | 0.1333 | 3,733 | 57 | 17 | 100 | 17.25 | 2.3006 |
| EFR-22 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-23 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-24 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-25 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-26 | 4.0 | 0.0667 | 4,441 | 68 | 17 | 100 | 20.53 | 1.3687 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| Total EFR Time (hrs) | | 0.7333 | AVG ppm | 2117.69 | | | TOTAL (LBS) | 13.7811 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 1.7648 |

NOTE: PPM = (% LEL on Meter) x (LEL of Product Mixture) x (1,000,000)

(1) Weighted LEL for analyte mixture @ 0.656% (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Analyte LELs: DEHP @ 0.3% ; Ethylbenzene @ 1%; Xylenes @ 1.1%

Where:

| | | | |
|---|---|---|---|
| $ppm_v$ = | Parts per Million by Volume | | |
| Flow = | Cubic feet per minute (CFM) | 100 | |
| Molar Mass (MM) = | Molecular Weight (lb/lb-mole) = | 292 | (2) |
| IGC = | Ideal Gas Constant (359 $ft^3$/lb-mole) = | 379 | |
| LEL = | Free Product Mixture = | 0.656 | (1) |
| SG = | Specific Gravity = | 0.9363 | (3) |

NOTE: (2) Avg. Molar Mass @ 292 (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Individual Analyte Molar Mass: DEHP @ 390.54; Ethylbenzene @ 106.2; Total Xylenes @ 106.2
(3) Average specific gravity of 0.9363 (RMT, Inc. product sampling in October 1999 @ MW-1R; EFR-11 & WP-A8)

$$\text{Pounds/Hr (lbs/hr)} = (ppm_v \times (60\ min/hr) \times (CFM) \times (MM)) / ((I \times 10^6) \times (359\ ft^3/lb\text{-}mole))$$

| Free Product & Groundwater Gauging (55-Gal Drum) | |
|---|---|
| Product Thickness (in) | 7.50 |
| Groundwater Thickness (in) | 1.50 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 12.38 |
| Total Groundwater Volume (gal) | 2.48 |
| Ratio Groundwater to Free Product (gal/gal) | 0.20 |

| | | Y (gal) |
|---|---|---|
| Total Recovered Groundwater Volume (gal) | | 2.48 |
| Total Recovered Free Product Volume (gal) | | 12.38 |
| Total Recovered Fluids Volume (gal) | | 14.85 |
| TOTAL EFR PRODUCT VOLUME | | 14.14 GAL |

| | |
|---|---|
| Date | 8-Jul-04 |
| Project # | 6527.03 |
| Subcontractor | CEMCO |
| Vac Head Utilized | NORTECH Corp. 551B |

CEMCO Field Technician: Gary Pizzuti

RMT Project Manager: Nick Clevett

TABLE 3
L. E. CARPENTER - WHARTON, NEW JERSEY

MONTHLY EFR WELL GAUGING LOG

EFR #81 DATE 12-Aug-04

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| EFR-1 | 10.78 | 11.79 | 1.01 |
| EFR-2 | 11.28 | 12.44 | 1.16 |
| EFR-3 | 11.3 | 11.58 | 0.28 |
| EFR-4 | 12.61 | 12.61 | 0.00 |
| EFR-5 | 11.06 | 12.37 | 1.31 |
| EFR-6 | 10.38 | 10.62 | 0.24 |
| EFR-7 | 6.77 | 6.77 | 0.00 |
| EFR-8 | 6.61 | 6.62 | 0.01 |
| EFR-9 | 6.82 | 6.84 | 0.02 |
| EFR-10 | 7.06 | 7.45 | 0.39 |
| EFR-11 | 7.13 | 9.15 | 2.02 |
| EFR-12 | 6.13 | 6.13 | 0.00 |
| EFR-13 | 5.73 | 6.94 | 1.21 |
| EFR-14 | 5.48 | 5.48 | 0.00 |
| EFR-15 | 4.87 | 4.87 | 0.00 |
| EFR-16 | 5.41 | 5.41 | 0.00 |
| EFR-17 | 9.45 | 9.45 | 0.00 |
| EFR-18 | 10.11 | 10.14 | 0.03 |
| EFR-19 | 12.95 | 12.99 | 0.04 |
| EFR-20 | 10.72 | 12.15 | 1.43 |
| EFR-21 | 9.67 | 11.3 | 1.63 |
| EFR-22 | 12.96 | 12.96 | 0.00 |
| EFR-23 | 9.32 | 9.34 | 0.02 |
| EFR-24 | 12.39 | 12.39 | 0.00 |
| EFR-25 | 12.1 | 12.2 | 0.10 |
| EFR-26 | 13.82 | 14.55 | 0.73 |
| EFR-27 | 10.83 | 10.83 | 0.00 |
| EFR-28 | EFR Well Destroyed during RAWP Pilot Test | | |

Total Volume Of Free Standing Product (gal) 7.56

CEMCO FIELD TECHNICIAN: G. Pizzuti

# TABLE 3
# L. E. CARPENTER - WHARTON, NEW JERSEY

## MONTHLY EFR
## VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

**EFR #81** **12-Aug-04**

| WELL ID | EXTRACTION TIME | | VAPOR PHASE CONCENTRATION | | SYSTEM RECOVERY DATA | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL TIME (min) | TOTAL TIME (hrs) | PPM | LEL (%) | VACUUM In Hg | CFM | lbs/hr | Total lbs |
| EFR-1 | 5.0 | 0.0833 | 6,560 | 100 | 17 | 100 | 30.32 | 2.5271 |
| EFR-2 | 6.0 | 0.1000 | 5,517 | 84 | 17 | 100 | 25.50 | 2.5503 |
| EFR-3 | 2.0 | 0.0333 | 2,795 | 43 | 17 | 100 | 12.92 | 0.4306 |
| EFR-4 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-5 | 6.0 | 0.1000 | 2,073 | 32 | 17 | 100 | 9.58 | 0.9583 |
| EFR-6 | 1.0 | 0.0167 | 1,443 | 22 | 17 | 100 | 6.67 | 0.1112 |
| EFR-7 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-8 | 1.0 | 0.0167 | 3,280 | 50 | 17 | 100 | 15.16 | 0.2527 |
| EFR-9 | 1.0 | 0.0167 | 656 | 10 | 17 | 100 | 3.03 | 0.0505 |
| EFR-10 | 2.0 | 0.0333 | 6,127 | 93 | 17 | 100 | 28.32 | 0.9441 |
| EFR-11 | 10.0 | 0.1667 | 6,560 | 100 | 17 | 100 | 30.32 | 5.0541 |
| EFR-12 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 3.0 | 0.0500 | 1,883 | 29 | 17 | 100 | 8.70 | 0.4352 |
| EFR-14 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-15 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-16 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-17 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-18 | 1.0 | 0.0167 | 1,181 | 18 | 17 | 100 | 5.46 | 0.0910 |
| EFR-19 | 1.0 | 0.0167 | 1,706 | 26 | 17 | 100 | 7.88 | 0.1314 |
| EFR-20 | 6.0 | 0.1000 | 6,560 | 100 | 17 | 100 | 30.32 | 3.0325 |
| EFR-21 | 8.0 | 0.1333 | 6,560 | 100 | 17 | 100 | 30.32 | 4.0433 |
| EFR-22 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-23 | 1.0 | 0.0167 | 787 | 12 | 17 | 100 | 3.64 | 0.0606 |
| EFR-24 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-25 | 1.0 | 0.0167 | 918 | 14 | 17 | 100 | 4.25 | 0.0708 |
| EFR-26 | 4.0 | 0.0667 | 5,432 | 83 | 17 | 100 | 25.11 | 1.6739 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| Total EFR Time (hrs) | | 0.9833 | AVG ppm | 2728.96 | | | TOTAL (lbs) | 22.4176 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 2.8708 |

NOTE: PPM = (% LEL on Meter) x (LEL of Product Mixture) x (1,000,000)
(1) Weighted LEL for analyte mixture @ 0.656% (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Analyte LELs: DEHP @ 0.3% ; Ethylbenzene @ 1%; Xylenes @ 1.1%

Where:

| | | | |
|---|---|---|---|
| ppm$_v$ = | Parts per Million by Volume | | |
| Flow = | Cubic feet per minute (CFM) | 100 | |
| Molar Mass (MM) = | Molecular Weight (lb/lb-mole) = | 292 | (2) |
| IGC = | Ideal Gas Constant (359 ft$^3$/lb-mole) = | 379 | |
| LEL = | Free Product Mixture = | 0.656 | (1) |
| SG = | Specific Gravity = | 0.9363 | (3) |

NOTE: (2) Avg. Molar Mass @ 292 (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Individual Analyte Molar Mass: DEHP @ 390.54; Ethylbenzene @ 106.2; Total Xylenes @ 106.2
(3) Average specific gravity of 0.9363 (RMT, Inc. product sampling in October 1999 @ MW-1R; EFR-11 & WP-A8)

$$\text{Pounds/Hr (lbs/hr)} = (\text{ppm}_v \times (60\ \text{min/hr}) \times (\text{CFM}) \times (\text{MM})) / ((1 \times 10^6) \times (359\ \text{ft}^3/\text{lb-mole}))$$

| Free Product & Groundwater Gauging (55-Gal Drum) | |
|---|---|
| | |
| Product Thickness (in) | 13.00 |
| Groundwater Thickness (in) | 1.00 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 21.45 |
| Total Groundwater Volume (gal) | 1.65 |
| Ratio Groundwater to Free Product (gal/gal) | 0.08 |

| | | Y (gal) |
|---|---|---|
| Total Recovered Groundwater Volume (gal) | | 1.65 |
| Total Recovered Free Product Volume (gal) | | 21.45 |
| Total Recovered Fluids Volume (gal) | | 23.10 |
| TOTAL EFR PRODUCT VOLUME | | 24.32 GAL |

| | |
|---|---|
| Date | 12-Aug-04 |
| Project # | 6527.03 |
| Subcontractor | CEMCO |
| Vac Head Utilized | NORTECH Corp. 551B |

CEMCO Field Technician: Gary Pizzuti

RMT Project Manager: Nick Clevett

TABLE 3
L. E. CARPENTER - WHARTON, NEW JERSEY

MONTHLY EFR WELL GAUGING LOG

EFR #82 DATE 17-Sep-04

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| EFR-1 | 10.66 | 11.57 | 0.91 |
| EFR-2 | 11.16 | 12.46 | 1.30 |
| EFR-3 | 11.16 | 11.17 | 0.01 |
| EFR-4 | 12.52 | 12.52 | 0.00 |
| EFR-5 | 10.94 | 10.94 | 0.00 |
| EFR-6 | 10.31 | 10.32 | 0.01 |
| EFR-7 | 6.95 | 6.95 | 0.00 |
| EFR-8 | 6.58 | 6.58 | 0.00 |
| EFR-9 | 6.72 | 6.73 | 0.01 |
| EFR-10 | 7 | 7.9 | 0.90 |
| EFR-11 | 7.05 | 7.05 | 0.00 |
| EFR-12 | 6.08 | 6.08 | 0.00 |
| EFR-13 | 5.68 | 5.68 | 0.00 |
| EFR-14 | 5.41 | 5.41 | 0.00 |
| EFR-15 | 4.76 | 4.76 | 0.00 |
| EFR-16 | 5.34 | 5.34 | 0.00 |
| EFR-17 | 9.4 | 9.4 | 0.00 |
| EFR-18 | 10 | 10.05 | 0.05 |
| EFR-19 | 12.85 | 12.97 | 0.12 |
| EFR-20 | 10.61 | 10.65 | 0.04 |
| EFR-21 | 9.52 | 9.55 | 0.03 |
| EFR-22 | 12.91 | 12.91 | 0.00 |
| EFR-23 | 9.26 | 9.29 | 0.03 |
| EFR-24 | 12.29 | 12.29 | 0.00 |
| EFR-25 | 12.04 | 12.04 | 0.00 |
| EFR-26 | 13.74 | 14.4 | 0.66 |
| EFR-27 | 10.92 | 10.92 | 0.00 |
| EFR-28 | | | |

Total Volume Of Free Standing Product (gal) 2.65

CEMCO FIELD TECHNICIAN: G. Pizzuti

# TABLE 3
## L. E. CARPENTER - WHARTON, NEW JERSEY

### MONTHLY EFR
### VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

**EFR #82** — **17-Sep-04**

| WELLID | EXTRACTION TIME | | VAPOR PHASE CONCENTRATION | | SYSTEM RECOVERY DATA | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL TIME (min) | TOTAL TIME (hrs) | PPM | LEL (%) | VACUUM In Hg | CFM | lbs/hr | Total lbs |
| EFR-1 | 4.0 | 0.0667 | 2,558 | 39 | 17 | 100 | 11.83 | 0.7884 |
| EFR-2 | 5.0 | 0.0833 | 1,378 | 21 | 17 | 100 | 6.37 | 0.5307 |
| EFR-3 | 0.5 | 0.0083 | 787 | 12 | 17 | 100 | 3.64 | 0.0303 |
| EFR-4 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-5 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-6 | 0.5 | 0.0083 | 5,970 | 91 | 17 | 100 | 27.60 | 0.2300 |
| EFR-7 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-8 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-9 | 0.5 | 0.0083 | 262 | 4 | 17 | 100 | 1.21 | 0.0101 |
| EFR-10 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-11 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-12 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-14 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-15 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-16 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-17 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-18 | 0.5 | 0.0083 | 3,214 | 49 | 17 | 100 | 14.86 | 0.1238 |
| EFR-19 | 0.5 | 0.0083 | 4,986 | 76 | 17 | 100 | 23.05 | 0.1921 |
| EFR-20 | 0.5 | 0.0083 | 800 | 12 | 17 | 100 | 3.70 | 0.0308 |
| EFR-21 | 0.5 | 0.0083 | 66 | 1 | 17 | 100 | 0.30 | 0.0025 |
| EFR-22 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-23 | 0.5 | 0.0083 | 918 | 14 | 17 | 100 | 4.25 | 0.0354 |
| EFR-24 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-25 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-26 | 2.0 | 0.0333 | 3,346 | 51 | 17 | 100 | 15.47 | 0.5155 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| Total EFR Time (hrs) = | | 0.2500 | AVG PPM = | 1103.87 | | | TOTAL (LBS) | 2.4897 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 0.3188 |

NOTE: PPM = (% LEL on Meter) x (LEL of Product Mixture) x (1,000,000)
(1) Weighted LEL for analyte mixture @ 0.656% (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Analyte LELs: DEHP @ 0.3% ; Ethylbenzene @ 1%; Xylenes @ 1.1%

Where:

| | | | |
|---|---|---|---|
| $ppm_v$ = | Parts per Million by Volume | | |
| Flow = | Cubic feet per minute (CFM) | 100 | |
| Molar Mass (MM) = | Molecular Weight (lb/lb-mole) = | 292 | (2) |
| IGC = | Ideal Gas Constant (359 $ft^3$/lb-mole) = | 379 | |
| LEL = | Free Product Mixture = | 0.656 | (1) |
| SG = | Specific Gravity = | 0.9363 | (3) |

NOTE: (2) Avg. Molar Mass @ 292 (based on DEHP, Ethylbenzene & Total Xylene concentrations in Roy F. Weston product sampling conducted on Feb 27, 1995 @ MW-1R; MW-11S; MW-6R; WP-B5 & WP-B4)
Individual Analyte Molar Mass: DEHP @ 390.54; Ethylbenzene @ 106.2; Total Xylenes @ 106.2
(3) Average specific gravity of 0.9363 (RMT, Inc. product sampling in October 1999 @ MW-1R; EFR-11 & WP-A8)

$$\text{Pounds/Hr (lbs/hr)} = (ppm_v \times (60\ \text{min/hr}) \times (\text{CFM}) \times (\text{MM})) / ((1 \times 10^6) \times (359\ ft^3/\text{lb-mole}))$$

| Free Product & Groundwater Gauging (55-Gal Drum) | |
|---|---|
| Product Thickness (in) | 4.50 |
| Groundwater Thickness (in) | 3.00 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 7.43 |
| Total Groundwater Volume (gal) | 4.95 |
| Ratio Groundwater to Free Product (gal/gal) | 0.67 |

| | Y (gal) |
|---|---|
| Total Recovered Groundwater Volume (gal) | 4.95 |
| Total Recovered Free Product Volume (gal) | 7.43 |
| Total Recovered Fluids Volume (gal) | 12.38 |
| TOTAL EFR PRODUCT VOLUME | 7.74 GAL |

| | |
|---|---|
| Date | 17-Sep-04 |
| Project # | 6527.03 |
| Subcontractor | CEMCO |
| Vac Head Utilized | NORTECH Corp. 551B |

CEMCO Field Technician: Gary Pizzuti

RMT Project Manager: Nick Clevett

## Table 4
## Quarterly Groundwater Monitoring Protocol
## L.E. Carpenter & Company

| FREE PRODUCT/DISSOLVED PLUME AEC [1] | |
|---|---|
| **Well** | **Objective.** |
| MW-6R | Define source area COC and MNA parameter concentrations. |
| MW-2R | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-3 | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-4 | Quarterly groundwater monitoring well for defining COC. |
| MW-14S | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-14I | Define COC and MNA parameter concentrations and vertical gradient relationships between shallow and intermediate groundwater zones. |
| MW-15S | Quarterly groundwater monitoring well (upgradient). |
| MW-15I | Quarterly groundwater monitoring well (upgradient) and evaluate vertical gradient. |
| WP-B6 | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| WP-B7 | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-17S [2] | Establish baseline MNA parameter concentrations in an on-site shallow upgradient "Clean Zone". |
| MW-21 | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-25(R) | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-22R | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-27 [3] | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| MW-28 [3] | Define COC and MNA parameter concentrations and shallow groundwater flow pattern relationships. |
| SW-5-1, SW-7-1, & SW-8-1 | Define COC in ditch surface-water samples. |

COCs = Contaminants of Concern: benzene, toluene, ethylbenzene, xylenes, and bis (2-ethyl hexyl) phthalate (DEHP)
AEC = Area of Environmental Concern
MNA = Monitored Natural Attenuation

**Note(s):**

1. Many of the wells in the AEC's are proposed for comprehensive sampling for all parameters listed on Table 2 to establish baseline concentrations for one full year (four quarters) of sampling. Once baseline concentrations have been established, a reduced list of wells will be selected for long-term monitoring. Rationale for well selection for long-term monitoring will be provided to USEPA/NJDEP once established.
2. MW-17S is a background well that has consistently shown no detection for all COCs.
3. Data obtained from these wells will more clearly define shallow groundwater flow patterns influenced by the Rockaway River and the Air Products drainage ditch.
4. MW-19/Hot Spot 1 area of concern is located in the northwestern portion of the LEC site.

## Table 4 (Cont.)
## Quarterly Groundwater Monitoring Protocol
## L.E. Carpenter & Company

| MW-19/HOTSPOT 1 AEC [5] [6] | |
|---|---|
| **Well** | **Objective** |
| MW-19 | Establish baseline dissolved COC and MNA parameter concentrations in the MW19/HS1 former source area. |
| MW-19-1 | Establish baseline dissolved COC and MNA parameter concentrations in the MW19/HS1 former source area. |
| MW-19-2 | Establish baseline dissolved COC and MNA parameter concentrations cross-gradient of the MW19/HS1 former source area (leading western edge of the plume). |
| MW-19-5 | Establish baseline downgradient dissolved COC and MNA parameter concentrations. |
| MW-19-6 | Establish baseline downgradient dissolved COC and MNA parameter concentrations. |
| MW-19-7 | Establish baseline downgradient dissolved COC and MNA parameter concentrations. |
| MW-19-8 | Establish baseline downgradient dissolved COC and MNA parameter concentrations. |
| MW-19-9D | Establish baseline dissolved COC concentrations at Ross Street regional interceptor sewer line, and vertical gradient evaluation. |
| MW-19-10 | Establish baseline downgradient dissolved COC and MNA parameter concentrations. |

COCs = Contaminants of Concern: benzene, toluene, ethylbenzene, xylenes, and bis (2-ethyl hexyl) phthalate (DEHP)

AEC = Area of Environmental Concern

MNA = Monitored Natural Attenuation

**Note(s):**

5. Many of the wells in the AEC's are proposed for comprehensive sampling for all parameters listed on Table 2 to establish baseline concentrations for one full year (four quarters) of sampling. Once baseline concentrations have been established, a reduced list of wells will be selected for long-term monitoring. Rationale for well selection for long-term monitoring will be provided to USEPA/NJDEP once established.
6. MW-17S is a background well that has consistently shown no detection for all COCs.
7. Data obtained from these wells will more clearly define shallow groundwater flow patterns influenced by the Rockaway River and the Air Products drainage ditch.
8. MW-19/Hot Spot 1 area of concern is located in the northwestern portion of the LEC site.

# TABLE 5

## L.E. Carpenter and Company, Wharton, New Jersey

### Quarterly Groundwater Elevations

| WELL LOCATION | WELL TYPE | ELEVATIONS (FT. MSL) | | | QUARTERLY MEASUREMENT INFORMATION [9] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GROUND | OUTER CASING | INNER WELL | MEAS. DATE | PRODUCT DEPTH | WATER DEPTH | PRODUCT ELEVATION | WATER ELEVATION | PRODUCT THICKNESS (ft) | CORRECTED WATER ELEVATIONS [2] | MAX. WATER ELEVATIONS | MIN. WATER ELEVATIONS |
| CW-1 | Caisson Well | 630.23 | 633.75 | | 9-Aug-04 | 7.60 | 7.61 | 622.63 | 622.62 | 0.01 | 622.63 | 627.60 | 621.01 |
| CW-3 | Caisson Well | 628.03 | 632.70 | | 9-Aug-04 | - | 8.00 | - | 620.03 | - | - | 626.92 | 619.22 |
| GEI-1I | Piezometer | 627.84 | 630.33 | 630.18 | 9-Aug-04 | - | 5.05 | - | 625.13 | - | - | 627.58 | 623.04 |
| GEI-2I | Piezometer | 635.32 | 637.75 | 637.60 | 9-Aug-04 | - | 11.39 | - | 626.21 | - | - | 630.22 | 624.14 |
| GEI-2S | Piezometer | 634.86 | 637.27 | 637.07 | 9-Aug-04 | - | 11.20 | - | 625.87 | - | - | 629.26 | 623.65 |
| GEI-3I | Piezometer | 636.96 | 639.39 | 639.25 | 9-Aug-04 | - | 13.64 | - | 625.61 | - | - | 630.17 | 623.53 |
| MW-1(R) | Monitoring Well | 635.19 | 635.18 | 634.87 | 9-Aug-04 | 10.04 | 11.56 | 624.83 | 623.31 | 1.52 | 624.73 | 628.99 | 623.68 |
| MW-2(R) | Monitoring Well | 628.46 | 631.68 | 631.54 | 9-Aug-04 | - | 7.02 | - | 624.52 | - | - | 627.05 | 623.46 |
| MW-3 | Monitoring Well | 628.04 | 631.67 | 631.96 | 9-Aug-04 | 7.28 | 7.55 | 624.68 | 624.41 | 0.27 | 624.66 | 627.28 | 622.69 |
| MW-4 [3] | Monitoring Well | 628.26 | 631.71 | 631.90 | 9-Aug-04 | - | 7.23 | - | 624.67 | - | - | 628.05 | 622.71 |
| MW-6(R) | Monitoring Well | 629.22 | 632.04 | 631.82 | 9-Aug-04 | 6.82 | 6.87 | 625.00 | 624.95 | 0.05 | 625.00 | 627.89 | 623.94 |
| MW-8 [5] | Monitoring Well | 627.39 | 629.96 | 628.19 | 9-Aug-04 | - | 3.47 | - | 624.72 | - | - | 628.52 | 622.23 |
| MW-9 [5] | Monitoring Well | 628.61 | 631.09 | 629.58 | 9-Aug-04 | - | 4.65 | - | 624.93 | - | - | 627.94 | 623.30 |
| MW-11S | Monitoring Well | 630.63 | 632.66 | 632.36 | 9-Aug-04 | 7.86 | 13.61 | 624.50 | 618.75 | 5.75 | 624.13 | 629.37 | 622.18 |
| MW-11I(R) | Monitoring Well | 630.29 | 633.07 | 632.73 | 9-Aug-04 | - | 8.05 | - | 624.68 | - | - | 632.25 | 621.87 |
| MW-11D(R) [3] | Monitoring Well | 630.06 | 632.75 | 632.49 | 9-Aug-04 | - | 5.91 | - | 626.58 | - | - | 631.59 | 624.72 |
| MW-12S(R) | Monitoring Well | 631.57 | 634.26 | 633.73 | 9-Aug-04 | - | 9.63 | - | 624.10 | - | - | 628.16 | 623.71 |
| MW-13S | Monitoring Well | 627.74 | 630.80 | 630.63 | 9-Aug-04 | - | 6.11 | - | 624.52 | - | - | 627.85 | 622.58 |
| MW-13S(R) | Monitoring Well | 627.66 | 630.36 | 629.99 | 9-Aug-04 | - | 5.59 | - | 624.40 | - | - | 626.72 | 622.73 |
| MW-13I | Monitoring Well | 627.76 | 630.28 | 630.06 | 9-Aug-04 | - | 5.50 | - | 624.56 | - | - | 627.86 | 622.50 |
| MW-14S | Monitoring Well | 625.18 | 628.03 | 627.81 | 9-Aug-04 | - | 3.56 | - | 624.25 | - | - | 626.27 | 622.24 |
| MW-14I [3] | Monitoring Well | 625.33 | 627.72 | 627.63 | 9-Aug-04 | - | 3.24 | - | 624.39 | - | - | 627.23 | 622.38 |
| MW-15S [3] | Monitoring Well | 634.23 | 636.43 | 636.17 | 9-Aug-04 | - | 11.14 | - | 625.03 | - | - | 628.45 | 622.89 |
| MW-15I [3] | Monitoring Well | 634.14 | 636.28 | 636.06 | 9-Aug-04 | - | 11.10 | - | 624.96 | - | - | 628.43 | 622.89 |
| MW-16S | Monitoring Well | 631.97 | 634.09 | 633.87 | 9-Aug-04 | - | 8.41 | - | 625.46 | - | - | 629.62 | 623.28 |
| MW-16I | Monitoring Well | 631.83 | 634.48 | 634.36 | 9-Aug-04 | - | 8.87 | - | 625.49 | - | - | 629.29 | 623.36 |
| MW-17S [3] | Monitoring Well | 632.35 | 634.32 | 634.19 | 9-Aug-04 | - | 9.12 | - | 625.07 | - | - | 629.53 | 622.97 |
| MW-18S | Monitoring Well | 627.62 | 630.88 | 630.66 | 9-Aug-04 | - | 0.00 | - | NA | - | - | 626.78 | 622.98 |
| MW-18I | Monitoring Well | 627.75 | 630.59 | 630.44 | 9-Aug-04 | - | 5.32 | - | 625.12 | - | - | 627.48 | 619.21 |
| MW-19 [9] | Monitoring Well | 636.22 | 636.23 | 635.90 | 9-Aug-04 | - | 9.90 | - | 626.00 | - | - | 629.35 | 623.74 |
| MW-19-1 [9] | Monitoring Well | 635.93 | 635.96 | 635.64 | 9-Aug-04 | - | 9.65 | - | 625.99 | - | - | 628.64 | 624.56 |
| MW-19-2 [9] | Monitoring Well | 636.46 | 636.50 | 636.30 | 9-Aug-04 | - | 10.27 | - | 626.03 | - | - | 628.33 | 624.55 |
| MW-19-3 [9] | Monitoring Well | 636.97 | 637.06 | 636.70 | 9-Aug-04 | - | 10.66 | - | 626.04 | - | - | 628.52 | 624.67 |
| MW-19-4 [9] | Monitoring Well | 635.69 | 635.76 | 635.43 | 9-Aug-04 | - | 9.35 | - | 626.08 | - | - | 629.26 | 623.60 |
| MW-19-5 [9] | Monitoring Well | 635.93 | 635.93 | 635.56 | 9-Aug-04 | - | 9.65 | - | 625.91 | - | - | 628.13 | 624.45 |
| MW-19-6 [4][9] | Monitoring Well | 636.17 | 636.16 | 635.82 | 9-Aug-04 | - | 9.90 | - | 625.92 | - | - | 628.18 | 624.96 |
| MW-19-7 [4][9] | Monitoring Well | 635.31 | 635.36 | 635.00 | 9-Aug-04 | - | 9.11 | - | 625.89 | - | - | 627.98 | 624.87 |
| MW-19-8 [4][9] | Monitoring Well | 635.82 | 635.82 | 635.36 | 9-Aug-04 | - | 9.55 | - | 625.81 | - | - | 627.98 | 624.88 |
| MW-19-9D [4][9] | Monitoring Well | 636.39 | 636.41 | 636.10 | 9-Aug-04 | - | 9.63 | - | 626.47 | - | - | 628.51 | 624.80 |
| MW-19-10 [10] | Monitoring Well | 634.72 | 634.81 | 634.43 | 9-Aug-04 | | 8.07 | | 626.36 | | | | |
| MW-20 | Monitoring Well | 634.22 | 636.43 | 636.17 | 9-Aug-04 | - | 9.97 | - | 626.20 | - | - | 630.45 | 623.55 |
| MW-21 [5] | Monitoring Well | 624.57 | 628.49 | 628.20 | 9-Aug-04 | - | 3.98 | - | 624.22 | - | - | 626.70 | 622.00 |
| MW-22(R) [5] | Monitoring Well | 625.34 | 627.71 | 627.53 | 9-Aug-04 | - | 3.46 | - | 624.07 | - | - | 627.60 | 622.29 |
| MW-23 | Monitoring Well | 628.10 | 630.35 | 630.04 | 9-Aug-04 | - | 4.53 | - | 625.51 | - | - | 628.44 | 624.64 |
| MW-25(R) [5] | Monitoring Well | 624.65 | 626.77 | 626.62 | 9-Aug-04 | - | 2.75 | - | 623.87 | - | - | 626.83 | 622.21 |
| MW-26 | Monitoring Well | 630.24 | 633.79 | 632.66 | 9-Aug-04 | - | 7.99 | - | 624.67 | - | - | 626.94 | 622.15 |
| RW-1 | Recovery Well | 634.59 | 637.21 | 636.78 | 9-Aug-04 | 11.86 | 12.32 | 624.92 | 624.46 | 0.46 | 624.89 | 628.82 | 622.77 |
| RW-2 | Recovery Well | 629.20 | 631.18 | 631.08 | 9-Aug-04 | - | 6.61 | - | 624.47 | - | - | 627.61 | 622.51 |
| RW-3 | Recovery Well | 629.29 | 631.55 | 631.39 | 9-Aug-04 | - | 6.81 | - | 624.58 | - | - | 627.14 | 622.64 |
| SG-D1 [1] | Drainage Channel Staff Gauge | 625.81 | - | - | 9-Aug-04 | - | 1.36 | - | 624.45 | - | - | 625.61 | 623.08 |
| SG-D2 [1] | Drainage Channel Staff Gauge | 626.26 | - | - | 9-Aug-04 | - | 1.20 | - | 624.13 | - | - | 626.86 | 623.53 |
| SG-D3 [1] | Drainage Channel Staff Gauge | 625.83 | - | - | 9-Aug-04 | - | NF | - | NA | - | - | 624.88 | 623.40 |
| SG-R1 [1] | Rockaway River Staff Gauge | 640.92 | - | - | 9-Aug-04 | - | 1.36 | - | 638.95 | - | - | 653.28 | 639.50 |
| SG-R2 [10] | Rockaway River Staff Gauge | 628.65 | - | - | 9-Aug-04 | - | 3.24 | | 625.41 | - | - | | |
| SG-R3 [1] | Rockaway River Staff Gauge | 626.78 | - | - | 9-Aug-04 | - | NF | | NA | - | - | 625.63 | 624.05 |
| WP-A1 | Area A Well Point | 635.69 | 635.72 | 635.21 | 9-Aug-04 | 10.21 | 11.17 | 625.00 | 624.04 | 0.96 | 624.94 | 628.55 | 623.66 |
| WP-A2 | Area A Well Point | 636.71 | 639.02 | 638.59 | 9-Aug-04 | 13.77 | 13.97 | 624.82 | 624.62 | 0.20 | 624.81 | 628.78 | 624.03 |
| WP-A3 | Area A Well Point | 635.37 | 635.37 | 634.96 | 9-Aug-04 | | 10.00 | - | 624.96 | - | - | 629.59 | 623.01 |
| WP-A4 | Area A Well Point | 635.03 | 635.06 | 634.50 | 9-Aug-04 | 9.91 | 11.92 | 624.59 | 622.58 | 2.01 | 624.46 | 628.31 | 621.84 |
| WP-A5 | Area A Well Point | 635.10 | | 637.25 | 9-Aug-04 | - | 12.32 | | 624.93 | - | - | 629.14 | 622.88 |
| WP-A6 | Area A Well Point | 634.35 | | 636.68 | 9-Aug-04 | 11.78 | 13.90 | 624.90 | 622.78 | 2.12 | 624.76 | 636.65 | 622.88 |
| WP-A7 | Area A Well Point | 632.34 | | 634.28 | 9-Aug-04 | 9.63 | 11.20 | 624.65 | 623.08 | 1.57 | 624.55 | 628.47 | 622.79 |
| WP-A8 | Area A Well Point | 634.10 | | 636.96 | 9-Aug-04 | 12.20 | 13.92 | 624.76 | 623.04 | 1.72 | 624.65 | 628.24 | 622.73 |
| WP-A9 | Area A Well Point | 636.62 | | 638.72 | 9-Aug-04 | 13.80 | 16.62 | 624.92 | 622.10 | 2.82 | 624.74 | 629.06 | 622.85 |
| WP-B1 | Area B Well Point | 631.25 | | 633.05 | 9-Aug-04 | 7.90 | 7.92 | - | 625.13 | - | - | 629.70 | 623.37 |
| WP-B2 | Area B Well Point | 629.88 | 631.98 | 631.65 | 9-Aug-04 | - | 6.81 | - | 624.84 | - | - | 627.97 | 622.72 |
| WP-B3 | Area B Well Point | 631.11 | | 632.73 | 9-Aug-04 | - | 7.51 | - | 625.22 | - | - | 628.92 | 622.80 |
| WP-B4 | Area B Well Point | 629.33 | | 631.96 | 9-Aug-04 | 7.40 | 8.86 | 624.56 | 623.10 | 1.46 | 624.47 | 627.62 | 622.78 |
| WP-B5 | Area B Well Point | 629.43 | | 631.51 | 9-Aug-04 | - | 5.79 | - | 625.72 | - | - | 627.77 | 623.83 |
| WP-B6 | Area B Well Point | 629.12 | | 631.26 | 9-Aug-04 | - | 6.77 | - | 624.49 | - | - | 627.56 | 622.86 |
| WP-B7 | Area B Well Point | 627.02 | | 628.89 | 9-Aug-04 | - | 4.86 | - | 624.03 | - | - | 626.82 | 622.81 |
| WP-B10 | Area B Well Point | 629.82 | 632.52 | 632.14 | 9-Aug-04 | - | 7.40 | - | 624.74 | - | - | 627.70 | 622.66 |
| WP-C1 | Area C Well Point | 632.21 | | 632.91 | 9-Aug-04 | - | 7.95 | - | 624.96 | - | - | 628.18 | 622.64 |
| WP-C2 | Area C Well Point | 632.42 | | 633.86 | 9-Aug-04 | - | 8.68 | - | 625.18 | - | - | 630.02 | 622.94 |
| WP-C3 | Area C Well Point | 630.40 | | 632.04 | 9-Aug-04 | - | 6.99 | - | 625.05 | - | - | 628.18 | 622.60 |
| WP-C4 | Area C Well Point | 631.84 | | 632.67 | 9-Aug-04 | - | dry | - | NA | - | - | 633.27 | 623.70 |

**FOOTNOTES**

(1) Elevation measured at the top of a 3.33 ft. Staff gauge. Reference elevation (ground) shot at the top of the staff gauge. Water depth based on a visual observation of the water level on the Staff gauge.
(2) Corrected water level elevations utilize an average specific gravity of 0.9363 (RMT, Inc. product sampling in October 1999 @ MW-1(R); EFR-11 & WP-A8)
(3) Wells included in the quarterly sampling program. Depth to water recorded before purging
(4) Wells installed during new RI efforts per NJDEP and EPA request to further delineate MW19/Hot Spot 1 Area
(5) No boring log or well construction diagram available. Well specific information determined from Weston Geologic Cross Section
(6) "-" in the Quarterly Measurement Information section of this database indicates that the presence of free product was NOT detected at any measurable thickness and therefore did not generate a product elevation, product thickness nor require water level elevation to be corrected
(7) "-" in the Well Installation and Construction Information section indicates that well construction logs were not available for review
(8) Horizontal Datum: New Jersey State Plane Coordinate System NAD 83. Vertical Datum: NGVD 29
(9) All "19 series" wells were resurveyed August 8, 2001 at owners request. Wells MW19 through MW19-5 were converted to flush mount wells to allow for through traffic. Professional survey performed by James M. Stewart, Inc., Philadelphia, PA
(10) MW-19-10 was installed as part of the MNA/PDB efforts. SG-R2 replaced SG-R2 installed in Nov. 1998. Professional survey performed by James M. Stewart, Inc., Philadelphia, PA
(11) Air Product monitoring wells and staff gauges located in the ditch were not sampled during 2nd quarter 2004 because no current access agreement was in place at the time of sampling.

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-2(R) | 2004 | 2 | 18-Jun-04 | < 0.2 | 8 | < 0.2 | 49 | 15,000 |
| | | 3 | 13-Aug-04 | < 0.2 | 7.2 | < 0.2 | 26 | 15,000 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-4 | 1995 | 1 | 22-Feb-95 | < 0.3 | 26 | < 0.3 | 32 | 25,000 |
| | | 2 | 13-Jun-95 | < 0.5 | 16 | < 0.7 | 13 | 46,000 |
| | | 3 | 13-Sep-95 | < 1 | 9.7 | < 1.4 | 8.7 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | 8.8 | < 0.14 | 11 | 17,000 |
| | 1996 | 1 | 7-Mar-96 | < 0.5 | 24 | < 0.7 | 47 | NA |
| | | 2 | 14-Jun-96 | < 0.1 | 7 | < 0.14 | 7.8 | 9,300 |
| | | 3 | 17-Sep-96 | < 0.1 | 6.8 | < 0.14 | 4.3 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | 2.3 | < 0.14 | < 0.5 | 11,000 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | 3.5 | < 0.14 | 1.8 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | 1.2 | < 0.14 | 4.2 | 120 |
| | | 3 | 3-Oct-97 | < 0.2 | 2.2 | < 0.14 | 12.6 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.4 | < 0.28 | < 0.28 | < 1 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | 1.0 | < 0.14 | 1.4 | 710 |
| | | 3 | 28-Aug-98 | < 0.2 | 1.9 | < 0.14 | 1.2 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | 9.3 | < 0.14 | 3.3 | 650 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | 1.1 | < 0.14 | 2.5 | NA |
| | | 2 | 15-Apr-99 | < 0.31 | 0.66 | < 0.34 | < 0.4 | 4,000 |
| | | 2 duplicate | 15-Apr-99 | < 0.31 | 0.43 | < 0.34 | < 0.4 | 4,400 |
| | | 3 | 22-Jul-99 | < 0.31 | 3.10 | < 0.34 | 2.9 | NA |
| | | 4 | 25-Oct-99 | < 0.31 | 0.51 | < 0.34 | < 0.4 | 4,000 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | 0.54 | < 0.34 | 1.6 | NA |
| | | 2 | 13-Apr-00 | < 0.25 | 0.31 | < 0.27 | < 0.25 | 480 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | 0.41 | 210 |
| | | 4 duplicate | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | 0.33 | NA |
| | 2001 | 1 | 27-Feb-01 | < 0.25 | 1 | < 0.27 | 3.7 | NA |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | 0.31 | < 0.26 | 0.41 | 300 |
| | | 3 | 24-Jul-01 | < 0.28 | 0.52 | < 0.26 | 2.5 | NA |
| | | 4 | 26-Oct-01 | < 0.28 | 0.33 | < 0.26 | 0.77 | 3300 |
| | 2002 | 1 | 7-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 150 |
| | | 2 | 21-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 1300 |
| | | 2 duplicate | 22-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 950 |
| Dilution factor 5.0 for bis(2-ethylhexyl)phthalate | | 3 | 13-Aug-02 | < 0.22 | 0.54 | < 0.24 | 0.86 | 670 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 8.6 |
| | 2003 | 1 | 20-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 46 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 72 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 3 |
| | | 3 duplicate | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 7 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 67 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | 0.6 | 28 |
| | | 2 | 18-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 5200 |
| | | 3 | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 2,500 |

# TABLE 6
## L.E. CARPENTER [illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-11(DR) [2][3] | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.1 | < 0.14 | < 0.5 | 64 |
| | | 1 duplicate | 21-Jan-99 | < 0.2 | < 0.1 | < 0.14 | < 0.5 | 20 |
| | | 2 | | NS | NS | NS | NS | NS |
| | | 3[3] | 22-Jul-99 | NA | NA | NA | NA | 59 |
| | | 3 duplicate | 22-Jul-99 | NA | NA | NA | NA | 13 |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | 2000 | 1 | 17-Jan-00 | NA | NA | NA | NA | < 4.2 |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | Field ID: MW-11DD | 2 duplicate | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 3.4 |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 2 |
| DEHP found in lab blank | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 0.8 |
| DEHP found in lab blank | Field ID: MW-11DD | 1 duplicate | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 0.9 |
| DEHP found in lab blank | | 2 | 2-Apr-01 | NA | NA | NA | NA | 1.5 |
| | | 3 | 24-Jul-01 | NA | NA | NA | NA | < 0.4 |
| | | 4 | 26-Oct-01 | NA | NA | NA | NA | 0.6 |
| | 2002 | 1 | 7-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 2.8 |
| | | 2 | 21-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 26 |
| | | 3 | 13-Aug-02 | NA | NA | NA | NA | 63 |
| | | 4 | 20-Nov-02 | NA | NA | NA | NA | B 0.2 |
| | 2003 | 1 | 20-Mar-03 | NA | NA | NA | NA | < 1 |
| | | 2 | 3-Jun-03 | NA | NA | NA | NA | J 2 |
| | | 3 | 20-Aug-03 | NA | NA | NA | NA | < 1 |
| | | 4 | 18-Nov-03 | NA | NA | NA | NA | < 1 |
| | 2004 | 1 | 25-Feb-04 | NA | NA | NA | NA | < 1 |
| | | 2 | | NA | NA | NA | NA | NS |
| | | 3 | 11-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-14S | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.2 |
| DEHP found in lab blank | | 2 | 21-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.7 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.3 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.5 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | J 0.21 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 3 |
| | | 4 | 17-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 2 |
| | 2004 | 1 | 24-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 16-Jun-04 | < 0.2 | < 0.2 | J 0.2 | < 0.6 | J 1 |
| | | 3 | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS(5) | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-14I | 1995 | 1 | 22-Feb-95 | < 0.3 | 0.4 | < 0.3 | 1.2 | 140 |
| | | 2 | 13-Jun-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.6 |
| | | 3 | 13-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 2.6 |
| | 1996 | 1 | 7-Mar-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.3 |
| | | 3 | 17-Sep-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 2.7 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 1.6 |
| | | 3 | 3-Oct-97 | 1.2 | 22.1 | < 0.7 | 176 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | 0.34 | < 0.14 | 2 | 24 |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 2.4 |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 3.5 |
| Field ID: MW-14kl | | 2 duplicate | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 2.2 |
| | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 3.4 |
| DEHP found in lab blank | | 2 | 21-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 1.0 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.2 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.3 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 2 |
| | | 4 | 17-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 24-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 16-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.9 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-15S | 1995 | 1 | 22-Feb-95 | < 0.3 | < 0.3 | < 0.3 | < 1 | 2.4 |
| | | 2 | 13-Jun-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.1 |
| | | 3 | 13-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | 1996 | 1 | 7-Mar-96 | < 0.2 | 33 | < 0.28 | 83 | NA |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | | 3 | 17-Sep-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | 0.21 | < 0.14 | 1.7 | < 1.2 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 1.2 |
| | | 3 | 3-Oct-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | < 0.14 | 1.4 | < 0.5 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | 1.3 | < 1.1 |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 1-Dec-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.2 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.8 |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | < 0.4 |
| | 2002 | 1 | 7-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.0 |
| DEHP found in lab blank | | 2 | 20-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.7 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.2 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.2 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | 8 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.9 |
| | | 2 | 15-Jun-04 | < 0.2 | < 0.2 | J 0.5 | < 0.6 | J 2 |
| | | 3 | 11-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS(5) | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-15I | 1995 | 1 | 22-Feb-95 | < 0.3 | < 0.3 | < 0.3 | < 1 | 250 |
| | | 2 | 13-Jun-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 7.2 |
| | | 3 | 13-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 2.8 |
| | 1996 | 1 | 7-Mar-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.2 |
| | | 3 | 17-Sep-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.7 |
| | | 4 duplicate | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.9 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 2.2 |
| | | 3 | 3-Oct-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 1.9 |
| | | 2 duplicate | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 3.8 |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | < 0.14 | < 0.14 | 0.53 | 11 |
| | | 4 duplicate | 20-Nov-98 | < 0.2 | 0.2 | < 0.14 | 0.8 | 9.8 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | 4.8 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | 4.1 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 2 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 2 |
| | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.2 |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.5 |
| | 2002 | 1 | 7-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.0 |
| | | 2 | 21-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.5 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | < 0.2 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.2 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 duplicate | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.9 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 4 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.9 |
| | | 1 duplicate | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 15-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 11-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# [illegible]LE 6
## L.E. CARPENTE[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-17S [4] | 1995 | 1 | 24-Feb-95 | < 0.3 | 0.6 | 0.3 | 1.9 | 11 |
| | | 2 | 13-Jun-95 | 0.2 | < 0.14 | 0.18 | < 0.5 | < 1.1 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | 0.63 | < 1.2 |
| | 1996 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.3 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.5 |
| | 1997 | 1 | | NA | NA | NA | NA | NA |
| | | 2 | 14-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 1.3 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | 1.2 | 6.1 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | 1-Dec-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 6 |
| | 1999 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | 40 |
| | 2000 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 3 | | NS | NS | NS | NS | NS |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| DEHP found in lab blank | 2001 | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.8 |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 9.6 |
| | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.0 |
| Sample designation DUP01 | | 1 duplicate | 6-Mar-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.6 |
| DEHP found in lab blank | | 2 | 20-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.6 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.2 |
| | | 4 | 21-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.2 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.9 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 18-Jun-04 | NS | NS | NS | NS | NS |

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-21 [1] | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 4.2 |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.2 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.3 |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.1 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | 6 |
| | | 1 duplicate | 17-Jan-00 | NA | NA | NA | NA | < 4.2 |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.24 | < 2.1 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| DEHP found in lab blank | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 2.7 |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.9 |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.9 |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.6 |
| | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.3 |
| DEHP found in lab blank | | 2 | 22-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 1 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.3 |
| Sample designation DUPE-001 | | 3 duplicate | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.4 |
| | | 4 | 19-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.3 |
| | 2003 | 1 | 18-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 2 |
| | | 4 | 17-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 24-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 17-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 13-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-22(R) | 1995 | 1 | 21-Feb-95 | < 0.3 | 57 | < 0.3 | 260 | 6,500 |
| | | 2 | 13-Jun-95 | < 2.5 | 311 | < 3.5 | 955 | 380 |
| | | 3 | 13-Sep-95 | < 2.5 | 171 | < 3.5 | 693 | NA |
| | | 4 | 7-Dec-95 | < 2 | 123 | < 2.8 | 494 | 320 |
| | 1996 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 8-Jul-96 | < 2 | 258 | < 2.8 | 941 | 70 |
| | | 3 | 17-Sep-96 | < 2.5 | 359 | < 3.5 | 1,320 | NA |
| | | 4 | 12-Dec-96 | < 5 | 320 | < 7 | 1,330 | < 1.2 |
| | 1997 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 14-Aug-97 | < 200 | 5,730 | < 140 | 32,900 | 7,500 |
| | | 3 | 3-Oct-97 | < 400 | 11,400 | < 280 | 66,000 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 200 | 4,070 | 348 | 20,600 | NA |
| | | 2 | 4-Jun-98 | < 40 | 2,260 | < 28 | 11,300 | 5,800 |
| | | 3 | 28-Aug-98 | < 50 | 1880 | < 35 | 10300 | NA |
| | | 3 duplicate | 28-Aug-98 | < 50 | 2,510 | < 35 | 11,000 | NA |
| | | 4 | 20-Nov-98 | < 40 | 1,650 | < 28 | 7,230 | 1,100 |
| | 1999 | 1 | 21-Jan-99 | < 0.4 | 18 | < 0.28 | 84 | NA |
| | | 2 | 15-Apr-99 | < 31 | 1,800 | < 34 | 7,600 | 670 |
| | | 3 | 22-Jul-99 | < 31 | 1,200 | 42 | 5,200 | NA |
| | | 4 | 25-Oct-99 | < 16 | 810 | < 17 | 3,300 | 1200 |
| | | 4 duplicate | 25-Oct-99 | < 31 | 840 | < 34 | 3,400 | 1600 |
| | 2000 | 1 | 17-Jan-00 | < 7.8 | 360 | < 8.5 | 1,400 | NA |
| Dilution Factor 50 | | 2 | 13-Apr-00 | < 12 | 820 | < 14 | 3,600 | 92 |
| Dilution Factor 200 | | 3 | 31-Jul-00 | < 50 | 1,000 | < 54 | 4,800 | NA |
| Dilution Factor 50 and 250 for DEHP and BTEX respectively | | 4 | 30-Oct-00 | < 62 | 1,200 | < 68 | 6,200 | 5,100 |
| Dilution Factor 200 | 2001 | 1 | 27-Feb-01 | < 50 | 1,900 | < 54 | 9,000 | NA |
| Dilution Factor 20 and 100 for DEHP and BTEX respectively. DEHP found in lab blank | | 2 | 2-Apr-01 | < 28 | 910 | < 26 | 4,100 | 2,400 |
| Dilution factor 100 for BTEX, 50 for DEHP. DEHP detected in field blank | | 3 | 24-Jul-01 | < 28 | 1,100 | < 26 | 5,300 | 8,200 |
| Dilution Factor 100 | | 4 | 26-Oct-01 | < 28 | 980 | < 26 | 4,700 | 15,000 |
| Dilution Factor 100 | | 4 duplicate | 26-Oct-01 | < 28 | 1,000 | < 26 | 4,900 | NA |
| Dilution factors - 10 for BTEX, 2 for DEHP. | 2002 | 1 | 6-Mar-02 | < 2.8 | 140 | < 2.6 | 420 | 18 |
| Dilution factors - 50 for BTEX, 1 for DEHP | | 2 | 22-May-02 | < 11 | 320 | < 12 | 1,400 | 21 |
| Dilution factors - 50 for BTEX, 1 for DEHP | | 3 | 13-Aug-02 | < 11 | 180 | < 12 | 1,400 | 13 |
| Dilution factor - 25 for BTEX | | 4 | 20-Nov-02 | < 5.5 | 310 | < 6 | 1,000 | B 6.3 |
| Dilution factor - 5 for total xylenes and ethylbenzene | 2003 | 1 | 18-Mar-03 | < 1 | 540 | < 0.2 | 2,000 | 54.0 |
| Dilution factors - 5 for BTEX, 8 for DEHP | | 2 | 3-Jun-03 | < 1 | 690 | < 1 | 2,600 | 170.0 |
| | | 3 | 20-Aug-03 | < 1 | 210 | < 1 | 1,200 | 260.0 |
| Dilution factor - 5 for total xylenes, 25 for DEHP | | 4 | 17-Nov-03 | J 0.2 | 190 | < 0.2 | 940 | 2,200.0 |
| Dupe-01 | | 4 duplicate | 17-Nov-03 | J 0.2 | 180 | < 0.2 | 920 | 910.0 |
| | 2004 | 1 | 25-Feb-04 | < 1 | 330 | < 1 | 1,500 | 3,800.0 |
| | | 2 | 16-Jun-04 | < 1 | 200 | < 1 | 1,200 | 150.0 |
| | | 3 | 11-Aug-04 | 0.3 | 51 | < 0.2 | 410 | 99.0 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| MW-25(R) | 1995 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 14-Jun-95 | < 0.2 | < 0.2 | < 0.2 | < 1 | 1.6 |
| | | 3 | 13-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 68 |
| | 1996 | 1 | | NS | NS | NS | NS | NS |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | | 3 | 17-Sep-96 | < 0.1 | 0.34 | < 0.14 | 2.2 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.3 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | 13.5 | < 0.14 | 89 | 63 |
| | | 3 | 3-Oct-97 | < 0.2 | 4.1 | < 0.14 | 30.7 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | 0.33 | < 0.14 | 1.5 | NA |
| | | 1 duplicate | 12-Mar-98 | < 0.2 | 0.39 | < 0.14 | 0.94 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 5.3 |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 1.9 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 4.3 |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | 14 | < 4.1 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | 1.4 | 9.6 |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.2 |
| | 2000 | 1 | 1-Mar-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 3.5 |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| Field ID: MW-25RD | | 3 duplicate | 31-Jul-00 | NA | NA | NA | NA | < 2 |
| | | 4 | 30-Oct-00 | < 0.25 | 0.33 | < 0.27 | 1.1 | 3.4 |
| DEHP found in lab blank | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 1.9 |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 1.4 |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.5 |
| Field ID: MW-25D | | 3 duplicate | 24-Jul-01 | NA | NA | NA | NA | 1.2 |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.7 |
| | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 0.5 |
| DEHP found in lab blank | | 2 | 22-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 1.1 |
| | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.2 |
| | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | < 0.3 |
| Dupe-01 | | 4 duplicate | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.2 |
| | 2003 | 1 | 18-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 7 |
| | | 4 | 17-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 1 |
| | 2004 | 1 | 24-Feb-04 | < 0.2 | < 0.2 | J 0.2 | < 0.6 | J 2 |
| | | 2 | 17-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 duplicate | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 6 |

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| WP-B6 | 2004 | 3 | 11-Aug-04 | < 0.2 | < 0.2 | 0.6 | 6.5 | 64,000 |

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS (5) | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| WP-B7 | 2004 | 2 | 17-Jun-04 | < 0.2 | 4.8 | < 0.2 | 4.6 | 25,000 |
| | | 3 | 11-Aug-04 | < 0.2 | < 2 | < 0.2 | < 5 | 63,000 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| **Trip Blank** | 1995 | 1 | 27-Feb-95 | < 0.3 | < 0.3 | < 0.3 | < 1 | NA |
| | | 2 | 12-Jun-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 3 | 12-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | 1996 | 1 | 6-Mar-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 12-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 3 | 16-Sep-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 13-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 3 | 3-Oct-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | ND |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | | 3 | 22-Jul-99 | NA | NA | NA | NA | < 4.2 |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | NA |
| | 2000 | 1 | 17-Jan-00 | NA | NA | NA | NA | < 4.1 |
| | | 1 | 1-Mar-00 | NA | NA | NA | NA | < 3.8 |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| | | 3 | 31-Jul-00 | NA | NA | NA | NA | < 2 |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | NA |
| DEHP found in lab blank | 2001 | 1 | 27-Feb-01 | NA | NA | NA | NA | 0.6 |
| | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| Performed for Lab No. N067 (MW22R DEHP sample). STL forgot to sample DEHP at this well on first round | | 3 | 24-Jul-01 | NA | NA | NA | NA | < 0.4 |
| | | 3 | 24-Jul-01 | NA | NA | NA | NA | < 0.4 |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | 2002 | 1 | 5-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | NA |
| | | 2 | 20-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | NA |
| | | 3 | 12-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 180 |
| TB-01 | | 4 | 19-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.2 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 4-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | NA |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 26-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 17-Jun-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | NA |
| | | 3 | 10-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | NA |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| **Rinsate Sample** | 2002 | 1 | | ND | ND | 0.7 | ND | 2.5 |
| DEHP found in lab blank | | 2 | 22-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 3.4 |
| Rinsate -001 | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 4.5 |
| Rinsate-01 | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.3 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 2 |
| | | 4 | 18-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | 18-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 1 |
| | | 3 | 10-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# TABLE 6
## L.E. CARPENTER, Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |
| **Field Blank** | 1995 | 1 | 27-Feb-95 | < 0.3 | < 0.3 | < 0.3 | < 1 | < 1.1 |
| | | 2 | 13-Jun-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | 1.3 |
| | | 3 | 13-Sep-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 7-Dec-95 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | 1996 | 1 | 7-Mar-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 14-Jun-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.4 |
| | | 3 | 17-Sep-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 12-Dec-96 | < 0.1 | < 0.14 | < 0.14 | < 0.5 | < 1.2 |
| | 1997 | 1 | 7-Apr-97 | < 0.2 | < 0.14 | 0.2 | < 0.5 | NA |
| | | 2 | 14-Aug-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 1.1 |
| | | 3 | 3-Oct-97 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | | NS | NS | NS | NS | NS |
| | 1998 | 1 | 12-Mar-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 2 | 4-Jun-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 1.1 |
| | | 3 | 28-Aug-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | NA |
| | | 4 | 20-Nov-98 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | 1.3 |
| | 1999 | 1 | 21-Jan-99 | < 0.2 | < 0.14 | < 0.14 | < 0.5 | < 4.4 |
| | | 2 | 15-Apr-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.4 |
| | | 3 | 22-Jul-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.3 |
| | | 4 | 25-Oct-99 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.6 |
| | 2000 | 1 | 17-Jan-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.2 |
| | | 1 | 1-Mar-00 | < 0.31 | < 0.38 | < 0.34 | < 0.4 | < 4.2 |
| | | 1 | 16-Mar-00 | NA | NA | NA | NA | 3.2 |
| | | 2 | 13-Apr-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 3 | 31-Jul-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| | | 4 | 30-Oct-00 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | < 2 |
| DEHP found in lab blank | 2001 | 1 | 27-Feb-01 | < 0.25 | < 0.27 | < 0.27 | < 0.25 | 1.3 |
| DEHP found in lab blank | | 2 | 2-Apr-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 2 |
| Performed for Lab No. N067 (MW22R DEHP sample). STL forgot to sample DEHP at this well on first round | | 3 | | NA | NA | NA | NA | 1.2 |
| | | 3 | 24-Jul-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | < 0.5 |
| | | 4 | 26-Oct-01 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | < 0.4 |
| | 2002 | 1 | 6-Mar-02 | < 0.28 | < 0.26 | < 0.26 | < 0.25 | 16 |
| | | 2 | 22-May-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 130 |
| FB-001 | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 0.5 |
| FB-01 | | 4 | 20-Nov-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | B 0.4 |
| | 2003 | 1 | 19-Mar-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 0.1 |
| | | 2 | 3-Jun-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 4 | 17-Nov-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | 2004 | 1 | 25-Feb-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |
| | | 2 | | NS | NS | NS | NS | NS |
| | | 3 | 12-Aug-04 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | < 1 |

# [illegible]LE 6
## L.E. CARPENT[illegible] Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS[5] | | | | |
|---|---|---|---|---|---|---|---|---|
| | YEAR | QUARTER | SAMPLING DATE | Benzene | Ethylbenzene | Toluene | Total Xylenes | DEHP |
| | | | | ug/l | ug/l | ug/l | ug/l | ug/l |
| | NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | 700 | 1,000 | 40 | 30 |
| | | PRACTICAL QUANTIFICATION LIMIT (PQL) | | 1 | 5 | 5 | 2 | 30 |

## GENERAL NOTES PAGE

**LEGEND**
ug/L: micrograms per liter
NJGWQS: New Jersey Groundwater Quality Standards
NS: Not Sampled
NA: Not Analyzed
duplicate: Duplicate sample
B: Analyte found in laboratory blank as well as sample.
DEHP: bis-2-Ethylhexylphthalate

**SAMPLING NOTES**
(1) MW-21 Quarterly sampling required for both DEHP and BTEX as of NJDEP letter dated Nov 23, 1998
(2) MW-11(IR) & MW-11(DR) sampled for both DEHP and BTEX per NJDEP letter dated Nov 23, 1998 (one time sample round- baseline concentration)
(3) MW-11D required to be sampled quarterly per NJDEP letter dated August 17, 1999. Third quarter 1999 sampling was performed prior to receiving the NJDEP letter. Subsequently, the well was only sampled for DEHP. Starting 4th quarter 1999, MW-11D will be sampled for both DEHP and BTEX. Based on NJDEP letter dated April 5, 2001, this well will be sampled for DEHP only (starting 2nd qtr 2001).
(4) Well initially sampled Biannually - 2nd and 4th Quarter as of the beginning of 1998. 1st quarter 2002, well sampled quarterly for both DEHP and BTEX.
(5) Low flow sampling initiated 1st quarter 2002.

15,000 Above the NJDEP NJGWQS

# Table 7
## L.E.Carpenter, Wharton, New Jersey
## Quarterly Groundwater Monitoring MNA Analytical Data

| Well ID | Sampling Event | Heterotrophic Plate Count | Alkalinity to pH 8.3 | Alkalinity to pH 4.5 | TSS | TDS | Nitrate Nitrogen | Ammonia Nitrogen | Phosphorus (total) | Sulfate | Ferrous Iron | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (units) | | cfu/ml | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | ug/l |
| MW-2(R) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 320.00 | ND | 202 | 499 | 347.00 | ND | 1.00 | 0.85 | 1.7 J | 32.10 | 8400.00 |
| | 3Q04 | >5700 | ND | 202 | 613 | 320.00 | ND | 1.10 | 1.00 | ND | 7.10 | 7800.00 |
| MW-3 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-4 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-6(R) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-11DR | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | 27 | ND | 83 | ND | 110 | ND | 0.18 J | ND | 10 | ND | ND |
| MW-14S | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 89.00 | ND | 167 | 17 | 256 | ND | 0.30 J | ND | 5.10 | 5.70 | 920.00 |
| | 3Q04 | 510.00 | ND | 134 | 21 | 298 | ND | ND | 0.10 | 9.70 | 7.50 | 41.00 |
| MW-14I | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 35.00 | ND | 112 | 3.6 J | 180 | 0.16 | ND | 0.048 J | 14.90 | 0.025 J | ND |
| | 3Q04 | 21.00 | ND | 110 | 6.4 J | 189 | 0.20 | ND | 0.040 J | 14.40 | 0.020 J | ND |
| MW-15S | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-15I | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-17S | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 520 | NS | 82 | 62 | 163 | ND | ND | 0.11 | 11.40 | ND | ND |
| | 3Q04 | 52 | ND | 73 | ND | 173 | ND | ND | ND | 9.40 | 0.01 | 2.10 |
| MW-19 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 80 | ND | 207 | 30 | 589 | ND | ND | 0.054 | 3.8 J | 19.2 | 150 |
| | 3Q04 | 630 | ND | 268 | 30.8 | 553 | ND | ND | 0.12 | 1.7 J | 31.8 | 230 |
| MW-19-1 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 100 | ND | 162 | ND | 725 | 1.4 | ND | ND | 32.4 | 0.091 J | ND |
| | 3Q04 | 49 | ND | 164 | 3.2 J | 928 | 3.9 | ND | ND | 35.3 | 0.14 | ND |
| MW-19-2 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 10 | ND | 335 | 6.0 J | 704 | ND | ND | ND | 33.6 | 2.1 | 1600 |
| | 3Q04 | 87 | ND | 176 | 6.0 J | 916 | 0.87 | ND | ND | 23.9 | 2 | 280 |
| MW-19-5 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | 180 | ND | 228 | 14 | 942 | 0.06 J | ND | ND | 15.7 | 3.6 | 2100 |
| MW-19-6 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 35 | ND | 151 | 10.4 J | 1670 | 1.6 | ND | ND | 37.3 | 1.8 | 140 |
| | 3Q04 | 110 | ND | 178 | 18.8 | 1240 | 1.1 | ND | 0.062 | 38.3 | 0.69 | 140 |
| MW-19-7 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 110 | ND | 142 | 6.8 J | 2110 | 0.21 | ND | ND | 47.2 | 6.6 | 5200 |
| | 2Q04D | 88 | ND | 152 | 9.2 J | 2040 | 0.21 | 0.15 J | ND | 37.3 | 9.6 | 5400 |
| | 3Q04 | 2000 | ND | 175 | 4.4 J | 1920 | 1.5 | ND | ND | 64.4 | 4 | 2400 |
| MW-19-8 | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 45 | ND | 143 | 14.4 | 1120 | ND | ND | 0.15 | 22.8 | 13.1 | 79 |
| | 3Q04 | 15 | ND | 152 | 7.2 J | 573 | ND | 0.24 J | 0.12 | 11.5 | 2.7 | 790 |
| MW-19-9D | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 210 | ND | 211 | 6.0 J | 821 | 0.14 | 0.33 J | ND | 18.2 | 1.2 | 1300 |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-19-10 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 34 | ND | 109 | 6.8 J | 563 | ND | ND | ND | 18 | 1.1 | 2.6 J |
| | 3Q04 | 18 | ND | 98 | 10.4 J | 908 | ND | ND | ND | 19.2 | 1.6 | 3.3 J |
| | 3Q04D | 22 | ND | 97.8 | 10.8 J | 890 | ND | 0.24 J | ND | 17.9 | 1.5 | 2.9 J |
| MW-21 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 110 | ND | 157 | 11.8 J | 301 | 0.16 | ND | 0.050 J | 14.10 | 0.018 J | ND |
| | 3Q04 | 580 | ND | 153 | ND | 443 | 0.40 | ND | ND | 16.10 | ND | ND |
| MW-22 (R) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 24 | ND | 196 | 29 | 320 | ND | 0.50 J | 0.10 | ND | 15.00 | 6100.00 |
| | 3Q04 | 35 | ND | 210 | 33 | 343 | ND | 0.30 J | 0.12 | ND | 16.00 | 8900.00 |
| MW-25(R) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 220 | ND | 204 | 38 | 341 | ND | ND | 0.056 | 2.9 J | 69 | 1100 |
| | 3Q04 | >5700 | ND | 200 | 22 | 323 | ND | 0.15 J | ND | 5.6 | 6 | 44 |
| | 3Q04D | >5700 | ND | 203 | 22 | 329 | ND | ND | ND | 5.8 | 4.8 | 46 |
| WP-S6 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| WP-S7 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 300 | ND | 226 | 378 | 356 | ND | ND | 0.53 | 6 | 52.5 | 14000 |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| SW-5 | 1Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| SW-7 | 1Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| SW-8 | 1Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

# Table 8
## L.E.Carpenter, Wharton, New Jersey
## Quarterly Groundwater Monitoring MNA Field Data

| Well ID | Event | DO (mg/L) | pH | ORP (mV) | Conductivity (uS/cm) | Turbidity (NTU) | Temperature (°C) | Total Iron (mg/L) | Ferrous Iron (ppm) | Alkalinity (ppm) | CO2 (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2(R ) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 2.50 | 6.91 | -1 | 723 | NM | 12.14 | NM | NM | NM | NM |
| | 3Q04 | NM | 7.44 | 29 | 669 | NM | 15.40 | NM | NM | NM | NM |
| | | | | | | | | | | | |
| MW-3 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | | | | | | | | | | | |
| MW-4 | 1Q04 | 3.82 | 7.64 | 65 | 630 | 3 | 3.29 | NM | NM | NM | NM |
| | 2Q04 | 2.91 | 7.00 | 25 | 67 | NM | 14.52 | NM | NM | NM | NM |
| | 3Q04 | NM | 7.45 | 31 | 653 | NM | 17.68 | NM | NM | NM | NM |
| | | | | | | | | | | | |
| MW-6(R ) | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | | | | | | | | | | | |
| MW-11DR | 1Q04 | 2.40 | 8.07 | 91 | 204 | 1 | 7 | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | 1.00 | 8.42 | 143 | 206 | 2 | 15.50 | NM | 0 | 55 | <10 |
| | | | | | | | | | | | |
| MW-14S | 1Q04 | 2.99 | 5.92 | 7 | 540 | 17 | 9.02 | NM | NM | NM | NM |
| | 2Q04 | 3.19 | 7.19 | -16 | 517 | 4 | 12.82 | 5.50 | NM | 125.00 | 14.00 |
| | 3Q04 | 0.20 | 7.78 | -29 | 602 | 4 | 13.66 | NM | 8.00 | 85.00 | 15.00 |
| | | | | | | | | | | | |
| MW-14I | 1Q04 | 2.78 | 6.30 | 80 | 335 | 41 | 10.79 | NM | NM | NM | NM |
| | 2Q04 | 1.29 | 7.56 | 207 | 321 | 8 | 13.30 | 0.50 | NM | 90.00 | 1000+ |
| | 3Q04 | 1.00 | 8.18 | 116 | 331 | 9 | 13.42 | NM | 0.00 | 60.00 | <10 |
| | | | | | | | | | | | |
| MW-15S | 1Q04 | 2.64 | 7.25 | 151 | 688 | 30 | 8.08 | NM | NM | NM | NM |
| | 2Q04 | 5.40 | 7.14 | 157 | 921 | 15 | 13.75 | NM | NM | NM | NM |
| | 3Q04 | 1.00 | 7.59 | 141 | 492 | 14 | 17.50 | NM | NM | NM | NM |
| | | | | | | | | | | | |
| MW-15I | 1Q04 | 3.24 | 7.55 | -11 | 674 | 5 | 10.57 | NM | NM | NM | NM |
| | 2Q04 | 2.97 | 7.44 | -25 | 477 | 10 | 14.37 | NM | NM | NM | NM |
| | 3Q04 | 0.10 | 7.70 | -31 | 777 | 2 | 16.11 | NM | NM | NM | NM |
| | | | | | | | | | | | |
| MW-17S | 1Q04 | 0.38 | 7.57 | 194 | 160 | 2 | 3.60 | NM | NM | NM | NM |
| | 2Q04 | 3.38 | 6.05 | 250 | 301 | NM | 13.10 | NM | NM | NM | NM |
| | 3Q04 | 1.00 | 7.56 | 219 | 269 | 3 | 18.13 | NM | 0.00 | 45.00 | 16.00 |
| | | | | | | | | | | | |
| MW-19 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 10.97 | 7.23 | 24 | 890 | 2 | 13.94 | 22.3 | NM | 160 | 70 |
| | 3Q04 | 0.1 | 7.62 | -10 | 1179 | 2 | 16.18 | NM | <10 | 200 | 95 |
| | | | | | | | | | | | |
| MW-19-1 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 13.9 | 7.22 | 180 | 1373 | 10 | 13.9 | 0.6 | NM | 125 | 17 |
| | 3Q04 | 1 | 7.5 | 80 | 1910 | 10 | 18.49 | NM | 0.2 | 90 | 28 |
| | | | | | | | | | | | |
| MW-19-2 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 4.45 | 7.3 | 83 | 1199 | 6 | 13.97 | 3.5 | NM | 210 | 60 |
| | 3Q04 | 5 | 7.45 | 59 | 1830 | 9 | 16.97 | NM | 2 | 130 | 15.5 |
| | | | | | | | | | | | |
| MW-19-5 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 10.16 | 7.02 | 41 | 1550 | 4 | 12.89 | 1.5 | NM | 130 | 70 |
| | 3Q04 | 1 | 7.26 | 87 | 1740 | 19 | 16.3 | NM | 2 | 150 | 60 |
| | | | | | | | | | | | |
| MW-19-6 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 5.48 | 6.86 | 56 | 2640 | 10 | 15.24 | 35 | NM | 80 | 33 |
| | 3Q04 | 1 | 7.43 | 83 | 2490 | 4 | 16.61 | NM | 0.4 | 125 | 20 |
| | | | | | | | | | | | |
| MW-19-7 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 5.89 | 6.82 | 48 | 380 | 6 | 14.34 | 8 | NM | 95 | 90 |
| | 3Q04 | 1 | 6.92 | 113 | 4040 | 2 | 16.77 | NM | 1 | 75 | 70 |
| | | | | | | | | | | | |
| MW-19-8 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 3.98 | 6.9 | -24 | 2010 | 10 | 15.69 | 15 | NM | 125 | 30 |
| | 3Q04 | 0.4 | 7.52 | 48 | 1093 | 7 | 18.29 | NM | 2 | 100 | 19 |
| | | | | | | | | | | | |
| MW-19-9D | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 3.03 | 7.11 | -28 | 480 | 63 | 14.64 | NM | NM | NM | NM |
| | 3Q04 | 0.2 | 7.4 | 8 | 545 | 35 | 15.7 | NM | NM | NM | NM |
| | | | | | | | | | | | |
| MW-19-10 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 3.82 | 6.78 | 85 | 1050 | 7 | 13.94 | 1 | NM | 80 | 25 |
| | 3Q04 | 0.1 | 7.35 | 107 | 1498 | 11 | 15.56 | NM | 1.5 | 65 | 20 |
| | | | | | | | | | | | |
| MW-21 | 1Q04 | 2.65 | 5.57 | 125 | 447 | 2 | 9.54 | NM | NM | NM | NM |
| | 2Q04 | 1.02 | 7.16 | 51 | 543 | 35 | 12.70 | NM | NM | NM | NM |
| | 3Q04 | 0.30 | 7.75 | 103 | 849 | 3 | 16.62 | NM | 0.00 | 100.00 | 9.00 |
| | | | | | | | | | | | |
| MW-22 (R ) | 1Q04 | 4.68 | 7.77 | -6 | 586 | 30 | 7.09 | NM | NM | NM | NM |
| | 2Q04 | 2.22 | 7.20 | -35 | 655 | 3 | 12.84 | 10.00 | NM | 175 | 25 |
| | 3Q04 | 0.20 | 7.56 | -46 | 608 | 3 | 16.83 | NM | 11.00 | 150 | <100 |
| | | | | | | | | | | | |
| MW-25(R ) | 1Q04 | 3.22 | 5.87 | 7 | 563 | 89 | 4.70 | NM | NM | NM | NM |
| | 2Q04 | 1.37 | 6.96 | -34 | 620 | 35 | 15.67 | NM | NM | NM | NM |
| | 3Q04 | 0.60 | 7.28 | 119 | 609 | 9 | 17.32 | NM | 3.00 | 90 | 50 |
| | | | | | | | | | | | |
| WP-B6 | 1Q04 | NM | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | NM | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | | | | | | | | | | | |
| WP-B7 | 1Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 2Q04 | 7.63 | 6.87 | -7 | 768 | 187 | 13 | NM | NM | 175 | 70 |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | | | | | | | | | | | |
| SW-5 | 1Q04 | 10.41 | 5.75 | 84 | 127 | 11 | 2.25 | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | | | | | | | | | | | |
| SW-7 | 1Q04 | 0.93 | 5.62 | 110 | 865 | 5 | 4.11 | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | | | | | | | | | | | |
| SW-8 | 1Q04 | 0.01 | 5.88 | 156 | 891 | 19 | 4.56 | NM | NM | NM | NM |
| | 2Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3Q04 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

# TABLE 9

THROUGH 3RD QUARTER 2004

## L.E. CARPENTER - Wharton, New Jersey
## MW19/Hot Spot 1 Groundwater Monitoring Data

| MONITORING WELLS | SAMPLE DATE | QUARTER | ANALYTICAL PARAMETERS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Benzene | | Ethylbenzene | | Toluene | | Total Xylenes | | bis-2-Ethylhexylphthalate (DEHP) | |
| | | UNITS | ug/l | | ug/l | | ug/l | | ug/l | | ug/l | |
| NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | | 700 | | 1,000 | | 40 | | 30 | |
| **MW19** | | | | | | | | | | | | |
| Dilution factor for BTEX 2000 | 24-Feb-95 | 1 | < | 660 | | 1,700 | | 110,000 | | 10,000 | | NR |
| Dilution factor for BTEX 100 | 14-Jun-95 | 2 | | 150 | | 3,400 | | 140,000 | | 17,000 | | NS |
| Dilution factor 5000 for BTEX & 2 for DEHP; MDL for Benzene 1000 ug/l | 24-Apr-98 | 2 | < | 1,000 | | 2,850 | | 76,700 | | 14,900 | | 6.6 |
| Dilution factor for BTEX 500 | 2-Aug-01 | 3 | < | 95 | | 3,000 | | 62,000 | | 17,000 | | 2.9 |
| Dilution factor for BTEX 1000 | 6-Jun-02 | 2 | < | 200 | | 1,000 | | 30,000 | | 6,000 | | 5.6 |
| Dilution factor for BEX 100, Toluene 200 | 20-Nov-03 | 4 | < | 20 | | 1,500 | | 40,000 | | 7,400 | J | 6.0 |
| | 15-Jun-04 | 2 | < | 100 | | 1,400 | | 46,000 | | 6,600 | J | 4.0 |
| Dilution factor for BTEX 100, Toluene 500 | 10-Aug-04 | 3 | < | 20 | | 2,100 | | 56,000 | | 11,000 | J | 2.0 |
| **MW19-1** | | | | | | | | | | | | |
| Dilution factor for BTEX 200 | 12-Mar-98 | 1 | < | 40 | | 219 | | 4,270 | | 1,160 | | 190 |
| | 2-Aug-01 | 3 | < | 0.2 | | 1.2 | < | 0.2 | < | 0.2 | | 85 |
| | 5-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | | 0.6 |
| | 19-Nov-03 | 4 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 0.9 |
| | 15-Jun-04 | 2 | < | 0.2 | < | 0.2 | | 1.7 | < | 0.6 | | 11.0 |
| | 10-Aug-04 | 3 | < | 0.2 | < | 0.2 | J | 0.6 | < | 0.6 | < | 1.0 |
| **MW19-2** | | | | | | | | | | | | |
| Dilution factor for BTEX 250 | 12-Mar-98 | 1 | < | 50 | | 1,130 | | 9,830 | | 6,010 | | 8.8 |
| Dilution factor for BTEX 2 | 1-Aug-01 | 3 | < | 0.4 | | 21 | | 160 | | 82 | | 16 |
| | 5-Jun-02 | 2 | < | 0.22 | | 19 | | 36 | | 39 | < | 0.4 |
| | 19-Nov-03 | 4 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | J | 1.0 |
| | 15-Jun-04 | 2 | < | 0.2 | | 1.2 | | 29.0 | | 4.8 | < | 1.0 |
| | 10-Aug-04 | 3 | < | 0.2 | | 28.0 | | 150.0 | | 100.0 | J | 1.0 |
| **MW19-3** | | | | | | | | | | | | |
| | 12-Mar-98 | 1 | < | 0.2 | < | 0.14 | < | 0.14 | < | 0.5 | < | 1.2 |
| | 2-Aug-01 | 3 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.5 |
| | 5-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | < | 0.5 |
| | 19-Nov-03 | 4 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 0.9 |
| **MW19-4** | | | | | | | | | | | | |
| | 12-Mar-98 | 1 | < | 0.2 | < | 0.14 | < | 0.14 | < | 0.5 | < | 1.3 |
| | 2-Aug-01 | 3 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.5 |
| | 6-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | < | 0.5 |
| | 19-Nov-03 | 4 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 1.0 |
| **MW19-5** | | | | | | | | | | | | |
| Dilution factor for BTEX 5000 | 12-Mar-98 | 1 | < | 1,000 | | 1,920 | | 123,000 | | 10,100 | | 42 |
| Dilution factor for BTEX 1000 | 2-Aug-01 | 3 | < | 190 | | 870 | | 79,000 | | 5,200 | | 3.2 |
| Dilution factor for BTEX 500 | 7-Mar-02 | 1 | < | 140 | | 300 | | 10,000 | | 1,700 | | 1.3 |
| Dilution factor for BTEX 5000, for DEHP 20 | 5-Jun-02 | 2 | < | 1,100 | | 1,100 | | 92,000 | | 6,300 | < | 9.8 |
| Dilution factor for BTEX 5000, for DEHP 20 | 5-Jun-02 | 2 duplicate | < | 1,100 | | 1,300 | | 92,000 | | 6,900 | < | 9.4 |
| | 19-Nov-03 | 4 | < | 0.2 | < | 0.2 | | 4.3 | J | 0.9 | < | 0.9 |
| | 18-Dec-03 | 4 resample | < | 0.2 | | 3.7 | | 240.0 | | 24.0 | < | 0.9 |
| | 16-Jun-04 | 2 | < | 100.0 | | 1,400 | | 83,000 | | 7,400 | J | 1.0 |
| | 10-Aug-04 | 3 | < | 200.0 | | 2,800 | | 140,000 | | 14,000 | J | 1.0 |
| **MW19-6** | | | | | | | | | | | | |
| Dilution factor for BTEX 200 | 15-Nov-99 | 4 | < | 62 | | 94 | | 3,400 | | 500 | | 32 |
| Dilution factor for BTEX 2 | 1-Aug-01 | 3 | < | 0.4 | | 14 | | 390 | | 47 | | 28 |
| | 5-Jun-02 | 2 | < | 0.22 | | 1.7 | | 13 | | 4.1 | | 2.3 |
| | 18-Nov-03 | 4 | < | 0.2 | < | 0.2 | J | 0.3 | < | 0.6 | J | 6 |
| | 17-Jun-04 | 2 | < | 0.2 | J | 0.4 | | 1.1 | | 1 | J | 3.0 |
| | 10-Aug-04 | 3 | < | 0.2 | | 4.6 | | 38.0 | | 18 | J | 4.0 |

# TABLE 9
## L.E. CARPENTER - Wharton, New Jersey
## MW19/Hot Spot 1 Groundwater Monitoring Data

| MONITORING WELLS | SAMPLE DATE | QUARTER | ANALYTICAL PARAMETERS: Benzene | | Ethylbenzene | | Toluene | | Total Xylenes | | bis-2-Ethylhexylphthalate (DEHP) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | UNITS | ug/l | | ug/l | | ug/l | | ug/l | | ug/l | |
| NEW JERSEY GROUNDWATER QUALITY STANDARDS (NJGWQS) | | | 1 | | 700 | | 1,000 | | 40 | | 30 | |
| **MW19-7** | | | | | | | | | | | | |
| Dilution factor for BTEX 50 | 15-Nov-99 | 4 | < | 16 | | 100 | | 51 | | 1,400 | < | 4.1 |
| Dilution factor for BTEX 2 | 1-Aug-01 | 3 | | 6.7 | | 6.6 | | 13 | | 680 | < | 0.4 |
| Dilution factor for BTEX 5 | 7-Mar-02 | 1 | | 3 | < | 1.3 | < | 1.3 | | 250 | | 1.6 |
| | 5-Jun-02 | 2 | | 0.48 | | 1.6 | | 27 | | 27 | < | 0.4 |
| | 19-Nov-03 | 4 | | 4.7 | J | 0.4 | J | 0.3 | | 460 | J | 1.0 |
| | 16-Jun-04 | 2 | J | 2.8 | | 130.0 | | 2,100.0 | | 630 | < | 1.0 |
| | 16-Jun-04 | 2 duplicate | J | 4.0 | | 130.0 | | 2,100.0 | | 610 | < | 1.0 |
| | 10-Aug-04 | 3 | | 2.0 | | 1.6 | | 1.3 | | 20 | < | 1.0 |
| **MW19-8** | | | | | | | | | | | | |
| Dilution factor for BTEX 50 | 15-Nov-99 | 4 | < | 0.31 | < | 0.38 | < | 0.34 | < | 0.4 | < | 4.1 |
| Dilution factor for BTEX 2 | 1-Aug-01 | 3 | | 0.5 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.4 |
| | 5-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | < | 0.4 |
| | 19-Nov-03 | 4 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | < | 0.9 |
| | 17-Jun-04 | 2 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | < | 1.0 |
| | 11-Aug-04 | 3 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | < | 1.0 |
| **MW19-9D** | | | | | | | | | | | | |
| Dilution factor for BTEX 2 | 1-Aug-01 | 3 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.2 | | 0.5 |
| | 5-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | | 1.9 |
| | 19-Nov-03 | 4 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | J | 1.0 |
| | 16-Jun-04 | 2 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | J | 2.0 |
| | 10-Aug-04 | 3 | < | 0.20 | < | 0.20 | < | 0.20 | < | 0.6 | < | 1.0 |
| **MW19-10** | | | | | | | | | | | | |
| | 17-Jun-04 | 2 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 1.0 |
| | 11-Aug-04 | 3 | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 1.0 |
| | 11-Aug-04 | 3 duplicate | < | 0.2 | < | 0.2 | < | 0.2 | < | 0.6 | < | 0.9 |
| **GEI-2I** | 24-Feb-95 | 1 | < | 0.3 | < | 0.3 | | 0.4 | < | 0.1 | | 27 |
| | 6-Jun-02 | 2 | < | 0.22 | < | 0.18 | < | 0.24 | < | 0.2 | | 1.4 |
| **GEI-2S** | 24-Feb-95 | 1 | < | 8.2 | | 46 | | 1,500 | | 380 | | 7.6 |
| | 25-Mar-98 | 1 | | NS | | NS | | NS | | NS | B | 2.5 |
| | 6-Jun-02 | 2 | | 1.2 | | 2.6 | | 16 | | 5.1 | | 2.4 |
| | 18-Dec-03 | 4 | < | 0.2 | < | 0.2 | J | 0.4 | < | 0.6 | < | 1.0 |

**LEGEND**

ug/L = micrograms per liter

NJGWQS = New Jersey Groundwater Quality Standards

ROD: Record of Decision

NA = Not Applicable

NS = Not Sampled

ND: No Detection

NR = Not Run

duplicate = Duplicate sample

680 : Concentration exceeds NJGWQS

B: Analyte also detected in blank

J: Estimated value. Value is greater than or equal to the Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ)

**NOTES**

(1) Low flow sampling initiated 1st quarter 2002

(2) GEI series wells are piezometers installed by Weston

# TABLE 10
## L.E. CARPENTER - Wharton, New Jersey
### Surface Water Monitoring Data

| | ROCKAWAY RIVER | | | INFILTRATION GALLERY | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SW-1 | SW-2 | SW-3 | SW-4 | SW-5 | | | | | | | | | | | SW-6 | | |
| SAMPLING DATE | 03/14/89 (1) | 03/14/89 (1) | 03/14/89 (1) | 03/14/89 (1)(6) | 08/02/89 (1) | 5/29/98 (5) | 06/06/02 | 11/21/02 | 03/20/03 | 06/02/03 | 08/20/03 | 11/18/03 | 02/24/04 | 06/14/04 | 08/11/04 | 03/14/89 (1) | 08/27/90 | 5/29/98 (5) |
| **VOLATILE ORGANIC COMPOUNDS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Methylene Chloride | J 1 | ND | ND | ND | JP 3.8 | ND | NA | NA | NA | NA | NA | NA | NA | NS | NA | J 3.8 | (2) ND | ND |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | J 3.7 | 0.4 | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | 0.5 |
| Ethylbenzene | ND | ND | ND | ND | J 3.5 | ND | NA | < 0.18 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | J 0.3 | NS | < 0.2 | ND | ND | ND |
| Chlorobenzene | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NS | NA | J 1.2 | ND | ND |
| Acetone | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | ND |
| Total Xylenes | ND | ND | ND | ND | 44 | ND | ND | < 0.2 | < 0.6 | < 0.6 | < 0.6 | < 0.6 | J 1.9 | NS | < 0.6 | ND | ND | ND |
| Toluene | ND | ND | ND | ND | ND | ND | 1 | < 0.24 | < 0.2 | < 0.2 | J 0.4 | < 0.2 | < 0.2 | NS | 1.5 | ND | ND | ND |
| 1,1,2-Trichloro-2,2,1-Triflouroethane | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | ND |
| Benzene | | | | | | | ND | < 0.22 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | < 0.2 | | | |
| | | | | | | | | | | | | | | | | | | |
| **BASE NEUTRAL COMPOUNDS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Di-n-butyl phthalate (3) | JP 3.2 | JP 3.7 | JP 3.6 | JP 3.5 | ND | ND | NA | NA | NA | NA | NA | NA | NA | NS | NA | JP 4 | NA | ND |
| bis(2-Ethylhexyl) phthalate | ND | ND | ND | J 7.2 | ND | ND | ND | B 0.3 | < 1 | < 1 | J 3 | < 1 | J 2 | NS | J 2 | ND | J(2) 7 | ND |
| | | | | | | | | | | | | | | | | | | |
| **METALS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Antimony | ND | ND | ND | J 22.8 | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | NA | NA |
| Arsenic | ND | ND | J 2.4 | ND | 10 | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 15.9 | NA | NA |
| Cadmium | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | J 22.2 | NA | NA |
| Chromium | ND | ND | J 8 | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 231 | NA | NA |
| Copper | J 16.7 | J 5.3 | J 22.1 | J 6.7 | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 405 | NA | NA |
| Lead | 20.7 | ND | 87.2 | J 2.7 | 6 | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 1340 | NA | NA |
| Mercury | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 2.8 | NA | NA |
| Nickel | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | J 60.8 | NA | NA |
| Selenium | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 7.1 | NA | NA |
| Zinc | 96.4 | J 4.2 | 152 | 23 | 60 | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | 2370 | NA | NA |
| | | | | | | | | | | | | | | | | | | |
| **POLYCHLORINATED BIPHENYLS (PCBs) (ug/l) (6)** | | | | | | | | | | | | | | | | | | |
| Arochlor-1016 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1221 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1232 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1242 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1248 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1254 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |
| Arochlor-1260 | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA |

**LEGEND**

ug/L = micrograms per liter
SW = Surface water sample (Roy F. Weston nomenclature)
ND: No Detection
NA: Not Analysed
Concentration data in BOLD above detection level
B: Compound detected in lab blank.

**LABORATORY QUALIFIERS**

J: Detected below reporting limit or is an estimated concentration
P: Compound detected in laboratory method blank
B: Analyte found in laboratory blank as well as sample

**NOTES**

(1) NJDEP Tier 1 sample holding time was exceeded
(2) Compound detected in method blank. Sample concentration < 3x conc. in method blank
Per Tier 1 guidelines the result is negated
(3) All concentrations later negated by NJDEP
(4) Only those parameters listed showed concentrations above ND.
All other parameters were either ND or NA.
(5) Sampling performed by RMT per NJDEP request letter dated Jan 28, 1998
VOCs and Base Neutrals ONLY (EPA 624 and 625 respectively)
(6) The PCB sample (SW-4) was collected May 9, 1989
(7) Surface water samples were not collected during 2nd quarter 2004 because there
was no existing access agreement with Air Products at the time of sampling

**Sediment Sampling Information**

1989 GeoEngineering/Roy F. Weston sampling November 1989: VO+15 (EPA 624), BN+15 (EPA 625); PP Metals (EPA 200 series), PCBs (SW-4 only) (EPA 608)
PP Metals (EPA 200 series), PCBs (SW/SS-4 only) (for SW sample EPA 608, for SS EPA 8080)
SW-1: Background sample location in Washington Forge Pond
SW-2: Assess impact on Rockaway River. Located immediately adjacent to Bldg. 12
SW-3: Assess impact on Rockaway River. Located dowNAtream of former impoundment area
SW-4: Located in former infiltration gallery between former impoundment area and tank farm
SW-5: Located in the drainage ditch between LEC and Air Products
SW-6: Located in a drainage feature in NE corner, up by former Starch drying beds. Potential floor drain and non-contact cooling water impacts

1990 Roy F. Weston Supplemental RI (November 1990)
SW-7: Former outfall from northeast corner starch drying beds. (VOC+10, BN+10, PCB)
SW-8: Bend in drainage ditch. Assess downgradient quality of drainAge ditch (VOC+10)
SW-9: Junction of ditch and Rockaway River. Assess impact of ditch on river quality. (VOC+10, BN+10, PCB)
SW-10: Rockaway River south of MW-4. Assess impact of site on contaminants of Rockaway River. (VOC+10, TAL Metals)

2002 Sampling performed by RMT pre the NJDEP letter dated May 31, 2002 [NJDEP/EPA review of Quarterly Monitoring Report - 1st Quarter 2002
During 3Q02 sampling event only SW-8 location sampled due drought conditions.

# TABLE 10
## L.E. CARPENTER - Wharton, New Jersey
Surface Water Monitoring Data

| | DRAINAGE DITCH | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SW-7 | | | | | | | | | SW-8 | | | | | | | | |
| SAMPLING DATE | 06/06/02 | 11/21/02 | 03/20/03 | 06/02/03 | 08/20/03 | 11/18/03 | 02/24/04 | 06/14/04 | 08/11/04 | 08/27/90 | 5/29/98 (5) | 06/06/02 | 08/14/02 | 11/21/02 | 03/20/03 | 06/02/03 | 08/20/03 | 11/18/03 |
| **VOLATILE ORGANIC COMPOUNDS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Methylene Chloride | NA | NA | NA | NA | NA | NA | NA | NS | NA | (2) ND | ND | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | ND | < 0.18 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | < 0.2 | ND | ND | ND | < 0.18 | < 0.18 | J 0.91 | J 0.2 | < 0.2 | < 0.2 |
| Chlorobenzene | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA |
| Acetone | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA |
| Total Xylenes | ND | < 0.2 | < 0.6 | < 0.6 | < 0.6 | < 0.6 | < 0.6 | NS | < 0.6 | ND | ND | ND | 0.43 | 0.32 | J 2.7 | J 1.2 | < 0.6 | J 1.2 |
| Toluene | ND | < 0.24 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | 1.4 | ND | ND | 1 | 0.54 | < 0.24 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-Trichloro-2,2,1-Triflouroethane | NA | NA | NA | NA | NA | NA | NA | NS | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA |
| Benzene | ND | < 0.22 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | < 0.2 | | | ND | < 0.22 | < 0.22 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| **BASE NEUTRAL COMPOUNDS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Di-n-butyl phthalate (3) | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Ethylhexyl) phthalate | ND | B 0.4 | < 1 | < 1 | J 1 | J 3 | < 1 | NS | J 4 | NA | ND | 0.6 | 1.3 | B 0.4 | < 1 | < 1 | J 4 | < 1 |
| **METALS (ug/l) (4)** | | | | | | | | | | | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chromium | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Copper | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Mercury | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Selenium | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Zinc | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCHLORINATED BIPHENYLS (PCBs) (ug/l) (6)** | | | | | | | | | | | | | | | | | | |
| Arochlor-1016 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1221 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1232 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1242 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1248 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1254 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1260 | NA | NA | NA | NA | NA | NA | NA | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**LEGEND**
ug/L = micrograms per liter
SW = Surface water sample (Roy F. Weston nomenclature)
ND: No Detection
NA: Not Analysed
Concentration data in BOLD above detection level
B: Compound detected in lab blank.

**LABORATORY QUALIFIERS**
J: Detected below reporting limit or is an estimated concentration
P: Compound detected in laboratory method blank
B: Analyte found in laboratory blank as well as sample

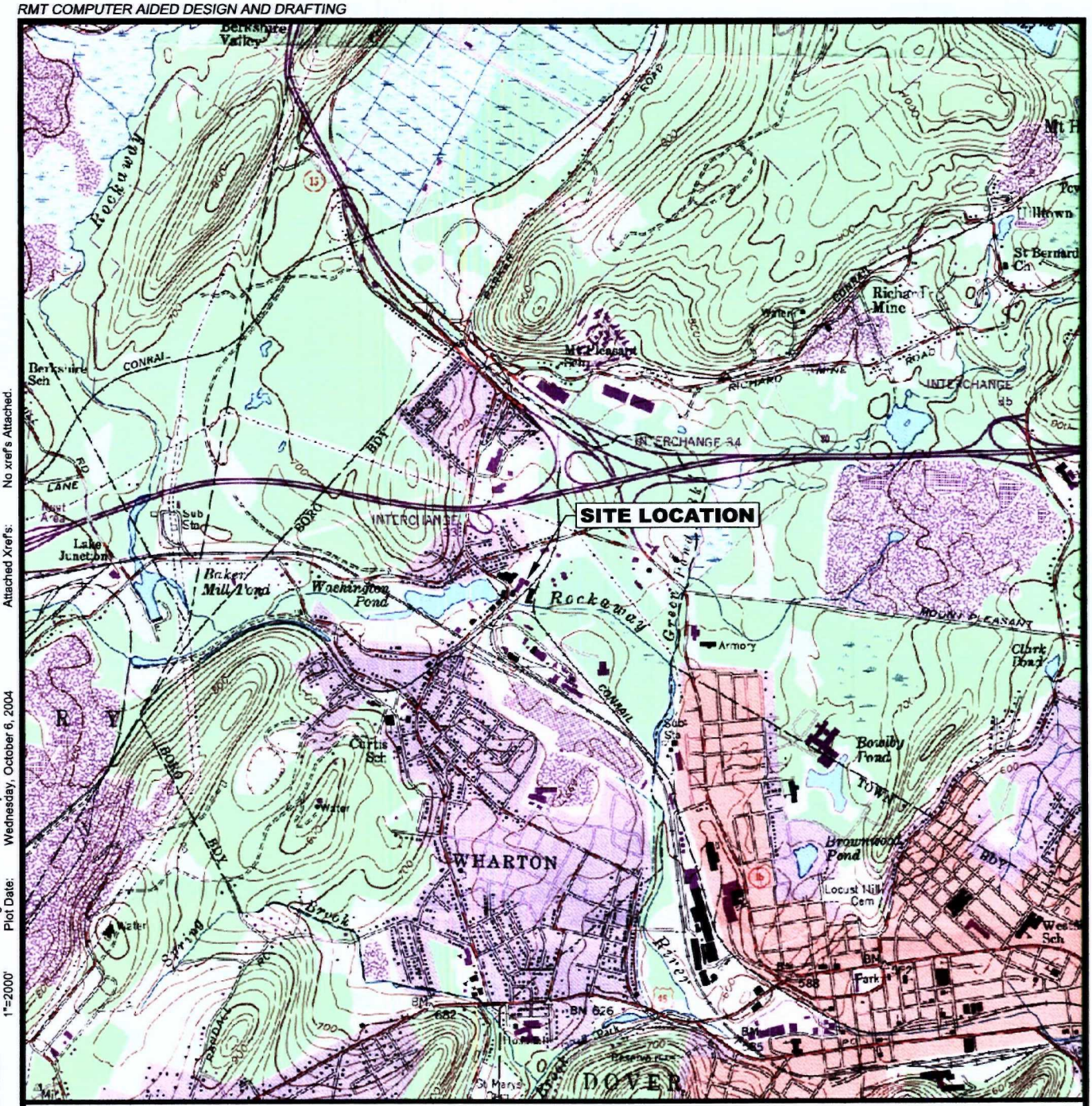
# TABLE 10
## L.E. CARPENTER - Wharton, New Jersey
Surface Water Monitoring Data

| | | | | ROCKAWAY RIVER | |
|---|---|---|---|---|---|
| | | | | SW-9 | SW-10 |
| SAMPLING DATE | 02/24/04 | 06/14/04 | 08/11/04 | 08/28/90 | 08/28/90 |
| **VOLATILE ORGANIC COMPOUNDS (ug/l) (4)** | | NS | NS | | |
| Methylene Chloride | NA | NS | NS | (2) ND | (2) ND |
| 1,1,1-Trichloroethane | NA | NS | NS | ND | ND |
| Ethylbenzene | J 0.8 | NS | NS | ND | ND |
| Chlorobenzene | NA | NS | NS | ND | ND |
| Acetone | NA | NS | NS | ND | ND |
| Total Xylenes | 6.8 | NS | NS | ND | ND |
| Toluene | < 0.2 | NS | NS | ND | ND |
| 1,1,2-Trichloro-2,2,1-Triflouroethane | NA | NS | NS | ND | ND |
| Benzene | < 0.2 | NS | NS | | |
| | | | | | |
| **BASE NEUTRAL COMPOUNDS (ug/l) (4)** | | | | | |
| Di-n-butyl phthalate (3) | NA | NS | NS | NA | NA |
| bis(2-Ethylhexyl) phthalate | < 1 | NS | NS | J(2) 6 | NA |
| | | | | | |
| **METALS (ug/l) (4)** | | | | | |
| Antimony | NA | NS | NS | NA | ND |
| Arsenic | NA | NS | NS | NA | J 3.9 |
| Cadmium | NA | NS | NS | NA | ND |
| Chromium | NA | NS | NS | NA | ND |
| Copper | NA | NS | NS | NA | ND |
| Lead | NA | NS | NS | NA | J 4.6 |
| Mercury | NA | NS | NS | NA | ND |
| Nickel | NA | NS | NS | NA | ND |
| Selenium | NA | NS | NS | NA | ND |
| Zinc | NA | NS | NS | NA | J 5.4 |
| | | | | | |
| **POLYCHLORINATED BIPHENYLS (PCBs) (ug/l) (6)** | | | | | |
| Arochlor-1016 | NA | NS | NS | NA | NA |
| Arochlor-1221 | NA | NS | NS | NA | NA |
| Arochlor-1232 | NA | NS | NS | NA | NA |
| Arochlor-1242 | NA | NS | NS | NA | NA |
| Arochlor-1248 | NA | NS | NS | NA | NA |
| Arochlor-1254 | NA | NS | NS | NA | NA |
| Arochlor-1260 | NA | NS | NS | NA | NA |

**LEGEND**
ug/L = micrograms per liter
SW = Surface water sample (Roy F. Weston nomenclature)
ND: No Detection
NA: Not Analysed
Concentration data in BOLD above detection level
B: Compound detected in lab blank.

**LABORATORY QUALIFIERS**
J: Detected below reporting limit or is an estimated concentration
P: Compound detected in laboratory method blank
B: Analyte found in laboratory blank as well as sample

# Figures




NEW JERSEY

QUADRANGLE LOCATION

N

0 2000' 4000'

APPROXIMATE SCALE IN FEET

**SOURCE**

BASE MAP DEVELOPED FROM THE DOVER, NEW JERSEY 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP, DATED 1954, PHOTOREVISED 1981.

RMT INC.®

**LE CARPENTER**
**WHARTON, NEW JERSEY**

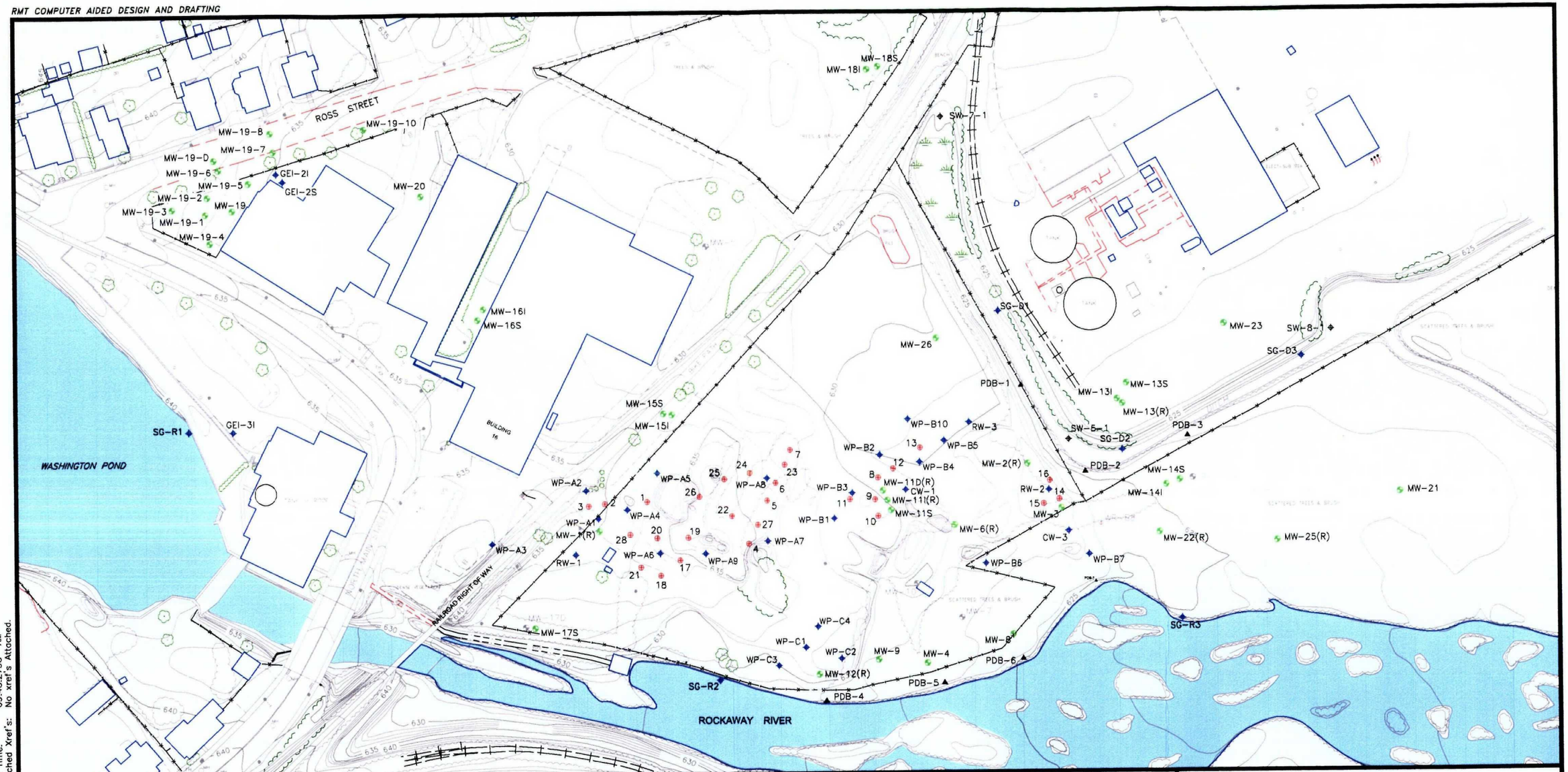
**SITE LOCATION MAP**
**3rd QUARTER 2004**

| | |
|---|---|
| DRAWN BY: | SJL |
| APPROVED BY: | JO |
| PROJECT NUMBER: | 6527.02 |
| FILE NUMBER: | 65270241.DWG |
| DATE: | OCTOBER 2004 |

**FIGURE 1**

PLOT DATA
Drawing Name: J:\06527\02\65270241.dwg
Operator Name: lucidos
Scale: 1"=2000'
Dwg Size: 88568 Bytes
Plot Date: Wednesday, October 6, 2004
Plot Time: 09:00.4139 AM
Attached Xref's: No xref's Attached.

RMT COMPUTER AIDED DESIGN AND DRAFTING




## LEGEND

| | | | |
|---|---|---|---|
| | PROPERTY LINE | WP-B7 | WELL POINTS |
| | FENCE | SG-R1 | RIVER POINT |
| MW-21 | MONITORING WELL | SG-D1 | DRAINAGE CHANNEL POINT |
| | ABANDONED WELL | GEI-2I | PIEZOMETERS |
| 13 | ENHANCED FLUID RECOVERY WELL | SW-7-1 | SURFACE WATER SAMPLE |
| RW-2 | RECOVERY WELL | PDB-1 | PASSIVE DIFFUSION BAG LOCATION AND NUMBER |
| CW-3 | CAISSON WELLS | | |

## NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BY JAMES M. STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02.

2. PDBs WERE INTSALLED AT THE GROUND WATER SURFACE INTERFACE.

N

0 100' 200'

SCALE IN FEET

**LE. CARPENTER**
**WHARTON, NEW JERSEY**

**SITE PLAN WITH WELL LOCATIONS**
**3rd QUARTER 2004**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 6527.02 |
| CHECKED BY: | JO | FILE NUMBER: | 65270242.DWG |
| APPROVED BY: | NC | DATE: | OCTOBER 2004 |

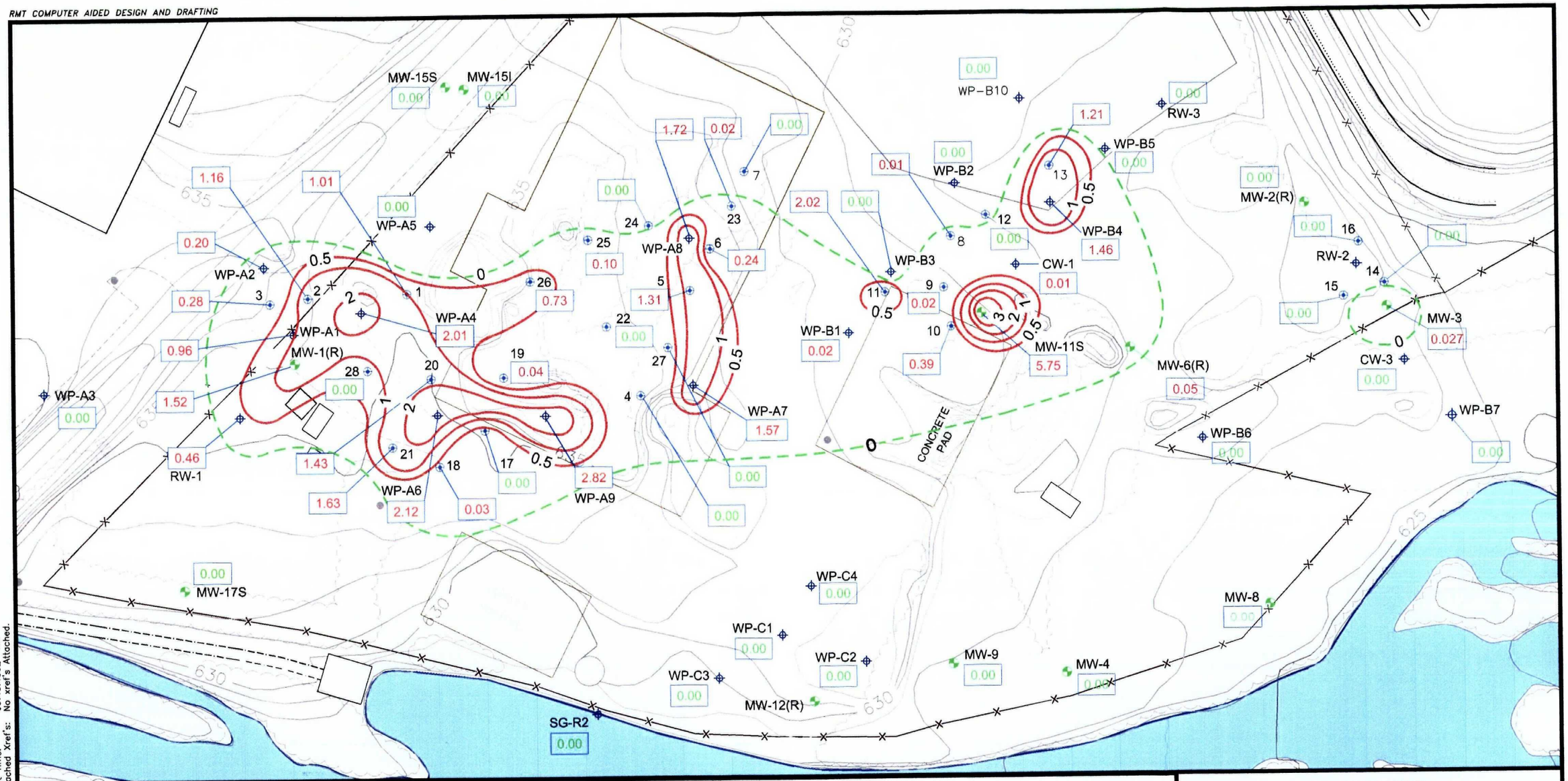

RMT INC.
1143 HIGHLAND DRIVE, SUITE B
ANN ARBOR, MI. 48108-2237
PHONE: 734-971-7080
FAX: 734-971-9022


FIGURE 2

PLOT DATA
Drawing Name: J:\06527\02\65270242.dwg
Operator Name: lucidos
Scale: 1"=1'
Dwg Size: 1208020 Bytes
Plot Date: Tuesday, October 26, 2004
Plot Time: 09:45:27 95 AM
Attached Xref's: No xref's Attached.

Layout Name: Site Plan - 3rd Quarter 2004

RMT COMPUTER AIDED DESIGN AND DRAFTING




## LEGEND

| | |
|---|---|
| FENCE LINE | |
| SS | APPROXIMATE LOCATION OF ROCKAWAY RIVER REGIONAL INTERCEPTOR SEWER |
| MW-19-7 | MONITORING WELL LOCATION AND NUMBER WITH CONCENTRATION OF TOTAL BTEX (mg/L) |
| 1 | APPARENT PRODUCT THICKNESS CONTOURS (FT) |
| 0 | APPROXIMATE OUTER LIMIT OF FREE PRODUCT |
| 0.00 | NO MEASURABLE PRODUCT |
| 1.13 | PRODUCT THICKNESS MEASURED IN WELL (FT) (Measurements collected at monitoring wells andwell points) on August 9, 2004 by RMT, Inc.) (Measurements collected at EFR wells on August 12, 2004 by CEMCO) |
| MW-13S | MONITORING WELL |
| MW-24 | ABANDONED WELL |
| RW-2 | RECOVERY WELL |
| CW-3 | CAISSON WELLS |
| WP-B7 | WELL POINTS WITH ELEVATION |
| 13 | ENHANCED FLUID RECOVERY WELL (EFR) |

N

0 40' 80'

SCALE IN FEET

**LE. CARPENTER**
**WHARTON, NEW JERSEY**

**FREE PRODUCT THICKNESS MAP**
**3rd QUARTER 2004**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 6527.02 |
| CHECKED BY: | JO | FILE NUMBER: | 65270243.DWG |
| APPROVED BY: | JDD | DATE: | OCTOBER 2004 |


RMT INC.
1143 HIGHLAND DRIVE, SUITE B
ANN ARBOR, MI. 48108-2237
PHONE: 734-971-7080
FAX: 734-971-9022


FIGURE 3

PLOT DATA
Drawing Name: J:\06527\02\65270243.dwg
Operator Name: lucidos
Scale: 1"=1'
Dwg Size: 1277039 Bytes
Plot Date: Tuesday, October 26, 2004
Plot Time: 09:45.4852 AM
Attached Xref's: No xref's Attached.

RMT COMPUTER AIDED DESIGN AND DRAFTING

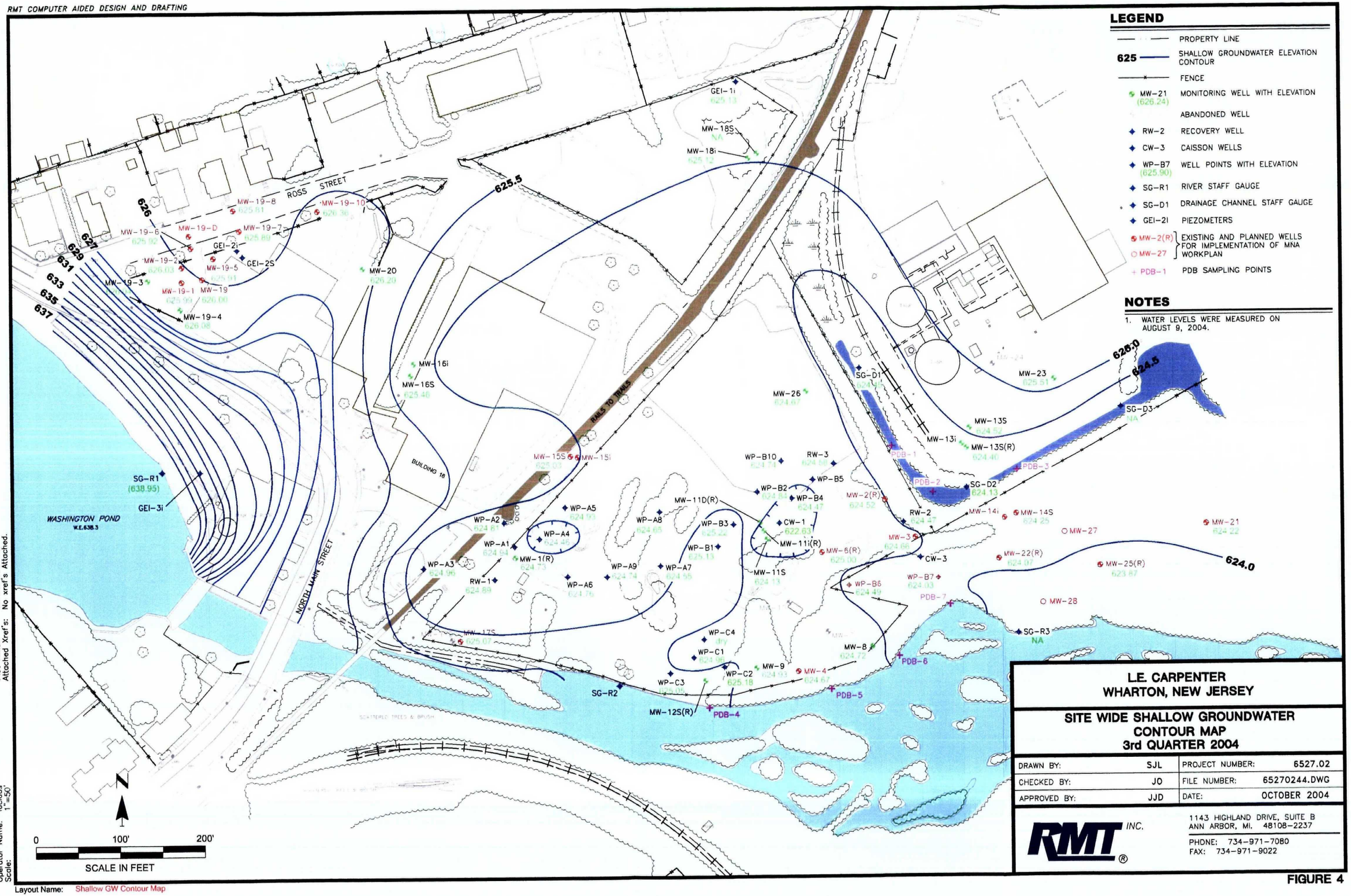
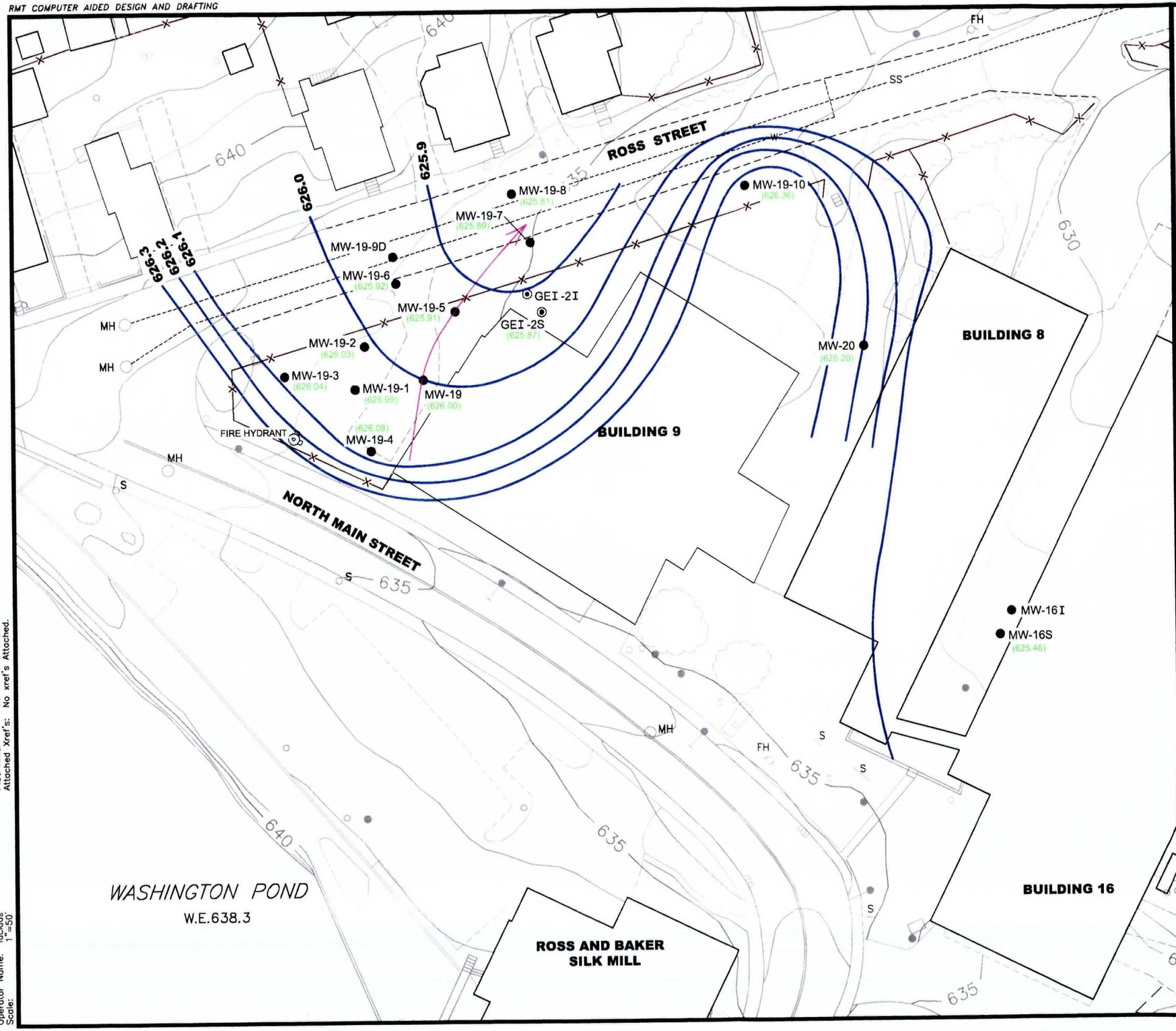



FIGURE 4

RMT COMPUTER AIDED DESIGN AND DRAFTING




## LEGEND

- FENCE LINE
- SS — APPROXIMATE LOCATION OF ROCKAWAY RIVER REGIONAL INTERCEPTOR SEWER
- 625.9 — GROUNDWATER ELEVATION CONTOUR
- MW-19-6 (627.80) — MONITORING WELL LOCATION AND NUMBER WITH CONCENTRATION OF TOTAL BTEX (mg/L)
- GEI-2S (627.66) — GEOPROBE INSTALLED PIEZOMETER LOCATION AND NUMBER WITH CONCENTRATION OF TOTAL BTEX (mg/L)
- SS — SANITARY SEWER
- G&W — GAS AND WATER
- E — ELECTRIC
- W — WATER
- APPROXIMATE GROUNDWATER FLOW DIRECTION

## NOTES

1. GROUNDWATER ELEVATIONS BASED ON LEVELS MEASURED ON AUGUST 9, 2004.

N

0 40' 80'

SCALE IN FEET

**L.E. CARPENTER**
**WHARTON, NEW JERSEY**

**MW-19 / HOT SPOT 1 SHALLOW AQUIFER POTENTIOMENTRIC SURFACE MAP**
**3rd QUARTER 2004**

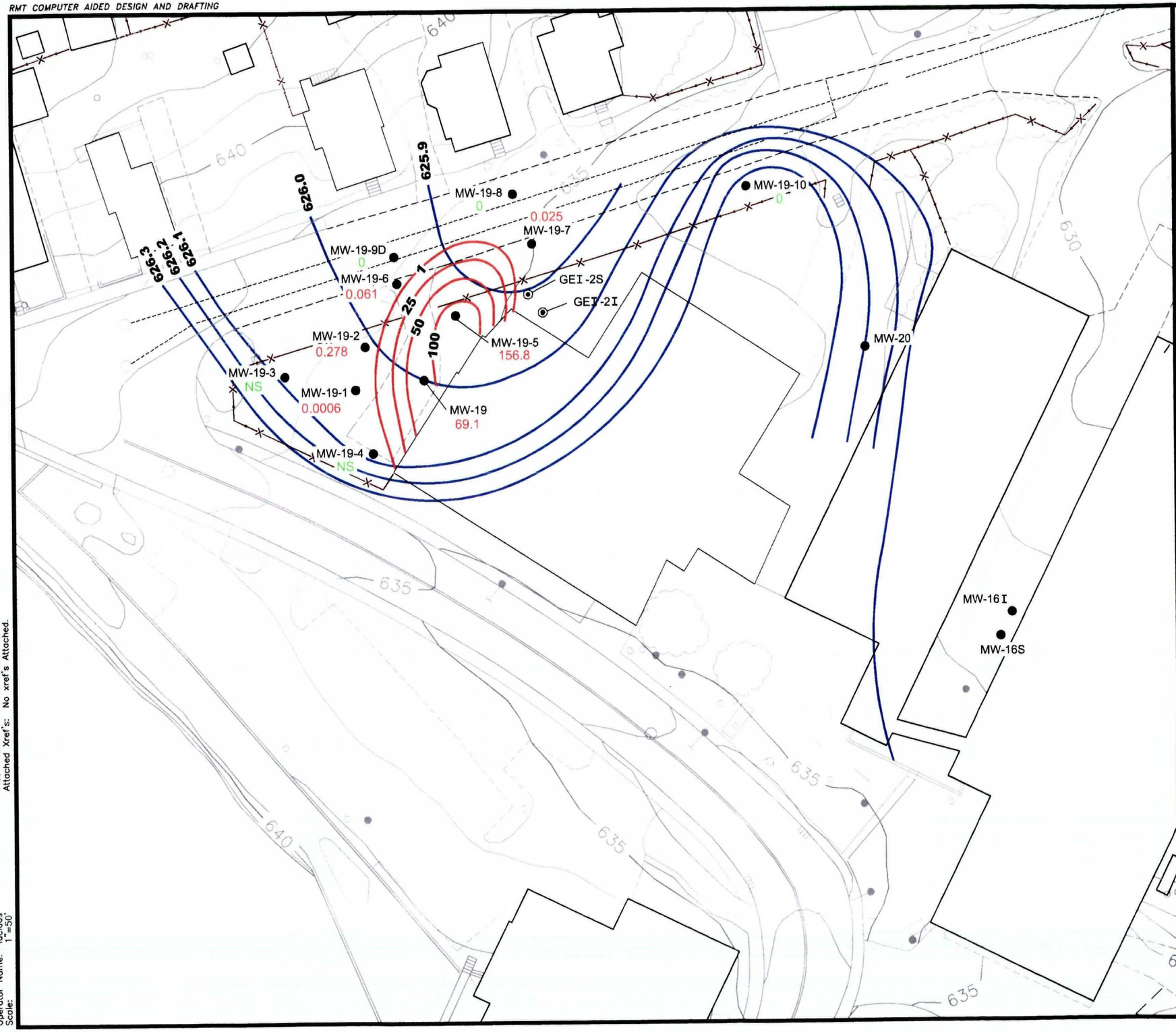
| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 6527.02 |
| CHECKED BY: | JO | FILE NUMBER: | 65270245.DWG |
| APPROVED BY: | JDD | DATE: | OCTOBER 2004 |

RMT INC.
1143 HIGHLAND DRIVE, SUITE B
ANN ARBOR, MI. 48108-2237
PHONE: 734-971-7080
FAX: 734-971-9022

FIGURE 5

PLOT DATA
Drawing Name: J:\06527\02\65270245.dwg
Operator Name: lucidos
Scale: 1"=50'
Dwg Size: 915332 Bytes
Plot Date: Tuesday, October 26, 2004
Plot Time: 09:47.0241 AM
Attached Xref's: No xref's Attached.

RMT COMPUTER AIDED DESIGN AND DRAFTING




## LEGEND

- FENCE LINE
- SS — APPROXIMATE LOCATION OF ROCKAWAY RIVER REGIONAL INTERCEPTOR SEWER
- 626 — GROUNDWATER ELEVATION CONTOUR
- MW-19-7 / 2.86 — MONITORING WELL LOCATION AND NUMBER WITH CONCENTRATION OF TOTAL BTEX (mg/L)
- GEI-2S — GEOPROBE INSTALLED PIEZOMETER LOCATION AND NUMBER
- SS — SANITARY SEWER
- G&W — GAS AND WATER
- E — ELECTRIC
- W — WATER
- 50 — ISOCONCENTRATION CONTOUR FOR TOTAL BTEX (ppm). SAMPLES COLLECTED JUNE 14 - 18, 2004.

## NOTES

1. GROUNDWATER ELEVATIONS BASED ON LEVELS MEASURED ON AUGUST 9, 2004.
2. NS = NOT SAMPLED.

N

0 40' 80'

SCALE IN FEET

**L.E. CARPENTER**
**WHARTON, NEW JERSEY**

**MW-19 / HOT SPOT 1**
**ISOCONCENTRATION MAP**
**3rd QUARTER 2004**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 6527.02 |
| CHECKED BY: | JO | FILE NUMBER: | 65270246.DWG |
| APPROVED BY: | JDD | DATE: | OCTOBER 2004 |

RMT INC.
1143 HIGHLAND DRIVE, SUITE B
ANN ARBOR, MI. 48108-2237
PHONE: 734-971-7080
FAX: 734-971-9022

FIGURE 6

PLOT DATA
Drawing Name: J:\06527\02\65270246.dwg
Operator Name: lucidos
Scale: 1"=50'
Dwg Size: 907854 Bytes
Plot Date: Tuesday, October 26, 2004
Plot Time: 09:47.5554 AM
Attached Xref's: No xref's Attached.

**Figure 7 - Upward Gradient Trend Chart for the MW-14 Well Cluster**

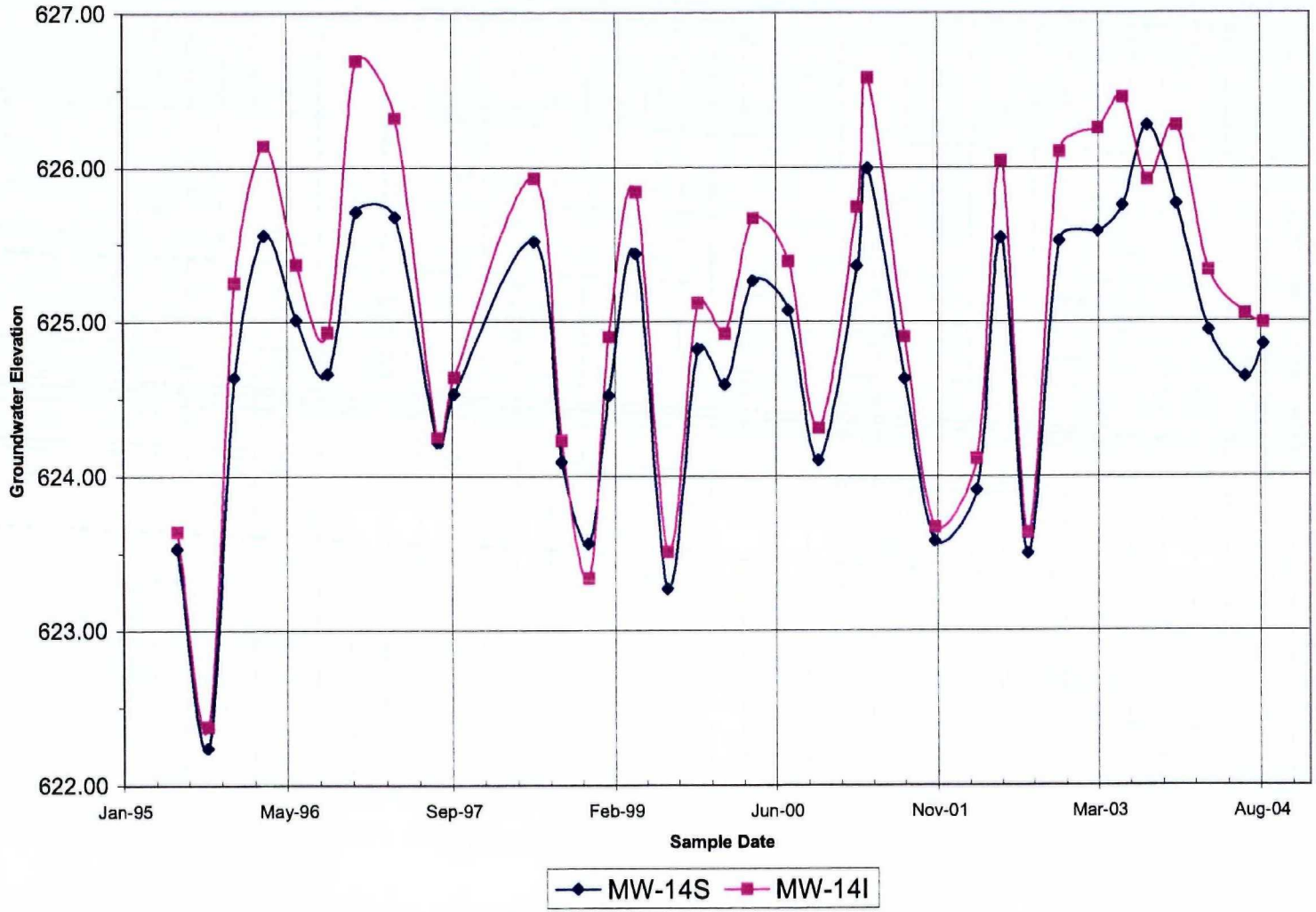
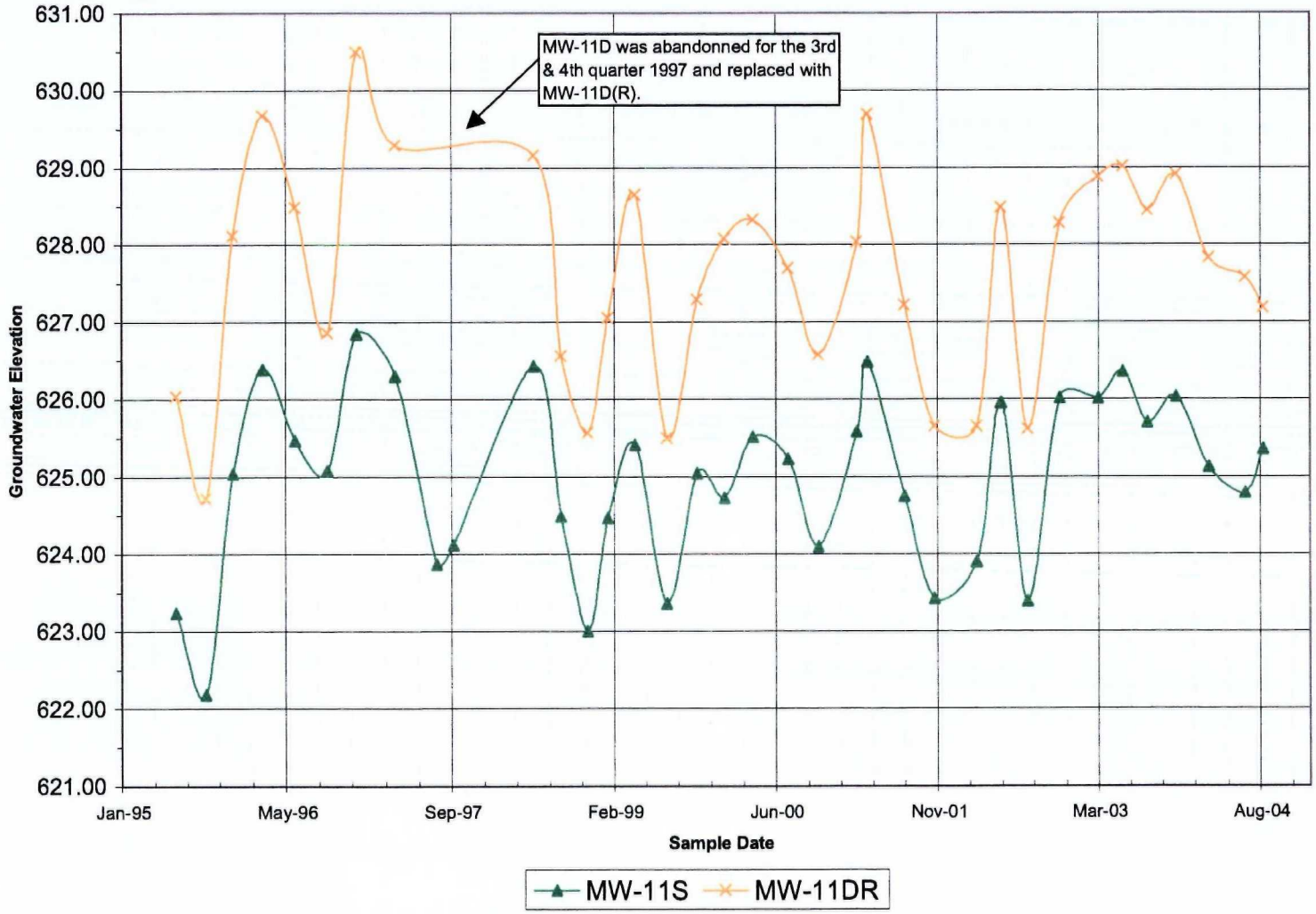


**Figure 8- Upward Gradient Trend Chart for the MW-11 Well Cluster**



# Appendix A
# Report Certification

# REPORT CERTIFICATION
# PURSUANT TO N.J.A.C. 7:26E-1.5

**"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement, which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."**

Mr. Cristopher R. Anderson

**PRINTED NAME**

Director, Environmental Services

**TITLE**

L.E. Carpenter & Company

**COMPANY**

Cristopher Anderson

**SIGNATURE**

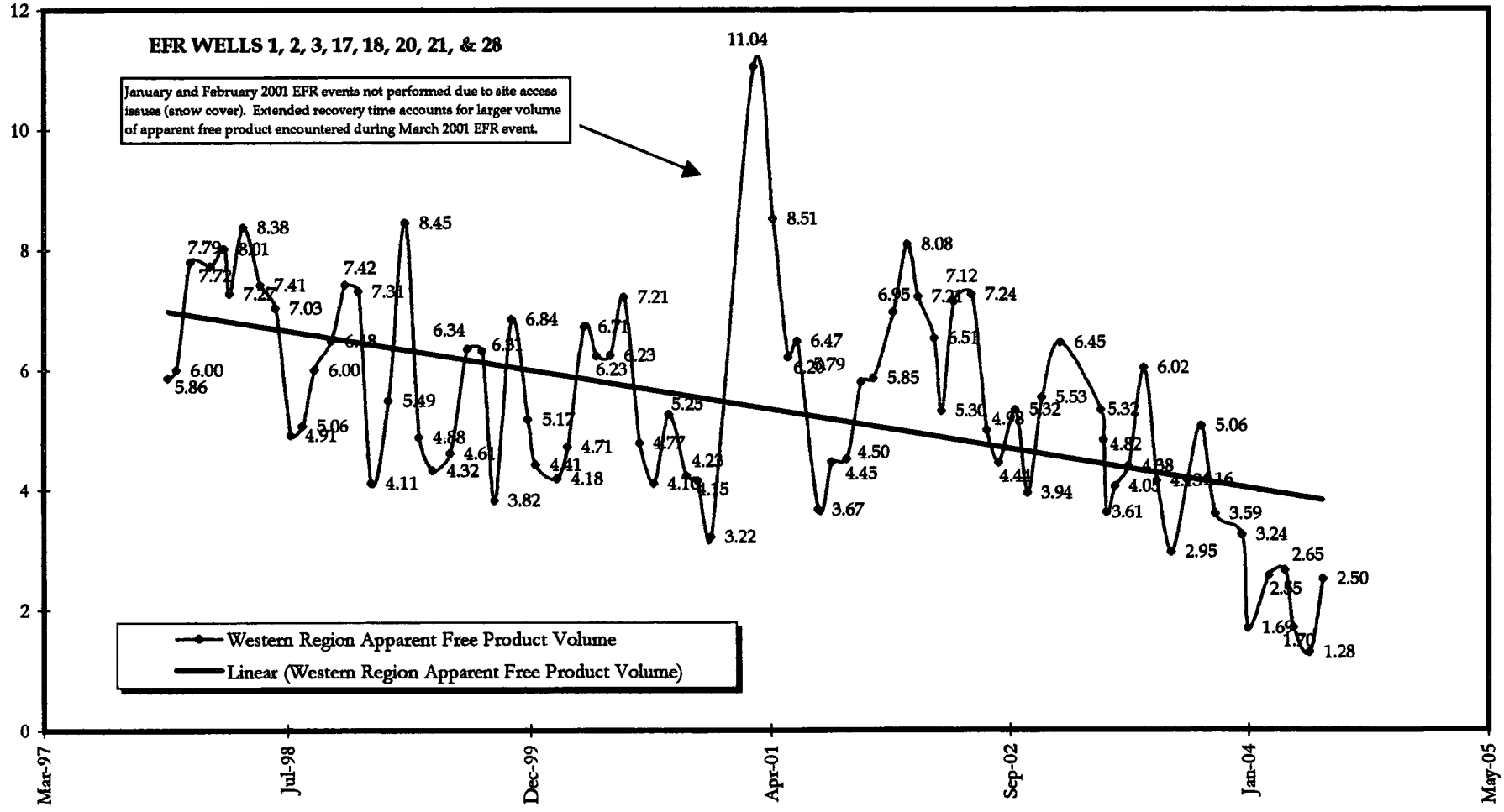
10/29/04

**DATE**

# Appendix B
# Apparent Free Product Volume Trend Charts

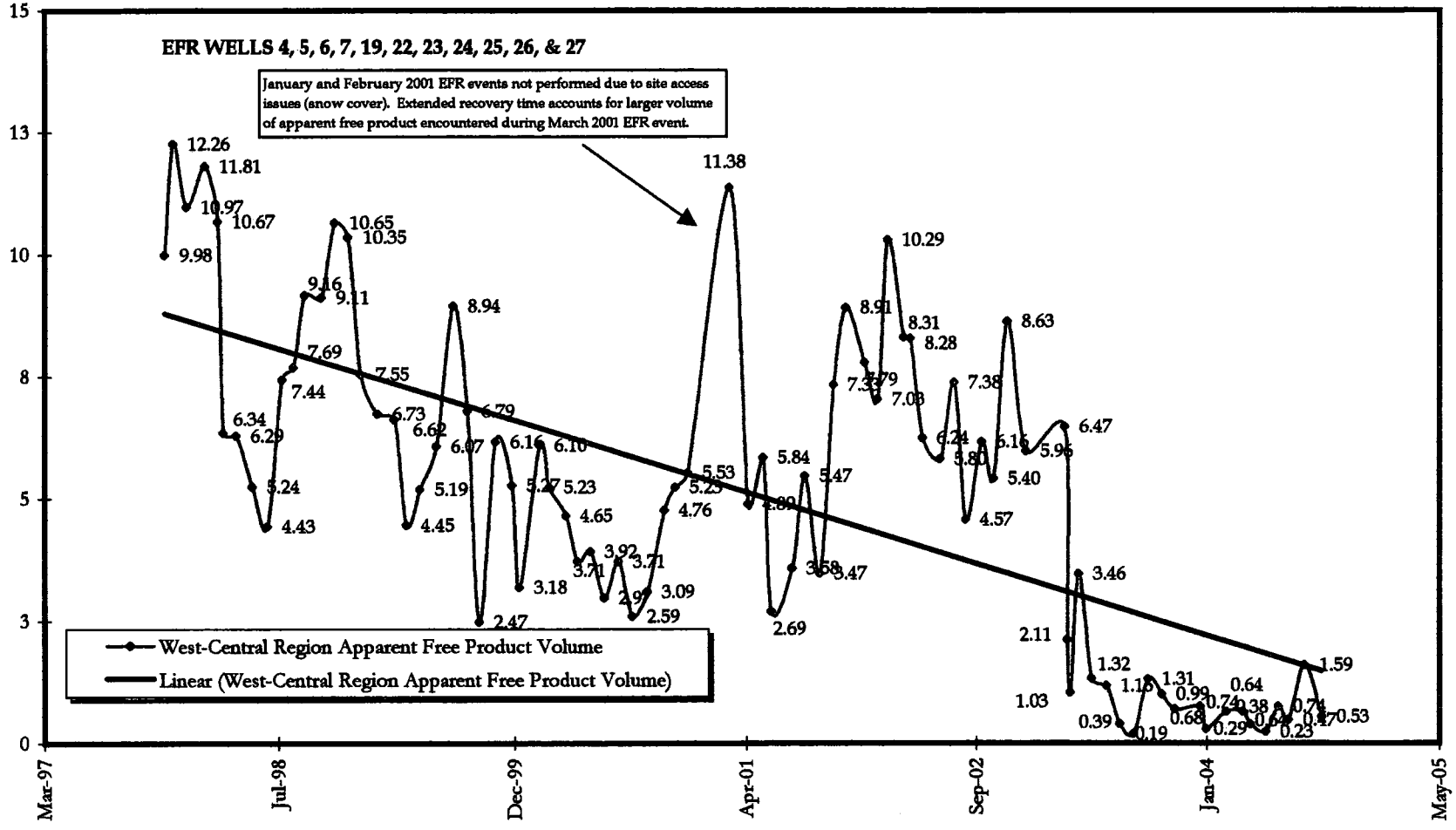
# L.E. Carpenter and Company
# Western Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2004**



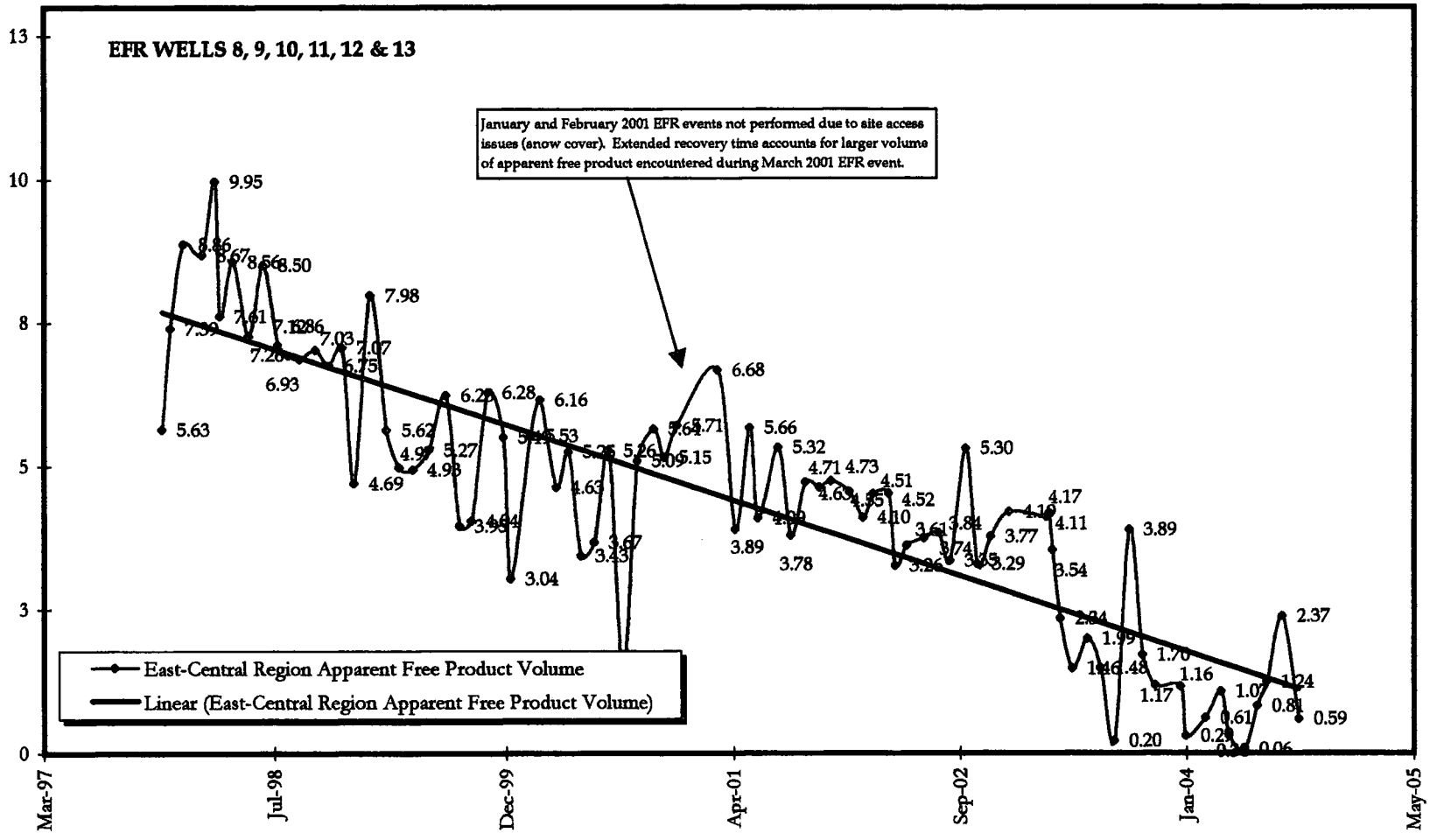
# L.E. Carpenter and Company
# West-Central Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2004**



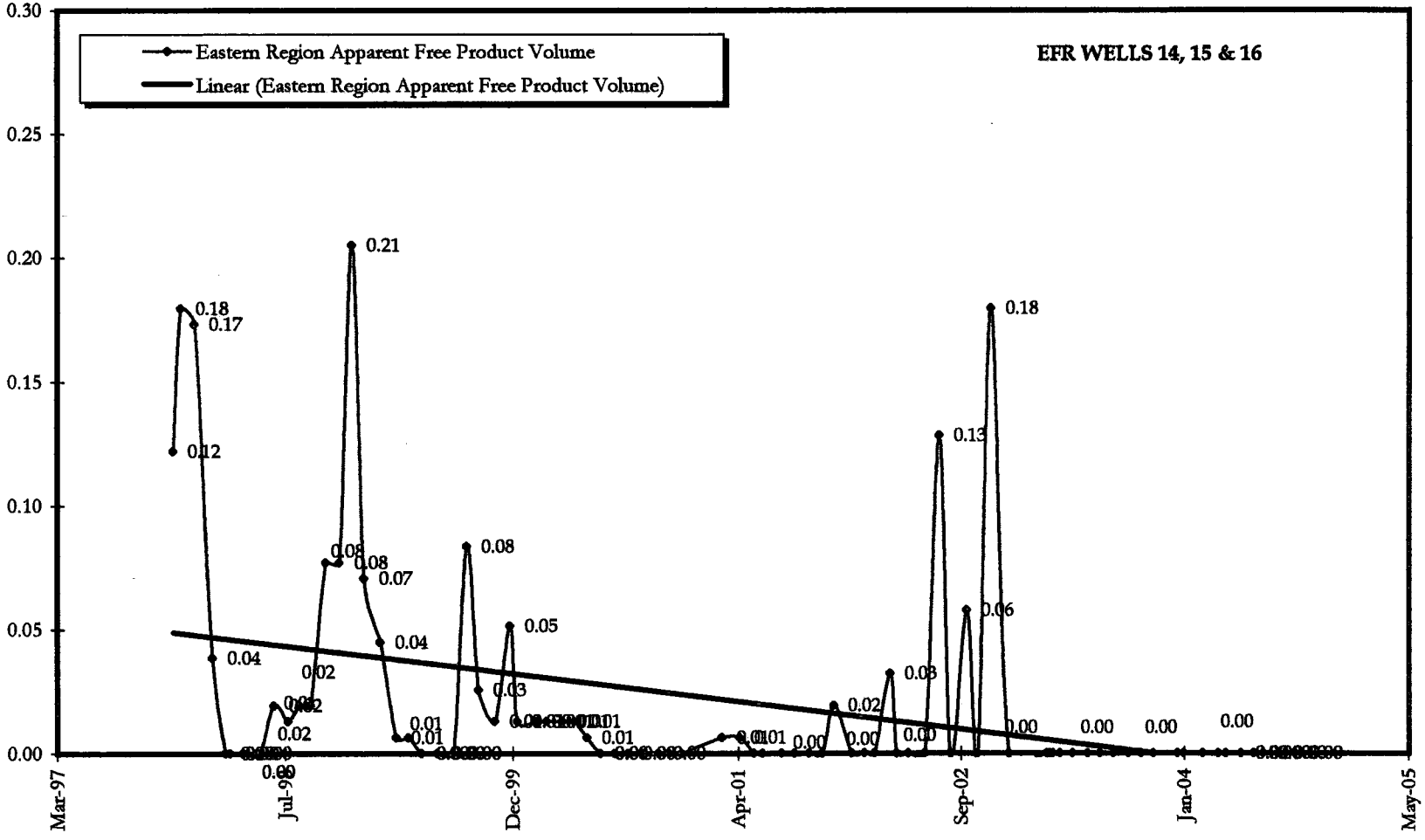
# L.E. Carpenter and Company
# East-Central Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2004**



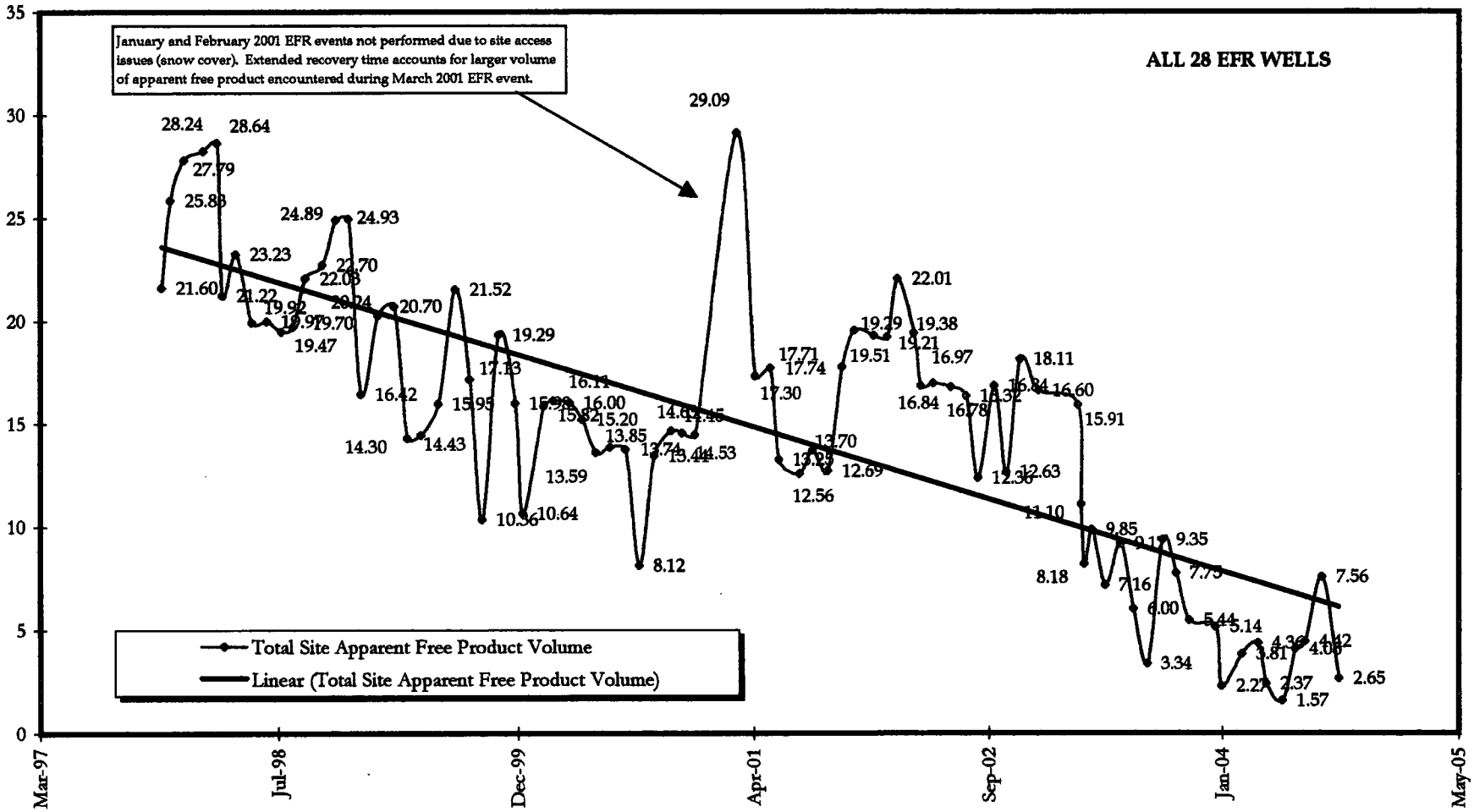
# L.E. Carpenter and Company
# Eastern Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2004**



# L.E. Carpenter and Company
# Total Site Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2004**



# Appendix C
# 3rd Quarter 2004 Monitoring Well Sampling Data

RMT®

| | |
|---|---|
| PROJECT NAME: | L. E. Carpenter |
| PROJECT NUMBER: | 6527.02 |
| LOCATION: | Wharton, NJ |
| DATES OF FIELD WORK: | August 9- 14/2004 |
| PURPOSE OF FIELD WORK: | 3rd Quarter Groundwater Monitoring<br>WLs<br>product level measurements<br>purge/sample wells<br>sample surface water |
| WORK PERFORMED BY: | Jennifer Overvoorde<br>Eric Vincke |

| | | | |
|---|---|---|---|
| JOvervoorde | 8/9/04 | | 10/6/04 |
| Signed | Date | OC'd By | Date |

RMT



## GENERAL NOTES

PROJECT NAME: LE Carpenter DATE: 8/9/04

PROJECT NUMBER: 6527.02 AUTHOR: J. Overvoorde

TIME ARRIVED ON SITE: 7:30 am TIME LEFT SITE: 4:00 pm

WEATHER:
Temperature: 85 F° Wind: 5-10 MPH Visibility: sunny, clear

WORK/SAMPLING PERFORMED:

measured product / WLs

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:

Called Steve Davies from Lancaster to cancel courier pick-up for today - no pump - at FedEx.

COMMUNICATIONS:

Name/Representing: Dave Condon, Nick Clevett

Subject/Comments: keys to storage building / locks, using interface in MW-22R / WP-B7 / WP-B6

Signed: J Overvoorde QC: [illegible]

RMT



## GENERAL NOTES

PROJECT NAME: LE Carpenter DATE: 8/10/04

PROJECT NUMBER: 6527.02 AUTHOR: J. Overvorde

TIME ARRIVED ON SITE: 7^00 am TIME LEFT SITE: 1930

WEATHER:
Temperature: 85 F° Wind: 5-15 MPH Visibility: Sunny, clear

WORK/SAMPLING PERFORMED:

sampled: MW-19-9D, MW-19-6, MW-19, MW-19-1, MW-19-2 (+ atmosph. blank), ~~MW-19~~ MW-19-5, MW-19-7

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:

MW-3, MW-6(R) not sampled due to free product present

COMMUNICATIONS:

Name/Representing: —

Subject/Comments:

Signed: JOvervorde QC: [illegible]

RMT



## GENERAL NOTES

PROJECT NAME: LEC
DATE: 8/11/04
PROJECT NUMBER: 6527.02
AUTHOR: J. Overvoorde
TIME ARRIVED ON SITE: 7⁰⁰
TIME LEFT SITE: 18⁰⁰ to 8/11/04

WEATHER:
Temperature: 84 F° Wind: 5-10 MPH Visibility: hazy, partly sunny

WORK/SAMPLING PERFORMED:

Continuing sampling:
MW-19-10 (w/ Dup-01), MW-19-8, MW-15S
MW-15I, MW-11DR, WP-B7, WP-B6,
SW-1, SW-2, MW-22R

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:

Bailed WP-B7 & WP-B6 because of high levels of contaminants - keep pump away from product.

COMMUNICATIONS:

Name/Representing: Janet Sanders
Subject/Comments: Air Products access

Signed: JOvervoorde QC: [illegible]

RMT



## GENERAL NOTES

PROJECT NAME: LEC
DATE: 8/12/04
PROJECT NUMBER: 6527.02
AUTHOR: J. Overvoorde
TIME ARRIVED ON SITE: 7^00
TIME LEFT SITE: 19^30

WEATHER:
Temperature: 78 F°
Wind: 0-5 MPH
Visibility: Rain, cloudy

WORK/SAMPLING PERFORMED:

Finished sampling: MW-17S, MW-14S, MW-14I, MW-4, MW-25(R) (+ Dup-02), MW-21 (+ Rinse Blank), MW-2

cleaned out storage building

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:

Bailed MW-2 because no connector parts for tubing. Sheen prevalent on purge water.

COMMUNICATIONS:

Name/Representing: Met CH2M Hill rep on-site at Air Products

Subject/Comments: take WLs on Air Products

Signed: J Overvoorde
QC: [illegible]

RMT

# WATER LEVEL DATA

PROJECT NAME: LEC

DATE: 8/9/04

PROJECT NUMBER: 6527.02

SAMPLER: JO/EV

| Well ID | Time | Top of Casing Elevation | Historical Depth to Water | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Water Elev. (MSL) |
|---|---|---|---|---|---|---|---|
| CW-1 | 1015 | | | 7.60 | 7.61 | | |
| MW-11S | 1005 | | | 7.86 | 13.61 | | |
| MW-1R | 837 | | | 1004 | 1156 | | |
| MW-2R | 1027 | | | — | 7.02 | 14.53 | |
| MW-3 | 1033 | | | 7.28 | 7.55 | NM | |
| MW-6R | 1036 | | | 6.82 | 6.87 | NM | |
| RW-1 | 846 | | | 1186 | 1232 | | |
| RW-2 | 1031 | | | — | 6.61 | | |
| RW-3 | 1024 | | | — | 6.81 | | |
| WPA1 | 834 | | | 10.21 | 11.17 | | |
| WPA2 | 829 | | | 13.77 | 13.97 | | |
| WPA4 | 850 | | | 9.91 | 11.92 | | |
| WPA5 | 854 | | | — | 12.32 | | |
| WPA6 | 900 | | | 11.78 | 13.90 | | |
| WPA7 | 955 | | | 9.63 | 11.20 | | |
| WPA8 | 950 | | | 12.20 | 13.92 | | |
| WPA9 | 906 | | | 13.80 | 16.62 | | |
| WPB1 | 940 | | | 7.90 | 7.92 | | |
| WPB2 | 959 | | | — | 6.81 | | |
| WPB3 | 943 | | | — | 7.51 | | |
| WPB4 | 1019 | | | 7.40 | 8.86 | | |
| WPB5 | 1021 | | | — | 5.79 | | |

* Note the Presence of Sheen as an "S"

* All Water Levels Must Include Reference Point and Tape Correction factor, i.e., 1.1 + 0.00 T/PVC.

TYPE OF MEASURING DEVICE: QED MP-30

[signature] 8/9/04

Signed Date

[signature] 10/6/04

QC'd By Date

RMT

# WATER LEVEL DATA

PROJECT NAME: LEC

DATE: 8/9/04

PROJECT NUMBER: 6527.02

SAMPLER: JO/EV

| Well ID | Time | Top of Casing Elevation | Historical Depth to Water | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Water Elev. (MSL) |
|---|---|---|---|---|---|---|---|
| MW-11DR | 1006 | | | — | 5.91 | | |
| MW-11IR | 1001 | | | — | 8.05 | | |
| MW-16I | 1227 | | | — | 8.87 | | |
| MW-16S | 1230 | | | — | 8.41 | | |
| MW-19 | 1147 | | | — | 9.90 | | |
| MW19-1 | 1144 | | | — | 9.65 | | |
| MW19-2 | 1148 | | | — | 10.27 | | |
| MW19-3 | 1141 | | | — | 10.66 | | |
| MW19-4 | 1154 | | | — | 9.35 | | |
| MW19-5 | 1157 | | | — | 9.65 | | |
| MW-20 | 1223 | | | — | 9.97 | | |
| MW-22 | 1358 | | | — | 3.46 | | |
| MW-21 | 1418 | | | — | 3.98 | 14.82 | |
| MW-25 | 1414 | | | — | 2.75 | 8.57 | |
| WPA3 | 815 | | | — | 10.00 | | |
| WPB10 | 1018 | | | — | 7.40 | | |
| WPB6 | 1352 | | | — | 6.77 | | |
| WPB7 | 1347 | | | — | 4.86 | | |
| WPC1 | 924 | | | — | 7.95 | | |
| WPC2 | 928 | | | — | 8.68 | | |
| WPC3 | 923 | | | — | 8.99 | | |
| WPC4 | 930 | | | — | dry | | |

* Note the Presence of Sheen as an "S"

* All Water Levels Must Include Reference Point and Tape Correction factor, i.e., 1.1 + 0.00 T/PVC.

TYPE OF MEASURING DEVICE: QED MP30

Signed: [signature] Date: 8/9/04

QC'd By: [signature] Date: 10/6/04

REV 09/98

RMT

# WATER LEVEL DATA

PROJECT NAME: LEC

DATE: 8/9/04

PROJECT NUMBER: 6527.02

SAMPLER: JO/EV

| Well ID | Time | Top of Casing Elevation | Historical Depth to Water | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Water Elev. (MSL) |
|---|---|---|---|---|---|---|---|
| GEI-1I | 1448 | | | — | 5.05 | | |
| GEI-2I | 1159 | | | — | 11.39 | | |
| GEI-2S | 1202 | | | — | 11.20 | | |
| GEI-3I | 1113 | | | — | 13.64 | | |
| MW_26 | 1022 | | | — | 7.99 | | |
| MW-12R | 926 | | | — | 9.63 | | |
| MW-14I | 1403 | | | — | 3.24 | | |
| MW-14S | 1404 | | | — | 3.56 | 13.25 | |
| MW-15I | 1238 | | | — | 11.10 | | |
| MW-15S | 1236 | | | — | 11.14 | | |
| MW-17S | 844 | | | — | 9.12 | | |
| MW-18I | 1446 | | | — | 5.32 | | |
| MW-18S | 1443 | | | — | dry | | |
| MW19-6 | 1135 | | | — | 9.90 | | |
| MW19-7 | 1212 | | | — | 9.11 | | |
| MW19-8 | 1214 | | | — | 9.55 | | |
| MW19-9D | 1133 | | | — | 9.63 | | |
| MW-4 | 1458 | | | — | JO ~~4.65~~ 7.23 | 12.20 | |
| MW-8 | 1452 | | | — | 3.47 | | |
| MW-9 | 1454 | | | — | 4.65 | | |
| SGR-1 | 1116 | | | — | 1.36 | | |
| SGR-2 | 919 | | | — | 3.24 | | |

* Note the Presence of Sheen as an "S"

* All Water Levels Must Include Reference Point and Tape Correction factor, i.e., 1.1 + 0.00 T/PVC.

TYPE OF MEASURING DEVICE: QED MP30

Signed: [signature] Date: 8/9/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER LEVEL DATA

PROJECT NAME: LEC

DATE: 8/9/04

PROJECT NUMBER: 6527.02

SAMPLER: JO/EV

| Well ID | Time | Top of Casing Elevation | Historical Depth to Water | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Water Elev (MSL) |
|---|---|---|---|---|---|---|---|
| CW-3 | 13 50 | | | — | 8.00 | | |
| MW-13I | NA | | | — | NM 5.50 | | |
| MW-13~~R~~D | NA | | | — | NM 5.59 | | |
| MW-13S | NA | | | — | NM ~~5.59~~ 6.11 | | |
| MW-23 | NA | | | — | NM 4.53 | | |
| SGD-1 | NA | | | — | ~~NM~~ 1.36 | | |
| SGD-2 | NA | | | — | NM 1.20 (?) | | |
| SGD-3 | NA | | | — | NM NF | | |
| SGR-3 | NA | | | — | Not Existant | | |
| MW-19-10 | 12 17 | | | — | 8.07 | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

* Note the Presence of Sheen as an "S"

* All Water Levels Must Include Reference Point and Tape Correction factor, i.e., 1.1 + 0.00 T/PVC.

TYPE OF MEASURING DEVICE: QED MP-30

J Overwoorde 8/9/04

Signed Date

QC'd By [signature] 10/6/04 Date

REV 09/98

| RMT | EQUIPMENT SUMMARY | SHEET: 10 of 72 |
|---|---|---|
| | | DATE: 8/10/04 |
| | | CHECKED BY: Drenovsky |
| PROJECT: LE Carpenter | PROJECT NO: 6527.02 | REVIEWED BY: |

**WATER LEVEL MEASUREMENTS WERE COLLECTED WITH:**

QED MP-30
Name and Model Number of Instrument

~~RMT-GRM~~ LEC
Serial Number (if applicable)

**DEPTH TO BOTTOM OF WELL MEASUREMENTS WERE COLLECTED WITH:**

QED MP-30
Name and Model Number

~~RMT-GRM~~ LEC
Serial Number (if applicable)

**PURGING METHOD:**

QED Portable Bladder
Name and Model Number of Pump or Type of Bailer

LEC
Serial Number (if applicable)

**PURGE WATER DISPOSAL METHOD:**

5 gallon buckets into 500 gal AGST

**SAMPLING METHOD:**

QED Portable Bladder
Name and Model Number of Pump or Type of Bailer

LEC
Serial Number (if applicable)

PE / Teflon Line
Turbing Type

**FILTRATION METHOD:**

NA
Name and Model Number of Device

NA
Serial Number (if applicable)

NA
Filter Type

NA
Tubing Type

**DECONTAMINATION AND FILED BLANK WATER SOURCE:**

NA
Potable Water Source (if applicable)

laboratory
DI Water Source

| RMT. | PH / CONDUCTIVITY METER CALIBRATION LOG | | SHEET 10 of 72 |
|---|---|---|---|
| | | | DATE: 8/10/04 |
| PROJECT: LEC | | | PROJECT NO: 6527.02 |
| LOCATION Wharton, NJ | | | SAMPLER NAME: JOvernoorde |
| MODEL: Hach | SERIAL NO: | | DEVICE OWNER: LEC |

## pH CALIBRATION

| DATE/TIME | pH 4 PRE CALIBRATION READING | pH 4 POST CALIBRATION READING | pH 7 PRE CALIBRATION READING | pH 7 POST CALIBRATION READING | pH 10 PRE CALIBRATION READING | pH 10 POST CALIBRATION READING |
|---|---|---|---|---|---|---|
| 8/10/04 8:10 | 4.30 / 4.00 | 4.00 / 4.00 | 6.75 / 7.00 | 7.00 / 7.00 | 9.89 / 10.00 | 10.01 / 10.00 |
| 8/10/04 14:55 | 4.02 / 4.00 | 4.00 / 4.00 | 6.89 / 7.00 | 7.00 / 7.00 | 9.92 / 10.00 | 10.00 / 10.00 |
| 8/11/04 7:28 | 4.10 / 4.00 | 4.00 / 4.00 | 7.01 / 7.00 | 7.00 / 7.00 | 10.02 / 10.00 | 10.00 / 10.00 |
| 8/11/04 14:00 | 4.07 / 4.00 | 4.00 / 4.00 | 6.99 / 7.00 | 7.00 / 7.00 | 10.05 / 10.00 | 10.00 / 10.00 |
| 8/12/04 7:35 | 3.98 / 4.00 | 4.00 / 4.00 | 7.05 / 7.00 | 7.00 / 7.00 | 9.98 / 10.00 | 10.00 / 10.00 |
| 8/12/04 14:13 | 4.01 / 4.00 | 4.00 / 4.00 | 6.99 / 7.00 | 7.00 / 7.00 | 9.98 / 10.00 | 10.00 / 10.00 |
| | / 4.00 | / 4.00 | / 7.00 | / 7.00 | / 10.00 | / 10.00 |
| | / 4.00 | / 4.00 | / 7.00 | / 7.00 | / 10.00 | / 10.00 |

Buffer Log Numbers: pH4: 4125 pH7: 4110 pH 10: 4109 Solution Source VWR / lab

## CONDUCTIVITY CALIBRATION

| DATE/TIME | CONDUCTIVITY SOLUTION (units) | PRE CALIBRATION READING (units) | POST CALIBRATION READING (units) |
|---|---|---|---|
| 8/10/04 8:10 | 1412 | 1423 | 1412 |
| 8/10/04 14:55 | 1412 | 1406 | 1412 |
| 8/11/04 7:28 | 1412 | 1397 | 1412 |
| 8/11/04 14:00 | 1412 | 1409 | 1412 |
| 8/12/04 7:35 | 1412 | 1410 | 1412 |
| 8/12/04 14:13 | 1412 | 1411 | 1412 |
| | | | |
| | | | |

CALIBRATION SOLUTION LOT NUMBER: 2815 CALIBRATION RANGE FOR SOLUTION: ± 1.0%

PROBLEMS / CORRECTIVE ACTIONS:

J Overnoorde 8/10/04
SIGNED DATE

REVIEWED BY 10/6/04
DATE

F-185 06/03

H:\FORMS\GRM FIELD FORMS\LEC Field Forms_2004.xls

| RMT | TURBIDITY METER CALIBRATION LOG | | | SHEET 12 of 72 |
|---|---|---|---|---|
| | | | | DATE: 8/10/04 |
| PROJECT: LEC | | | | PROJECT NO: 6527.02 |
| LOCATION: Wharton, NJ | | | | SAMPLER NAME: JOverturde |
| MODEL: Hach | | SERIAL NO: | | DEVICE OWNER: LEC |

| DATE / TIME | 0 - 10 NTU READING | 0 - 100 NTU READING | 0 - 1000 NTU READING | Comments |
|---|---|---|---|---|
| 8/10/04 8:00 | 5 | 49 | 495 | |
| 8/10/04 14:55 | 5 | 49 | 489 | |
| 8/11/04 7:28 | 5 | 50 | 498 | |
| 8/11/04 14:00 | 5 | 49 | 497 | |
| 8/12/04 7:35 | 5 | 50 | 498 | |
| 8/12/04 14:13 | 5 | 50 | 498 | |
| | | | | |
| | | | | |

CALIBRATION SOLUTION LOT NUMBER: NA CALIBRATION RANGE FOR SOLUTION: NA

PROBLEMS / CORRECTIVE ACTIONS:

JOverturde 8/10/04
SIGNED DATE

REVIEWED BY 10/6/04
DATE

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-6R

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/9/04

SAMPLER: JO/EV

Type of pump used:

Pumping rate (milliliters/minute): NA

Water level before purging (nearest 0.01 ft. below reference point) + T/

Depth to bottom of well (obtained from well logs) + T/

Calculated volume of water in casing

Weather conditions

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (µS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | Not sampled- free prod present | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/9/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: / | SAMPLE TIME: / |

| WELL INFORMATION | WELL ID: MW-6R | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: ~~SS~~ PVC | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 6.87 | TOTAL DEPTH: 10.98 | |
| FREE PRODUCT: ☐ SHEEN ☒ MEAS. THICKNESS: .05 | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: (use purge form) | |
|---|---|---|
| SAMPLING PUMP: NA | PNEUMATIC SOURCE | |
| BLADDER TYPE: (new / used) | | |
| TUBING TYPE: | TUBING CONDITION: | HOW STORED: |
| WATER QUALITY METER TYPE: | CALIBRATION DATE / TIME | |

| SAMPLE DESCRIPTION | COLOR: | ODOR: |
|---|---|---|
| FINAL D.O. UNITS | FINAL ORP NA UNITS | FINAL TURBIDITY: |
| FINAL PH: | FINAL COND. | FINAL TEMP.: |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: NA |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative | Filtered | Number | Size | Type | Preservative | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: NA DATE SHIPPED: NA METHOD: NA

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/9/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-3

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/9/04

SAMPLER: JO/EV

Type of pump used:

Pumping rate (milliliters/minute):

Water level before purging (nearest 0.01 ft. below reference point) + T/

Depth to bottom of well (obtained from well logs) + T/

Calculated volume of water in casing

Weather conditions

NA

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | Not sampled - free product present | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed — Date 8/9/04

QC'd By — Date 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: / | SAMPLE TIME: / |

| WELL INFORMATION | WELL ID: MW-3 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: ~~7.28~~ 7.55 | TOTAL DEPTH: 27.0 | |
| FREE PRODUCT: ☐ SHEEN ☒ MEAS. THICKNESS: .27 | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: | (use purge form) |
|---|---|---|
| SAMPLING PUMP: | PNEUMATIC SOURCE | |
| BLADDER TYPE: (new / used) | NA | |
| TUBING TYPE: | TUBING CONDITION: | HOW STORED: |
| WATER QUALITY METER TYPE: | CALIBRATION DATE / TIME | |

| SAMPLE DESCRIPTION | COLOR: | ODOR: |
|---|---|---|
| FINAL D.O. UNITS | FINAL ORP UNITS NA | FINAL TURBIDITY: |
| FINAL PH: | FINAL COND. | FINAL TEMP.: |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - ~~HCL~~ F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: NA DATE SHIPPED: NA METHOD: NA

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/9/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-9D

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED portable bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 9.72 + 0.0 T/oc

Depth to bottom of well (obtained from well logs) 35.0+ – T/oc

Calculated volume of water in casing 4.12 gal

Weather conditions clear, sunny, hot, wind 0-5 mph

3.8 L/gal

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (µS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 838 | 400 | 6.98 | 612 | 231 | 0.4 | 272 | 15.62 | 9.72 | 0 |
| 843 | | 6.98 | 573 | 168 | 0.2 | 265 | 15.50 | 9.84 | .53 |
| 848 | | 7.02 | 549 | 84 | 0.2 | 212 | 15.45 | 9.90 | 1.06 |
| 853 | | 7.08 | 546 | 71 | 0.2 | 143 | 15.44 | 9.91 | 1.59 |
| 858 | | 7.16 | 545 | 56 | 0.2 | 79 | 15.51 | 9.85 | 2.12 |
| 903 | | 7.26 | 546 | 47 | 0.2 | 41 | 15.53 | 9.85 | 2.65 |
| 908 | | 7.24 | 546 | 42 | 0.2 | 32 | 15.50 | 9.85 | 3.18 |
| 913 | | 7.36 | 545 | 33 | 0.2 | 21 | 15.77 | 9.85 | 3.71 |
| 918 | | 7.37 | 543 | 37 | 0.2 | 17 | 15.65 | 9.86 | 4.24 |
| 923 | | 7.40 | 545 | 35 | 0.2 | 8 | 15.70 | 9.86 | 4.77 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/10/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 9 23 |

| WELL INFORMATION | WELL ID: MW-19-9D | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS ~~galv~~ SD | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.63 | TOTAL DEPTH: 35.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: Teflon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP20 Flow Thru | CALIBRATION DATE / TIME 8/10/04 800 | |

| SAMPLE DESCRIPTION | COLOR: clear w/ tan floaties | ODOR: none |
|---|---|---|
| FINAL D.O. 0.2 UNITS mg/L | FINAL ORP 8 UNITS mV | FINAL TURBIDITY: 35 NTU |
| FINAL PH: 7.40 SU | FINAL COND. 545 umhos/cm | FINAL TEMP.: 15.70 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 1 ~~2~~ | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| 8/10/04 ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☒N~~ | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063393 DATE SHIPPED: 8/10/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-6

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 9.92 + 0.0 T/OC

Depth to bottom of well (obtained from well logs) 20.0 + – T/OC

Calculated volume of water in casing 1.64 gal.

Weather conditions partly sunny, wind 5-10, hot

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/l) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 950 | 400 | 7.38 | 2480 | 134 | 1.0 | 19 | 18.47 | 9.92 | 0 |
| 955 | | 7.37 | 2470 | 33 | 1.0 | 50 | 17.32 | 9.88 | .53 |
| 1000 | | 7.38 | 2490 | 13 | 1.0 | 57 | 16.14 | 9.85 | 1.06 |
| 1005 | | 7.40 | 2500 | 9 | 0.8 | 67 | 16.68 | 9.86 | 1.59 |
| 1010 | | 7.40 | 2500 | 4 | 0.8 | 78 | 16.58 | 9.86 | 2.12 |
| 1015 | | 7.43 | 2490 | 4 | 1.0 | 83 | 16.61 | 9.85 | 2.65 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

alk 125 ppm $CO_2$ 20 ppm Fe 0.4 ppm Ferrous

JO Venovde
Signed

8/10/04
Date

QC'd By

10/6/04
Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 10^15 |

| WELL INFORMATION | WELL ID: MW-19-6 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.90 | TOTAL DEPTH: 20.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Portable bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: ~~Teflon~~ ~~lined~~ PE (new / used) | | |
| TUBING TYPE: 8/10/04 PE - teflon lined | TUBING CONDITION: good | HOW STORED: storage room |
| WATER QUALITY METER TYPE: QED MP20 Flow thru | CALIBRATION DATE / TIME 8/10/04 800 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 83 UNITS mV | FINAL TURBIDITY: 4 NTU |
| FINAL PH: 7.43 SU | FINAL COND. 2490 umhos/cm | FINAL TEMP.: 16.61 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 8/10/04 4 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 003393 DATE SHIPPED: 8/10/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 320

Water level before purging (nearest 0.01 ft. below reference point) 10.02+0.0 T/OC

Depth to bottom of well (obtained from well logs) 17.0+ ~~0.0~~ T/OC

Calculated volume of water in casing 4.56 gal

Weather conditions mostly sunny, hot, wind 5-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 11:10 | 320 | 7.59 | 926 | 3 | 0.4 | 28 | 17.37 | 10.02 | 0 |
| 11:15 | ↓ | 7.55 | 1118 | 3 | 0.2 | 3 | 16.28 | 10.02 | .42 |
| 11:20 | | 7.58 | 1167 | 3 | 0.1 | -1 | 16.25 | 10.05 | .84 |
| 11:25 | | 7.59 | 1169 | 2 | 0.1 | -4 | 16.26 | 10.07 | 1.26 |
| 11:30 | | 7.62 | 1179 | 2 | 0.1 | -10 | 16.18 | 10.08 | 1.68 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 200 ppm $CO_2$ 95 ppm Ferrous Fe >10 ppm

Soluable Fe 12 ppm

[signature] Signed 8/10/04 Date

[signature] QC'd By 10/6/04 Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 1130 |

| WELL INFORMATION | WELL ID: MW-19 | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.90 | TOTAL DEPTH: 17.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: ~~teflon~~ PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP20 Flow Thru | CALIBRATION DATE / TIME 8/10/04 800 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.1 UNITS mg/L | FINAL ORP -10 UNITS mV | FINAL TURBIDITY: 2 NTU |
| FINAL PH: 7.62 SU | FINAL COND. 1179 umhos/cm | FINAL TEMP.: 16.18 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063393 DATE SHIPPED: 8/10/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-1

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 9.63 + 0.0 T/OC

Depth to bottom of well (obtained from well logs) 17.0 + — T/OC

Calculated volume of water in casing 4.81 gal

Weather conditions mostly sunny, hot, wind 10-15 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1220 | 400 | 7.40 | 1830 | 112 | 1.0 | 3 | 23.19 | 9.63 | 0 |
| 1225 | | 7.42 | 1940 | 34 | 1.0 | 26 | 18.46 | 9.66 | .53 |
| 1230 | | 7.43 | 1940 | 31 | 1.0 | 45 | 18.38 | 9.70 | 1.06 |
| 1235 | | 7.46 | 1930 | 22 | 1.0 | 61 | 18.28 | 9.72 | 1.59 |
| 1240 | | 7.50 | 1920 | 10 | 1.0 | 72 | 18.40 | 9.72 | 2.12 |
| 1245 | | 7.50 | 1910 | 10 | 1.0 | 80 | 18.49 | 9.73 | 2.65 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 90 ppm $CO_2$ 28 ppm Ferrous Fe 0.2

Signed: [signature] Date: 8/10/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG

Sheet 24 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 1245 |

| WELL INFORMATION | WELL ID: mw-19-1 | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.65 | TOTAL DEPTH: 17.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP20 Flow thru | CALIBRATION DATE / TIME 8/10/04 800 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 80 UNITS mV | FINAL TURBIDITY: 10 NTU |
| FINAL PH: 7.50 SU | FINAL COND. 1910 umhos/cm | FINAL TEMP.: 18.49 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063393 DATE SHIPPED: 8/10/04 METHOD: Lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING
## STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-2 + atmosph. blank

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 350

Water level before purging (nearest 0.01 ft. below reference point) 10.26 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 16.0+ - T/OC

Calculated volume of water in casing 3.74 gal

Weather conditions mostly sunny, wind 10-15 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| $15^{05}$ | 350 | 7.44 | 1800 | 46 | 5.0 | 64 | 18.94 | 10.26 | 0 |
| $15^{10}$ | | 7.42 | 1810 | 35 | 5.0 | 60 | 17.59 | 10.26 | .46 |
| $15^{15}$ | | 7.40 | 1810 | 23 | 5.0 | 57 | 17.92 | 10.30 | .92 |
| $15^{20}$ | | 7.42 | 1820 | 15 | 5.0 | 58 | 17.60 | 10.32 | 1.38 |
| $15^{25}$ | | 7.44 | 1830 | 9 | 5.0 | 58 | 17.00 | 10.32 | 1.84 |
| $15^{30}$ | | 7.45 | 1830 | 9 | 5.0 | 59 | 16.97 | 10.32 | 2.30 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 130 ppm

Ferrous Fe 2.0 ppm $CO_2$ 15.5 ppm

J Overvoorde — Signed — 8/10/04 Date

[signature] — QC'd By — 10/6/04 Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 1530 |

| WELL INFORMATION | WELL ID: MW-19-2 | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 10.27 | TOTAL DEPTH: 16.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: storage room |
| WATER QUALITY METER TYPE: QED MP20 Flow Thru | CALIBRATION DATE / TIME 8/10/04 1455 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: |
|---|---|---|
| FINAL D.O. 5.0 UNITS mg/L | FINAL ORP 59 UNITS mV | FINAL TURBIDITY: 9 NTUs |
| FINAL PH: 7.45 su | FINAL COND. 1830 umhos/cm | FINAL TEMP.: 16.97 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | ☒N | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063393 DATE SHIPPED: 8/10/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW-19-5
PROJECT NUMBER: 00-06527.02
WELL DIAMETER: 2"
DATE: 8/10/04
SAMPLER: SO/EV
Type of pump used: QED Portable Bladder
Pumping rate (milliliters/minute): 400
Water level before purging (nearest 0.01 ft. below reference point) 9.80 +0.0 T/OC
Depth to bottom of well (obtained from well logs) 16.0 + – T/OC
Calculated volume of water in casing 1.01 gal
Weather conditions mostly sunny, hot, humid, wind 10-15 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1625 | 400 | 7.39 | 1101 | 388 | 1.0 | 80 | 17.24 | 9.80 | 0 |
| 1630 | 400 | 7.28 | 1267 | 116 | 1.0 | 89 | 16.49 | 9.82 | .53 |
| 1635 | 400 | 7.27 | 1395 | 71 | 1.0 | 91 | 16.29 | 9.78 | 1.06 |
| 1640 | | 7.29 | 1540 | 42 | 1.0 | 91 | 16.48 | 9.79 | 1.59 |
| 1645 | | 7.28 | 1580 | 33 | 1.0 | 91 | 16.45 | 9.79 | 2.12 |
| 1650 | | 7.26 | 1670 | 25 | 1.0 | 91 | 16.40 | 9.80 | 2.65 |
| 1655 | | 7.24 | 1700 | 20 | 1.0 | 89 | 16.25 | 9.80 | 3.18 |
| 1700 | | 7.23 | 1730 | 19 | 1.0 | 88 | 16.26 | 9.80 | 3.71 |
| 1705 | | 7.26 | 1740 | 19 | 1.0 | 87 | 16.30 | 9.80 | 4.24 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 150 ppm CO2 60 ppm Ferrous Fe 2.0 ppm

Signed: [signature] Date: 8/10/04
QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG

Sheet 28 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 1705 |

| WELL INFORMATION | WELL ID: MW-19-5 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: ~~[illegible]~~ PVC | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.65 | TOTAL DEPTH: 16.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: tephlon lined PE | TUBING CONDITION: good | HOW STORED: storage room |
| WATER QUALITY METER TYPE: QED MP-20 Flow thru | CALIBRATION DATE / TIME 8/10/04 14:55 | |

| SAMPLE DESCRIPTION | COLOR: clear w/ floaties | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 87 UNITS mV | FINAL TURBIDITY: 19 NTU |
| FINAL PH: 7.26 SU | FINAL COND. 1740 umhos/cm | FINAL TEMP.: 16.30 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

**BOTTLES FILLED**

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063394 DATE SHIPPED: 8/10/04 METHOD: Fed Ex

AIRBILL NUMBER: ~~[illegible]~~ 841607243961 SIGNED: J Overvoorde DATE: 8/10/04

F-186 (REV 09MAY2002)
FIELD FORMS\FIELD FORMS\WATERSAMPLELOG.DOC 07/29/04

P:\LECARPENTER\L.E. CARPENTER- NICK\SITE MONITORING\GW MONITORING PROTOCOL &

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-7

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/10/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 300

Water level before purging (nearest 0.01 ft. below reference point) 9.24 +0.01/0C

Depth to bottom of well (obtained from well logs) 20.0 + — T/0C

Calculated volume of water in casing 1.75 gal

Weather conditions sunny, still 0-5mph, hot, clear

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1806 03 | 300 | 7.23 | 1580 | 34 | 2.0 | 83 | 24.10 | 9.24 | 0 |
| 1806 08 | | 6.95 | 3500 | 7 | 2.0 | 101 | 17.72 | 9.26 | .39 |
| 1806 13 | | 6.90 | 3970 | 3 | 2.0 | 111 | 17.15 | 9.24 | .78 |
| 1806 18 | | 6.92 | 4050 | 2 | 1.0 | 110 | 16.87 | 9.24 | 1.17 |
| 1806 23 | | 6.92 | 4050 | 2 | 0.8 | 111 | 16.87 | 9.24 | 1.56 |
| 1806 28 | | 6.92 | 4040 | 2 | 1.0 | 113 | 16.77 | 9.24 | 1.95 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 75 ppm $CO_2$ 70 ppm Ferrous Fe 1.0 ppm

Signed: [signature] Date: 8/10/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/10/04 | SAMPLE TIME: 1828 |

| WELL INFORMATION | WELL ID: MW-19-7 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.11 | TOTAL DEPTH: 20.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: tephlon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP-20 | CALIBRATION DATE / TIME 8/10/04 1455 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 113 UNITS mV | FINAL TURBIDITY: 2 NTU |
| FINAL PH: 6.92 NTU | FINAL COND. 4040 umhos/cm | FINAL TEMP.: 16.77 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative | Filtered | Number | Size | Type | Preservative | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063394 DATE SHIPPED: 8/10/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243950 SIGNED: J Overvoorde DATE: 8/10/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

+Dup-01

PROJECT NAME: LEC

WELL NUMBER: MW-19-10

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 8.22 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 20.0+ – T/OC

Calculated volume of water in casing 1.92 gal

Weather conditions cloudy, hazy, warm, still

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 740 | 400 | 7.55 | 1250 | 398 | 0.6 | 163 | 16.16 | 8.22 | 0 |
| 745 | | 7.40 | 1268 | 131 | 0.6 | 133 | 15.67 | 8.22 | .53 |
| 750 | | 7.40 | 1275 | 99 | 0.2 | 131 | 15.55 | 8.18 | 1.06 |
| 755 | | 7.41 | 1299 | 69 | 0.2 | 126 | 15.50 | 8.15 | 1.59 |
| 800 | | 7.39 | 1327 | 54 | 0.2 | 123 | 15.40 | 8.15 | 2.12 |
| 805 | | 7.37 | 1371 | 34 | 0.2 | 120 | 15.44 | 8.18 | 2.65 |
| 810 | | 7.36 | 1397 | 28 | 0.1 | 119 | 15.50 | 8.20 | 3.18 |
| 815 | | 7.38 | 1430 | 20 | 0.1 | 114 | 15.27 | 8.20 | 3.71 |
| 820 | | 7.37 | 1453 | 17 | 0.1 | 112 | 15.37 | 8.20 | 4.24 |
| 825 | | 7.39 | 1471 | 12 | 0.1 | 110 | 15.42 | 8.20 | 4.77 |
| 830 | | 7.38 | 1483 | 11 | 0.1 | 109 | 15.51 | 8.20 | 5.30 |
| 835 | | 7.35 | 1498 | 11 | 0.1 | 107 | 15.56 | 8.20 | 5.83 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 65 ppm $CO_2$ 20 ppm Ferrous Fe .15 ppm

Signed: [signature] Date: 8/11/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 8 35 |

| WELL INFORMATION | WELL ID: MW-19-10 +Dup-01 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 8.07 | TOTAL DEPTH: 20.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: Teflon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/11/04 7 28 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.1 UNITS mg/L | FINAL ORP 107 UNITS | FINAL TURBIDITY: 11 |
| FINAL PH: 7.35 SU | FINAL COND. 1498 umhos/cm | FINAL TEMP.: 15.56 |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - H2SO4 D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 1 ~~2~~ | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING
## STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-19-8

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 9.72 + 0.0 T/OC

Depth to bottom of well (obtained from well logs) 20.0 + — T/OC

Calculated volume of water in casing 1.68 gal

Weather conditions hazy, cloudy, warm, wind 5-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 935 | 400 | 7.50 | 1064 | 114 | 0.4 | 93 | 19.59 | 9.72 | 0 |
| 940 | | 7.50 | 1087 | 53 | 0.4 | 87 | 18.58 | 9.68 | .53 |
| 945 | | 7.49 | 1095 | 28 | 0.4 | 81 | 18.35 | 9.63 | 1.06 |
| 950 | | 7.49 | 1089 | 14 | 0.4 | 68 | 18.30 | 9.63 | 1.59 |
| 955 | | 7.49 | 1087 | 9 | 0.4 | 49 | 18.26 | 9.64 | 2.12 |
| 1000 | | 7.52 | 1093 | 7 | 0.4 | 48 | 18.29 | 9.64 | 2.65 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 100 ppm $CO_2$ 19 ppm Ferrous Fe 2.0 ppm

JO Vernoude — Signed — 8/11/04 Date

[signature] — QC'd By — 10/6/04 Date

RMT

# WATER SAMPLE LOG

Sheet 34 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 10^00 |

| WELL INFORMATION | WELL ID: MW-19-8 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.55 | TOTAL DEPTH: 20.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Port. Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: tephlon lined PE | TUBING CONDITION: good | HOW STORED: storage building |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/11/04 7^28 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: |
|---|---|---|
| FINAL D.O. 0.4 UNITS mg/L | FINAL ORP 48 UNITS mV | FINAL TURBIDITY: 7 NTU |
| FINAL PH: 7.52 SU | FINAL COND. 1093 umhos/cm | FINAL TEMP.: 18.29 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - H2SO4 D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-15MS

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 11.26 + 0.0 T/OC

Depth to bottom of well (obtained from well logs) 25.94 + — T/OC

Calculated volume of water in casing 9.59 gal

Weather conditions partly sunny, hot, wind 0-5 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1042 | 400 | 7.66 | 481 | 67 | 1.0 | 127 | 18.47 | 11.26 | 0 |
| 1047 | | 7.60 | 475 | 46 | 1.0 | 129 | 18.09 | 11.26 | .53 |
| 1052 | | 7.61 | 473 | 32 | 1.0 | 133 | 18.17 | 11.28 | 1.06 |
| 1057 | | 7.61 | 473 | 27 | 1.0 | 135 | 18.08 | 11.28 | 1.59 |
| 1102 | | 7.58 | 480 | 20 | 1.0 | 139 | 17.49 | 11.29 | 2.12 |
| 1107 | | 7.59 | 477 | 16 | 1.0 | 139 | 17.60 | 11.30 | 2.65 |
| 1112 | | 7.57 | 482 | 15 | 1.0 | 142 | 17.65 | 11.30 | 3.18 |
| 1117 | | 7.59 | 492 | 14 | 1.0 | 141 | 17.50 | 11.30 | 3.71 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/11/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG

Sheet 36 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1117 |

| WELL INFORMATION | WELL ID: MW-15S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 11.14 | TOTAL DEPTH: 25.94 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP 20 | CALIBRATION DATE / TIME 8/11/04 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear w/ few floaties | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 141 UNITS mV | FINAL TURBIDITY: 14 NTUs |
| FINAL PH: 7.59 SU | FINAL COND. 492 umhos/cm | FINAL TEMP.: 17.50 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - H2SO4 D - NaOH E - HCL F- Na2S2O3

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☒N~~ | | | | | |

104

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-15I

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 10.27 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 43.92+ - T/OC

Calculated volume of water in casing 5.48 gal

Weather conditions partly sunny, hot, hazy, wind 5-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1140 | 400 | 7.45 | 500 | 24 | 0.2 | 140 | 22.42 | 10.27 | 0 ~~10.27~~ JO |
| 1145 | | 7.57 | 806 | 2 | 0.1 | 104 | 17.04 | 10.27 | .53 |
| 1150 | | 7.65 | 806 | 2 | 0.1 | 10 | 16.29 | 10.29 | 1.06 |
| 1155 | | 7.68 | 790 | 2 | 0.1 | -14 | 16.02 | 10.29 | 1.59 |
| 1200 | | 7.67 | 781 | 2 | 0.1 | -26 | 16.09 | 10.28 | 2.12 |
| 1205 | | 7.70 | 777 | 2 | 0.1 | -31 | 16.11 | 10.29 | 2.65 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed [signature] Date 8/11/04

QC'd By [signature] Date 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1205 |

| WELL INFORMATION | WELL ID: MW-15I | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 11.10 | TOTAL DEPTH: 43.92 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/11/04 7:28 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.1 UNITS mg/L | FINAL ORP -31 UNITS mV | FINAL TURBIDITY: 2 NTU |
| FINAL PH: 7.70 SU | FINAL COND. 777 umhos/cm | FINAL TEMP.: 16.11 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☐Y ☒N~~ | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J. Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-11DR

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: LC/EV

Type of pump used: Portable Bladder

Pumping rate (milliliters/minute): 350

Water level before purging (nearest 0.01 ft. below reference point) 6.04 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 157.0+ — T/OC

Calculated volume of water in casing 24.61 gal

Weather conditions raining, cloudy, still

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1415 | 350 | 7.30 | 360 | 4 | 1.0 | 160 | 18.87 | 6.04 | 0 |
| 1420 | | 8.21 | 205 | 4 | 1.0 | 154 | 15.17 | 6.08 | .46 |
| 1425 | | 8.27 | 204 | 2 | 1.0 | 147 | 15.15 | 6.08 | .92 |
| 1430 | | 8.40 | 207 | 3 | 2.0 | 141 | 15.44 | 6.02 | 1.38 |
| 1435 | | 8.39 | 206 | 2 | 1.0 | 143 | 15.41 | 6.02 | 1.84 |
| 1440 | | 8.42 | 206 | 2 | 1.0 | 143 | 15.50 | 6.03 | 2.30 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 55 ppm $CO_2$ <10 ppm Ferrous Fe 0 ppm

Signed: [signature] Date: 8/11/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1440 |

| WELL INFORMATION | WELL ID: MW-11DR | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 5.91 | TOTAL DEPTH: 157.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/11/04 1400 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 143 UNITS mV | FINAL TURBIDITY: 2 NTU |
| FINAL PH: 8.42 SU | FINAL COND. 206 umhos/cm | FINAL TEMP.: 15.50 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - $HNO_3$ C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: WP-B7

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: Bailer

Pumping rate ~~(milliliters/minute)~~: <.5 gal/min

Water level before purging (nearest 0.01 ft. below reference point) 4.86+0.0T/oc

Depth to bottom of well (obtained from well logs) NM+ — T/oc

Calculated volume of water in casing NM

Weather conditions Cloudy, wind 5-10 mph,

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NM

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

[signature] Signed 8/11/04 Date

[signature] QC'd By 10/6/04 Date

RMT

# WATER SAMPLE LOG

Sheet 42 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 16[10] |

| WELL INFORMATION | WELL ID: WP-B7 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: PVC | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 4.86 | TOTAL DEPTH: NM | |
| FREE PRODUCT: ☒ SHEEN ☐ MEAS. THICKNESS: _____ | ☒ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Bailer (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Bailer | PNEUMATIC SOURCE — | |
| BLADDER TYPE: — (new / used) | | |
| TUBING TYPE: — | TUBING CONDITION: — | HOW STORED: — |
| WATER QUALITY METER TYPE: NA | CALIBRATION DATE / TIME — | |

| SAMPLE DESCRIPTION | COLOR: gray w/ blk flecks | ODOR: fuel / oil |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP NM UNITS | FINAL TURBIDITY: ~~none~~ NM |
| FINAL PH: NM | FINAL COND. NM | FINAL TEMP.: ~~none~~ NM |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

**BOTTLES FILLED**

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~xN~~ | | | | | |

14/04

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: WP-B6

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: Bailer

Pumping rate ~~(milliliters/minute)~~: <.5 gal/min

Water level before purging (nearest 0.01 ft. below reference point) 6.77+0.01/OC

Depth to bottom of well (obtained from well logs) NM+ — T/OC

Calculated volume of water in casing NM

Weather conditions cloudy,

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | NM | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/11/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1600 |

| WELL INFORMATION | WELL ID: WP-B6 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: pvc | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 6.77 | TOTAL DEPTH: NM | |
| FREE PRODUCT: ☒ SHEEN ☐ MEAS. THICKNESS: _____ | ☒ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Bailer (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Bailer | PNEUMATIC SOURCE — | |
| BLADDER TYPE: — (new / used) | | |
| TUBING TYPE: — | TUBING CONDITION: — | HOW STORED: — |
| WATER QUALITY METER TYPE: — | CALIBRATION DATE / TIME — | |

| SAMPLE DESCRIPTION | COLOR: light gray with blk flecks | ODOR: fuel/oil |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP NM UNITS | FINAL TURBIDITY: NM |
| FINAL PH: NM | FINAL COND. NM | FINAL TEMP.: NM |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~8~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☐Y ☒N~~ | | | | | |

1/04

CHAIN-OF-CUSTODY NUMBER: 0063391 DATE SHIPPED: 8/11/04 METHOD: lab courier

AIRBILL NUMBER: NM SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: SW-7

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/FY

Type of pump used: NA

Pumping rate (milliliters/minute): NA

Water level before purging (nearest 0.01 ft. below reference point) NM + – T/

Depth to bottom of well (obtained from well logs) NM + – T/

Calculated volume of water in casing NA

Weather conditions cloudy, mild, wind 0-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | NM | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/11/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1645 |

| WELL INFORMATION | WELL ID: SW7 | WELL DIAMETER: NA |
|---|---|---|
| WELL MATERIAL: NA | WELL CONDITIONS: NA | |
| STATIC WATER LEVEL: NA | TOTAL DEPTH: NA | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Grab (use purge form) | |
|---|---|---|
| SAMPLING PUMP: NA | PNEUMATIC SOURCE — | |
| BLADDER TYPE: NA (new / used) | | |
| TUBING TYPE: NA | TUBING CONDITION: — | HOW STORED: — |
| WATER QUALITY METER TYPE: NA | CALIBRATION DATE / TIME — | |

| SAMPLE DESCRIPTION | COLOR: clear / lt yellow | ODOR: none |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP NM UNITS | FINAL TURBIDITY: NM |
| FINAL PH: NM | FINAL COND. NM | FINAL TEMP.: NM |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☒N~~ | | | | | |

2/4/04

CHAIN-OF-CUSTODY NUMBER: 0063396 DATE SHIPPED: 8/11/04 METHOD: Fed Ex

AIRBILL NUMBER: ~~NA~~ 841607243939 841607243940 SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: SW-5

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: NA

Pumping rate (milliliters/minute): NA

Water level before purging (nearest 0.01 ft. below reference point) NM + - T/

Depth to bottom of well (obtained from well logs) NM + - T/

Calculated volume of water in casing NA

Weather conditions cloudy, mild, wind 0-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | NM | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

J Overwoorde — Signed

8/11/04 — Date

[signature] — QC'd By

10/6/04 — Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1655 |

| WELL INFORMATION | WELL ID: SW-5 | WELL DIAMETER: NA |
|---|---|---|
| WELL MATERIAL: NA | WELL CONDITIONS: NA | |
| STATIC WATER LEVEL: NA | TOTAL DEPTH: NA | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Grab (use purge form) | |
|---|---|---|
| SAMPLING PUMP: NA | PNEUMATIC SOURCE — | |
| BLADDER TYPE: NA (new / used) | | |
| TUBING TYPE: NA | TUBING CONDITION: — | HOW STORED: — |
| WATER QUALITY METER TYPE: NA | CALIBRATION DATE / TIME — | |

| SAMPLE DESCRIPTION | COLOR: clear / A yellow | ODOR: none |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP NM UNITS | FINAL TURBIDITY: NM |
| FINAL PH: NM | FINAL COND. NM | FINAL TEMP.: NM |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☒N~~ | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063396 DATE SHIPPED: 8/11/04 METHOD: Fed Ex

AIRBILL NUMBER: ~~NA~~ 841607243939 " " 40 SIGNED: J Overvoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-22R

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/11/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 350

Water level before purging (nearest 0.01 ft. below reference point) 3.66+00 T/OC

Depth to bottom of well (obtained from well logs) 7.50+ — T/OC

Calculated volume of water in casing .56 gal

Weather conditions cloudy, mild, wind 0-5 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1735 | 350 | 7.59 | 575 | 105 | 0.4 | -1 | 19.78 | 4.06 | 0 |
| 1740 | | 7.55 | 552 | 25 | 0.3 | -20 | 17.62 | 4.08 | .46 |
| 1745 | | 7.54 | 577 | 19 | 0.3 | -44 | 17.00 | 4.08 | .92 |
| 1750 | | 7.56 | 570 | 5 | 0.2 | -49 | 16.53 | 4.10 | 1.38 |
| 1755 | | 7.56 | 608 | 3 | 0.2 | -46 | 16.83 | 4.10 | 1.84 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 150 ppm $CO_2$ <100 ppm ~60% Ferrous Fe 11 ppm

Signed: [illegible] Date: 8/11/04

QC'd By: [illegible] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/11/04 | SAMPLE TIME: 1755 |

| WELL INFORMATION | WELL ID: MW-22(R) | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 3.46 | TOTAL DEPTH: 7.50 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/11/04 1400 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.2 UNITS mg/L | FINAL ORP -46 UNITS mV | FINAL TURBIDITY: 3 NTU |
| FINAL PH: 7.56 SU | FINAL COND. 608 umhos/cm | FINAL TEMP.: 16.83 |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063396 DATE SHIPPED: 8/11/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243939 (11 14 40) SIGNED: JOvervoorde DATE: 8/11/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-17S

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: Portable Bladder

Pumping rate (milliliters/minute): 300

Water level before purging (nearest 0.01 ft. below reference point) 9.20+0.0 T/ ~~9.20~~ OC

Depth to bottom of well (obtained from well logs) 15.04+ – T/OC

Calculated volume of water in casing 3.81 gal

Weather conditions Overcast, rain, warm, wind 0-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 755 | 300 | 7.43 | 270 | 7 | 0.8 | 217 | 18.27 | 9.20 | 0 |
| 800 | 300 | 7.56 | 272 | 4 | 1.0 | 216 | 18.18 | 9.20 | .39 |
| 805 | 300 | 7.56 | 280 | 4 | 0.8 | 217 | 18.13 | 9.20 | .78 |
| 810 | 300 | 7.54 | 273 | 2 | 0.8 | 217 | 18.03 | 9.20 | 1.17 |
| 815 | 300 | 7.56 | 269 | 3 | 1.0 | 219 | 18.13 | 9.20 | 1.54 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 45 ppm Ferrous Fe 0 ppm $CO_2$ 16 ppm

J Overwoorde — Signed — 8/12/04 Date

[signature] — QC'd By — 10/6/04 Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 815 |

| WELL INFORMATION | WELL ID: MW-17S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 9.12 | TOTAL DEPTH: 15.04 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: tephlon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/12/04 735 | |

| SAMPLE DESCRIPTION | COLOR: ~~PB~~ clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 219 UNITS mV | FINAL TURBIDITY: 3 NTU |
| FINAL PH: 7.56 SU | FINAL COND. 269 umhos/cm | FINAL TEMP.: 18.13 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 2 ~~8~~ | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| ~~2~~ | ~~1000 ml~~ | ~~amber~~ | ~~F~~ | ~~☐Y ☒N~~ | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | ☒N | | | | | |

12/04

CHAIN-OF-CUSTODY NUMBER: 0063397 DATE SHIPPED: 8/12/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: JOvervoorde DATE: 8/12/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-145

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 500

Water level before purging (nearest 0.01 ft. below reference point) 3.66 + T/OC

Depth to bottom of well (obtained from well logs) 13.25 + 0.1 T/OC = 13.35

Calculated volume of water in casing 6.33 gal

Weather conditions cloudy, still, rain on + off

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp. (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 10¹⁵ | 500 | 7.74 | 604 | 43 | 0.4 | 90 | 13.71 | 3.66 | 0 |
| 10²⁰ | | 7.72 | 603 | 14 | 0.3 | 34 | 13.68 | 3.66 | .66 |
| 10²⁵ | | 7.78 | 602 | 9 | 0.2 | 18 | 13.64 | 3.66 | 1.32 |
| 10³⁰ | | 7.75 | 601 | 7 | 0.2 | -15 | 13.63 | 3.66 | 1.65 |
| 10³⁵ | | 7.77 | 601 | 6 | 0.2 | -23 | 13.61 | 3.66 | 2.31 |
| 10⁴⁰ | | 7.78 | 602 | 4 | 0.2 | -29 | 13.66 | 3.66 | 2.97 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 85 ppm $CO_2$ 15 ppm Ferrous Fe 8 ppm

Signed [signature] Date 8/12/04 QC'd By [signature] Date 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1040 |

| WELL INFORMATION | WELL ID: MW-14S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 3.56 | TOTAL DEPTH: 13.25 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined-PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP 20 | CALIBRATION DATE / TIME 8/12/04 7:35 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.2 UNITS mg/L | FINAL ORP -29 UNITS mV | FINAL TURBIDITY: 4 NTU |
| FINAL PH: 7.78 SU | FINAL COND. 602 umhos/cm | FINAL TEMP.: 13.66 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 6063397 DATE SHIPPED: 8/12/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/12/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-14I

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 450

Water level before purging (nearest 0.01 ft. below reference point) 3.29 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 43.22+ 0.1 T/OC

Calculated volume of water in casing 6.50 gal

Weather conditions cloudy, still (wind 0-5 mph), warm

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1115 | 450 | 8.07 | 331 | 241 | 2.0 | 83 | 13.94 | 3.29 | 0 |
| 1120 | | 8.14 | 332 | 178 | 3.0 | 83 | 13.77 | 3.29 | .59 |
| 1125 | | 8.18 | 332 | 78 | 2.0 | 91 | 13.54 | 3.29 | 1.18 |
| 1130 | | 8.17 | 331 | 41 | 1.0 | 97 | 13.52 | 3.31 | 1.77 |
| 1135 | | 8.20 | 331 | 23 | 1.0 | 102 | 13.46 | 3.31 | 2.36 |
| 1140 | | 8.21 | 331 | 19 | 1.0 | 106 | 13.43 | 3.32 | 2.95 |
| 1145 | | 8.20 | 331 | 15 | 1.0 | 113 | 13.44 | 3.32 | 3.54 |
| 1150 | | 8.20 | 331 | 12 | 1.0 | 115 | 13.43 | 3.32 | 4.13 |
| 1155 | | 8.18 | 331 | 9 | 1.0 | 116 | 13.42 | 3.32 | 4.72 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 60 ppm $CO_2$ <10 ppm Ferrous Fe 0 ppm

Signed: [illegible] Date: 8/12/04

QC'd By: [illegible] Date: 10/6/04

RMT

# WATER SAMPLE LOG

Sheet 56 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1155 |

| WELL INFORMATION | WELL ID: MW-14I | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 3.24 | TOTAL DEPTH: 43.22 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE air compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: | CALIBRATION DATE / TIME 8/12/04 735 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.0 UNITS mg/L | FINAL ORP 116 UNITS mV | FINAL TURBIDITY: 9 NTU |
| FINAL PH: 8.18 SU | FINAL COND. 331 umhos/cm | FINAL TEMP.: 13.42°C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | ☒N | | | | | |

CHAIN-OF-CUSTODY NUMBER: 00063397 DATE SHIPPED: 8/12/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/12/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-4

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: bailer

Pumping rate ~~(milliliters/minute)~~: < .5 gal/min

Water level before purging (nearest 0.01 ft. below reference point) 7.25 +0.0 T/O ~~7.25~~

Depth to bottom of well (obtained from well logs) 12.20 + 0.10 T/OC ~~12.20~~

Calculated volume of water in casing .82 gal

Weather conditions Cloudy, wind 5-10 mph, rain on + off

| Time | Purge Rate gal/min (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1353 | <.5 | 7.44 | 629 | NM | NM | 106 | 19.20 | 7.25 | 0 |
| 1356 | ↓ | 7.48 | 652 | ↓ | ↓ | 58 | 17.88 | 7.25 | 1.5 |
| 1358 | ↓ | 7.45 | 653 | ↓ | ↓ | 31 | 17.68 | 7.25 | 3.0 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Signed: [signature] Date: 8/12/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1358 |

| WELL INFORMATION | WELL ID: MW-4 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 7.23 | TOTAL DEPTH: 12.20 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NM | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Bailer (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Bailer | PNEUMATIC SOURCE NA | |
| BLADDER TYPE: NA (new / used) | | |
| TUBING TYPE: NA | TUBING CONDITION: NA | HOW STORED: NA |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/12/04 735 | |

| SAMPLE DESCRIPTION | COLOR: clear w/ brown seds | ODOR: none |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP 31 UNITS mV | FINAL TURBIDITY: NM |
| FINAL PH: 7.45 SU | FINAL COND. 653 | FINAL TEMP.: 17.68 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~5~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 2 | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☐Y ☒N~~ | | | | | |

3 2/04

CHAIN-OF-CUSTODY NUMBER: GDL63397 DATE SHIPPED: 8/12/04 METHOD: lab courier

AIRBILL NUMBER: NA SIGNED: J Overvoorde DATE: 8/12/04

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-25(R) + Dup-02

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/12/04

SAMPLER: JD/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 2.50 +0.0 T/OC

Depth to bottom of well (obtained from well logs) 8.57 + 0.10 T/OC

Calculated volume of water in casing 1.01 gal

Weather conditions cloudy, rain on + off, wind 5-10 mph

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1443 | 400 | 6.81 | 591 | 1000+ | 1.0 | 128 | 18.98 | 2.50 | 0 |
| 1448 | | 6.73 | 609 | 649 | 0.8 | 147 | 18.41 | 2.50 | .53 |
| 1453 | | 6.80 | 619 | 267 | 0.8 | 153 | 18.13 | 2.50 | 1.06 |
| 1458 | | 6.90 | 619 | 145 | 0.8 | 152 | 18.13 | 2.52 | 1.59 |
| 1503 | | 7.00 | 618 | 72 | 0.6 | 150 | 17.92 | 2.53 | 2.12 |
| 1508 | | 7.07 | 616 | 58 | 0.6 | 147 | 17.79 | 2.55 | 2.65 |
| 1513 | | 7.19 | 615 | 28 | 0.6 | 140 | 17.64 | 2.55 | 3.18 |
| 1518 | | 7.24 | 613 | 21 | 0.6 | 135 | 17.57 | 2.55 | 3.71 |
| 1523 | | 7.29 | 611 | 15 | 0.6 | 128 | 17.44 | 2.55 | 4.24 |
| 1528 | | 7.30 | 610 | 12 | 0.6 | 126 | 17.52 | 2.57 | 4.77 |
| 1533 | | 7.28 | 609 | 9 | 0.6 | 119 | 17.32 | 2.57 | 5.30 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

50 ppm CO

3 ppm ferrous Fe

90 ppm Total Alk

Signed: [signature] Date: 8/12/04

QC'd By: [signature] Date: 10/6/04

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1533 |

*Dup-02

| WELL INFORMATION | WELL ID: MW-25 (R) | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 2.75 | TOTAL DEPTH: 8.57 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: Portable Bladder | PNEUMATIC SOURCE ~~air~~ backpack | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP20 | CALIBRATION DATE / TIME 8/12/04 14:13 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.6 UNITS mg/L | FINAL ORP 119 UNITS mV | FINAL TURBIDITY: 9 NTU |
| FINAL PH: 7.28 SU | FINAL COND. 609 umhos/cm | FINAL TEMP.: 17.32 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | ☒N | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063398 DATE SHIPPED: 8/12/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243880 SIGNED: J Overvoorde DATE: 8/12/04

" " 917
" " 928
" " 906

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-21

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 4"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: QED Portable Bladder

Pumping rate (milliliters/minute): 400

Water level before purging (nearest 0.01 ft. below reference point) 4.02 + 0.0T/OC

Depth to bottom of well (obtained from well logs) 14.82 + 0.1 T/OC

Calculated volume of water in casing 7.12 gal

Weather conditions partly cloudy, still, hot, humid

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1635 | 400 | 7.63 | 816 | 14 | 0.8 | 110 | 18.15 | 4.02 | 0 |
| 1640 | | 7.67 | 831 | 9 | 0.6 | 106 | 17.23 | 4.02 | .53 |
| 1645 | | 7.77 | 844 | 5 | 0.2 | 103 | 16.87 | 4.04 | 1.06 |
| 1650 | | 7.73 | 849 | 3 | 0.3 | 104 | 16.59 | 4.04 | 1.59 |
| 1655 | | 7.75 | 849 | 3 | 0.3 | 103 | 16.62 | 4.04 | 2.12 |
| 30 ~~1700~~ | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

Alk 100 ppm $CO_2$ 9 ppm Ferrous Fe 0 ppm

[signature] Signed 8/12/04 Date

[signature] QC'd By 10/6/04 Date

RMT

# WATER SAMPLE LOG

Sheet 62 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1655 |

| WELL INFORMATION | WELL ID: MW-21 | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 3.98 | TOTAL DEPTH: 14.82 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: QED Portable Bladder (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED Port. Bladder | PNEUMATIC SOURCE backpack comp. air | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: teflon lined PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: QED MP-20 | CALIBRATION DATE / TIME 8/12/04 1413 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.3 UNITS mg/L | FINAL ORP 103 UNITS | FINAL TURBIDITY: 3 NTU |
| FINAL PH: 7.75 SU | FINAL COND. 849 umhos/cm | FINAL TEMP.: 16.62°C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - H2SO4 D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000ml | plastic | A | ☐Y ☒N |
| 2 | 1000ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063398 DATE SHIPPED: 8/12/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243880 SIGNED: J Overvoorde DATE: 8/12/04

" " 917
" " 928
" " 906

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW-2

PROJECT NUMBER: 00-06527.02

WELL DIAMETER: 2"

DATE: 8/12/04

SAMPLER: JO/EV

Type of pump used: Bailer

Pumping rate ~~(milliliters/minute)~~: < .5 gal/min

Water level before purging (nearest 0.01 ft. below reference point) 7.04 + T/oc

Depth to bottom of well (obtained from well logs) ~~14~~ 14.53 + 0.1 T/OC

Calculated volume of water in casing 1.23 gal

Weather conditions partly cloudy, wind 5-10 mph, hot + humid

| Time | Purge Rate gal/min ~~(ml/min)~~ | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1810 | <.5 | 7.39 | 677 | NM | NM | 78 | 17.72 | 7.04 | 0 |
| 1812 | ↓ | 7.43 | 688 | ↓ | ↓ | 39 | 15.87 | 7.06 | 2.0 |
| 1814 | ↓ | 7.44 | 669 | ↓ | ↓ | 29 | 15.40 | 7.10 | 4.0 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: STABILIZATION TEST IS COMPLETE WHEN A MINIMUM OF 5 READINGS HAVE BEEN RECORDED AND 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 SU; COND. - ±5%; TEMP (CORRECTED) - ±0.5°C; TURBIDITY ±10%; DO ±10%; ORP ±20 mV

[signature] Signed — 8/12/04 Date — [signature] QC'd By — 10/6/04 Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1814 |

| WELL INFORMATION | WELL ID: MW-2 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: PVC | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 7.02 | TOTAL DEPTH: 14.53 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NM | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Bailer (use purge form) | |
|---|---|---|
| SAMPLING PUMP: NA | PNEUMATIC SOURCE NA | |
| BLADDER TYPE: NA (new / used) | | |
| TUBING TYPE: NA | TUBING CONDITION: NA | HOW STORED: NA |
| WATER QUALITY METER TYPE: QED MP-20 | CALIBRATION DATE / TIME 8/12/04 1413 | |

| SAMPLE DESCRIPTION | COLOR: tan w/ seds (gray) | ODOR: fuel |
|---|---|---|
| FINAL D.O. NM UNITS | FINAL ORP 29 UNITS | FINAL TURBIDITY: NM |
| FINAL PH: 7.44 | FINAL COND. 669 umhos/cm | FINAL TEMP.: 15.40 °C |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 40 ml | glass | E | ☐Y ☒N | 1 | 500ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | amber | F | ☐Y ☒N | 2 | 1000 ml | plastic | A | ☐Y ☒N |
| 2 | 1000 ml | glass | C | ☐Y ☒N | 1 | 120 ml | plastic | F | ☐Y ☒N |
| 1 | 40 ml | glass | C | ☐Y ☒N | 1 | 250 ml | amber | E | ☐Y ☒N |
| 1 | 40 ml | glass | A | xN | | | | | |

CHAIN-OF-CUSTODY NUMBER: 0063398 DATE SHIPPED: 8/12/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243880 SIGNED: J Overvoorde DATE: 8/12/04

" " 906
" " 917
" " 928

RMT

# WATER SAMPLE LOG

Sheet 65 of 72

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1850 |

(LEC Pump)

| WELL INFORMATION | WELL ID: RB-1 | WELL DIAMETER: NA |
|---|---|---|
| WELL MATERIAL: NA | WELL CONDITIONS: NA | |
| STATIC WATER LEVEL: NA | TOTAL DEPTH: NA | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: Grab (use purge form) | |
|---|---|---|
| ~~SAMPLING PUMP:~~ | PNEUMATIC SOURCE | |
| ~~BLADDER TYPE: (new / used)~~ | NA | |
| ~~TUBING TYPE:~~ | ~~TUBING CONDITION:~~ | ~~HOW STORED:~~ |
| ~~WATER QUALITY METER TYPE:~~ | ~~CALIBRATION DATE / TIME~~ | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. NA UNITS | FINAL ORP NA UNITS | FINAL TURBIDITY: NA |
| FINAL PH: NA | FINAL COND. NA | FINAL TEMP.: NA |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 2 ~~3~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| 1 ~~2~~ | 1000 ml | amber | F | ☐Y ☒N | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☐Y ☒N~~ | | | | | |

8/12/04

CHAIN-OF-CUSTODY NUMBER: 0063398 DATE SHIPPED: 8/12/04 METHOD: Fed Ex

AIRBILL NUMBER: 841607243880 SIGNED: JOvervoorde DATE: 8/12/04

" " 917
" " 928
" " 906

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2004 Sampling |
|---|---|---|
| SAMPLER NAME 1: J. Overvoorde | SAMPLER NAME 2: E. Vincke | PROJECT NO: 00-06527.02 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/12/04 | SAMPLE TIME: 1905 |

~~RMT office guess~~

| WELL INFORMATION | WELL ID: RB-2 | WELL DIAMETER: NA |
|---|---|---|
| WELL MATERIAL: NA | WELL CONDITIONS: NA | |
| STATIC WATER LEVEL: NA | TOTAL DEPTH: NA | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: NA | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: grab (use purge form) | |
|---|---|---|
| SAMPLING PUMP: | PNEUMATIC SOURCE | |
| BLADDER TYPE: (new / used) | | |
| TUBING TYPE: | TUBING CONDITION: NA | HOW STORED: |
| WATER QUALITY METER TYPE: | CALIBRATION DATE / TIME | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. NA UNITS | FINAL ORP NA UNITS | FINAL TURBIDITY: NA |
| FINAL PH: NA | FINAL COND. NA | FINAL TEMP.: NA |
| COMMENTS: | | |

| SAMPLE FILTRATION | FILTER TYPE / SIZE / DESCRIPTION: NA |
|---|---|
| FILTER METALS SAMPLE ONLY | COLOR AFTER FILTRATION: |

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B – HNO3 C - $H_2SO_4$ D - NaOH E - HCL F- $Na_2S_2O_3$

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 ~~8~~ | 40 ml | glass | E | ☐Y ☒N | ~~1~~ | ~~500 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~amber~~ | ~~F~~ | ~~☐Y ☒N~~ | ~~2~~ | ~~1000 ml~~ | ~~plastic~~ | ~~A~~ | ~~☐Y ☒N~~ |
| ~~2~~ | ~~1000 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~120 ml~~ | ~~plastic~~ | ~~F~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~C~~ | ~~☐Y ☒N~~ | ~~1~~ | ~~250 ml~~ | ~~amber~~ | ~~E~~ | ~~☐Y ☒N~~ |
| ~~1~~ | ~~40 ml~~ | ~~glass~~ | ~~A~~ | ~~☐Y ☒N~~ | | | | | |

O 8/12/04

CHAIN-OF-CUSTODY NUMBER: 00063398 DATE SHIPPED: 8/12/04 METHOD: Fed Ex

AIRBILL NUMBER: 846073243880 SIGNED: J Overvoorde DATE: 8/12/04

" " 917
" " 928
" " 906

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
*Where quality is a science.*

For Lancaster Laboratories use only

Acct. #_____ Group#_____ Sample # _____

**COC #** 0063393

Please print. Instructions on reverse side correspond with circled numbers.

(1)

Client: [illegible] Acct. #: _____

Project Name/#: [illegible] PWSID #: _____

Project Manager: [illegible] P.O.#: _____

Sampler: [illegible] Quote #: _____

Name of state where samples were collected: [illegible]

For Lab Use Only
FSC: _____
SCR #: _____

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Matrix: Soil | Matrix: Water (☐ Potable ☐ NPDES Applicable) | Matrix: Other | Total # of Containers | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19D | 8/10/04 | 923 | X | | | X | | 4 | | | | | X | X | | | | |
| MW-19 6 | 8/10/04 | 1015 | X | | | X | | 15 | X | X | X | X | X | X | X | X | | |
| MW-11 | 8/10/04 | 1130 | X | | | X | | 16 | X | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | |
| MW-19 1 | 8/10/04 | 1245 | X | | | X | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | |
| MW-19-2 | 8/10/04 | 1530 | X | | | X | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | |
| trip blank | | | | | | | | | | | | | X | | | | | |
| atmospheric blank | 8/10/04 | 1555 | X | | | X | | 5 | | | | | X | X | | | | |

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
QC Summary — Type VI (Raw Data)
Type I (Tier I) — GLP
Type II (Tier II) — Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 8/10/04 | 16:35 | [illegible] | 8/10/04 | 16:35 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
*Where quality is a science.*

For Lancaster Laboratories use only

Acct. # _____ Group# _____ Sample # _____

**COC #** 0063394

Please print. Instructions on reverse side correspond with circled numbers.

(1)

Client: [illegible], Inc. Acct. #: _____

Project Name/#: [illegible] Carpenter PWSID #: _____

Project Manager: Jennifer Overwade P.O.#: _____

Sampler: [illegible] Quote #: _____

Name of state where samples were collected: NT

For Lab Use Only
FSC: _____
SCR #: _____

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water (☐ Potable ☐ NPDES) | Other | Total # of Containers | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Remarks | Temperature of samples upon receipt (if requested) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19-7 | 8/10/04 | 18:28 | X | | | X | | 16 | X | X | X | X | X | X | X | X | | |
| MW-19-5 | 8/10/04 | 17:05 | X | | | X | | 16 | X | X | X | X | X | X | X | X | | |

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 8/10/04 | 19:30 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

72/68 2102 Rev. 10/27/02

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only

Acct. # _____ Group# _____ Sample # _____

**COC #** 0063391

Please print. Instructions on reverse side correspond with circled numbers.

(1)

Client: [illegible] Acct. #: _____

Project Name/#: [illegible] PWSID #: _____

Project Manager: [illegible] P.O.#: _____

Sampler: [illegible] Quote #: _____

Name of state where samples were collected: NJ

For Lab Use Only
FSC: _____
SCR #: _____

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water (Potable / NPDES) | Other | Total # of Containers | NH3 | 8260B | NO2+NO3 | EB | BTEX | EPH 28 | [illegible] | [illegible] | Remarks | Temperature of samples upon receipt (if requested) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19-10 | 8/11/04 | 8:35 | X | | | X | | 5 | X | X | X | X | X | X | X | X | TP [illegible] | |
| MW-19-8 | | 10:00 | | | | | | 16 | X | X | X | X | | | X | X | | |
| MW-19 | | 11:17 | | | | | | 5 | | | | | | | | | | |
| MW-19I | | 12:05 | | | | | | 5 | | | | | | | | | | |
| MW-11DR | | 14:10 | | | | | | 16 | X | X | X | X | | | X | X | | |
| trip blank | | | | | | X | | 1 | | | | | X | X | | | | |
| Dup-01 | 8/11/04 | | X | | | X | | 16 | X | X | X | X | X | X | X | X | | |
| [illegible] | | 12:00 | X | | | X | | 5 | | | | | X | X | | | | |
| [illegible] | | 16:00 | X | | | X | | 5 | | | | | X | X | | | | |

(7)

**Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8)

**Data Package Options** (please circle if required)

QC Summary — Type VI (Raw Data)
Type I (Tier I) — GLP
Type II (Tier II) — Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | [illegible] | 16:32 | [illegible] | [illegible] | [illegible] |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
*Where quality is a science.*

For Lancaster Laboratories use only

Acct. # _____ Group# _____ Sample # _____

**COC #** 0063396

Please print. Instructions on reverse side correspond with circled numbers.

(1)

Client: [illegible] Acct. #: _____

Project Name/#: [illegible] PWSID #: _____

Project Manager: [illegible] P.O.#: _____

Sampler: [illegible] Quote #: _____

Name of state where samples were collected: [illegible]

For Lab Use Only
FSC: _____
SCR #: _____

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water (Potable / NPDES) | Other | Total # of Containers | NH3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-1 | 8/11/04 | 16:45 | X | | | X | | 5 | | | | | X | X | | | |
| SW-2 | ↓ | 16:55 | ↓ | | | ↓ | | 5 | | | | | X | X | | | |
| MW-22R | ↓ | 17:55 | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | |
| Trip blank | | | | | | | | | | | | | X | | | | |

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
QC Summary
Type I (Tier I)
Type II (Tier II)
Type III (NJ Red. Del.)
Type IV (CLP)
Type VI (Raw Data)
GLP
Other

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 8/11/04 | 18:45 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

72 701

2102 Rev. 10/27/02

# Analysis Request / Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only

Acct. # _____ Group# _____ Sample # _____

**COC #** 0063397

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: [illegible] Inc. Acct. #: _____
Project Name/#: [illegible] PWSID #: _____
Project Manager: [illegible] P.O.#: _____
Sampler: [illegible] Quote #: _____
Name of state where samples were collected: [illegible]

For Lab Use Only
FSC: _____
SCR #: _____

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water (Potable / NPDES) | Other | Total # of Containers | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | Remarks | Temperature of samples upon receipt (if requested) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | 8[illegible] | X | | | X | | 11 | X | X | X | X | | | X | X | | | |
| [illegible] | [illegible] | 10[illegible] | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | | | |
| [illegible] | ↓ | 11[illegible] | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | | | |
| [illegible] | ↓ | 13[illegible] | ↓ | | | ↓ | | 5 | | | | | X | X | | | | | |
| [illegible] | | | | | | ↓ | | | | | | | | | | | | | |

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 8/12/04 | 1512 | L. Smoker | 8/12/04 | [illegible] |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
*Where quality is a science.*

For Lancaster Laboratories use only

Acct. # _____ Group# _____ Sample # _____

**COC #** 0063398

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: KMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overmoyer P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Potable Water / NPDES Water (Check if Applicable) | Other | Total # of Containers | $NH_3$ | $NO_2$ | $NO_3$ | $PO_4$ | $SO_4$ | EDTA | Cl+ | $SO_4$ | Total Metals | Remarks | Temperature of samples upon receipt (if requested) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RB-1 | 8/12/04 | 18 50 | X | | | X | | 3 | | | | | X | X | | | | | |
| RB-2 | | 19 05 | | | | | | 2 | | | | | X | | | | | | |
| MW-[illegible] | | 15 53 | | | | | | 16 | X | X | X | X | X | X | X | X | X | | |
| MW-21 | | 16 55 | | | | | | 16 | | | | | | | | | | | |
| MW-2 | | 18 14 | | | | | | 16 | | | | | | | | | | | |
| Trip blank | | | | | | | | | | | | | X | | | | | | |
| Dup-2 | 8/12/04 | | X | | | X | | 16 | X | X | X | X | X | X | X | X | X | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

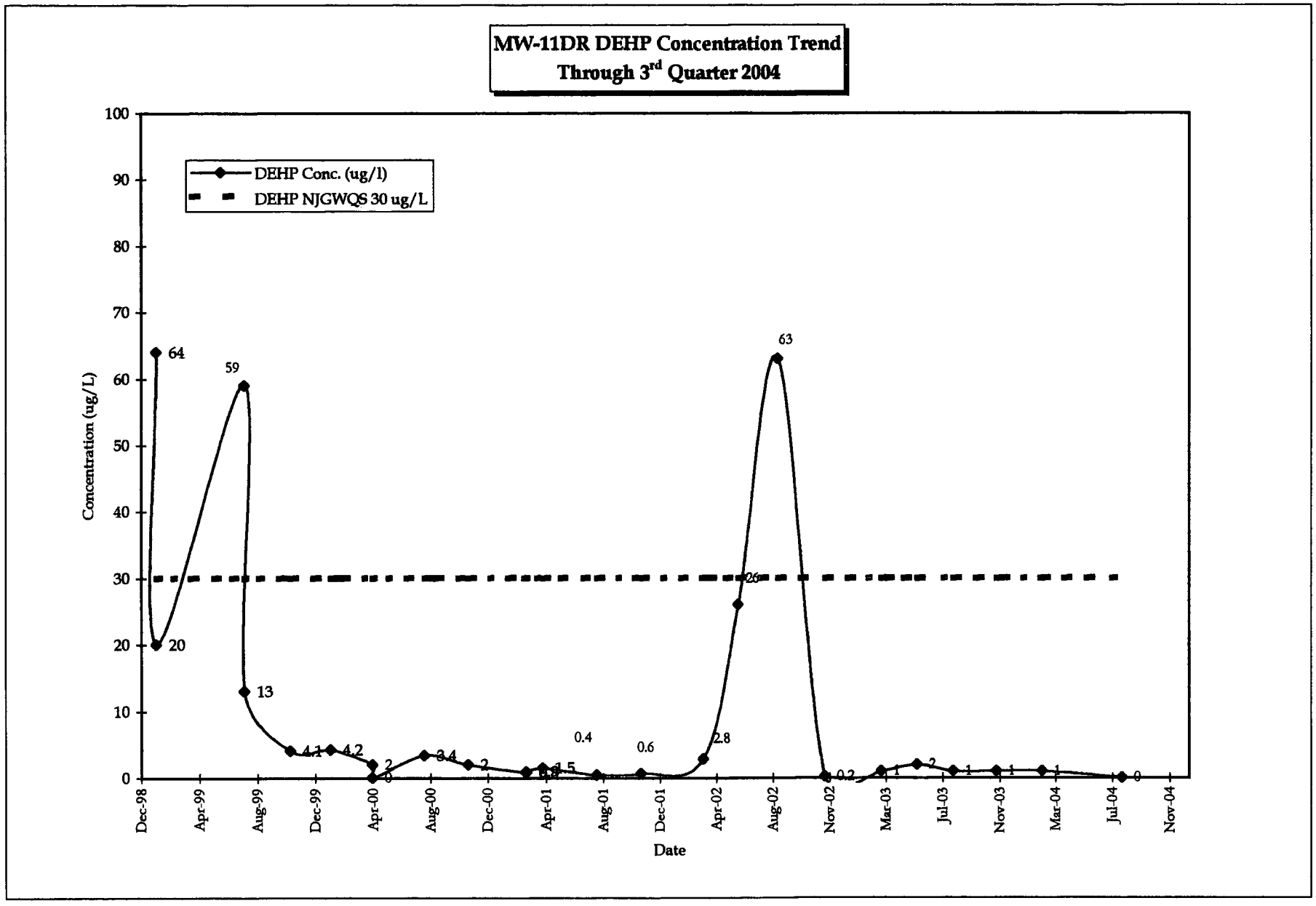
SDG Complete? Yes No

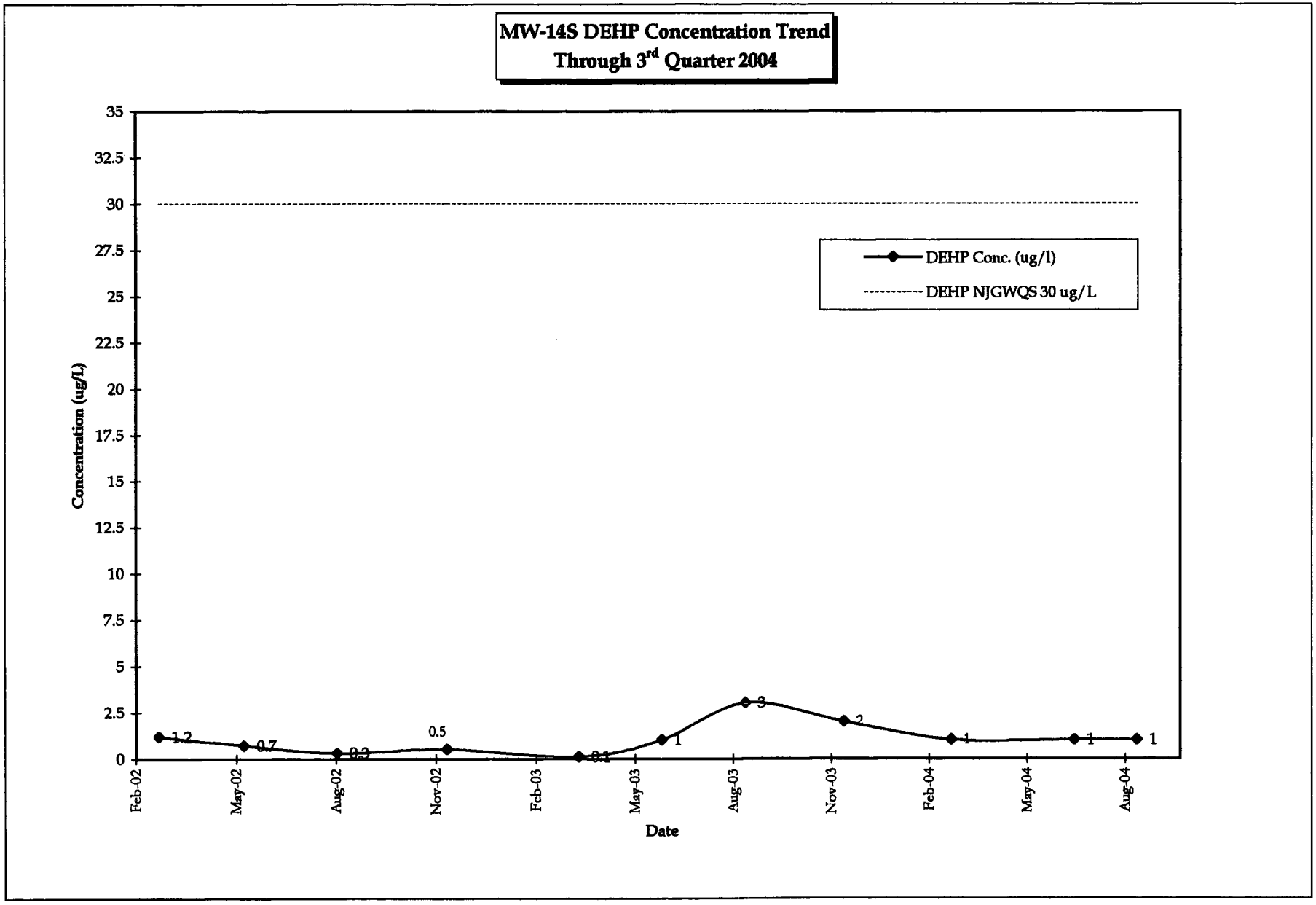
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

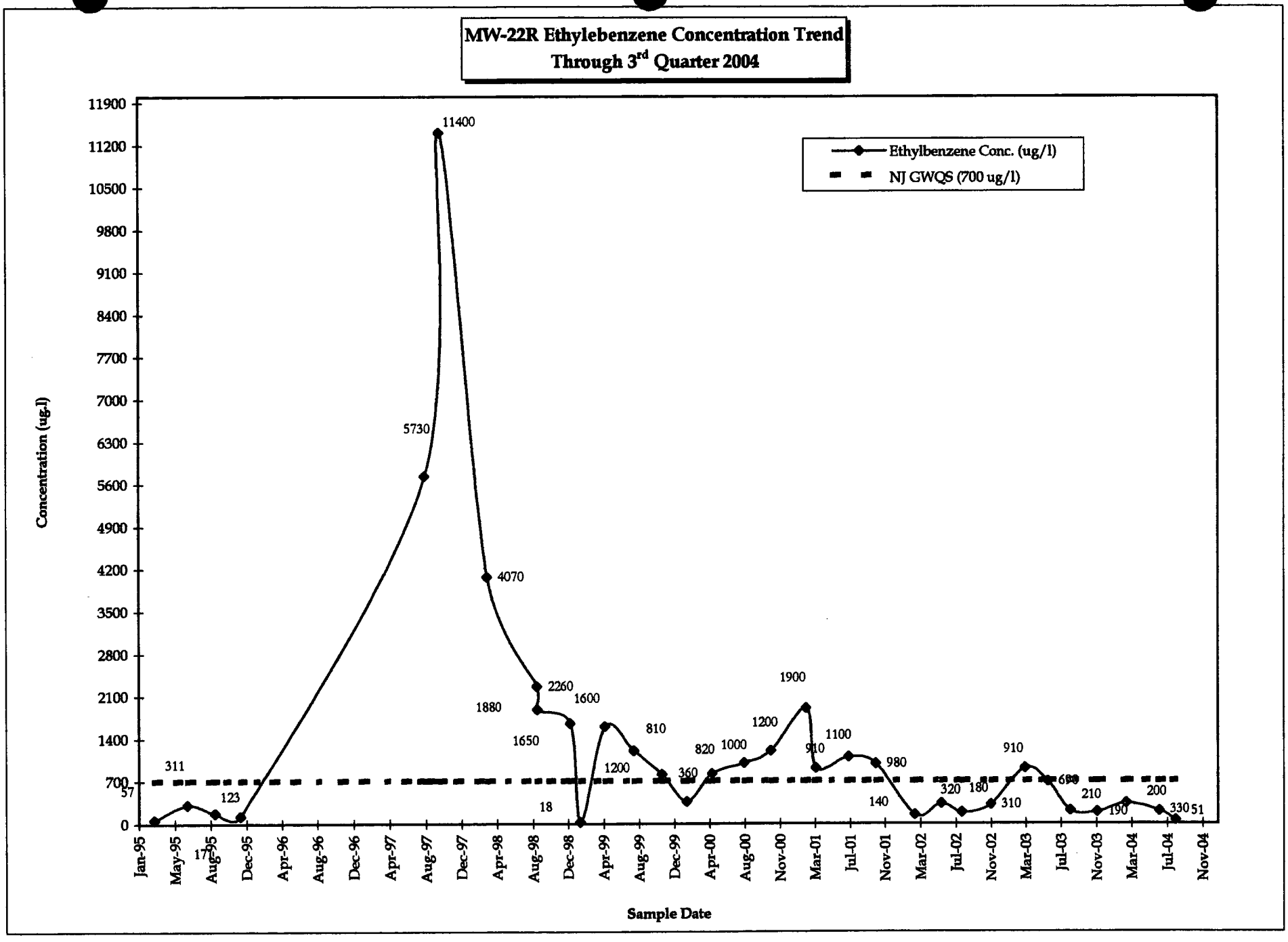
(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 7/16 | 1940 | [illegible] | 7/16 | 1940 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

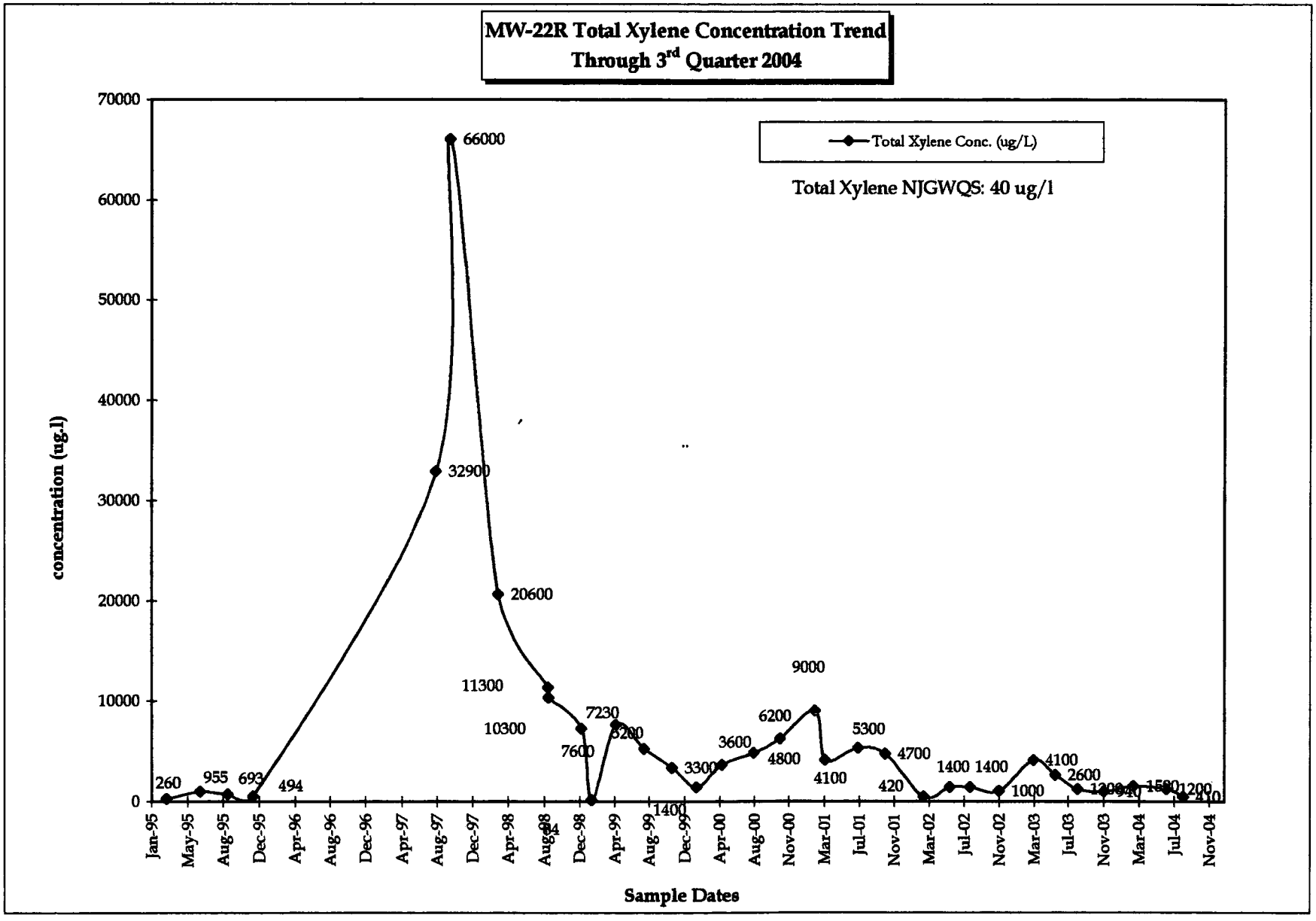
# Appendix D
# Groundwater Concentration Trend Analysis


MW-11DR DEHP Concentration Trend
Through 3rd Quarter 2004
DEHP Conc. (ug/l)
DEHP NJGWQS 30 ug/L
Concentration (ug/L)
Date
100
90
80
70
60
50
40
30
20
10
0
64
20
59
13
4.1
4.2
2
0
3.4
2
0.4
0.6
2.8
63
26
0.2
1
2
1
1
1
0
Dec-98
Apr-99
Aug-99
Dec-99
Apr-00
Aug-00
Dec-00
Apr-01
Aug-01
Dec-01
Apr-02
Aug-02
Nov-02
Mar-03
Jul-03
Nov-03
Mar-04
Jul-04
Nov-04

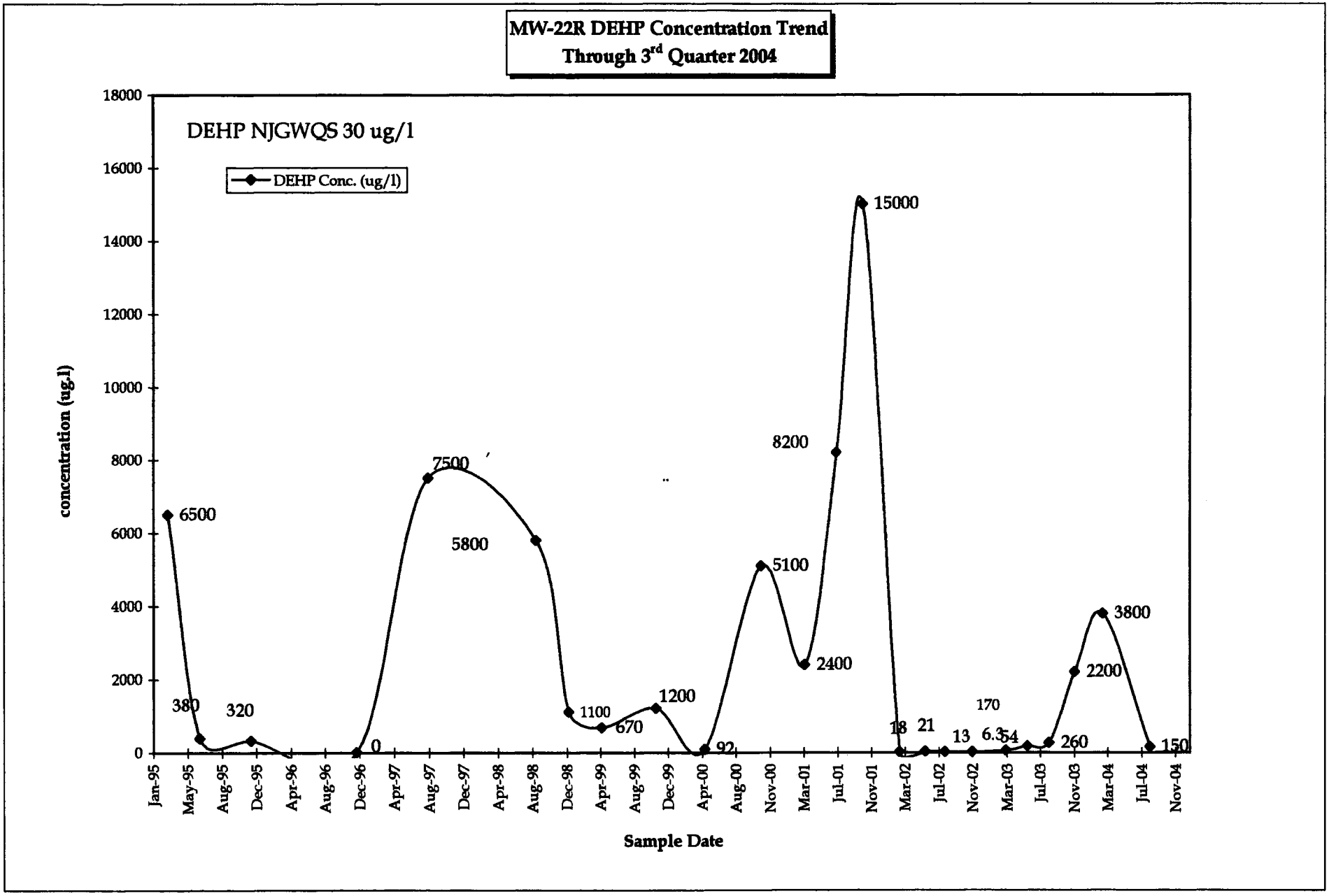

MW-14S DEHP Concentration Trend
Through 3rd Quarter 2004
Concentration (ug/L)
35
32.5
30
27.5
25
22.5
20
17.5
15
12.5
10
7.5
5
2.5
0
DEHP Conc. (ug/l)
DEHP NJGWQS 30 ug/L
1.2
0.7
0.3
0.5
0.1
1
3
2
1
1
1
Feb-02
May-02
Aug-02
Nov-02
Feb-03
May-03
Aug-03
Nov-03
Feb-04
May-04
Aug-04
Date

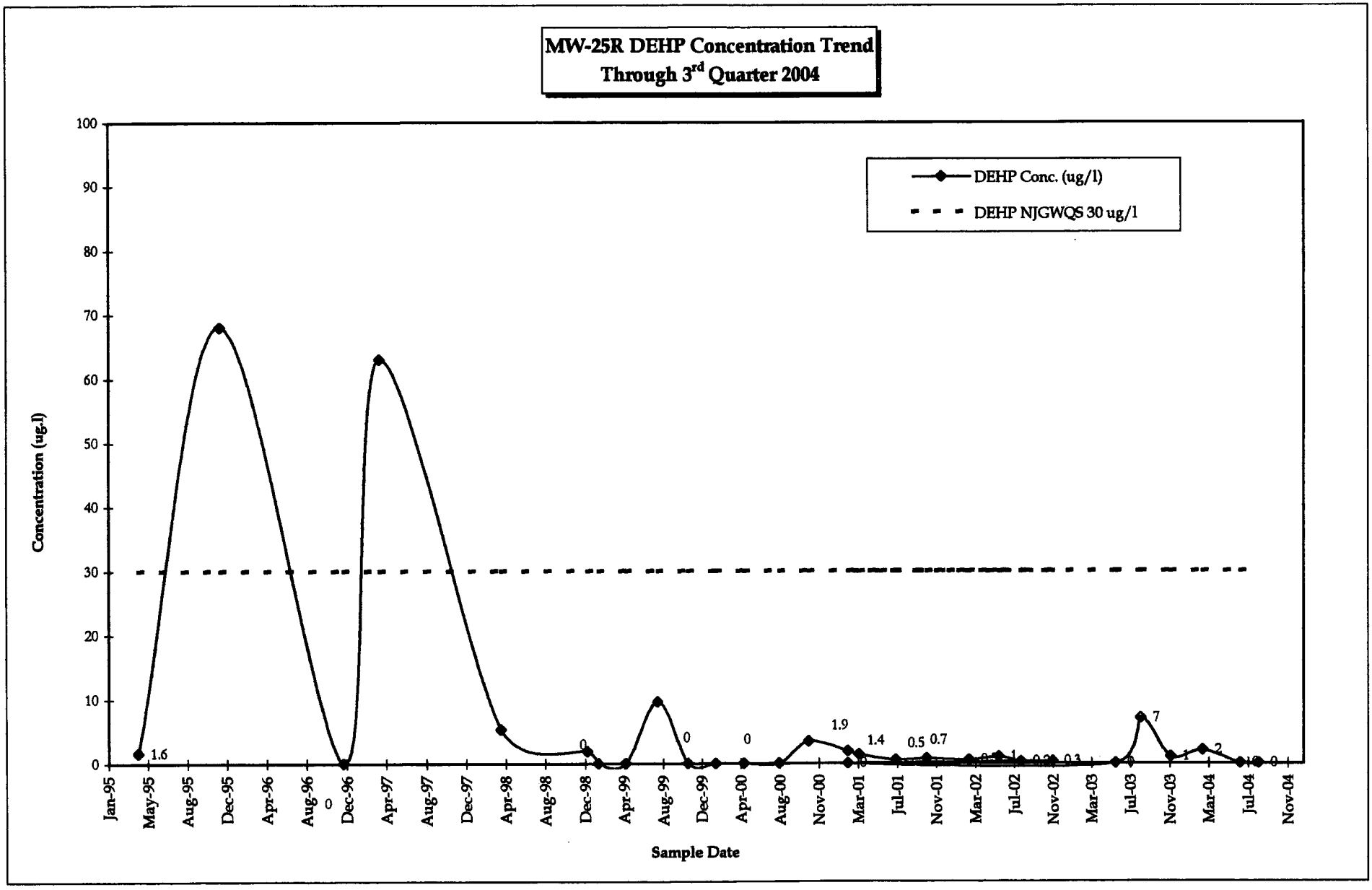


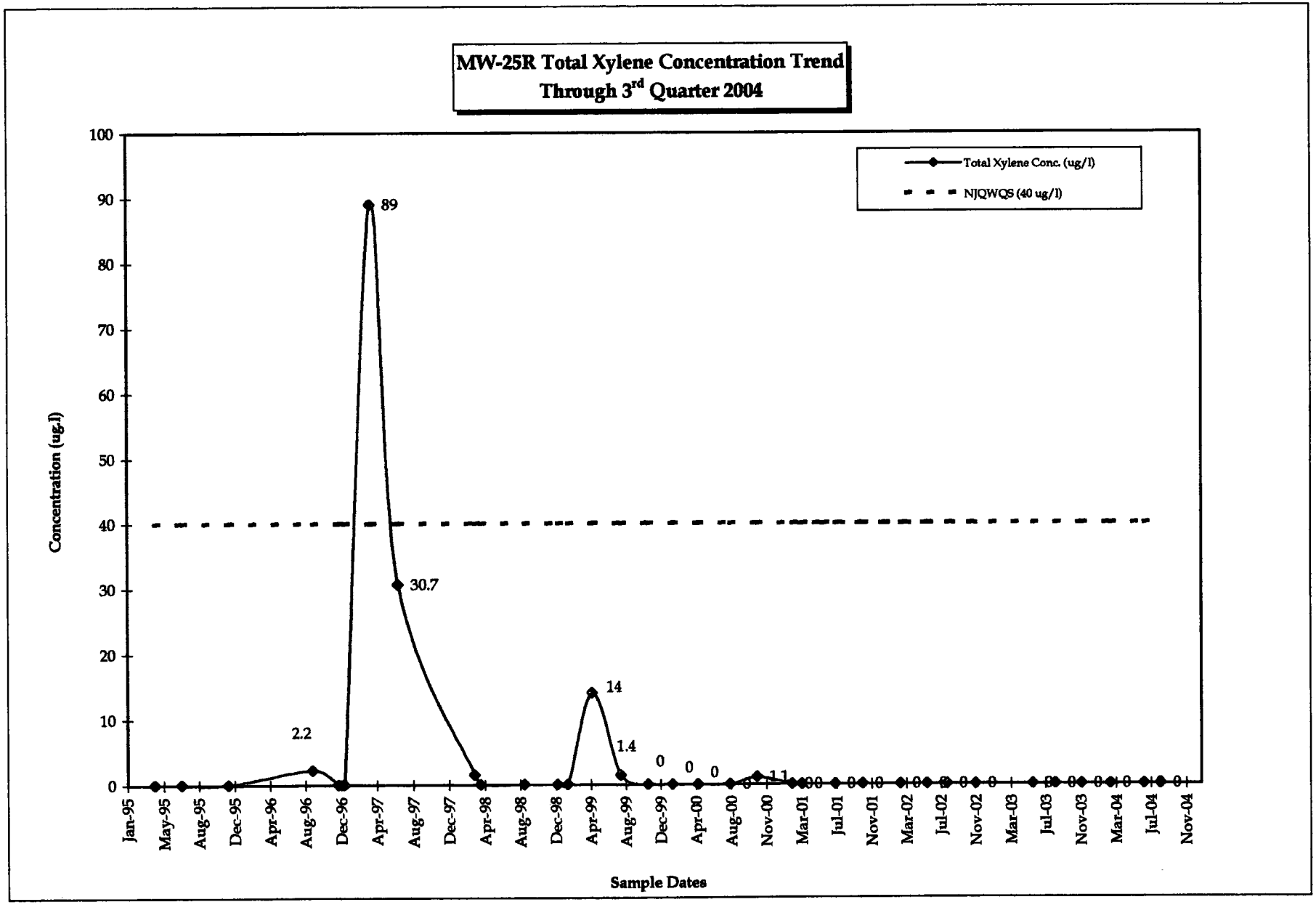

Appendix D-3 Chart 1




Appendix D-3 Chart 2


MW-22R DEHP Concentration Trend
Through 3rd Quarter 2004
DEHP NJGWQS 30 ug/l
DEHP Conc. (ug/l)
concentration (ug/l)
Sample Date
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan-95
May-95
Aug-95
Dec-95
Apr-96
Aug-96
Dec-96
Apr-97
Aug-97
Dec-97
Apr-98
Aug-98
Dec-98
Apr-99
Aug-99
Dec-99
Apr-00
Aug-00
Nov-00
Mar-01
Jul-01
Nov-01
Mar-02
Jul-02
Nov-02
Mar-03
Jul-03
Nov-03
Mar-04
Jul-04
Nov-04
6500
380
320
0
7500
5800
1100
670
1200
92
5100
2400
8200
15000
18
21
13
170
6.3
54
260
2200
3800
150


MW-25R DEHP Concentration Trend
Through 3rd Quarter 2004
DEHP Conc. (ug/l)
DEHP NJGWQS 30 ug/l
Concentration (ug.l)
Sample Date
100
90
80
70
60
50
40
30
20
10
0
Jan-95
May-95
Aug-95
Dec-95
Apr-96
Aug-96
Dec-96
Apr-97
Aug-97
Dec-97
Apr-98
Aug-98
Dec-98
Apr-99
Aug-99
Dec-99
Apr-00
Aug-00
Nov-00
Mar-01
Jul-01
Nov-01
Mar-02
Jul-02
Nov-02
Mar-03
Jul-03
Nov-03
Mar-04
Jul-04
Nov-04
1.6
0
0
0
1.9
1.4
0.5
0.7
0.3
7
1
2
0


MW-25R Total Xylene Concentration Trend
Through 3rd Quarter 2004
Total Xylene Conc. (ug/l)
NJQWQS (40 ug/l)
Concentration (ug/l)
Sample Dates
100
90
80
70
60
50
40
30
20
10
0
89
30.7
14
2.2
1.4
0
0
0
1.1
Jan-95
May-95
Aug-95
Dec-95
Apr-96
Aug-96
Dec-96
Apr-97
Aug-97
Dec-97
Apr-98
Aug-98
Dec-98
Apr-99
Aug-99
Dec-99
Apr-00
Aug-00
Nov-00
Mar-01
Jul-01
Nov-01
Mar-02
Jul-02
Nov-02
Mar-03
Jul-03
Nov-03
Mar-04
Jul-04
Nov-04

# Appendix E
# 3rd Quarter 2004
# Laboratory Analytical Report

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907264. Samples arrived at the laboratory on Tuesday, August 10, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-19-9D Grab Water Sample | 4328114 |
| MW-19-6 Grab Water Sample | 4328115 |
| MW-19 Grab Water Sample | 4328116 |
| MW-19-1 Grab Water Sample | 4328117 |
| MW-19-2 Grab Water Sample | 4328118 |
| Trip Blank Water Sample | 4328119 |
| Atmospheric Blank Grab Water Sample | 4328120 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO RMT, Inc. Attn: Mr. Nicholas J. Clevett
1 COPY TO Data Package Group

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328114**

**MW-19-9D Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 09:23 by JO

Account Number: 09322

~~Submitted: 08/10/2004 19:50~~
Reported: 08/31/2004 at 10:54
Discard: 10/01/2004

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

19-9D SDG#: LEC15-01

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 12:47 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 01:01 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328115**

**MW-19-6 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 10:15 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-6- SDG#: LEC15-02

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 110. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 2140 on 8-10-04 by Keith Hoover. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 178. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 18.8 | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 1,240. | | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 1.1 | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.062 | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 38.3 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 0.69 | | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 140. | | 10. | ug/l | 5 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 18. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 38. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 4.6 | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 4. | J | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328115**

**MW-19-6 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 10:15 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-6- SDG#: LEC15-02

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/12/2004 21:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/12/2004 10:33 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:06 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/17/2004 18:46 | Kyle W Eckenroad | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/11/2004 15:55 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/12/2004 18:09 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 11:46 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 09:53 | Lisa A Johnson | 5 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 14:24 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 01:56 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/11/2004 10:30 | Choon Y Tian | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328116**

**MW-19 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 11:30 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19--- SDG#: LEC15-03

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 630. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 2140 on 8-10-04 by Keith Hoover. | | | | | | |
| | This is an estimated count since one or more of the plates used in calculating the result was outside of the established counting range. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 268. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 30.9 | | 4.3 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 553. | | 19.4 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | 0.036 | J | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.12 | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 1.7 | J | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 31.8 | | 0.80 | mg/l | 100 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 230. | | 10. | ug/l | 5 |
| 07107 | Ethane | 74-84-0 | 9.1 | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | 8.5 | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 11,000. | | 60. | ug/l | 100 |
| 07029 | Benzene | 71-43-2 | N.D. | | 20. | ug/l | 100 |
| 07030 | Toluene | 108-88-3 | 56,000. | | 100. | ug/l | 500 |
| 07031 | Ethylbenzene | 100-41-4 | 2,100. | | 20. | ug/l | 100 |
| | Due to dilution of the sample made necessary by the high level of toluene, normal reporting limits were not attained. | | | | | | |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 2. | J | 1. | ug/l | 1 |

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328116**

**MW-19 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 11:30 by JO

Account Number: 09322

~~Submitted: 08/10/2004 19:50~~
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

19--- SDG#: LEC15-03

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/12/2004 21:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/12/2004 10:33 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:42 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/17/2004 18:47 | Kyle W Eckenroad | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/11/2004 15:56 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/12/2004 19:17 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 100 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 11:56 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 10:05 | Lisa A Johnson | 5 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 16:01 | K. Robert Caulfeild-James | 100 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 10:37 | Stephanie A Selis | 500 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 02:52 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/11/2004 10:30 | Choon Y Tian | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328117**

**MW-19-1 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 12:45 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-1- SDG#: LEC15-04

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 49. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 2140 on 8-10-04 by Keith Hoover. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 184. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 3.2 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 928. | | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 3.9 | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 35.3 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 0.14 | | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | N.D. | | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 0.6 | J | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328117**

**MW-19-1 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 12:45 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-1- SDG#: LEC15-04

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/12/2004 21:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/11/2004 16:17 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:19 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/17/2004 18:49 | Kyle W Eckenroad | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/11/2004 16:01 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/12/2004 19:31 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 12:07 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 13:20 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 03:47 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/11/2004 10:30 | Choon Y Tian | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328118**

**MW-19-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 15:30 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-2- SDG#: LEC15-05

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 87. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 2140 on 8-10-04 by Keith Hoover. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 176. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 6.0 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 916. | | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 0.87 | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 23.9 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 2.0 | | 0.032 | mg/l | 4 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 280. | | 10. | ug/l | 5 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 100. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 150. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 28. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 1. | J | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328118**

**MW-19-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 15:30 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

19-2- SDG#: LEC15-05

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/12/2004 21:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/13/2004 08:00 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/12/2004 10:33 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:35 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/17/2004 18:50 | Kyle W Eckenroad | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/11/2004 16:02 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/12/2004 19:45 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 4 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 12:17 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 10:17 | Lisa A Johnson | 5 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 13:52 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 13:30 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/11/2004 10:30 | Choon Y Tian | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328119**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected: n.a.

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

TB19- SDG#: LEC15-06TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/11/2004 15:56 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328120**

**Atmospheric Blank Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 15:55 by JO

Account Number: 09322

Submitted: 08/10/2004 19:50
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

ATMBL SDG#: LEC15-07BL

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/11/2004 16:29 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 14:26 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:55 AM

Group Number: 907264

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04224021201A | Sample number(s): 4328117 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 103 | | 80-120 | | |
| Batch number: 04224105101B | Sample number(s): 4328115-4328117 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 103 | | 89-110 | | |
| Batch number: 04224105102A | Sample number(s): 4328118 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 102 | | 89-110 | | |
| Batch number: 04224109101A | Sample number(s): 4328115-4328118 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 94 | | 90-110 | | |
| Batch number: 04224834401A | Sample number(s): 4328115-4328118 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 101 | | 95-105 | | |
| Batch number: 04224A36A | Sample number(s): 4328119-4328120 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 100 | 102 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 104 | 105 | 79-123 | 1 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 100 | 102 | 81-119 | 2 | 30 |
| Batch number: 04224A36B | Sample number(s): 4328114-4328118 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 100 | 102 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 104 | 105 | 79-123 | 1 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 100 | 102 | 81-119 | 2 | 30 |
| Batch number: 04224A36C | Sample number(s): 4328116 | | | | | | | |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Batch number: 04224WAG625 | Sample number(s): 4328114-4328118,4328120 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 93 | 94 | 68-111 | 1 | 30 |
| Batch number: 04225021202A | Sample number(s): 4328115-4328116,4328118 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 106 | | 80-120 | | |
| Batch number: 04225401301B | Sample number(s): 4328115-4328118 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907264
Reported: 08/31/04 at 10:55 AM

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Sulfate | N.D. | 0.30 | mg/l | 102 | | 89-110 | | |
| Batch number: 04226020201A | Sample number(s): 4328115-4328118 | | | | | | | |
| Alkalinity to pH 4.5 | | | | 100 | | 98-103 | | |
| Batch number: 04226020601A | Sample number(s): 4328115-4328118 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 81 | | 55-132 | | |
| Batch number: 042290008A | Sample number(s): 4328115-4328118 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 95 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 95 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 95 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 94 | | 80-120 | | |
| Batch number: 04229022101A | Sample number(s): 4328115-4328118 | | | | | | | |
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04230106102B | Sample number(s): 4328115-4328118 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 96 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04224021201A | Sample number(s): 4328117 | | | | | | | | |
| Total Dissolved Solids | 100 | 93 | 60-140 | 3 | 5 | 928. | 936. | 1 | 5 |
| Batch number: 04224105101B | Sample number(s): 4328115-4328117 | | | | | | | | |
| Nitrite Nitrogen | 104 | | 90-110 | | | N.D. | N.D. | 24* (1) | 20 |
| Batch number: 04224105102A | Sample number(s): 4328118 | | | | | | | | |
| Nitrite Nitrogen | 104 | | 90-110 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 04224109101A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Total Phosphorus as P (water) | 103 | | 90-110 | | | 0.12 | 0.12 | 1 (1) | 3 |
| Batch number: 04224834401A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Ferrous Iron | 106 | 104 | 83-111 | 1 | 5 | 31.8 | 32.7 | 3 (1) | 6 |
| Batch number: 04224A36A | Sample number(s): 4328119-4328120 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 113 | | 67-136 | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Ethylbenzene | 111 | | 75-133 | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907264
Reported: 08/31/04 at 10:55 AM

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04224A36B | Sample number(s): 4328114-4328118 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 113 | | 67-136 | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Ethylbenzene | 111 | | 75-133 | | | | | | |
| Batch number: 04224A36C | Sample number(s): 4328116 | | | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Batch number: 04225021202A | Sample number(s): 4328115-4328116,4328118 | | | | | | | | |
| Total Dissolved Solids | 96 | 97 | 60-140 | 0 | 5 | 916. | 924. | 1 | 5 |
| Batch number: 04225401301B | Sample number(s): 4328115-4328118 | | | | | | | | |
| Sulfate | 98 | | 90-110 | | | 38.3 | 37.8 | 1 | 3 |
| Batch number: 04226020201A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 100 | 100 | 64-130 | 0 | 2 | 176. | 180. | 2 | 4 |
| Batch number: 04226020601A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Total Suspended Solids | | | | | | 8.4 J | 9.2 J | 9 (1) | 24 |
| Batch number: 042290008A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Methane | 88 | 85 | 67-120 | 2 | 20 | | | | |
| Ethane | 92 | 93 | 78-114 | 2 | 20 | | | | |
| Ethene | 95 | 98 | 78-119 | 3 | 20 | | | | |
| Propane | 89 | 87 | 62-125 | 2 | 20 | | | | |
| Batch number: 04229022101A | Sample number(s): 4328115-4328118 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 11.1 | 11.1 | 0 | 2 |
| Batch number: 04230106102B | Sample number(s): 4328115-4328118 | | | | | | | | |
| Nitrate Nitrogen | 114* | | 90-110 | | | N.D. | N.D. | 200* (1) | 2 |

## Surrogate Quality Control

Analysis Name: BTEX (EPA 602)
Batch number: 04224A36A

| | Trifluorotoluene-P |
|---|---|
| 4328119 | 102 |
| 4328120 | 104 |
| Blank | 101 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907264
Reported: 08/31/04 at 10:55 AM

## Surrogate Quality Control

| | |
|---|---|
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: BTEX (EPA 602)
Batch number: 04224A36B

| | Trifluorotoluene-P |
|---|---|
| 4328114 | 103 |
| 4328115 | 98 |
| 4328116 | 105 |
| 4328117 | 100 |
| 4328118 | 100 |
| Blank | 104 |
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: Master Scan for EPA 602
Batch number: 04224A36C

| | Trifluorotoluene-P |
|---|---|
| Blank | 94 |
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: Base Neutrals
Batch number: 04224WAG625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4328114 | 93 | 92 | 82 |
| 4328115 | 90 | 96 | 77 |
| 4328116 | 86 | 97 | 85 |
| 4328117 | 87 | 90 | 110 |
| 4328118 | 88 | 91 | 87 |
| 4328120 | 86 | 93 | 92 |
| Blank | 92 | 91 | 107 |
| LCS | 95 | 93 | 100 |
| LCSD | 93 | 92 | 91 |
| Limits: | 50-124 | 64-122 | 33-149 |

Analysis Name: Volatile Headspace Hydrocarbon

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907264
Reported: 08/31/04 at 10:55 AM

## Surrogate Quality Control

Batch number: 042290008A

| | Propene |
|---|---|
| 4328115 | 98 |
| 4328116 | 94 |
| 4328117 | 99 |
| 4328118 | 98 |
| Blank | 99 |
| LCS | 99 |
| MS | 91 |
| MSD | 93 |
| Limits: | 68-113 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 9322 Group# 907264 Sample # 4328114-20

**COC #** 0063393

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overwoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | $NH_3$, SPC | 8015 B | $NO_2$, $NO_3$ | TP, Fe 2+ | BTEX | EPA 625 | $SO_4$, TSS, TDS | Bicarb Alk, Carb Alk | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19-9D | 8/10/04 | 9:23 | X | | | X | | 5 | | | | | X | X | | | | |
| MW-19-6 | 8/10/04 | 10:15 | X | | | X | | 15 | X | X | X | X | X | X | X | X | | temp 2-4°C |
| MW-19 | 8/10/04 | 11:30 | X | | | X | | 16 | X | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | amc 8/10/04 |
| MW-19-1 | 8/10/04 | 12:45 | X | | | X | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | |
| MW-19-2 | 8/10/04 | 15:30 | X | | | X | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | |
| trip blank | | | | | | | | | | | | | X | | | | | |
| atmospheric blank | 8/10/04 | 15:55 | X | | | X | | 5 | | | | | X | X | | | | |

(7) **Turnaround Time Requested (TAT)** (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Overwoorde | 8/10/04 | 16:35 | L. Sinker | 8/10/04 | 16:35 |
| L. Sinker | 8/10/04 | 19:50 | | | |
| | | | | | |
| | | | | | |
| | | | Jessica Bu | 8/10/04 | 1950 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.
2102 Rev. 10/27/02

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907304. Samples arrived at the laboratory on Wednesday, August 11, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| Trip Blank Water Sample | 4328267 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Victoria M Martell

Victoria M. Martell
Chemist

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328267**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected: n.a.

Account Number: 09322

Submitted: 08/11/2004 09:00
Reported: 08/15/2004 at 11:57
Discard: 09/15/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

CARTB SDG#: LEC15-10TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 11:43 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/15/04 at 11:57 AM

Group Number: 907304

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04224A36B | Sample number(s): 4328267 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 100 | 102 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 104 | 105 | 79-123 | 1 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 100 | 102 | 81-119 | 2 | 30 |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04224A36B | Sample number(s): 4328267 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 113 | | 67-136 | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Ethylbenzene | 111 | | 75-133 | | | | | | |

## Surrogate Quality Control

Analysis Name: BTEX (EPA 602)
Batch number: 04224A36B

| | Trifluorotoluene-P |
|---|---|
| 4328267 | 101 |
| Blank | 104 |
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/15/04 at 11:57 AM

Group Number: 907304

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907291. Samples arrived at the laboratory on Wednesday, August 11, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-19-7 Grab Water Sample | 4328227 |
| MW-19-5 Grab Water Sample | 4328228 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO RMT, Inc. Attn: Mr. Nicholas J. Clevett
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick
Michele A. Jarosick
Senior Chemist, Coordinator

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 907291. Samples arrived at the laboratory on Wednesday, August 11, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-19-7 Grab Water Sample | 4328227 |
| MW-19-5 Grab Water Sample | 4328228 |

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Earl R. Custer
Sr. Microbiologist/Coordinator

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328227**

**MW-19-7 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 18:28 by JO

Account Number: 09322

Submitted: 08/11/2004 09:00
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW197 SDG#: LEC15-08

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 2,000. | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. Mold growth was observed on the plates. | | | | | |
| | The sample was plated by Marlaina Kohler on 8-11-04 by 1245. | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 175. | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 4.4 J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 1,920. | 77.6 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 1.5 | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 64.4 | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 4.0 | 0.20 | mg/l | 25 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | |
| 07106 | Methane | 74-82-8 | 2,400. | 100. | ug/l | 50 |
| 07107 | Ethane | 74-84-0 | 2.7 J | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 20. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | 2.0 | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 1.3 | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 1.6 | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328227**

**MW-19-7 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 18:28 by JO

Account Number: 09322

Submitted: 08/11/2004 09:00
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW197 SDG#: LEC15-08

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/13/2004 11:30 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/16/2004 08:02 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/16/2004 08:02 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:39 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 10:23 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 16:59 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 2 | 08/24/2004 12:41 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 25 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 16:24 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 12:41 | Lisa A Johnson | 50 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 15:28 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 18:07 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4328228**

**MW-19-5 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/10/2004 17:05 by JO

Account Number: 09322

Submitted: 08/11/2004 09:00
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW195 SDG#: LEC15-09

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 180. | 1. | cfu/ml | n.a. |
| | The sample was plated by Marlaina Kohler on 8-11-04 by 1245. | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 228. | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 14.0 | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 942. | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 0.060 J | 0.040 | mg/l | 1 |
| | Matrix QC was performed on this sample for the nitrate analysis. Please see the attached QC Summary report for the parameter showing a matrix bias. | | | | | |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 15.7 | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 3.6 | 0.20 | mg/l | 25 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | |
| 07106 | Methane | 74-82-8 | 2,100. | 50. | ug/l | 25 |
| 07107 | Ethane | 74-84-0 | 2.6 J | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 14,000. | 600. | ug/l | 1000 |
| 07029 | Benzene | 71-43-2 | N.D. | 200. | ug/l | 1000 |
| 07030 | Toluene | 108-88-3 | 140,000. | 200. | ug/l | 1000 |
| 07031 | Ethylbenzene | 100-41-4 | 2,800. | 200. | ug/l | 1000 |
| | Due to dilution of the sample made necessary by the high level of toluene, normal reporting limits were not attained. | | | | | |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 1. J | 1. | ug/l | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



Lancaster Laboratories Sample No. WW 4328228

MW-19-5 Grab Water Sample
L.E. Carpenter, NJ

Collected:08/10/2004 17:05 by JO

Account Number: 09322

Submitted: 08/11/2004 09:00
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW195 SDG#: LEC15-09

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/13/2004 11:30 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/16/2004 08:02 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/16/2004 08:02 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/13/2004 13:48 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 20:44 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 10:52 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:00 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/13/2004 14:42 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 19:15 | Daniel S Smith | 25 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 16:34 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 12:53 | Lisa A Johnson | 25 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 16:33 | K. Robert Caulfeild-James | 1000 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/15/2004 19:02 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/12/2004 07:30 | Mark P Mastropietro | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/27/04 at 03:49 PM

Group Number: 907291

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04224105102A | Sample number(s): 4328227 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 102 | | 89-110 | | |
| Batch number: 04224105102B | Sample number(s): 4328228 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 102 | | 89-110 | | |
| Batch number: 04224834401A | Sample number(s): 4328227-4328228 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 101 | | 95-105 | | |
| Batch number: 04224A36B | Sample number(s): 4328227-4328228 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 100 | 102 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 104 | 105 | 79-123 | 1 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 100 | 102 | 81-119 | 2 | 30 |
| Batch number: 04224WAG625 | Sample number(s): 4328227-4328228 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 93 | 94 | 68-111 | 1 | 30 |
| Batch number: 04226020601A | Sample number(s): 4328227-4328228 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 81 | | 55-132 | | |
| Batch number: 04226109101A | Sample number(s): 4328227-4328228 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 103 | | 90-110 | | |
| Batch number: 04226401101A | Sample number(s): 4328227-4328228 | | | | | | | |
| Sulfate | N.D. | 0.30 | mg/l | 90 | | 89-110 | | |
| Batch number: 042290010A | Sample number(s): 4328227-4328228 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 93 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 90 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 93 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 87 | | 80-120 | | |
| Batch number: 04229020201A | Sample number(s): 4328227-4328228 | | | | | | | |
| Alkalinity to pH 4.5 | | | | 100 | | 98-103 | | |
| Batch number: 04229021201A | Sample number(s): 4328227-4328228 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/27/04 at 03:49 PM

Group Number: 907291

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 103 | | 80-120 | | |
| Batch number: 04229022101A | Sample number(s): 4328227-4328228 | | | | | | | |
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04231106101A | Sample number(s): 4328227 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 97 | | 89-110 | | |
| Batch number: 04231106101B | Sample number(s): 4328228 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 97 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04224105102A | Sample number(s): 4328227 | | | | | | | | |
| Nitrite Nitrogen | 104 | | 90-110 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 04224105102B | Sample number(s): 4328228 | | | | | | | | |
| Nitrite Nitrogen | 98 | | 90-110 | | | N.D. | N.D. | 81* (1) | 20 |
| Batch number: 04224834401A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Ferrous Iron | 106 | 104 | 83-111 | 1 | 5 | 31.8 | 32.7 | 3 (1) | 6 |
| Batch number: 04224A36B | Sample number(s): 4328227-4328228 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 113 | | 67-136 | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Ethylbenzene | 111 | | 75-133 | | | | | | |
| Batch number: 04226020601A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Total Suspended Solids | | | | | | 8.4 J | 9.2 J | 9 (1) | 24 |
| Batch number: 04226109101A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Total Phosphorus as P (water) | 107 | | 90-110 | | | 0.29 | 0.29 | 1 | 3 |
| Batch number: 04226401101A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Sulfate | 89* | | 90-110 | | | 5,830. | 5,620. | 4* | 3 |
| Batch number: 042290010A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Methane | 87 | 80 | 67-120 | 4 | 20 | | | | |
| Ethane | 90 | 94 | 78-114 | 3 | 20 | | | | |
| Ethene | 95 | 95 | 78-119 | 0 | 20 | | | | |
| Propane | 90 | 92 | 62-125 | 2 | 20 | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907291
Reported: 08/27/04 at 03:49 PM

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04229020201A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 96 | 96 | 64-130 | 0 | 2 | 118. | 119. | 1 | 4 |
| Batch number: 04229021201A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Total Dissolved Solids | 98 | 100 | 60-140 | 1 | 5 | 890. | 876. | 2 | 5 |
| Batch number: 04229022101A | Sample number(s): 4328227-4328228 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 11.1 | 11.1 | 0 | 2 |
| Batch number: 04231106101A | Sample number(s): 4328227 | | | | | | | | |
| Nitrate Nitrogen | 104 | | 90-110 | | | 0.47 | 0.46 | 3* (1) | 2 |
| Batch number: 04231106101B | Sample number(s): 4328228 | | | | | | | | |
| Nitrate Nitrogen | 111* | | 90-110 | | | 0.062 J | 0.066 J | 7* (1) | 2 |

## Surrogate Quality Control

Analysis Name: BTEX (EPA 602)
Batch number: 04224A36B

| | Trifluorotoluene-P |
|---|---|
| 4328227 | 101 |
| 4328228 | 102 |
| Blank | 104 |
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: Base Neutrals
Batch number: 04224WAG625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4328227 | 88 | 96 | 82 |
| 4328228 | 89 | 94 | 70 |
| Blank | 92 | 91 | 107 |
| LCS | 95 | 93 | 100 |
| LCSD | 93 | 92 | 91 |
| Limits: | 50-124 | 64-122 | 33-149 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/27/04 at 03:49 PM

Group Number: 907291

## Surrogate Quality Control

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 042290010A

| | Propene |
|---|---|
| 4328227 | 86 |
| 4328228 | 93 |
| Blank | 81 |
| LCS | 91 |
| MS | 89 |
| MSD | 91 |
| Limits: | 68-113 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 09322 Group# 907304 907291 Sample # 4328267 4328227-28

**COC #** 0063394

3-5.5°C

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overvoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | $NH_3$, SPC | 8015 B | $NO_2$, $NO_3$ | TP, $Fe^{2+}$ | BTEX | EPA 625 | $SO_4$, TSS, TDS | Bicalb Alk, Carb Alk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19-7 | 8/10/04 | 18:28 | X | | | X | | 16 | X | X | X | X | X | X | X | X | |
| MW-19-5 | 8/10/04 | 17:05 | X | | | X | | 16 | X | X | X | X | X | X | X | X | |

(7) **Turnaround Time Requested (TAT) (please circle):** Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Overvoorde | 8/10/04 | 19:30 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | [signature] | 8/10/04 | 0900 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102 Rev. 10/27/02

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907481. Samples arrived at the laboratory on Wednesday, August 11, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-19-10 Grab Water Sample | 4329004 |
| MW-19-8 Grab Water Sample | 4329005 |
| MW-15S Grab Water Sample | 4329006 |
| MW-15I Grab Water Sample | 4329007 |
| MW-11DR Grab Water Sample | 4329008 |
| Trip Blank Water Sample | 4329009 |
| DUP-01 Grab Water Sample | 4329010 |
| WP-B6 Grab Water Sample | 4329011 |
| WP-B7 Grab Water Sample | 4329012 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907481. Samples arrived at the laboratory on Wednesday, August 11, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-19-8 Grab Water Sample | 4329005 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Earl R. Custer
Sr. Microbiologist/Coordinator

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329004**

**MW-19-10 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 08:35 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M1910 SDG#: LEC15-11

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 18. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by 0825 on 8-12-04 by Earl Custer. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 98.0 | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 10.4 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 908. | | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.22 | mg/l | 2 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| | Matrix QC was performed on this sample for the TP as P analysis. Please see the attached QC Summary report for the parameter showing a matrix bias. | | | | | | |
| 00228 | Sulfate | 14808-79-8 | 19.2 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 1.6 | | 0.080 | mg/l | 10 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 3.3 | J | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 1. | ug/l | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329004**

**MW-19-10 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 08:35 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M1910 SDG#: LEC15-11

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/14/2004 10:30 | Earl R Custer | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/17/2004 14:34 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 21:38 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 12:39 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 2 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:10 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/18/2004 12:52 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 21:50 | Daniel S Smith | 10 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 18:38 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 05:14 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 13:45 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329005**

**MW-19-8 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 10:00 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 09/03/2004 at 08:35
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW189 SDG#: LEC15-12

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 15. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by Earl Custer on 8-12-04 by 0825. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 152. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 7.2 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 573. | | 19.4 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 0.24 | J | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.12 | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 11.5 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 2.7 | | 0.16 | mg/l | 20 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 790. | | 20. | ug/l | 10 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 1. | ug/l | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329005**

**MW-19-8 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 10:00 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 09/03/2004 at 08:35
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW189 SDG#: LEC15-12

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| | State of New Jersey Lab Certification No. PA011 | | | | | |

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/14/2004 10:30 | Earl R Custer | n.a. |
| [illegible]01 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| [illegible]202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/17/2004 14:34 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 21:39 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 12:21 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:13 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/18/2004 13:06 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 21:50 | Daniel S Smith | 20 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 18:49 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/17/2004 13:05 | Lisa A Johnson | 10 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 05:46 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 14:40 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329006**

**MW-15S Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 11:17 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW15S SDG#: LEC15-13

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 06:18 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 15:35 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329007**

**MW-15I Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 12:05 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MW15I SDG#: LEC15-14

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 06:50 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 16:31 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329008**

**MW-11DR Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 14:40 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M11DR SDG#: LEC15-15

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 27. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by 0825 on 8-12-04 by Earl Custer | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 83.0 | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | N.D. | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 110. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 0.18 | J | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 10. | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | N.D. | | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | N.D. | | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 1. | ug/l | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329008**

**MW-11DR Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 14:40 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M11DR SDG#: LEC15-15

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/14/2004 10:30 | Earl R Custer | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/17/2004 14:34 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 21:48 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 12:23 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:14 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/18/2004 17:33 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 21:50 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 19:00 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 07:23 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 17:25 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329009**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected: n.a.

Account Number: 09322

~~Submitted: 08/11/2004 20:15~~
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

MW-TB SDG#: LEC15-16TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/12/2004 12:15 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329010**

**DUP-01 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

DUP01 SDG#: LEC15-17FD

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 22. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by 0825 on 8-12-04 by Earl Custer | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 97.8 | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 10.8 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 890. | | 38.8 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 0.24 | J | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 17.9 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 1.5 | | 0.080 | mg/l | 10 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 2.9 | J | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 0.9 | ug/l | 1 |

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329010**

**DUP-01 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 by JO

Account Number: 09322

~~Submitted: 08/11/2004 20:15~~
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

DUP01 SDG#: LEC15-17FD

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/14/2004 10:30 | Earl R Custer | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/17/2004 14:34 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/11/2004 21:53 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/18/2004 12:24 | Nicole M Kepley | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/16/2004 14:30 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:15 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/18/2004 17:47 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/11/2004 21:50 | Daniel S Smith | 10 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/16/2004 19:11 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 07:55 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 18:20 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329011**

**WP-B6 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 16:00 by JO

Account Number: 09322

Submitted: 08/11/2004 20:15
Reported: 08/31/2004 at 10:55
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

WP-B6 SDG#: LEC15-18

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 6.5 | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 0.6 | J | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 1.0 | ug/l | 1 |

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for ethylbenzene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 64,000. | | 1,900. | ug/l | 2000 |

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

Surrogate recoveries were outside of QC limits for the GC/MS semivolatile compounds due to the dilution needed to perform the analysis.

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 08:27 | Stephanie A Selis | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 03:49 | Brian K Graham | 2000 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329012**

**WP-B7 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 16:10 by JO

Account Number: 09322

~~Submitted: 08/11/2004 20:15~~

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

Reported: 08/31/2004 at 10:56
Discard: 10/01/2004

WP-B7 SDG#: LEC15-19*

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 5.0 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 2.0 | ug/l | 1 |

Due to the presence of interferents near their retention time, normal reporting limits were not attained for ethylbenzene and total xylenes. The presence or concentration of these compounds cannot be determined below the reporting limits due to the presence of these interferents.

| | | | | | | |
|---|---|---|---|---|---|---|
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 63,000. | 1,900. | ug/l | 2000 |

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

Surrogate recoveries were outside of QC limits for the GC/MS semivolatile compounds due to the dilution needed to perform the analysis.

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/13/2004 16:42 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 20:21 | Brian K Graham | 2000 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907481
Reported: 08/31/04 at 10:56 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04224105103A | Sample number(s): 4329004-4329005 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 102 | | 89-110 | | |
| Batch number: 04224105103B | Sample number(s): 4329008,4329010 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 102 | | 89-110 | | |
| Batch number: 04224834402A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 103 | | 95-105 | | |
| Batch number: 04224A36B | Sample number(s): 4329004-4329011 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 100 | 102 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 104 | 105 | 79-123 | 1 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 102 | 104 | 82-119 | 2 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 100 | 102 | 81-119 | 2 | 30 |
| Batch number: 04225WAB625 | Sample number(s): 4329004-4329008,4329010-4329012 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 96 | 99 | 68-111 | 3 | 30 |
| Batch number: 04226109101B | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 103 | | 90-110 | | |
| Batch number: 04226A36A | Sample number(s): 4329012 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 102 | 105 | 82-120 | 3 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 105 | 108 | 79-123 | 3 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 104 | 107 | 82-119 | 3 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 102 | 106 | 81-119 | 3 | 30 |
| Batch number: 042290010A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 93 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 90 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 93 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 87 | | 80-120 | | |
| Batch number: 04229021201A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 103 | | 80-120 | | |
| Batch number: 04229022101A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907481
Reported: 08/31/04 at 10:56 AM

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04230020601A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 91 | | 55-132 | | |
| Batch number: 04231020201A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Alkalinity to pH 4.5 | | | | 100 | | 98-103 | | |
| Batch number: 04231106102A | Sample number(s): 4329004-4329005 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 103 | | 89-110 | | |
| Batch number: 04231106102B | Sample number(s): 4329008,4329010 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 103 | | 89-110 | | |
| Batch number: 04231401301A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | |
| Sulfate | N.D. | 0.30 | mg/l | 101 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04224105103A | Sample number(s): 4329004-4329005 | | | | | | | | |
| Nitrite Nitrogen | 104 | | 90-110 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 04224105103B | Sample number(s): 4329008,4329010 | | | | | | | | |
| Nitrite Nitrogen | 92 | | 90-110 | | | N.D. | N.D. | 36* (1) | 20 |
| Batch number: 04224834402A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Ferrous Iron | 101 | 100 | 83-111 | 1 | 5 | 1.6 | 1.6 | 1 (1) | 6 |
| Batch number: 04224A36B | Sample number(s): 4329004-4329011 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 113 | | 67-136 | | | | | | |
| Toluene | 114 | | 78-129 | | | | | | |
| Ethylbenzene | 111 | | 75-133 | | | | | | |
| Batch number: 04226109101B | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Total Phosphorus as P (water) | 111* | | 90-110 | | | N.D. | N.D. | 53* (1) | 3 |
| Batch number: 04226A36A | Sample number(s): 4329012 | | | | | | | | |
| Total Xylenes | 112 | | 78-130 | | | | | | |
| Benzene | 117 | | 67-136 | | | | | | |
| Toluene | 115 | | 78-129 | | | | | | |
| Ethylbenzene | 113 | | 75-133 | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:56 AM

Group Number: 907481

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 042290010A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Methane | 87 | 80 | 67-120 | 4 | 20 | | | | |
| Ethane | 90 | 94 | 78-114 | 3 | 20 | | | | |
| Ethene | 95 | 95 | 78-119 | 0 | 20 | | | | |
| Propane | 90 | 92 | 62-125 | 2 | 20 | | | | |
| Batch number: 04229021201A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Total Dissolved Solids | 98 | 100 | 60-140 | 1 | 5 | 890. | 876. | 2 | 5 |
| Batch number: 04229022101A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 11.1 | 11.1 | 0 | 2 |
| Batch number: 04230020601A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Total Suspended Solids | | | | | | 252. | 294. | 15 (1) | 24 |
| Batch number: 04231020201A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 71 | 71 | 64-130 | 0 | 2 | 156. | 154. | 1 | 4 |
| Batch number: 04231106102A | Sample number(s): 4329004-4329005 | | | | | | | | |
| Nitrate Nitrogen | 107 | | 90-110 | | | N.D. | N.D. | 0 (1) | 2 |
| Batch number: 04231106102B | Sample number(s): 4329008,4329010 | | | | | | | | |
| Nitrate Nitrogen | 111* | | 90-110 | | | 0.071 J | N.D. | 193* (1) | 2 |
| Batch number: 04231401301A | Sample number(s): 4329004-4329005,4329008,4329010 | | | | | | | | |
| Sulfate | 91 | | 90-110 | | | 18.9 | 18.8 | 1 (1) | 3 |

## Surrogate Quality Control

Analysis Name: BTEX (EPA 602)
Batch number: 04224A36B

| | Trifluorotoluene-P |
|---|---|
| 4329004 | 104 |
| 4329005 | 102 |
| 4329006 | 104 |
| 4329007 | 102 |
| 4329008 | 102 |
| 4329009 | 102 |
| 4329010 | 102 |
| 4329011 | 81 |
| Blank | 104 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907481
Reported: 08/31/04 at 10:56 AM

## Surrogate Quality Control

| | |
|---|---|
| LCS | 101 |
| LCSD | 103 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: Base Neutrals
Batch number: 04225WAB625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4329004 | 71 | 81 | 81 |
| 4329005 | 83 | 89 | 88 |
| 4329006 | 83 | 94 | 87 |
| 4329007 | 86 | 92 | 90 |
| 4329008 | 82 | 92 | 84 |
| 4329010 | 84 | 91 | 69 |
| 4329011 | 39* | 31* | 0* |
| 4329012 | 71 | 61* | 60 |
| Blank | 86 | 82 | 88 |
| LCS | 86 | 91 | 95 |
| LCSD | 93 | 95 | 98 |
| Limits: | 50-124 | 64-122 | 33-149 |

Analysis Name: BTEX (EPA 602)
Batch number: 04226A36A

| | Trifluorotoluene-P |
|---|---|
| 4329012 | 82 |
| Blank | 101 |
| LCS | 102 |
| LCSD | 101 |
| MS | 102 |
| Limits: | 66-136 |

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 042290010A

| | Propene |
|---|---|
| 4329004 | 87 |
| 4329005 | 89 |
| 4329008 | 92 |
| 4329010 | 90 |
| Blank | 81 |
| LCS | 91 |
| MS | 89 |
| MSD | 91 |
| Limits: | 68-113 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:56 AM

Group Number: 907481

## Surrogate Quality Control

---

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request / Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 9322 Group# 907481 Sample # 4329004-12 **COC #** 0063391

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overvoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | $NH_3$, SPC | 8015B | $NO_2$, $NO_3$ | TP, $Fe^{2+}$ | BTEX | EPA625 | $SO_4$, TSS, TDS | bicarb, Alk, Carb Alk | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-19-10 | 8/11/04 | 8:35 | X | | | X | | 15 | X | X | X | X | X | X | X | X | | TP bottle broke white icing down. Run out of $NH_3$ bottle |
| MW-19-8 | ↓ | 10:00 | ↓ | | | ↓ | | 16 | X | X | X | X | ↓ | ↓ | X | X | | |
| MW-15S | ↓ | 11:17 | ↓ | | | ↓ | | 5 | | | | | ↓ | ↓ | | | | temp 2-3°C |
| MW-15I | ↓ | 12:05 | ↓ | | | ↓ | | 5 | | | | | ↓ | ↓ | | | | TJB 8/11/04 |
| MW-11DR | ↓ | 14:40 | ↓ | | | ↓ | | 16 | X | X | X | X | ↓ | ↓ | X | X | | |
| trip blank | | | | | | X | | 1 | | | | | X | | | | | |
| Dup-01 | 8/11/04 | | X | | | X | | 16 | X | X | X | X | X | X | X | X | | |
| WP-B6 | ↓ | 16:00 | X | | | X | | 5 | | | | | X | X | | | | |
| WP-B7 | ↓ | 16:10 | X | | | X | | 5 | | | | | X | X | | | | |

(7) **Turnaround Time Requested (TAT) (please circle):** Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Overvoorde | 8/11/04 | 16:32 | L. Smoker | 8/11/04 | 16:32 |
| L. Smoker | 8/11/04 | 20:15 | | | |
| | | | | | |
| | | | | | |
| | | | Jessica B[illegible] | 8/11/04 | 2015 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster [illegible]atories. The pink copy should be retained by the client.
2102 Rev. [illegible]02

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907718. Samples arrived at the laboratory on Thursday, August 12, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-17S Grab Water Sample | 4330407 |
| MW-14S Grab Water Sample | 4330408 |
| MW-14I Grab Water Sample | 4330409 |
| MW-4 Grab Water Sample | 4330410 |
| Trip Blank Water Sample | 4330411 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907718. Samples arrived at the laboratory on Thursday, August 12, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-14I Grab Water Sample | 4330409 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Earl R. Custer
Sr. Microbiologist/Coordinator

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330407**

**MW-17S Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 08:15 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:56
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M17S- SDG#: LEC16-05

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 52. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 21:30 on 8-12-04 by Keith Hoover. | | | | | | |
| | A spreading mold was observed on one of the plates used to enumerate this sample. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 72.5 | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | N.D. | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 173. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 9.4 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 0.011 | J | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 2.1 | J | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/18/2004 10:11 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330407**

**MW-17S Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 08:15 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:56
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M17S- SDG#: LEC16-05

| | | | | | | |
|---|---|---|---|---|---|---|
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/13/2004 11:18 | Venia B McFadden | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 17:55 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:30 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 14:08 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/13/2004 00:35 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 10:13 | Lisa A Johnson | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:45 | Cheryl L Robinson | 1 |

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330408**

**MW-14S Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 10:40 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M14S- SDG#: LEC16-06

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 510. | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | |
| | The sample was plated at 21:30 on 8-12-04 by Keith Hoover. | | | | | |
| | Mold growth was observed on one of the plates used to enumerate this sample. | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 134. | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 21.2 | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 298. | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.098 | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 9.7 | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 7.5 | 0.16 | mg/l | 20 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | |
| 07106 | Methane | 74-82-8 | 41. | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 1. J | 1. | ug/l | 1 |

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330408**

**MW-14S Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 10:40 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M14S- SDG#: LEC16-06

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/18/2004 10:11 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/13/2004 11:22 | Venia B McFadden | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 17:57 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:36 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 14:21 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/13/2004 00:35 | Daniel S Smith | 20 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 10:25 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 07:45 | Linda C Pape | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/17/2004 02:06 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/14/2004 04:15 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:45 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330409**

**MW-14I Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 11:55 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 09/03/2004 at 08:36
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M14I- SDG#: LEC16-07

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 21. | | 1. | cfu/ml | n.a. |
| | The sample was plated at 21:30 on 8-12-04 by Keith Hoover. | | | | | | |
| | This is an estimated count since one or more of the plates used in calculating the result was outside of the established counting range. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 110. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 6.4 | J | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 189. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 0.20 | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.040 | J | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 14.4 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 0.020 | J | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | N.D. | | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 0.9 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330409**

**MW-14I Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 11:55 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 09/03/2004 at 08:36
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M14I- SDG#: LEC16-07

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:40 | Keith A Hoover | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 10:02 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/18/2004 10:11 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/13/2004 11:23 | Venia B McFadden | 1 |
| [illegible]20 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 17:58 | Venia B McFadden | 1 |
| [illegible]221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:54 | Kyle W Eckenroad | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 14:35 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/13/2004 00:35 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 10:37 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 08:17 | Linda C Pape | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/17/2004 03:01 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/14/2004 04:15 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 12:20 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330410**

**MW-4 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 13:58 by JO

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

M4--- SDG#: LEC16-08

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 2,500. | 97. | ug/l | 100 |

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 08:49 | Linda C Pape | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/18/2004 22:44 | Brian K Graham | 100 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/14/2004 04:15 | Danette S Blystone | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330411**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected: n.a.

Account Number: 09322

Submitted: 08/12/2004 19:10
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

TBLEC SDG#: LEC16-09TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 07:12 | Linda C Pape | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907718

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04226105101A | Sample number(s): 4330407-4330409 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 99 | | 89-110 | | |
| Batch number: 04226109102A | Sample number(s): 4330407-4330408 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 104 | | 90-110 | | |
| Batch number: 04226109103A | Sample number(s): 4330409 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 98 | | 90-110 | | |
| Batch number: 04226834401A | Sample number(s): 4330407-4330409 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 101 | | 95-105 | | |
| Batch number: 04226WAB625 | Sample number(s): 4330408-4330410 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 99 | 100 | 68-111 | 2 | 30 |
| Batch number: 042290012A | Sample number(s): 4330407-4330409 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 90 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 93 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 95 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 97 | | 80-120 | | |
| Batch number: 04229A36A | Sample number(s): 4330408-4330411 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 104 | 101 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 107 | 104 | 79-123 | 3 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 106 | 103 | 82-119 | 3 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 104 | 101 | 81-119 | 3 | 30 |
| Batch number: 04231020202A | Sample number(s): 4330407-4330409 | | | | | | | |
| Alkalinity to pH 4.5 | | | | 98 | | 98-103 | | |
| Batch number: 04231020601A | Sample number(s): 4330407-4330409 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 87 | | 55-132 | | |
| Batch number: 04231021201A | Sample number(s): 4330407-4330409 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 109 | | 80-120 | | |
| Batch number: 04231022101A | Sample number(s): 4330407-4330409 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907718

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04233106102A | Sample number(s): 4330407-4330409 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 92 | | 89-110 | | |
| Batch number: 04238401301B | Sample number(s): 4330407-4330409 | | | | | | | |
| Sulfate | N.D. | 0.30 | mg/l | 102 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04226105101A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Nitrite Nitrogen | 97 | | 90-110 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 04226109102A | Sample number(s): 4330407-4330408 | | | | | | | | |
| Total Phosphorus as P (water) | 102 | | 90-110 | | | N.D. | N.D. | 0 (1) | 3 |
| Batch number: 04226109103A | Sample number(s): 4330409 | | | | | | | | |
| Total Phosphorus as P (water) | 92 | | 90-110 | | | 0.040 J | N.D. | 1 (1) | 3 |
| Batch number: 04226834401A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Ferrous Iron | 98 | 101 | 83-111 | 1 | 5 | 16.0 | 16.2 | 1 (1) | 6 |
| Batch number: 042290012A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Methane | 87 | 85 | 67-120 | 2 | 20 | | | | |
| Ethane | 90 | 89 | 78-114 | 2 | 20 | | | | |
| Ethene | 92 | 90 | 78-119 | 2 | 20 | | | | |
| Propane | 87 | 84 | 62-125 | 4 | 20 | | | | |
| Batch number: 04229A36A | Sample number(s): 4330408-4330411 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 114 | | 78-131 | | | | | | |
| Toluene | 113 | | 78-129 | | | | | | |
| Ethylbenzene | 112 | | 75-133 | | | | | | |
| Batch number: 04231020202A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 100 | 101 | 64-130 | 1 | 2 | 258. | 258. | 0 | 4 |
| Batch number: 04231020601A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Total Suspended Solids | | | | | | 1,470. | 1,400. | 5 | 24 |
| Batch number: 04231021201A | Sample number(s): 4330407-4330409 | | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907718

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 99 | 99 | 60-140 | 0 | 5 | 9,840. | 9,830. | 0 | 5 |
| Batch number: 04231022101A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 1.1 | 1.1 | 4* (1) | 2 |
| Batch number: 04233106102A | Sample number(s): 4330407-4330409 | | | | | | | | |
| Nitrate Nitrogen | 67* | | 90-110 | | | N.D. | N.D. | 195* (1) | 2 |
| Batch number: 04238401301B | Sample number(s): 4330407-4330409 | | | | | | | | |
| Sulfate | 114* | | 90-110 | | | 25.7 | 25.6 | 0 | 3 |

## Surrogate Quality Control

Analysis Name: Base Neutrals
Batch number: 04226WAB625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4330408 | 88 | 90 | 94 |
| 4330409 | 86 | 92 | 97 |
| 4330410 | 79 | 90 | 94 |
| Blank | 82 | 89 | 94 |
| LCS | 84 | 91 | 97 |
| LCSD | 89 | 97 | 98 |
| Limits: | 50-124 | 64-122 | 33-149 |

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 042290012A

| | Propene |
|---|---|
| 4330407 | 100 |
| 4330408 | 97 |
| 4330409 | 100 |
| Blank | 106 |
| LCS | 100 |
| MS | 87 |
| MSD | 88 |
| Limits: | 68-113 |

Analysis Name: BTEX (EPA 602)
Batch number: 04229A36A

| | Trifluorotoluene-P |
|---|---|

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907718

## Surrogate Quality Control

| | |
|---|---|
| 4330408 | 102 |
| 4330409 | 101 |
| 4330410 | 104 |
| 4330411 | 101 |
| Blank | 102 |
| LCS | 102 |
| LCSD | 101 |
| MS | 103 |
| Limits: | 72-128 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 9322 Group# 907718 Sample # 4330407-11

**COC #** 0063397

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overvoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | NH3, SPC | 8015B | NO2, NO3 | TP, Fe2+ | BTEX | EPA 625 | SO4, TSS, TDS | Bicarb Alk, Carb Alk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-17S | 8/12/04 | 8:15 | X | | | X | | 11 | X | X | X | X | | | X | X | |
| MW-14S | 8/12/04 | 10:40 | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | temp 2°C |
| MW-14I | ↓ | 11:55 | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | cmc 8/12/04 |
| MW-4 | ↓ | 13:58 | ↓ | | | ↓ | | 5 | | | | | X | X | | | |
| trip blank | | | | | | ↓ | | | | | | | | | | | |

(7) **Turnaround Time Requested (TAT) (please circle):** Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Overvoorde | 8/12/04 | 15:12 | L. Smoker | 8/12/04 | 15:20 |
| L. Smoker | 8/12/04 | 19:10 | | | |
| | | | | | |
| | | | | | |
| | | | Jessica B[illegible] | 8/12/04 | 1910 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.
2102 Rev. 10/27/02

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907517. Samples arrived at the laboratory on Thursday, August 12, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| SW-1 Grab Water Sample | 4329184 |
| SW-2 Grab Water Sample | 4329185 |
| MW-22R Grab Water Sample | 4329186 |
| Trip Blank Water Sample | 4329187 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO RMT, Inc. Attn: Mr. Nicholas J. Clevett
1 COPY TO Data Package Group

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 907517. Samples arrived at the laboratory on Thursday, August 12, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| SW-7 Grab Water Sample | 4329184 |
| SW-5 Grab Water Sample | 4329185 |

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 907517. Samples arrived at the laboratory on Thursday, August 12, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| MW-22R Grab Water Sample | 4329186 |

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Earl H. Cristal
Sr. Microbiologist/Coordinator

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329185**

**SW-5 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 16:55 by JO

Account Number: 09322

Submitted: 08/12/2004 08:50
Reported: 10/05/2004 at 16:55
Discard: 11/05/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MTSW2 SDG#: LEC16-02

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 1.5 | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 2. | J | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/15/2004 02:56 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 22:00 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories


REPRINT

**Lancaster Laboratories Sample No. WW 4329184**

**SW-7 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 16:45 by JO

Account Number: 09322

Submitted: 08/12/2004 08:50
Reported: 10/05/2004 at 16:55
Discard: 11/05/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MTSW1 SDG#: LEC16-01

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 1.4 | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 4. | J | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/15/2004 02:24 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 21:05 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329186**

**MW-22R Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 17:55 by JO

Account Number: 09322

Submitted: 08/12/2004 08:50
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

22RMT SDG#: LEC16-03

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 35. | | 1. | cfu/ml | n.a. |
| | The sample was plated by Earl Custer on 8-12-04 by 1230. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 210. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 33.2 | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 343. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | 0.016 | J | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 0.30 | J | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 0.12 | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | N.D. | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 16.0 | | 0.40 | mg/l | 50 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 8,900. | | 400. | ug/l | 200 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 410. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | 0.3 | J | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 51. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 99. | | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329186**

**MW-22R Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/11/2004 17:55 by JO

Account Number: 09322

Submitted: 08/12/2004 08:50
Reported: 09/03/2004 at 08:37
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

22RMT SDG#: LEC16-03

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/14/2004 10:40 | Earl R Custer | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/18/2004 06:26 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/17/2004 14:34 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/16/2004 10:46 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/12/2004 20:19 | Kyle W Eckenroad | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 16:25 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/13/2004 17:18 | Kyle W Eckenroad | 1 |
| [illegible]28 | Sulfate | EPA 300.0 | 1 | 08/18/2004 18:01 | Shannon L Phillips | 5 |
| [illegible]344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/13/2004 00:35 | Daniel S Smith | 50 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 10:01 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/19/2004 10:22 | Lisa A Johnson | 200 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/15/2004 03:28 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/24/2004 22:55 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/13/2004 08:30 | Danette S Blystone | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/13/2004 08:55 | Cheryl L Robinson | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4329187**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected: n.a.

Account Number: 09322

Submitted: 08/12/2004 08:50
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

MTTRB SDG#: LEC16-04TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/14/2004 18:23 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907517

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04225105101A | Sample number(s): 4329186 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 106 | | 89-110 | | |
| Batch number: 04225WAB625 | Sample number(s): 4329184-4329186 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 96 | 99 | 68-111 | 3 | 30 |
| Batch number: 04226109101B | Sample number(s): 4329186 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 103 | | 90-110 | | |
| Batch number: 04226834401A | Sample number(s): 4329186 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 101 | | 95-105 | | |
| Batch number: 04227A36A | Sample number(s): 4329184-4329187 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 103 | 106 | 82-120 | 3 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 105 | 109 | 79-123 | 3 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 105 | 108 | 82-119 | 3 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 103 | 106 | 81-119 | 3 | 30 |
| Batch number: 042290012A | Sample number(s): 4329186 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 90 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 93 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 95 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 97 | | 80-120 | | |
| Batch number: 04229021201A | Sample number(s): 4329186 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 103 | | 80-120 | | |
| Batch number: 04230020601A | Sample number(s): 4329186 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 91 | | 55-132 | | |
| Batch number: 04231020201A | Sample number(s): 4329186 | | | | | | | |
| Alkalinity to pH 4.5 | | | | 100 | | 98-103 | | |
| Batch number: 04231022101A | Sample number(s): 4329186 | | | | | | | |
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04231401301B | Sample number(s): 4329186 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907517

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Sulfate | N.D. | 0.30 | mg/l | 101 | | 89-110 | | |
| Batch number: 04233106101B | Sample number(s): 4329186 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 102 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04225105101A | Sample number(s): 4329186 | | | | | | | | |
| Nitrite Nitrogen | 112* | | 90-110 | | | N.D. | N.D. | 4 (1) | 20 |
| Batch number: 04226109101B | Sample number(s): 4329186 | | | | | | | | |
| Total Phosphorus as P (water) | 111* | | 90-110 | | | N.D. | N.D. | 53* (1) | 3 |
| Batch number: 04226834401A | Sample number(s): 4329186 | | | | | | | | |
| Ferrous Iron | 98 | 101 | 83-111 | 1 | 5 | 16.0 | 16.2 | 1 (1) | 6 |
| Batch number: 04227A36A | Sample number(s): 4329184-4329187 | | | | | | | | |
| Total Xylenes | 108 | | 78-130 | | | | | | |
| Benzene | 114 | | 78-131 | | | | | | |
| Toluene | 113 | | 78-129 | | | | | | |
| Ethylbenzene | 110 | | 75-133 | | | | | | |
| Batch number: 042290012A | Sample number(s): 4329186 | | | | | | | | |
| Methane | 87 | 85 | 67-120 | 2 | 20 | | | | |
| Ethane | 90 | 89 | 78-114 | 2 | 20 | | | | |
| Ethene | 92 | 90 | 78-119 | 2 | 20 | | | | |
| Propane | 87 | 84 | 62-125 | 4 | 20 | | | | |
| Batch number: 04229021201A | Sample number(s): 4329186 | | | | | | | | |
| Total Dissolved Solids | 98 | 100 | 60-140 | 1 | 5 | 890. | 876. | 2 | 5 |
| Batch number: 04230020601A | Sample number(s): 4329186 | | | | | | | | |
| Total Suspended Solids | | | | | | 252. | 294. | 15 (1) | 24 |
| Batch number: 04231020201A | Sample number(s): 4329186 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 71 | 71 | 64-130 | 0 | 2 | 156. | 154. | 1 | 4 |
| Batch number: 04231022101A | Sample number(s): 4329186 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 1.1 | 1.1 | 4* (1) | 2 |
| Batch number: 04231401301B | Sample number(s): 4329186 | | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907517

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 105 | | 90-110 | | | N.D. | N.D. | 19* (1) | 3 |
| Batch number: 04233106101B | Sample number(s): 4329186 | | | | | | | | |
| Nitrate Nitrogen | 82* | | 90-110 | | | 2.9 | 3.0 | 1 | 2 |

## Surrogate Quality Control

Analysis Name: Base Neutrals
Batch number: 04225WAB625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4329184 | 88 | 93 | 98 |
| 4329185 | 77 | 83 | 84 |
| 4329186 | 83 | 86 | 106 |
| Blank | 86 | 82 | 88 |
| LCS | 86 | 91 | 95 |
| LCSD | 93 | 95 | 98 |
| Limits: | 50-124 | 64-122 | 33-149 |

Analysis Name: BTEX (EPA 602)
Batch number: 04227A36A

| | Trifluorotoluene-P |
|---|---|
| 4329184 | 103 |
| 4329185 | 103 |
| 4329186 | 91 |
| 4329187 | 102 |
| Blank | 101 |
| LCS | 103 |
| LCSD | 103 |
| MS | 103 |
| Limits: | 72-128 |

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 042290012A

| | Propene |
|---|---|
| 4329186 | 94 |
| Blank | 106 |
| LCS | 100 |
| MS | 87 |
| MSD | 88 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:57 AM

Group Number: 907517

## Surrogate Quality Control

Limits: 68-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request / Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 9322 Group# 987517 Sample # 432918487 **COC #** 0063396

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Overvoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | $NH_3$, SPC | 8015 B | $NO_2$, $NO_3$ | TP, $Fe^{2+}$ | BTEX | EPA 625 | $SO_4$, TSS, TDS | Bicarb Alk, Carb Alk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SW-1 | 8/11/04 | 16:45 | X | | | X | | 5 | | | | | X | X | | | |
| SW-2 | ↓ | 16:55 | ↓ | | | ↓ | | 5 | | | | | X | X | | | |
| MW-22R | ↓ | 17:55 | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | |
| trip blank | | | | | | | | | | | | | X | | | | |

(7) **Turnaround Time Requested (TAT)** (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Overvoorde | 8/11/04 | 18:45 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | [signature] | 8/12/04 | 0850 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102 Rev. [illegible]/02

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 907783. Samples arrived at the laboratory on Friday, August 13, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| RB-1 Grab Water Sample | 4330766 |
| RB-2 Grab Water Sample | 4330767 |
| MW-25(R) Grab Water Sample | 4330768 |
| MW-21 Grab Water Sample | 4330769 |
| MW-2 Grab Water Sample | 4330770 |
| Trip Blank Water Sample | 4330771 |
| DUP-2 Grab Water Sample | 4330772 |

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

Michele A. Jarosick

Michele A. Jarosick
Senior Chemist, Coordinator

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Sample Reprint

ANALYTICAL RESULTS

Prepared for:

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

608-831-4444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 907783. Samples arrived at the laboratory on Friday, August 13, 2004. The PO# for this group is 6527.02.

| Client Description | Lancaster Labs Number |
|---|---|
| DUP-2 Grab Water Sample | 4330772 |

## METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

| | | |
|---|---|---|
| 1 COPY TO | RMT, Inc. | Attn: Mr. Nicholas J. Clevett |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300.

Respectfully Submitted,

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330766**

**RB-1 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 18:50 by JO

Account Number: 09322

~~Submitted: 08/13/2004 09:20~~
Reported: 08/31/2004 at 10:57
Discard: 10/01/2004

~~RMT, Inc.~~
PO Box 8923
Madison WI 53708-8923

LERB1 SDG#: LEC16-10

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 14. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 16:13 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 01:59 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/16/2004 18:00 | Elia R Botrous | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330767**

**RB-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 19:05 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LERB2 SDG#: LEC16-11

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 16:45 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330768**

**MW-25(R) Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 15:33 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LER25 SDG#: LEC16-12

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | > 5700. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by 1315 on 8-13-04 by Marlaina Kohler. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 200. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 22.4 | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 323. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 0.15 | J | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 5.8 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 6.0 | | 0.16 | mg/l | 20 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 44. | | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330768**

**MW-25(R) Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 15:33 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LER25 SDG#: LEC16-12

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:45 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/19/2004 14:25 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/14/2004 09:37 | Shannon L Phillips | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 18:18 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/17/2004 20:26 | Venia B McFadden | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 16:13 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/15/2004 08:20 | Daniel S Smith | 20 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/25/2004 14:19 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 10:44 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 02:54 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/16/2004 18:00 | Elia R Botrous | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/16/2004 15:10 | Nancy J Shoop | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330769**

**MW-21 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 16:55 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LER21 SDG#: LEC16-13

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | 580. | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | |
| | The sample was plated by 1315 on 8-13-04 by Marlaina Kohler. | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 153. | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | N.D. | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 443. | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | 0.40 | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 16.1 | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | N.D. | 0.0080 | mg/l | 1 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | |
| 07106 | Methane | 74-82-8 | N.D. | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330769**

**MW-21 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 16:55 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LER21 SDG#: LEC16-13

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:45 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/19/2004 14:25 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/14/2004 09:38 | Shannon L Phillips | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 18:19 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/17/2004 20:27 | Venia B McFadden | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 16:27 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/15/2004 08:20 | Daniel S Smith | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 13:37 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 11:16 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 21:16 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/16/2004 18:00 | Elia R Botrous | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/16/2004 15:10 | Nancy J Shoop | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330770**

**MW-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 18:14 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LERM2 SDG#: LEC16-14

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | > 5700. | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. Spreader-type colony growth was present on the plates used to enumerate this sample. | | | | | |
| | The sample was plated by 1315 on 8-13-04 by Marlaina Kohler. | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 202. | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 813. | 10. | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 320. | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | 0.038 J | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | 1.1 | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | 1.0 | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | N.D. | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 7.1 | 0.16 | mg/l | 20 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | |
| 07106 | Methane | 74-82-8 | 7,800. | 400. | ug/l | 200 |
| 07107 | Ethane | 74-84-0 | N.D. | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | 26. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 7.2 | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 15,000. | 1,000. | ug/l | 1000 |

Lancaster Laboratories



Lancaster Laboratories Sample No. WW 4330770

MW-2 Grab Water Sample
L.E. Carpenter, NJ

Collected:08/12/2004 18:14 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LERM2 SDG#: LEC16-14

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:45 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/19/2004 14:25 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/14/2004 09:39 | Shannon L Phillips | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 18:20 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/17/2004 20:28 | Venia B McFadden | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 16:41 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/15/2004 08:20 | Daniel S Smith | 20 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 14:23 | Lisa A Johnson | 1 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/19/2004 12:46 | Lisa A Johnson | 200 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 11:49 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/27/2004 10:29 | Brian K Graham | 1000 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/16/2004 18:00 | Elia R Botrous | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/16/2004 15:10 | Nancy J Shoop | 1 |

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330771**

**Trip Blank Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 08/31/2004 at 10:58
Discard: 10/01/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LERTB SDG#: LEC16-15TB

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | 0.2 | ug/l | 1 |

State of New Jersey Lab Certification No. PA011

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 15:08 | K. Robert Caulfeild-James | 1 |

MEMBER ACIL

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4330772**

**DUP-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 09/03/2004 at 08:35
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LEDUP SDG#: LEC16-16*

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | n.a. | > 5700. | | 1. | cfu/ml | n.a. |
| | This result is an estimated count. All plates used to calculate the result are outside the established counting range of 30 to 300 colony forming units (cfu) per dilution. | | | | | | |
| | The sample was plated by Marlaina Kohler on 8-13-04 by 1315. | | | | | | |
| 00201 | Alkalinity to pH 8.3 | n.a. | N.D. | | 0.41 | mg/l as CaCO3 | 1 |
| 00202 | Alkalinity to pH 4.5 | n.a. | 203. | | 0.41 | mg/l as CaCO3 | 1 |
| 00206 | Total Suspended Solids | n.a. | 22.4 | | 3.0 | mg/l | 1 |
| 00212 | Total Dissolved Solids | n.a. | 329. | | 9.7 | mg/l | 1 |
| 00219 | Nitrite Nitrogen | 14797-65-0 | N.D. | | 0.015 | mg/l | 1 |
| 00220 | Nitrate Nitrogen | 14797-55-8 | N.D. | | 0.040 | mg/l | 1 |
| 00221 | Ammonia Nitrogen | 7664-41-7 | N.D. | | 0.11 | mg/l | 1 |
| 00227 | Total Phosphorus as P (water) | 7723-14-0 | N.D. | | 0.040 | mg/l | 1 |
| 00228 | Sulfate | 14808-79-8 | 5.9 | | 1.5 | mg/l | 5 |
| 08344 | Ferrous Iron | n.a. | 4.9 | | 0.16 | mg/l | 20 |
| 07105 | Volatile Headspace Hydrocarbon | | | | | | |
| 07106 | Methane | 74-82-8 | 46. | | 2.0 | ug/l | 1 |
| 07107 | Ethane | 74-84-0 | N.D. | | 1.0 | ug/l | 1 |
| 07108 | Ethene | 74-85-1 | N.D. | | 1.0 | ug/l | 1 |
| 07109 | Propane | 74-98-6 | N.D. | | 1.0 | ug/l | 1 |
| 08238 | BTEX (EPA 602) | | | | | | |
| 05538 | Total Xylenes | 1330-20-7 | N.D. | | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | N.D. | | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | N.D. | | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | N.D. | | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 6. | J | 1. | ug/l | 1 |

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Lancaster Laboratories Sample No.: WW 4330772**

**DUP-2 Grab Water Sample**
**L.E. Carpenter, NJ**

Collected:08/12/2004 by JO

Account Number: 09322

Submitted: 08/13/2004 09:20
Reported: 09/03/2004 at 08:35
Discard: 10/04/2004

RMT, Inc.
PO Box 8923
Madison WI 53708-8923

LEDUP SDG#: LEC16-16*

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| | State of New Jersey Lab Certification No. PA011 | | | | | |

## Laboratory Chronicle

| CAT No. | Analysis Name | Method | Trial# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|
| 00307 | Heterotrophic Plate Count | Std Meth 9215B 19th ed 1995 | 1 | 08/16/2004 07:45 | Marlaina E Kohler | n.a. |
| 00201 | Alkalinity to pH 8.3 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00202 | Alkalinity to pH 4.5 | EPA 310.1 | 1 | 08/19/2004 06:47 | Susan A Engle | 1 |
| 00206 | Total Suspended Solids | EPA 160.2 | 1 | 08/19/2004 14:25 | Anne L Kuenzli | 1 |
| 00212 | Total Dissolved Solids | EPA 160.1 | 1 | 08/18/2004 10:09 | Anne L Kuenzli | 1 |
| 00219 | Nitrite Nitrogen | EPA 353.2 | 1 | 08/14/2004 09:40 | Shannon L Phillips | 1 |
| 00220 | Nitrate Nitrogen | EPA 353.2 | 1 | 08/20/2004 18:22 | Venia B McFadden | 1 |
| 00221 | Ammonia Nitrogen | EPA 350.2 | 1 | 08/18/2004 14:45 | Luz M Groff | 1 |
| 00227 | Total Phosphorus as P (water) | EPA 365.1 | 1 | 08/17/2004 20:29 | Venia B McFadden | 1 |
| 00228 | Sulfate | EPA 300.0 | 1 | 08/25/2004 16:55 | Shannon L Phillips | 5 |
| 08344 | Ferrous Iron | SM 18, 3500-Fe D (modified) | 1 | 08/15/2004 08:20 | Daniel S Smith | 20 |
| 07105 | Volatile Headspace Hydrocarbon | SW-846 8015B, modified | 1 | 08/18/2004 14:35 | Lisa A Johnson | 1 |
| 08238 | BTEX (EPA 602) | EPA 602 | 1 | 08/16/2004 12:21 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2004 23:06 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/16/2004 18:00 | Elia R Botrous | 1 |
| 08263 | Total Phos as P Prep (water) | EPA 365.1 | 1 | 08/16/2004 15:10 | Nancy J Shoop | 1 |

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:58 AM

Group Number: 907783

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 04227105101A | Sample number(s): 4330768-4330769 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 100 | | 89-110 | | |
| Batch number: 04227105101B | Sample number(s): 4330770,4330772 | | | | | | | |
| Nitrite Nitrogen | N.D. | 0.015 | mg/l | 100 | | 89-110 | | |
| Batch number: 04228834402A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Ferrous Iron | N.D. | 0.0080 | mg/l | 100 | | 95-105 | | |
| Batch number: 042290015A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Methane | N.D. | 2.0 | ug/l | 92 | | 80-120 | | |
| Ethane | N.D. | 1.0 | ug/l | 95 | | 80-120 | | |
| Ethene | N.D. | 1.0 | ug/l | 97 | | 80-120 | | |
| Propane | N.D. | 1.0 | ug/l | 98 | | 80-120 | | |
| Batch number: 04229109102A | Sample number(s): 4330768-4330770 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 96 | | 90-110 | | |
| Batch number: 04229109102B | Sample number(s): 4330772 | | | | | | | |
| Total Phosphorus as P (water) | N.D. | 0.040 | mg/l | 96 | | 90-110 | | |
| Batch number: 04229A36A | Sample number(s): 4330766-4330772 | | | | | | | |
| Total Xylenes | N.D. | 0.6 | ug/l | 104 | 101 | 82-120 | 2 | 30 |
| Benzene | N.D. | 0.2 | ug/l | 107 | 104 | 79-123 | 3 | 30 |
| Toluene | N.D. | 0.2 | ug/l | 106 | 103 | 82-119 | 3 | 30 |
| Ethylbenzene | N.D. | 0.2 | ug/l | 104 | 101 | 81-119 | 3 | 30 |
| Batch number: 04229WAB625 | Sample number(s): 4330766,4330768-4330770,4330772 | | | | | | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 1. | ug/l | 92 | 93 | 68-111 | 2 | 30 |
| Batch number: 04231021201A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Total Dissolved Solids | N.D. | 9.7 | mg/l | 109 | | 80-120 | | |
| Batch number: 04231022101A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Ammonia Nitrogen | N.D. | 0.11 | mg/l | 97 | 97 | 91-100 | 0 | 1 |
| Batch number: 04232020201A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907783
Reported: 08/31/04 at 10:58 AM

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Alkalinity to pH 4.5 | | | | 100 | | 98-103 | | |
| Batch number: 04232020601A | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Total Suspended Solids | N.D. | 3.0 | mg/l | 82 | | 55-132 | | |
| Batch number: 04233106102B | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Nitrate Nitrogen | N.D. | 0.040 | mg/l | 92 | | 89-110 | | |
| Batch number: 04238401301B | Sample number(s): 4330768-4330770,4330772 | | | | | | | |
| Sulfate | N.D. | 0.30 | mg/l | 102 | | 89-110 | | |

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04227105101A | Sample number(s): 4330768-4330769 | | | | | | | | |
| Nitrite Nitrogen | 102 | | 90-110 | | | 0.023 J | 0.023 J | 0 (1) | 20 |
| Batch number: 04227105101B | Sample number(s): 4330770,4330772 | | | | | | | | |
| Nitrite Nitrogen | 103 | | 90-110 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 04228834402A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Ferrous Iron | 96 | 96 | 83-111 | 0 | 5 | N.D. | N.D. | 200* (1) | 6 |
| Batch number: 042290015A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Methane | 88 | 92 | 67-120 | 4 | 20 | | | | |
| Ethane | 90 | 95 | 78-114 | 5 | 20 | | | | |
| Ethene | 92 | 95 | 78-119 | 4 | 20 | | | | |
| Propane | 89 | 97 | 62-125 | 9 | 20 | | | | |
| Batch number: 04229109102A | Sample number(s): 4330768-4330770 | | | | | | | | |
| Total Phosphorus as P (water) | 105 | | 90-110 | | | N.D. | N.D. | 0 (1) | 3 |
| Batch number: 04229109102B | Sample number(s): 4330772 | | | | | | | | |
| Total Phosphorus as P (water) | 104 | | 90-110 | | | N.D. | N.D. | 100* (1) | 3 |
| Batch number: 04229A36A | Sample number(s): 4330766-4330772 | | | | | | | | |
| Total Xylenes | 110 | | 78-130 | | | | | | |
| Benzene | 114 | | 78-131 | | | | | | |
| Toluene | 113 | | 78-129 | | | | | | |
| Ethylbenzene | 112 | | 75-133 | | | | | | |
| Batch number: 04231021201A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Total Dissolved Solids | 99 | 99 | 60-140 | 0 | 5 | 9,840. | 9,830. | 0 | 5 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc. Group Number: 907783
Reported: 08/31/04 at 10:58 AM

## Sample Matrix Quality Control

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 04231022101A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Ammonia Nitrogen | | | | | | 1.1 | 1.1 | 4* (1) | 2 |
| Batch number: 04232020201A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Alkalinity to pH 8.3 | | | | | | N.D. | N.D. | 0 (1) | 4 |
| Alkalinity to pH 4.5 | 104 | 101 | 64-130 | 1 | 2 | 196. | 199. | 2 | 4 |
| Batch number: 04232020601A | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Total Suspended Solids | | | | | | 444. | 456. | 3 (1) | 24 |
| Batch number: 04233106102B | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Nitrate Nitrogen | 86* | | 90-110 | | | 0.37 | 0.36 | 2 (1) | 2 |
| Batch number: 04238401301B | Sample number(s): 4330768-4330770,4330772 | | | | | | | | |
| Sulfate | 114* | | 90-110 | | | 25.7 | 25.6 | 0 | 3 |

## Surrogate Quality Control

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 042290015A

| | Propene |
|---|---|
| 4330768 | 93 |
| 4330769 | 92 |
| 4330770 | 86 |
| 4330772 | 88 |
| Blank | 101 |
| LCS | 94 |
| MS | 83 |
| MSD | 88 |
| Limits: | 68-113 |

Analysis Name: BTEX (EPA 602)
Batch number: 04229A36A

| | Trifluorotoluene-P |
|---|---|
| 4330766 | 102 |
| 4330767 | 103 |
| 4330768 | 101 |
| 4330769 | 102 |
| 4330770 | 96 |
| 4330771 | 103 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



# Quality Control Summary

Client Name: RMT, Inc.
Reported: 08/31/04 at 10:58 AM

Group Number: 907783

## Surrogate Quality Control

| | |
|---|---|
| 4330772 | 101 |
| Blank | 102 |
| LCS | 102 |
| LCSD | 101 |
| MS | 103 |
| Limits: | 72-128 |

Analysis Name: Base Neutrals
Batch number: 04229WAB625

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|
| 4330766 | 80 | 85 | 105 |
| 4330768 | 89 | 90 | 106 |
| 4330769 | 90 | 95 | 78 |
| 4330770 | 38* | 77 | 37 |
| 4330772 | 90 | 89 | 74 |
| Blank | 89 | 91 | 120 |
| LCS | 93 | 86 | 96 |
| LCSD | 91 | 88 | 84 |
| Limits: | 50-124 | 64-122 | 33-149 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Request / Environmental Services Chain of Custody

**Lancaster Laboratories**
*Where quality is a science.*

For Lancaster Laboratories use only
Acct. # 09322 Group# 907783 Sample # 43307766-772 **COC #** 0063398

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: RMT, Inc. Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Jennifer Ovenoorde P.O.#:
Sampler: JO/EV Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(2) (3) (4) (5) (6)

| Sample Identification | Date Collected | Time Collected | Grab | Composite | Soil | Water | Other | Total # of Containers | $NH_3$, SpC | 8015B | $NO_2$, $NO_3$ | TP, $Fe^{2+}$ | BTEX | EPA 625 | $SO_4$, TSS, TDS | Bicarb Alk, Carb Alk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RB-1 | 8/12/04 | 18 50 | X | | | X | | 3 | | | | | X | X | | | |
| RB-2 | ↓ | 19 05 | ↓ | | | ↓ | | 2 | | | | | X | | | | |
| MW-25(R) | ↓ | 15 33 | ↓ | | | ↓ | | 16 | X | X | X | X | X | X | X | X | X |
| MW-21 | ↓ | 16 55 | ↓ | | | ↓ | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| MW-2 | ↓ | 18 14 | ↓ | | | ↓ | | 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| trip blank | | | | | | | | | | | | | X | | | | |
| Dup-2 | 8/12/04 | | X | | | X | | 16 | X | X | X | X | X | X | X | X | X |

(7) **Turnaround Time Requested (TAT) (please circle):** Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| J Ovenoorde | 8/12/04 | 1930 | Fed Ex | 8/12/04 | 1930 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | Rebecca Shetted | 8/13/04 | 0920 |

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102 Rev. [illegible]/02