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# Quarterly Monitoring Report 3rd Quarter 2003

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

*USEPA ID No. NJD002168748*

**October 2003**

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# 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 2003, including routine quarterly groundwater monitoring, surface water monitoring, and monthly free product recovery activities. In addition, this report includes summaries of additional site activities performed during the third quarter of 2003, and activities scheduled for commencement during fourth quarter of 2003. 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 third quarter of 2003:

- Monthly mobile free product recovery using enhanced fluid recovery (EFR) techniques in accordance with the NJDEP approval letter dated August 20, 1997 (Ref. Section 2).
- Quarterly groundwater monitoring as required under the ACO (Ref. Sections 3 and 4).
- Surface water sampling at the drainage ditch feature that separates the LEC site from the Air Products property as requested in the NJDEP letter dated May 31, 2002 (Ref. Section 5).
- Various follow-up activities associated with both the lead and free product investigations, and the proposed conceptual remediation plan. (Ref. Section 6).

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

# Section 2
# Monthly EFR Activities

## 2.1 Introduction

In August 1997, the NJDEP approved the Remedial Action Plan (RAP), which described free product removal using enhanced fluid recovery (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 third quarter of 2003 on July 8th, August 7th, and September 9th. RMT coordinated measurement of the free product thickness in each recovery well (where applicable), followed by EFR. RMT's subcontractor, CEMCO, used the recorded free product measurements to determine the placement of the drop pipe that maximized free product recovery volumes. Table 1 lists apparent free product thickness measurements recorded during third quarter 2003. RMT observed measurable free product within 15 of the 69 wells monitored on August 19, 2003 (Table 6). 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, and extracted product (liquid and vapor phase) and groundwater volumes (in gallons) to date.

During third quarter 2003, 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 third quarter of 2003 was approximately 0.22 gallons/gallon. Before use of this method (November 1997 to December 1999), 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 aboveground storage tank (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. During third quarter 2003, 529 gallons of EFR fluids were transported by Clean Venture on August 8, 2003 (State Manifest No. NJA5010142) and taken to the Cycle Chem facility in Elizabeth, NJ. This volume accounted for EFR fluid volume generated between March and August 2003 (inclusive).

## 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. Apparent product refers to a volume (in gallons) of free product occupying the casings 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.

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 free product thickness and volume in our report entitled Free Product Volume Analysis (May 2000). That report estimated a total volume of recoverable free product actually present in the subsurface to be between at 8,000 and 13,000 gallons. To facilitate description of the current distribution of free product, the zone of free product occurrence has been divided into four sub areas. These four areas discussed from west to east are:

### 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 a decrease in the total volume of apparent free product measured during the third quarter of 2003. Free product thickness decreased at EFR wells 2, 17, 20 and 28 and increased at EFR wells 1, 3, 18, and 21. In general, the overall apparent free product volume in the western region continues to decrease since LEC initiated EFR in November 1997 (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 .39 gallons in July 2003 to 1.31 gallons in September 2003. Free product thickness increased at EFR

wells 4, 5, 6, 23, 25, and 26 and remained the same at EFR wells 7, 19, 22, 24, and 27. The overall apparent free product volume in the west-central region continues to decrease since LEC initiated EFR in November 1997 (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 third quarter of 2003. Free product thickness decreased at EFR wells 9 and 12 increased at EFR wells 10, 11, and 13 and stayed the same at EFR well 8. The overall apparent free product volume in the eastern-central region continues to decrease since LEC initiated EFR in November 1997 (Appendix B).

### 2.2.4 Eastern Region of Free Product

During third quarter 2003, no free product was detected in the EFR wells 14, 15, and 16. A free product thickness of 0.93 feet was measured in nearby monitoring well MW-3.

### 2.2.5 Site Total Apparent Free Product Area

In general, the total apparent free product trend chart indicates a general decrease in the volume of apparent free product existing on-site. 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, that graphically display apparent free product volume fluctuations over time are presented in Appendix B. Figure 3 shows iso-thickness contours and the lateral extent of apparent free product on-site during third quarter 2003. This figure incorporates the apparent free product thickness measurements from the groundwater monitoring event conducted by RMT on August 19, 2003 and the pre-EFR event measurements obtained by CEMCO on August 7, 2003.

## 2.3 Recovered Free Product Volume Estimations

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. 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 third quarter 2003 was 60.03 gallons. Approximately 50.93 gallons of that amount were measurable free product as determined by vacuum head drum gauging and vapor phase volume calculations, and 9.1 gallons were groundwater. Since initiation in December 1997, site EFR activities have removed approximately 15,020 gallons of total fluids, of which, approximately 3,843 gallons were measurable free phase product. Based on historical modeling data (Ref. Section 2.2), approximately 4,157 to 9,157 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

RMT conducted groundwater monitoring activities in the third quarter of 2003 on August 19th, 20th and 21st. 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 we initiated groundwater monitoring using the low-flow methodology outlined in our May 2001 Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater (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 have not yet been initiated. A QED bladder pump system with disposable Teflon bladders (as described in the approved MNA workplan Quality Assurance Project Plan (QAPP)) was used as dedicated monitoring equipment to collect groundwater samples at LEC. Locations of the quarterly monitoring wells are shown on Figure 2.

Monitoring wells MW-4, MW-11D(R), 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 third quarter of 2003 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. RMT submitted the samples to Lancaster Laboratories, Inc. (Lancaster), located in Lancaster, Pennsylvania for benzene, toluene, ethylbenzene, xylenes (BTEX) and bis (2-ethylhexyl) phthalate (DEHP) analysis per the current groundwater monitoring protocol outlined in Table 4.

A sample duplicate, a field blank, a trip 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. The duplicate was collected from monitoring well MW-4 (duplicate sample No. Dupe-01) and analyzed for BTEX and DEHP. The rinsate blank was collected by circulating distilled water, provided by the laboratory, through the cleaned

bladder pump assembly to verify that the decontamination procedures were adequate. Ideally, triple distilled water is used to collect the rinsate blank. However, because the triple distilled water container broke during transit, distilled water provided by the laboratory was used. 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 collected during the sampling event 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.

A comparison of the results of the chemical analyses to New Jersey Class IIa Groundwater Quality Standards (NJGWQS) is outlined in Table 5. The presence of BTEX and/or DEHP was not detected at concentrations above NJGWQS in samples collected from MW-4, MW-11D(R), MW-14S, MW-14I, MW-15S, MW-15I, MW-17S, MW-21, and MW-25(R). At MW-22(R), total xylenes and DEHP were detected at concentrations of 1,200 µg/L and 260 µg/L respectively. The concentrations detected at MW-22(R) exceed the NJGWQS for DEHP and total xylenes of 30 µg/L and 40 µg/L respectively.

Even though contaminant concentrations (specifically total xylenes and DEHP) at MW-22(R) have consistently exceeded NJGWQS, contaminant concentrations 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, and contaminant concentration further downgradient at MW-21 have never exceeded NJGWQS since sampling began at this location in first quarter 1999.

It is important to note again that there is no discernable trend of DEHP concentrations in MW-11D(R) when the data are viewed in total from 1999 through 2003 (Table 5; Appendix D). In addition, as we have described in previous reports, DEHP has been problematic in terms of laboratory analytical results because it is ubiquitous in the environment, and it is also a common laboratory contaminant. Based on the following facts: 1.) DEHP has often been found in laboratory blanks, 2.) past difficulties with field decontamination of sampling equipment, and 3.) the very strong upward vertical hydraulic gradient (Table 6), sporadic past DEHP detections in MW-11D(R) are false positives. 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 suspended particulate matter (*e.g.* clay particles) and stagnant water within the well riser.

Despite these actions, laboratory cross-contamination of DEHP still proved to be a concern in monitoring events through fourth quarter of 2002. 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 fourth quarter 2002 monitoring report, beginning with first quarter 2003 Lancaster Laboratories, Inc., a New Jersey certified laboratory, performed all laboratory analyses. As shown in the third quarter 2003 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 taken during this event. The rinsate sample collected during this event was taken using distilled water provided by the laboratory. The analytical result for this sample was just above the detection limit and qualified as an estimated value.

LEC will continue to sample groundwater from MW-11D(R) and test it for the presence of DEHP.

# Section 4
# Water Table Elevations

On August 19, 2003, RMT measured static groundwater levels from 75 different locations throughout the site (Table 6). 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 potentiometric surface, and indicates that groundwater flow direction in the shallow aquifer east of the rail spur is similar to that observed historically (generally toward the east). Also exhibited in Figure 4 are the effects caused by the presence of the drainage ditch and the Rockaway River. The drainage ditch acts as a local groundwater "sink", and shallow groundwater flow direction from a large portion of the site is controlled by the drainage ditch.

The regional groundwater "sink" for this area is the Rockaway River, and it is this feature that causes the strong upward vertical gradients observed for all of the on-site well clusters. For example, the water elevation in MW-11D (R) is 2.75 feet higher than the corrected water elevation for its' shallow conterpart MW-11S (Table 6). Shallow groundwater at the southern edge of the LEC site is recharged directly by the Rockaway River and flows towards the site before turning eastward toward the drainage ditch and the narrow area between the Air Products property and the Rockaway River known as the Wharton Enterprises property. 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 and the Washington Forge Reservoir to control and interpret the groundwater elevation contours.

Activities in the MW19/Hot Spot 1 area for the third quarter 2003 event were limited to groundwater level elevation measurements only. As in previous quarters, groundwater flow in this area is generally northwards and bends northeast (Figure 5). Also consistent with previous sampling events, the general flow of shallow groundwater in this area is controlled by the presence of the 24-inch Rockaway River Regional Interceptor Sewer (RRRIS), which is encased in a gravel - lined trench running parallel to Ross Street.

# Section 5
# Drainage Channel Surface Water Sampling

As part of the third quarter 2003 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. As requested in the NJDEP letter dated November 4, 2002, grab sampling was performed in the three locations along this channel (SW-5, SW-7 and SW-8). Sampling started with the downstream location SW-8 and proceeded to upstream location SW-7. Similar to previous sampling event results, the drainage ditch controls shallow groundwater flow direction as described above.

The presence of BTEX compounds was not detected at either SW-7 or SW-8. The surface water sample collected at SW-5 contained very low levels of toluene (0.40 μg/L). All surface water locations sampled during this event contained very low levels of DEHP. All 5 analytes 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 7.

These data show 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 the same three locations.

# Section 6
# Site Investigation and Remedial Actions

The following section briefly outlines additional activities and scope(s) of work performed at various on-site areas of environmental concern during third quarter 2003 and provides a brief discussion of activities anticipated for completion during fourth quarter 2003.

## 6.1 Free Product

In December 2001, RMT conducted a subsurface investigation to further investigate viable free product remedial technologies 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. No written regulatory response has been provided to date, but 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. As such, RMT on behalf of LEC is committed to the preparation of a RAWP outlining 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. As was requested in the NJDEP letter dated January 22, 2003, RMT submitted on March 4, 2003 a detailed schedule of all activities anticipated through remedial mobilization tentatively set at August 31, 2004. Implementation of the source removal strategy is pending the final approved disposition of lead impacted soils (Ref. Section 6.2).

## 6.2 Lead in 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 (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 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. Information gathered during this meeting is currently being used to determine the most appropriate management scenario for lead impacted soils >400 ppm. LEC anticipates formulating a recommended approach in fourth quarter 2003.

## 6.3 PDB Sampling in Drainage Ditch

As outlined in the email dated August 6, 2003, NJDEP continues to recommend sampling at surface water locations SW-5, SW-7, and SW-8, using Passive Diffusion Bags (PDB). This sampling methodology was discussed at the October 7, 2003 meeting with NJDEP. LEC anticipates collection of samples using PDB sampling devices during the fourth quarter 2003.

# Tables

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

| EFR Event Date / Well No. | Development 21-Nov-97 Feet of Product | EFR #1 09-Dec-97 Feet of Product | EFR #2 07-Jan-98 Feet of Product | EFR #3 22-Jan-98 Feet of Product | EFR #4 17-Feb-98 Feet of Product | EFR #5 13-Mar-98 Feet of Product | EFR #6 27-Mar-98 Feet of Product | EFR #7 24-Apr-98 Feet of Product | EFR #8 29-May-98 Feet of Product | EFR #9 30-Jun-98 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 1.64 | 1.58 | 1.94 | 0.36 | 2.46 | 0.93 | 0.94 | 1.42 | 1.55 | 2.11 |
| EFR-2 | 1.55 | 1.50 | 1.96 | 0.06 | 2.20 | 2.96 | 2.92 | 2.65 | 2.44 | 1.78 |
| EFR-3 | 0.85 | 1.02 | 1.27 | -- | 1.58 | 1.19 | 0.03 | 0.24 | 0.19 | 0.77 |
| EFR-4 | 1.03 | 2.27 | 0.54 | 0.07 | 0.30 | -- | -- | -- | -- | 0.03 |
| EFR-5 | 4.03 | 3.74 | 4.25 | 0.32 | 3.29 | 3.39 | 1.71 | 2.71 | 2.02 | 1.86 |
| EFR-6 | 0.72 | 1.00 | 1.24 | -- | 2.27 | 1.71 | 1.17 | 2.23 | 1.55 | 1.56 |
| EFR-7 | 0.17 | 0.09 | 0.16 | -- | -- | -- | -- | -- | -- | 0.02 |
| EFR-8 | 0.00 | 0.00 | 0.00 | -- | 0.08 | -- | -- | -- | -- | 0.03 |
| EFR-9 | 0.00 | 1.10 | 1.79 | 1.15 | 0.16 | 3.08 | 0.08 | 0.07 | 0.11 | 0.29 |
| EFR-10 | 5.20 | 5.80 | 6.42 | 2.34 | 7.47 | 7.06 | 6.05 | 6.71 | 5.47 | 5.68 |
| EFR-11 | 3.07 | 4.04 | 4.28 | 5.64 | 4.47 | 4.32 | 4.67 | 5.91 | 5.73 | 6.08 |
| EFR-12 | 0.04 | 0.03 | 0.00 | -- | 0.07 | -- | -- | -- | 0.02 | 0.28 |
| EFR-13 | 0.48 | 0.56 | 1.33 | 0.05 | 1.28 | 1.07 | 1.07 | 0.67 | -- | 0.90 |
| EFR-14 | 0.10 | 0.16 | 0.00 | -- | -- | -- | -- | -- | -- | -- |
| EFR-15 | 0.09 | 0.12 | 0.27 | -- | 0.06 | -- | -- | -- | -- | 0.03 |
| EFR-16 | 0.00 | 0.00 | 0.00 | -- | -- | -- | -- | -- | -- | -- |
| EFR-17 | 0.04 | 0.17 | 1.56 | 0.39 | 0.17 | 0.08 | -- | 0.09 | -- | 0.02 |
| EFR-18 | 0.10 | 0.10 | 0.09 | -- | -- | -- | -- | -- | -- | 0.01 |
| EFR-19 | 0.54 | 2.60 | 1.89 | 0.49 | 1.95 | 1.63 | 1.44 | 0.88 | 0.65 | 0.42 |
| EFR-20 | 0.40 | 0.34 | 0.85 | 0.47 | 0.27 | -- | -- | 0.04 | 0.24 | 0.37 |
| EFR-21 | 2.36 | 2.40 | 2.71 | 2.74 | 2.74 | 4.14 | 3.97 | 4.23 | 3.98 | 3.29 |
| EFR-22 | 3.78 | 4.10 | 0.05 | 4.81 | 3.40 | 4.69 | 3.42 | 1.82 | 1.22 | 0.96 |
| EFR-23 | 0.00 | 0.06 | 0.06 | -- | 0.02 | -- | -- | -- | -- | 0.05 |
| EFR-24 | 0.00 | 0.00 | 0.00 | -- | -- | -- | -- | -- | -- | -- |
| EFR-25 | 2.95 | 3.00 | 3.55 | 0.26 | 4.15 | 3.11 | 0.72 | 0.82 | 0.79 | 0.79 |
| EFR-26 | 2.20 | 2.05 | 2.66 | 0.29 | 2.90 | 2.12 | 1.43 | 1.32 | 1.95 | 1.21 |
| EFR-27 | 0.15 | 0.02 | 2.71 | 0.02 | 0.74 | -- | -- | 0.03 | -- | 0.02 |
| EFR-28 | 2.20 | 2.30 | 1.78 | 0.49 | 2.60 | 3.20 | 3.48 | 4.40 | 3.16 | 2.61 |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.08 | 0.03 | 0.03 | 0.02 | 0.01 |
| MAX (ft) | 5.20 | 5.80 | 6.42 | 5.64 | 7.47 | 7.06 | 6.05 | 6.71 | 5.73 | 6.08 |
| Average (ft) | 1.20 | 1.44 | 1.55 | 1.17 | 1.92 | 2.79 | 2.21 | 2.01 | 1.94 | 1.25 |
| Total Free Product (ft) | 33.69 | 40.30 | 43.36 | 19.94 | 44.05 | 44.69 | 33.10 | 36.24 | 31.07 | 31.16 |
| Total Standing Free Product Volume (gal) | 21.60 | 25.83 | 27.79 | 12.78 | 28.24 | 28.64 | 21.22 | 23.23 | 19.92 | 19.97 |
| Estimated Total Free Product Removed (gal) (1) *(Liquid and Vapor Phase Free Product Volume)* | 315.00 | 250.00 | 210.00 | 80.00 | 120.00 | 130.00 | 100.00 | 110.00 | 95.00 | 105.00 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | | | | | | | | | | |
| Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | | |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | | |
| Groundwater Extraction Volume (gal) per each EFR Event (7) *as of Jan 2000* | | | | | | | | | | |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 2350.00 | 1410.00 | 376.00 | 256.00 | 314.00 | 300.00 | 339.00 | 403.00 | 390.00 | 561.00 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* (9) | - | - | - | - | - | 338 | 150 | 600 | 70 | 110 |
| Total Volume Removed from Site (gal) *(Manifested volume)* (8) | 2,350 | 1,410 | 376 | 256 | 314 | 638 | 489 | 1,003 | 460 | 671 |
| Cumulative Total Free Product Removed (gal) | 315 | 565 | 775 | 855 | 975 | 1,105 | 1,205 | 1,315 | 1,410 | 1,515 |
| Extraction, Transportation & Disposal Cost(2) | $ 3,976.37 | $ 2,742.62 | $ 1,130.50 | $ 1,130.50 | $ 1,219.12 | $ 1,431.87 | $ 1,541.31 | $ 2,039.49 | $ 1,240.75 | $ 1,347.69 |
| Unit Cost per gal(3) | $ 1.69 | $ 1.95 | $ 3.01 | $ 4.42 | $ 3.88 | $ 2.24 | $ 3.15 | $ 2.03 | $ 2.70 | $ 2.01 |
| State Manifest Document Number | NJA2786096 | NJA2786165 | NJA2787308 | NJA2785935 | NJA2785930 | NJA2785549 | NJA2786541 | NJA2787847 | NJA2786596 | NJA2970479 |

| EFR Event Date / Well No. | EFR #10 31-Jul-98 Feet of Product | EFR #11(4) 24-Aug-98 Feet of Product | EFR #12 17-Sep-98 Feet of Product | EFR #13 22-Oct-98 Feet of Product | EFR #14 20-Nov-98 Feet of Product | EFR #15 18-Dec-98 Feet of Product | EFR #16 13-Jan-99 Feet of Product | EFR #17 18-Feb-99 Feet of Product | EFR #18 24-Mar-99 Feet of Product | EFR #19 19-Apr-99 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 1.28 | 1.22 | 1.71 | 1.59 | 1.71 | 1.57 | 0.53 | 1.79 | 3.69 | 1.13 |
| EFR-2 | 1.12 | 1.09 | 1.21 | 1.29 | 1.51 | 1.41 | 0.95 | 1.40 | 2.42 | 1.46 |
| EFR-3 | 0.72 | 0.93 | 1.03 | 1.01 | 1.19 | 1.18 | 1.14 | 1.01 | 1.63 | 0.36 |
| EFR-4 | 0.39 | 1.23 | 2.40 | 2.17 | 1.75 | 1.79 | 0.73 | 0.10 | 0.14 | 0.08 |
| EFR-5 | 2.38 | 2.52 | 2.33 | 2.52 | 2.19 | 2.28 | 2.68 | 3.47 | 6.15 | 2.65 |
| EFR-6 | 1.96 | 1.56 | 1.42 | 1.25 | 1.29 | 1.38 | 0.49 | 0.84 | 0.88 | 0.61 |
| EFR-7 | 0.02 | 0.03 | 0.07 | 0.05 | 0.20 | 0.16 | 0.02 | 0.04 | 0.04 | 0.07 |
| EFR-8 | 0.04 | 0.09 | 0.13 | 0.09 | 0.07 | 0.03 | 0.12 | 0.00 | 0.03 | 0.03 |
| EFR-9 | 0.61 | 0.98 | 1.23 | 1.31 | 1.28 | 1.88 | 0.74 | 0.49 | 0.06 | 0.11 |
| EFR-10 | 4.94 | 4.52 | 4.84 | 4.38 | 3.98 | 3.99 | 3.69 | 5.79 | 5.52 | 4.97 |
| EFR-11 | 4.73 | 4.47 | 3.95 | 4.06 | 3.65 | 3.52 | 2.42 | 4.69 | 2.84 | 2.02 |
| EFR-12 | 0.22 | 0.28 | 0.24 | 0.15 | 0.29 | 0.17 | 0.04 | 0.11 | 0.05 | 0.02 |
| EFR-13 | 0.56 | 0.48 | 0.66 | 0.82 | 1.13 | 1.30 | 0.22 | 1.19 | 0.15 | 0.49 |
| EFR-14 | - | -- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | 0.00 |
| EFR-15 | 0.02 | 0.03 | 0.03 | 0.12 | 0.12 | 0.32 | 0.11 | 0.07 | 0.01 | 0.01 |
| EFR-16 | - | -- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EFR-17 | 0.37 | 0.29 | 0.46 | 0.56 | 0.71 | 0.53 | 0.26 | 0.09 | 0.06 | 0.06 |
| EFR-18 | 0.08 | 0.14 | 0.48 | 0.68 | 0.98 | 1.08 | 0.56 | 0.11 | - | 0.06 |
| EFR-19 | 0.90 | 1.26 | 1.68 | 1.95 | 2.31 | 2.44 | 1.83 | 1.68 | 0.52 | 0.44 |
| EFR-20 | 0.65 | 0.63 | 0.79 | 1.24 | 1.85 | 2.11 | 0.65 | 1.33 | 0.88 | 0.43 |
| EFR-21 | 1.97 | 1.97 | 1.86 | 1.77 | 1.67 | 1.62 | 1.21 | 1.43 | 2.62 | 2.35 |
| EFR-22 | 2.86 | 2.87 | 2.97 | 2.83 | 2.58 | 2.27 | 2.06 | 0.84 | 0.34 | 0.95 |
| EFR-23 | 0.11 | 0.08 | 0.27 | 1.03 | 3.07 | 2.29 | 1.55 | 0.91 | 0.47 | 0.22 |
| EFR-24 | - | -- | 0.00 | 0.03 | 0.12 | 0.14 | 0.38 | 0.06 | 0.00 | 0.00 |
| EFR-25 | 0.60 | 0.41 | 0.29 | 0.41 | 1.33 | 1.58 | 1.05 | 1.75 | 1.19 | 1.08 |
| EFR-26 | 2.06 | 1.58 | 1.17 | 1.24 | 1.08 | 1.09 | 0.73 | 0.55 | 0.45 | 0.75 |
| EFR-27 | 0.33 | 0.45 | 1.49 | 0.54 | 0.47 | 0.51 | 0.09 | 0.12 | 0.00 | 0.00 |
| EFR-28 | 1.47 | 1.73 | 1.69 | 1.83 | 1.79 | 1.74 | 1.03 | 1.29 | 1.71 | 1.65 |
| MIN (ft) | 0.02 | 0.08 | 0.03 | 0.03 | 0.07 | 0.03 | 0.02 | 0.04 | 0.00 | 0.00 |
| MAX (ft) | 4.94 | 4.52 | 4.34 | 4.38 | 3.98 | 3.99 | 3.69 | 5.79 | 6.15 | 4.97 |
| Average (ft) | 1.22 | 1.23 | 1.36 | 1.84 | 1.47 | 1.48 | 0.97 | 1.25 | 1.22 | 0.79 |
| Total Free Product (ft) | 30.38 | 30.73 | 33.90 | 34.92 | 38.30 | 38.36 | 25.27 | 31.14 | 31.84 | 22.00 |
| Total Standing Free Product Volume (gal) | 19.47 | 19.70 | 22.04 | 22.70 | 24.90 | 24.93 | 16.43 | 20.24 | 20.70 | 14.30 |
| Estimated Total Free Product Removed (gal) (1) *(Liquid and Vapor Phase Free Product Volume)* | 76.00 | 55.00 | 60.00 | 15.00 | 25.00 | 51.00 | 23.00 | 74.00 | 40.00 | 59.24 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | | | | | | | | | | |
| Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | | |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | | |
| Groundwater Extraction Volume (gal) per each EFR Event (7) *as of Jan 2000* | | | | | | | | | | |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 211.00 | 220.00 | 329.00 | 212.00 | 120.00 | 256.00 | 234.00 | 498.00 | 683.00 | 904.76 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* (9) | 71 | - | 110 | - | - | 110 | - | 235 | - | 139 |
| Total Volume Removed from Site (gal) *(Manifested volume)* (8) | 282 | 220 | 439 | 212 | 120 | 256 | 234 | 733 | 683 | 1,044 |
| Cumulative Total Free Product Removed (gal) | 1,591 | 1,646 | 1,706 | 1,721 | 1,746 | 1,797 | 1,820 | 1,894 | 1,934 | 1,993 |
| Extraction, Transportation & Disposal Cost(2) | $ 1,324.62 | $ 1,838.93 | $ 1,383.18 | $ 915.25 | $ 863.25 | $ 973.00 | $ 1,156.62 | $ 1,641.56 | $ 1,703.44 | $ 2,049.75 |
| Unit Cost per gal(3) | $ 4.70 | $ 8.36 | $ 3.15 | $ 4.32 | $ 7.19 | $ 3.80 | $ 4.94 | $ 2.24 | $ 2.49 | $ 1.96 |
| State Manifest Document Number | NJA2988712 | NJA2988448 | NJA2988517 | NJA2989962 | NJA2986073 | NJA2986996 | NJA3017471 | NJA3030488 | NJA3016902 | NJA3015530 |

**Notes:**
Product thickness was determined prior to the EFR event.
gal = gallon
All EFR Wells are 4 inch in diameter
EFR events 13 and 14 product removal was low due to significant quantities of product remaining emulsified

as the result of a short vac truck standing time prior to gauging

Product removal estimate does not take into account a % of product remaining emulsified do to high agitation
(shaded) Indicates that this data will be known once the next EFR waste T&D event is performed

(1) Estimated free product (gal) based on Vacuum Truck gauging (interface probe) directly after each EFR Event and vapor monitoring during extraction (See Table 3)
(2) Total invoiced disposal cost for EFR event (product and groundwater) and monitoring well purge water from 1/4ly well development and monitoring activities *(if applicable)*
(3) Total Cost per gallon includes product transportation & disposal, manifest prep, & regulatory admin. fee for combined EFR and GW purge water volumes *(if applicable)*
(4) EFR # 11 free product volume was 55 gal and contained PCBs (approx. weight 450lbs total @ specific gravity of 8.18 lbs./gal). Disposal costs were significantly higher due to PCB content
(5) EFR # 23 cost and unit cost higher than normal due to additional vac truck trans and mob time. As the vac truck was broken when it reached the site, a 3 hour credit will be applied to next months EFR T&D bill.
(6) Free product stored in an on-site 550-gallon AST equipped with secondary containment. AST contents, along with groundwater resulting from well purge activities are drained and transported by CycleChem/CleanVenture every 90 days.
(7) Volume of ground water collected during each EFR event. Volume estimated using an oil/water interface probe on the 55-gal extraction drum. On-Site measurement began 1st quarter of 2000.
(8) Those volumes that are totaled over a specific period (beginning 1st quarter 2000) is that volume specific to each of the EFR event it represents.
(9) Estimated by subtracting the free product aqueous volume and extracted groundwater volume for each of the representative EFR event from the total removal volume manifested for a specific disposal event
(10) EFR events did not take place in January or February 2001 due to access issues caused by inclement weather.
(11) This shippment contained 7.0 ppm of PCBs in organic layer and % moisture of organic lyer 57.56%
(12) Vapor phase free product volume not determined for July 2003 EFR Event No. 68 due to instrument failure
(13) This shipment contained 18.3 ppm PCBs, 2nd sample contained 12.5 ppm PCBs.

Prepared By: RMT, Inc. 10/29/2003
File: 3Q03 Tables and Appendicies.xls Table 1 11x17

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

| EFR Event Date / Well No. | EFR #20 18-May-99 Feet of Product | EFR #21 22-Jun-99 Feet of Product | EFR #22 29-Jul-99 Feet of Product | EFR #23 (6) 27-Aug-99 Feet of Product | EFR #24 22-Sep-99 Feet of Product | EFR #25 27-Oct-99 Feet of Product | EFR #26 30-Nov-99 Feet of Product | EFR #27 16-Dec-99 Feet of Product | EFR #28 28-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-1 | 1.09 | 1.15 | 1.49 | 1.27 | 1.94 | 1.63 | 1.47 | 1.20 | 1.22 | 0.85 | 1.86 | 1.59 | 1.54 | 2.10 | 1.51 | 1.26 | 1.53 | 1.00 | 1.07 | 1.14 |
| EFR-2 | 1.22 | 0.92 | 1.21 | 1.00 | 0.63 | 1.35 | 1.28 | 1.40 | 0.06 | 1.04 | 2.25 | 2.00 | 1.64 | 1.89 | 1.40 | 0.86 | 1.08 | 0.97 | 1.09 | 0.76 |
| EFR-3 | 0.25 | 0.96 | 0.88 | 1.03 | 0.74 | 0.69 | 0.47 | 0.02 | 0.51 | 0.07 | 0.08 | 0.09 | 0.62 | 1.02 | 0.25 | 0.02 | 0.08 | 0.44 | 0.43 | 0.46 |
| EFR-4 | 0.05 | 0.03 | 0.44 | 0.99 | 0.51 | 0.11 | 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 |
| EFR-5 | 2.61 | 2.86 | 2.66 | 1.57 | 1.77 | 3.23 | 2.99 | 1.27 | 2.95 | 2.46 | 2.91 | 2.54 | 1.84 | 2.34 | 1.99 | 1.69 | 1.57 | 2.74 | 2.47 | 2.76 |
| EFR-6 | 1.07 | 1.16 | 1.51 | 0.91 | 0.15 | 0.86 | 0.63 | 0.33 | 1.07 | 0.77 | 0.29 | 0.31 | 0.49 | 0.27 | 0.54 | 0.29 | 0.55 | 0.83 | 0.79 | 0.96 |
| EFR-7 | 0.02 | 0.08 | 0.28 | 0.06 | 0.01 | 0.07 | 0.04 | 0.47 | 0.15 | 0.02 | 0.35 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| EFR-8 | 0.03 | 0.09 | 0.39 | 0.27 | 0.09 | 0.13 | 0.05 | 0.11 | 0.05 | 0.06 | 0.08 | 0.03 | 0.05 | 0.03 | 0.02 | 0.01 | 0.01 | 4.26 | 0.02 | 0.06 |
| EFR-9 | 0.32 | 0.49 | 1.16 | 0.56 | 0.41 | 0.28 | 0.10 | 0.15 | 0.13 | 0.08 | 0.19 | 0.02 | 0.06 | 0.06 | 0.12 | 0.16 | 0.09 | 0.02 | 0.50 | 0.77 |
| EFR-10 | 4.23 | 3.71 | 3.63 | 2.47 | 3.02 | 5.18 | 3.95 | 3.07 | 4.50 | 3.55 | 3.50 | 4.50 | 1.38 | 2.50 | 3.09 | 0.75 | 2.76 | 3.88 | 3.27 | 4.05 |
| EFR-11 | 2.48 | 3.28 | 2.78 | 1.57 | 1.93 | 3.20 | 3.11 | 1.07 | 3.44 | 4.95 | 2.41 | 2.95 | 2.93 | 2.49 | 4.12 | 0.79 | 4.73 | 0.16 | 4.00 | 3.73 |
| EFR-12 | 0.02 | 0.10 | 0.30 | 0.20 | 0.03 | 0.09 | 0.67 | 0.01 | 0.03 | 0.49 | 0.46 | 0.10 | 0.19 | 0.01 | 0.01 | 0.00 | 0.03 | 0.11 | 0.04 | 0.02 |
| EFR-13 | 0.50 | 0.44 | 1.33 | 1.01 | 0.74 | 0.78 | 0.57 | 0.26 | 0.36 | 0.34 | 0.48 | 0.47 | 0.69 | 0.55 | 0.73 | 0.49 | 0.22 | 0.25 | 0.09 | 0.15 |
| 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 |
| EFR-15 | 0.00 | 0.00 | 0.00 | 0.13 | 0.04 | 0.02 | 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 |
| 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 |
| EFR-17 | 0.08 | 0.12 | 0.39 | 0.36 | 0.10 | 0.06 | 0.24 | 0.25 | 0.11 | 0.32 | 0.04 | 0.16 | 0.65 | 0.04 | 0.01 | 0.02 | 0.09 | 0.06 | 0.86 | 0.01 |
| EFR-18 | 0.16 | 0.46 | 0.96 | 1.37 | 0.61 | 0.36 | 0.77 | 0.05 | 0.20 | 0.05 | 0.12 | 0.04 | 0.32 | 0.01 | 0.06 | 0.16 | 0.08 | 0.31 | 0.31 | 0.20 |
| EFR-19 | 0.52 | 1.10 | 2.05 | 2.02 | 0.51 | 1.54 | 0.84 | 0.69 | 1.67 | 1.73 | 0.25 | 0.60 | 0.98 | 0.17 | 0.63 | 0.34 | 0.22 | 0.87 | 0.59 | 1.42 |
| EFR-20 | 0.89 | 0.87 | 1.59 | 1.86 | 0.47 | 1.92 | 1.36 | 0.75 | 1.08 | 2.58 | 0.64 | 0.42 | 0.54 | 0.33 | 0.30 | 0.39 | 0.45 | 0.54 | 0.11 | 0.37 |
| EFR-21 | 1.49 | 1.46 | 1.57 | 1.04 | 1.01 | 2.32 | 1.40 | 1.70 | 1.92 | 1.34 | 3.04 | 2.86 | 2.47 | 3.02 | 2.09 | 1.62 | 2.75 | 1.79 | 1.65 | 1.37 |
| EFR-22 | 1.39 | 1.93 | 1.47 | 1.41 | 0.17 | 2.22 | 1.76 | 0.53 | 0.82 | 0.58 | 0.09 | 0.16 | 0.05 | 0.05 | 0.01 | 0.18 | 0.06 | 0.53 | 2.14 | 1.50 |
| EFR-23 | 0.25 | 0.45 | 2.13 | 1.03 | 0.12 | 0.53 | 0.64 | 0.24 | 0.23 | 0.31 | 0.46 | 0.06 | 0.06 | 0.01 | 0.13 | 0.03 | 0.07 | 0.07 | 0.09 | 0.39 |
| EFR-24 | 0.00 | 0.08 | 0.08 | 0.06 | 0.00 | 0.00 | 0.04 | 0.13 | 0.11 | 0.07 | 0.58 | 0.02 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.04 |
| EFR-25 | 0.76 | 0.54 | 1.74 | 1.48 | 0.21 | 0.39 | 0.19 | 0.05 | 0.31 | 0.39 | 0.58 | 0.21 | 0.10 | 0.03 | 0.10 | 0.03 | 0.10 | 0.19 | 0.12 | 0.10 |
| EFR-26 | 1.29 | 1.28 | 1.23 | 0.72 | 0.29 | 0.52 | 0.94 | 0.59 | 1.54 | 1.10 | 1.33 | 1.88 | 2.02 | 1.44 | 2.25 | 1.38 | 2.01 | 2.05 | 1.78 | 1.10 |
| EFR-27 | 0.02 | 0.03 | 0.17 | 0.21 | 0.06 | 0.01 | 0.01 | 0.01 | 0.02 | 0.14 | 0.20 | 0.01 | 0.03 | 0.04 | 0.01 | 0.01 | 0.15 | 0.01 | 0.01 | 0.01 |
| EFR-28 | 1.46 | 1.25 | 1.67 | 1.78 | 0.38 | 2.19 | 0.96 | 1.42 | 1.33 | 1.00 | 2.30 | 2.42 | 1.81 | 2.68 | 1.72 | 2.48 | 2.02 | 1.39 | 1.36 | 0.64 |
| 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 |
| MAX (ft) | 4.23 | 3.71 | 3.63 | 2.47 | 3.02 | 5.18 | 3.95 | 3.07 | 4.50 | 4.95 | 3.50 | 4.50 | 2.93 | 3.02 | 4.12 | 2.48 | 4.73 | 4.26 | 4.00 | 4.05 |
| Average (ft) | 0.79 | 0.88 | 1.19 | 0.94 | 0.57 | 1.06 | 0.88 | 0.58 | 0.87 | 0.89 | 0.88 | 0.84 | 0.75 | 0.76 | 0.76 | 0.45 | 0.74 | 0.80 | 0.80 | 0.79 |
| Total Free Product (ft) | 22.20 | 24.54 | 33.11 | 26.36 | 15.94 | 29.68 | 24.59 | 16.37 | 24.34 | 24.79 | 24.62 | 23.88 | 20.91 | 21.30 | 21.14 | 12.49 | 20.67 | 22.51 | 22.35 | 22.23 |
| Total Standing Free Product Volume (gal) | 14.43 | 15.95 | 21.52 | 17.13 | 10.36 | 19.29 | 15.98 | 10.64 | 15.82 | 16.11 | 16.00 | 15.20 | 13.59 | 13.85 | 13.74 | 8.12 | 13.44 | 14.63 | 14.53 | 14.45 |
| Estimated Total Free Product Removed (gal) (1) *(Liquid and Vapor Phase Free Product Volume)* | 47.20 | 38.51 | 54.48 | 36.00 | 44.00 | 54.73 | 44.79 | 49.34 | 49.52 | 51.66 | 48.14 | 45.46 | 45.50 | 43.66 | 46.69 | 22.05 | 25.07 | 44.12 | 35.36 | 49.32 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | | | | | | | | | 40.93 | 46.21 | 52.80 | 41.26 | 40.18 | 39.44 | 40.43 | 20.13 | 21.05 | 38.78 | 31.36 | 43.73 |
| [illegible]or Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | 6.55 | 7.93 | 10.19 | 5.85 | 6.31 | 5.05 | 7.60 | 5.22 | 5.26 | 6.58 | 5.65 | 6.42 |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | | | | | | | | | 36.97 | 43.73 | 37.95 | 39.61 | 39.19 | 38.61 | 38.78 | 16.83 | 19.81 | 37.54 | 29.71 | 42.90 |
| Groundwater Extraction Volume (gal) per each EFR Event (7) *as of Jan 2000* | | | | | | | | | 3.96 | 2.48 | 14.85 | 1.65 | 0.99 | 0.83 | 1.65 | 3.30 | 1.24 | 1.24 | 1.65 | 0.83 |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 360.00 | 564.26 | 725.54 | 298.00 | 239.00 | 265.00 | 249.07 | 350.00 | 47.48 | 54.14 | 62.99 | 47.11 | 46.49 | 44.49 | 48.03 | 25.35 | 26.31 | 45.36 | 37.01 | 50.15 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* (8) | - | - | 374 | - | - | 199 | 82 | - | 357 | | | | 110 | | | | 134 | | | |
| Total Volume Removed from Site (gal) *(Manifested volume)* (8) | 353 | 538 | 1,100 | 292 | 241 | 464 | 331 | 350 | 538 | | | | 250 | | | | 225 | | | |
| Cumulative Total Free Product Removed (gal) | 2,040 | 2,079 | 2,183 | 2,169 | 2,213 | 2,268 | 2,313 | 2,362 | 2,406 | 2,457 | 2,506 | 2,551 | 2,597 | 2,640 | 2,687 | 2,709 | 2,734 | 2,779 | 2,813 | 2,863 |
| Extraction, Transportation & Disposal Cost(2) | $ 930.31 | $ 1,598.13 | $ 2,165.75 | $ 2,162.12 | $ 995.91 | $ 1,298.50 | $ 1,028.93 | $ 968.97 | $ 1,045.62 | | | | $ 795.13 | | | | $ 762.31 | | | $ |
| Unit Cost per gal(3) | $ 2.64 | $ 2.97 | $ 1.97 | $ 7.40 | $ 4.13 | $ 2.78 | $ 3.11 | $ 2.77 | $ 1.94 | | | | $ 3.18 | | | | $ 3.39 | | | $ |
| State Manifest Document Number | NJA3031178 | NJA3016209 | NJA3016543 | NJA3022956 | NJA2986932 | NJA313015 | NJA3030027 | NJA3074974 | NJA3114960 | | | | NJA3115887 | | | | NJA3101136 | | | |

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

| EFR Event Date / Well No. | EFR #40[NI] 15-Mar-01 Feet of Product | EFR #41 22-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 #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 09-Aug-02 Feet of Product | EFR #58 13-Sep-02 Feet of Product | EFR #59 08-Oct-02 Feet of Product |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 2.91 | 1.25 | 1.02 | 1.14 | 0.57 | 0.60 | 1.29 | 1.60 | 1.51 | 1.57 | 2.07 | 1.93 | 0.90 | 0.77 | 1.60 | 1.92 | 0.65 | 0.81 | 1.14 | 0.93 |
| EFR-2 | 2.92 | 2.68 | 1.75 | 2.26 | 1.22 | 1.17 | 1.22 | 1.14 | 1.15 | 1.19 | 1.97 | 1.93 | 1.40 | 1.20 | 2.39 | 2.15 | 1.93 | 1.02 | 0.09 | 1.27 |
| EFR-3 | 0.33 | 0.29 | 0.49 | 0.70 | 0.40 | 0.68 | 0.51 | 0.91 | 0.78 | 0.90 | 0.70 | 0.78 | 1.05 | 1.09 | 1.28 | 1.53 | 0.25 | 0.89 | 0.81 | 0.91 |
| EFR-4 | 0.59 | 1.65 | 0.01 | 0.44 | 0.02 | 1.86 | 0.11 | 0.57 | 0.69 | 0.54 | 0.26 | 1.13 | 0.97 | 0.99 | 0.98 | 1.07 | 1 | 0.26 | 0.11 | 0.43 |
| EFR-5 | 5.95 | 1.75 | 1.90 | 0.62 | 2.24 | 2.05 | 2.25 | 2.55 | 2.10 | 2.67 | 2.66 | 2.66 | 3.50 | 3.07 | 3.25 | 2.17 | 2.01 | 2.00 | 2.05 | 1.67 |
| EFR-6 | 2.05 | 0.32 | 0.49 | 0.16 | 0.46 | 0.49 | 0.37 | 1.13 | 1.56 | 1.23 | 0.71 | 2.21 | 2.30 | 0.77 | 0.48 | 0.27 | 0.54 | 0.45 | 0.62 | 0.38 |
| EFR-7 | 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 | 0.11 | 0.01 | 0.00 |
| EFR-8 | 0.08 | 0.05 | 0.04 | 0.03 | 0.01 | 0.19 | 0.00 | 0.18 | 0.16 | 0.22 | 0.01 | 0.04 | 0.07 | 0.10 | 0.05 | 0.07 | 0 | 0.14 | 0.28 | 0.19 |
| EFR-9 | 0.57 | 0.07 | 0.56 | 0.07 | 0.14 | 0.27 | 0.39 | 0.56 | 0.65 | 0.82 | 0.29 | 0.45 | 0.32 | 0.32 | 0.28 | 0.11 | 0.95 | 0.30 | 0.18 | 0.32 |
| EFR-10 | 5.84 | 3.17 | 3.52 | 3.32 | 3.79 | 2.80 | 2.62 | 2.70 | 2.61 | 2.91 | 2.02 | 3.32 | 3.48 | 2.77 | 2.64 | 3.39 | 3.16 | 2.81 | 2.68 | 1.95 |
| EFR-11 | 2.62 | 2.41 | 3.56 | 2.60 | 3.91 | 2.97 | 3.88 | 3.22 | 2.44 | 2.90 | 2.69 | 2.58 | 2.12 | 0.99 | 0.97 | 1.01 | 1.54 | 2.09 | 3.91 | 2.06 |
| EFR-12 | 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 | 0.06 | 0.33 | 0.25 |
| EFR-13 | 1.14 | 0.27 | 0.78 | 0.26 | 0.39 | 0.47 | 0.88 | 0.46 | 0.88 | 0.44 | 0.64 | 0.44 | 0.87 | 0.88 | 1.71 | 1.11 | 0.55 | 0.26 | 0.61 | 0.30 |
| 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 |
| EFR-15 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.09 | 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 |
| EFR-17 | 0.41 | 0.31 | 0.51 | 0.28 | 0.02 | 0.49 | 0.34 | 0.95 | 0.97 | 1.57 | 1.49 | 2.23 | 1.90 | 0.77 | 0.75 | 0.60 | 0.43 | 0.67 | 1.50 | 0.71 |
| EFR-18 | 3.27 | 1.95 | 0.43 | 0.31 | 0.01 | 0.13 | 0.41 | 0.69 | 0.75 | 1.22 | 1.90 | 1.00 | 1.07 | 0.81 | 0.60 | 0.05 | 0.32 | 0.02 | 1.58 | 0.21 |
| EFR-19 | 2.32 | 0.85 | 1.98 | 1.01 | 0.44 | 1.19 | 0.54 | 2.15 | 2.98 | 2.39 | 2.26 | 3.22 | 2.90 | 2.69 | 1.94 | 0.95 | 1.92 | 1.55 | 2.55 | 0.35 |
| EFR-20 | 0.24 | 0.97 | 0.52 | 0.91 | 0.06 | 0.32 | 0.24 | 0.73 | 1.10 | 1.29 | 1.79 | 0.46 | 1.24 | 1.24 | 1.74 | 2.03 | 1.62 | 1.58 | 1.85 | 1.47 |
| EFR-21 | 4.09 | 3.51 | 2.96 | 2.61 | 1.98 | 1.61 | 1.87 | 1.58 | 1.38 | 1.54 | 1.51 | 1.50 | 2.25 | 1.65 | 2.11 | 2.51 | 1.98 | 1.46 | 0.02 | 0.44 |
| EFR-22 | 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 | 0.18 | 0.19 | 0.32 | 0.11 | 0.22 | 1.39 |
| EFR-23 | 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 | 0.38 | 0.77 | 0.53 |
| EFR-24 | 2.27 | 0.05 | 0.84 | 0.01 | 0.01 | 0.27 | 0.14 | 0.35 | 0.38 | 0.34 | 0.47 | 2.65 | 0.60 | 1.35 | 0.38 | 0.24 | 1.19 | 0.19 | 0.19 | 0.16 |
| EFR-25 | 0.04 | 0.09 | 0.28 | 0.14 | 0.03 | 0.47 | 0.09 | 0.43 | 0.63 | 0.64 | 0.82 | 0.89 | 0.75 | 1.21 | 0.83 | 0.29 | 0.36 | 0.25 | 0.35 | 0.28 |
| EFR-26 | 2.64 | 2.58 | 2.68 | 1.48 | 2.24 | 1.07 | 1.20 | 1.45 | 1.22 | 1.13 | 1.14 | 0.87 | 1.55 | 1.67 | 1.68 | 1.92 | 2.42 | 1.69 | 1.24 | 0.59 |
| EFR-27 | 0.48 | 0.05 | 0.04 | 0.00 | 0.01 | 0.04 | 0.00 | 0.52 | 0.49 | 0.13 | 0.58 | 0.92 | 0.00 | 0.00 | 0.38 | 1.31 | 1.10 | 0.04 | 1.43 | 2.53 |
| EFR-28 | 2.81 | 2.75 | 1.86 | 2.94 | 1.38 | 1.67 | 1.05 | 1.50 | 1.38 | 1.51 | 1.67 | 1.86 | 0.21 | 0.63 | 0.29 | 0.85 | 1.08 | 0.38 | 1.22 | 0.22 |
| 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 |
| MAX (ft) | 5.95 | 3.51 | 3.56 | 3.32 | 3.91 | 2.97 | 3.88 | 3.22 | 2.67 | 2.91 | 2.69 | 3.32 | 3.50 | 3.07 | 3.25 | 3.39 | 3.16 | 2.31 | 3.91 | 2.53 |
| Average (ft) | 1.60 | 0.95 | 0.97 | 0.73 | 0.69 | 0.75 | 0.70 | 0.97 | 1.07 | 1.06 | 1.06 | 1.21 | 1.06 | 0.93 | 0.93 | 0.92 | 0.90 | 0.68 | 0.93 | 0.69 |
| Total Free Product (ft) | 44.76 | 26.62 | 27.24 | 20.38 | 19.33 | 21.08 | 19.52 | 27.29 | 30.01 | 29.67 | 29.55 | 33.86 | 29.91 | 25.91 | 26.11 | 25.82 | 25.11 | 19.01 | 25.91 | 19.43 |
| Total Standing Free Product Volume (gal) | 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 | 12.36 | 16.84 | 12.63 |
| Estimated Total Free Product Removed (gal) [1] *(Liquid and Vapor Phase Free Product Volume)* | 79.06 | 46.44 | 56.75 | 37.50 | 40.96 | 37.70 | 27.66 | 29.54 | 31.09 | 29.38 | 32.46 | 33.26 | 29.73 | 31.72 | 29.10 | 29.15 | 25.59 | 26.19 | 39.55 | 29.67 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | 74.01 | 40.01 | 51.15 | 31.23 | 36.30 | 33.00 | 25.58 | 25.16 | 26.40 | 23.93 | 24.75 | 26.40 | 25.16 | 28.05 | 26.40 | 28.05 | 25.59 | 24.75 | 37.19 | 31.02 |
| Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 11.06 | 8.49 | 8.90 | 7.50 | 6.53 | 6.35 | 4.76 | 6.26 | 7.99 | 7.91 | 9.38 | 8.53 | 6.63 | 6.15 | 5.00 | 6.05 | 2.49 | 3.51 | 6.55 | 1.93 |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 68.00 | 37.95 | 47.85 | 30.00 | 33.83 | 31.35 | 23.10 | 22.29 | 23.10 | 21.45 | 22.10 | 24.75 | 23.10 | 25.58 | 23.10 | 23.10 | 23.10 | 22.69 | 33.00 | 26.73 |
| Groundwater Extraction Volume (gal) per each EFR Event [1] *as of Jan 2000* | 6.01 | 2.06 | 3.30 | 1.24 | 2.48 | 1.65 | 2.48 | 2.99 | 3.30 | 2.48 | 1.65 | 1.65 | 2.06 | 2.48 | 3.30 | 4.95 | 2.48 | 2.06 | 4.13 | 4.29 |
| Total EFR Extraction Volume (gal) (Total Volume: *free product + groundwater + product vapor)* | 85.07 | 48.50 | 60.05 | 38.73 | 42.84 | 39.35 | 30.34 | 31.42 | 34.39 | 31.84 | 34.13 | 34.93 | 31.79 | 34.21 | 31.40 | 34.10 | 28.07 | 28.26 | 43.68 | 32.95 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* [2] | 148 | | 298 | | | 90 | | | | 0 | | | | 142 | | | | 0 | | |
| Total Volume Removed from Site (gal) *(Manifested volume)* [2] | 306 | | 415 | | | 200 | | | | 100 | | | | 250 | | | | 105 | | |
| Cumulative Total Free Product Removed (gal) | 2,942 | 2,988 | 3,045 | 3,082 | 3,123 | 3,160 | 3,189 | 3,217 | 3,248 | 3,277 | 3,310 | 3,343 | 3,373 | 3,404 | 3,433 | 3,462 | 3,487 | 3,519 | 3,553 | 3,582 |
| Extraction, Transportation & Disposal Cost[2] | 998.13 | | $ 1,175.19 | | | $ 1,069.50 | | | | $ 788.25 | | | | $ 965.12 | | | | $ | | |
| Unit Cost per gal[2] | 3.26 | | $ 2.83 | | | $ 5.65 | | | | $ 7.89 | | | | $ 3.86 | | | | $ | | |
| State Manifest Document Number | NJA3239198 | | NJA3286399 | | | NJA4036630 | | | | NJA4035384 | | | | NJA4035962 | | | | NJA4068029 (11) | | |

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

| EFR Event Date<br>Well No. | EFR #60<br>07-Nov-02<br>Feet of Product | EFR #61<br>17-Dec-02<br>Feet of Product | EFR #62<br>11-Mar-03<br>Feet of Product | EFR #63<br>17-Mar-03<br>Feet of Product | EFR #64<br>21-Mar-03<br>Feet of Product | EFR #65<br>10-Apr-03<br>Feet of Product | EFR #66<br>08-May-03<br>Feet of Product | EFR #67<br>10-Jun-03<br>Feet of Product | EFR #68 (12)<br>08-Jul-03<br>Feet of Product | EFR #69<br>07-Aug-03<br>Feet of Product | EFR #70<br>09-Sep-03<br>Feet of Product | EFR AVERAGES | EFR TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFR-1 | 1.62 | 1.33 | 0.68 | 0.22 | 0.41 | 0.45 | 0.19 | 0.48 | 0.13 | 0.49 | 0.69 | | |
| EFR-2 | 2.96 | 3.07 | 1.96 | 0.94 | 1.02 | 1.40 | 1.54 | 2.34 | 1.61 | 1.32 | 1.41 | | |
| EFR-3 | 0.98 | 0.88 | 0.70 | 0.30 | 0.20 | 0.07 | 0.14 | 0.05 | 0.09 | 0.10 | 0.19 | | |
| EFR-4 | 2.96 | 0.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | | |
| EFR-5 | 1.68 | 0.37 | 2.91 | 1.19 | 0.16 | 0.79 | 0.49 | 0.81 | 0.29 | 0.29 | 0.72 | | |
| EFR-6 | 3.14 | 1.63 | 0.27 | 0.29 | 0.27 | 0.39 | 0.14 | 0.48 | 0.12 | 0.00 | 0.16 | | |
| EFR-7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-8 | 0.1 | 0.25 | 0.37 | 0.27 | 0.23 | 0.33 | 0.05 | 0.11 | 0.00 | 0.00 | 0 | | |
| EFR-9 | 0.33 | 0.25 | 0.24 | 0.02 | 0.32 | 0.54 | 0.17 | 0.10 | 1.03 | 0.00 | 0.02 | | |
| EFR-10 | 2.70 | 2.76 | 2.45 | 0.84 | 0.29 | 0.64 | 0.79 | 1.33 | 0.54 | 0.00 | 2.21 | | |
| EFR-11 | 1.86 | 1.97 | 2.62 | 4.69 | 3.83 | 1.19 | 0.99 | 1.01 | 0.66 | 0.19 | 3.57 | | |
| EFR-12 | 0.24 | 0.64 | 0.56 | 0.49 | 0.52 | 0.45 | 0.13 | 0.24 | 0.01 | 0.00 | 0.00 | | |
| EFR-13 | 0.55 | 0.68 | 0.08 | 0.11 | 0.26 | 0.25 | 0.12 | 0.27 | 0.03 | 0.12 | 0.19 | | |
| EFR-14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-15 | 0.29 | 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 | | |
| EFR-17 | 1.10 | 1.07 | 0.18 | 0.03 | 0.00 | 0.00 | 0.39 | 0.51 | 0.01 | 0.00 | 0.00 | | |
| EFR-18 | 0.04 | 0.84 | 1.32 | 1.31 | 0.04 | 0.00 | 0.86 | 0.01 | 0.00 | 0.00 | 0.08 | | |
| EFR-19 | 1.30 | 1.09 | 0.40 | 0.80 | 0.31 | 1.51 | 0.52 | 0.09 | 0.00 | 0.00 | 0.00 | | |
| EFR-20 | 1.77 | 2.45 | 2.30 | 1.88 | 1.33 | 2.42 | 1.00 | 3.18 | 2.41 | 0.00 | 1.78 | | |
| EFR-21 | 0.00 | 0.00 | 0.01 | 2.43 | 1.85 | 1.45 | 2.44 | 2.39 | 2.03 | 2.55 | 2.19 | | |
| EFR-22 | 1.09 | 0.76 | 2.60 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-23 | 0.81 | 0.67 | 0.82 | 0.06 | 0.50 | 2.24 | 0.05 | 0.26 | 0.04 | 0.00 | 0.11 | | |
| EFR-24 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-25 | 0.33 | 0.69 | 0.14 | 0.09 | 0.05 | 0.21 | 0.32 | 0.00 | 0.00 | 0.00 | 0.08 | | |
| EFR-26 | 0.28 | 0.40 | 0.38 | 0.27 | 0.30 | 0.18 | 0.51 | 0.20 | 0.15 | 0.00 | 0.93 | | |
| EFR-27 | 1.77 | 3.10 | 2.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| EFR-28 | 0.14 | 0.28 | 1.04 | 0.30 | 0.61 | 0.44 | 0.88 | 0.30 | 0.09 | 0.08 | 0.08 | | |
| MIN (ft) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| MAX (ft) | 3.14 | 3.10 | 2.91 | 4.69 | 3.83 | 2.42 | 2.44 | 3.18 | 2.41 | 2.55 | 3.57 | | |
| Average (ft) | 1.00 | 0.91 | 0.87 | 0.81 | 0.45 | 0.54 | 0.39 | 0.50 | 0.33 | 0.18 | 0.51 | | |
| Total Free Product (ft) | 27.96 | 25.54 | 24.47 | 17.07 | 12.59 | 15.15 | 11.02 | 14.11 | 9.23 | 5.14 | 14.39 | | |
| Total Standing Free Product Volume (gal) | 18.11 | 16.60 | 15.91 | 11.10 | 8.18 | 9.85 | 7.16 | 9.17 | 6.00 | 3.34 | 9.35 | | |
| Estimated Total Free Product Removed (gal) (1) *(Liquid and Vapor Phase Free Product Volume)* | 25.66 | 27.22 | 38.50 | 30.89 | 17.21 | 27.94 | 19.05 | 25.45 | 21.45 | 12.02 | 17.46 | 54 | 3,843 |
| Estimated Total Fluids Removed (gal) *(Liquid Phase Free Product Volume plus Groundwater Extraction Volume) as of Jan 2000* | 28.05 | 28.05 | 38.78 | 31.35 | 17.33 | 30.53 | 19.39 | 26.40 | 22.28 | 14.85 | 20.63 | 32 | 1,378 |
| Vapor Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 1.74 | 1.64 | 1.38 | 1.51 | 0.71 | 0.94 | 0.90 | 2.35 | 0.00 | 1.30 | 0.96 | 5 | 224 |
| Liquid Phase Free Product Extraction Volume (gal) *as of Jan 2000* | 23.93 | 25.58 | 37.13 | 28.88 | 16.50 | 26.40 | 18.15 | 23.10 | 21.45 | 10.73 | 16.50 | 29 | 1,257 |
| Groundwater Extraction Volume (gal) per each EFR Event (7) *as of Jan 2000* | 4.13 | 2.48 | 1.65 | 2.48 | 0.83 | 4.13 | 1.24 | 3.30 | 0.83 | 4.13 | 4.13 | 3 | 121 |
| Total EFR Extraction Volume (gal) *(Total Volume: free product + groundwater + product vapor)* | 29.80 | 29.70 | 40.16 | 32.87 | 18.04 | 31.47 | 20.29 | 29.75 | 22.28 | 16.16 | 21.59 | 212 | 15,020 |
| Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* (9) | | | 328.09 | | | | | | | | In Onsite Storage (8) | 182 | 4,193 |
| Total Volume Removed from Site (gal) *(Manifested volume)* (9) | | | 529 | | | | | | | | In Onsite Storage (8) | 494 | 18,777 |
| Cumulative Total Free Product Removed (gal) | 3,607 | 3,635 | 3,673 | 3,703 | 3,721 | 3,748 | 3,767 | 3,792 | 3,814 | 3,826 | 3,843 | N/A | 3,843 |
| Extraction, Transportation & Disposal Cost(2) | 851.00 | | $ 1,344.36 | | | | | | | | | $ 1,283.66 | $ 52,559.78 |
| Unit Cost per gal(3) | 8.10 | | $ 2.54 | | | | | | | | | $ 3.69 | N/A |
| State Manifest Document Number | | | NJA5010142 (13) | | | | | | | | | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| | 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 |
| | EFR-3 | 0.65 | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 | 1.46 | 1.25 | 1.67 | 1.78 | 0.38 |
| | 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 |
| | 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 |
| 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 |
| | 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 | 2.68 | 3.47 | 6.15 | 2.65 | 2.61 | 2.66 | 2.66 | 1.57 | 1.77 |
| | EFR-6 | 0.72 | 1.00 | 1.24 | 2.27 | 1.71 | 1.17 | 2.23 | 1.55 | 1.56 | 1.86 | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 | 3.63 | 2.47 | 3.02 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 | 6.86 | 7.03 | 6.75 | 7.07 | 4.69 | 7.98 | 5.62 | 4.97 | 4.93 | 5.27 | 6.23 | 3.95 | 4.04 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |

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

| | EFR Event Date | 27-Oct-99 | 30-Nov-99 | 16-Dec-99 | 28-Jan-00 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Western Region of Free Product | EFR-1 | 1.63 | 1.47 | 1.20 | 1.22 | 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 |
| | EFR-2 | 1.35 | 1.28 | 1.40 | 0.06 | 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 |
| | EFR-3 | 0.69 | 0.47 | 0.02 | 0.51 | 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 |
| | EFR-17 | 0.06 | 0.24 | 0.25 | 0.11 | 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 |
| | EFR-18 | 0.36 | 0.77 | 0.05 | 0.20 | 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 |
| | EFR-20 | 1.92 | 1.36 | 0.75 | 1.08 | 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 |
| | EFR-21 | 2.32 | 1.40 | 1.70 | 1.92 | 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 | 1.87 | 1.58 | 1.38 |
| | EFR-28 | 2.19 | 0.96 | 1.42 | 1.33 | 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 |
| | Total Free Product (ft) | 10.52 | 7.95 | 6.79 | 6.43 | 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 |
| | Total Free Product (gal) | 6.84 | 5.17 | 4.41 | 4.18 | 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 |
| West-Central Region of Free Product | EFR-4 | 0.11 | 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 |
| | EFR-5 | 3.23 | 2.99 | 1.27 | 2.95 | 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 |
| | EFR-6 | 0.86 | 0.63 | 0.33 | 1.07 | 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 |
| | EFR-7 | 0.07 | 0.04 | 0.47 | 0.15 | 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 |
| | EFR-19 | 1.54 | 0.84 | 0.69 | 1.67 | 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 |
| | EFR-22 | 2.22 | 1.76 | 0.53 | 0.82 | 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 |
| | EFR-23 | 0.53 | 0.64 | 0.24 | 0.23 | 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 |
| | EFR-24 | 0.00 | 0.04 | 0.13 | 0.11 | 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 |
| | EFR-25 | 0.39 | 0.19 | 0.05 | 0.31 | 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 |
| | EFR-26 | 0.52 | 0.94 | 0.59 | 1.54 | 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 |
| | EFR-27 | 0.01 | 0.01 | 0.01 | 0.02 | 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 |
| | Total Free Product (ft) | 9.48 | 8.11 | 4.89 | 9.38 | 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 |
| | Total Free Product (gal) | 6.16 | 5.27 | 3.18 | 6.10 | 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 |
| East-Central Region of Free Product | EFR-8 | 0.13 | 0.05 | 0.11 | 0.05 | 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 |
| | EFR-9 | 0.28 | 0.10 | 0.15 | 0.13 | 0.08 | 0.19 | 0.02 | 0.06 | 0.06 | 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 |
| | EFR-10 | 5.18 | 3.95 | 3.07 | 4.50 | 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 |
| | EFR-11 | 3.20 | 3.11 | 1.07 | 3.44 | 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 | 3.56 | 2.60 | 3.91 | 2.37 | 3.86 | 3.22 | 2.44 |
| | EFR-12 | 0.09 | 0.67 | 0.01 | 0.03 | 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 |
| | EFR-13 | 0.78 | 0.57 | 0.26 | 0.36 | 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 |
| | Total Free Product (ft) | 9.66 | 8.45 | 4.67 | 8.51 | 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 |
| | Total Free Product (gal) | 6.28 | 5.49 | 3.04 | 5.53 | 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 |
| 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 |
| | EFR-15 | 0.02 | 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 | 0.03 |
| | 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 |
| | Total Free Product (ft) | 0.02 | 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 | 0.03 |
| | Total Free Product (gal) | 0.01 | 0.05 | 0.01 | 0.01 | 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 |
| TOTAL APPARENT FREE PRODUCT VOLUME (GAL) | | 19.29 | 15.98 | 10.64 | 15.82 | 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 |

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

| | EFR Event Date | 31-Dec-01 | 29-Jan-02 | 20-Feb-02 | 26-Mar-02 | 10-Apr-02 | 6-May-02 | 13-Jun-02 | 15-Jul-02 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | 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 | 1.57 | 2.07 | 1.93 | 0.90 | 0.77 | 1.60 | 1.92 | 0.65 | 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 |
| | EFR-2 | 1.19 | 1.37 | 1.33 | 1.40 | 1.20 | 2.39 | 2.15 | 1.33 | 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 |
| | EFR-3 | 0.80 | 0.70 | 0.78 | 1.05 | 1.09 | 1.28 | 1.53 | 0.25 | 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 |
| | EFR-17 | 1.57 | 1.43 | 2.23 | 1.90 | 0.77 | 0.75 | 0.60 | 0.43 | 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 |
| | EFR-18 | 1.22 | 1.90 | 1.00 | 1.07 | 0.81 | 0.80 | 0.05 | 0.32 | 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 |
| | EFR-20 | 1.29 | 1.78 | 0.46 | 1.24 | 1.24 | 1.74 | 2.03 | 1.62 | 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 |
| | EFR-21 | 1.54 | 1.51 | 1.50 | 2.25 | 1.65 | 2.11 | 2.51 | 1.98 | 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 |
| | EFR-28 | 1.51 | 1.67 | 1.86 | 0.21 | 0.63 | 0.29 | 0.35 | 1.08 | 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 |
| | Total Free Product (ft) | 10.69 | 12.43 | 11.09 | 10.02 | 8.16 | 10.96 | 11.14 | 7.66 | 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 |
| | Total Free Product (gal) | 6.95 | 8.08 | 7.21 | 6.51 | 5.30 | 7.12 | 7.24 | 4.98 | 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 |
| West-Central Region of Free Product | EFR-4 | 0.54 | 0.26 | 1.13 | 0.37 | 0.89 | 0.98 | 1.07 | 1.00 | 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 |
| | EFR-5 | 2.67 | 2.66 | 2.68 | 3.50 | 3.07 | 3.25 | 2.17 | 2.01 | 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 |
| | EFR-6 | 1.23 | 0.71 | 2.21 | 2.30 | 0.77 | 0.43 | 0.27 | 0.54 | 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 | 0.16 |
| | EFR-7 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 |
| | EFR-19 | 2.38 | 2.26 | 3.22 | 2.90 | 2.69 | 1.34 | 0.95 | 1.82 | 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 |
| | EFR-22 | 1.93 | 0.98 | 0.63 | 0.80 | 0.39 | 0.16 | 0.19 | 0.32 | 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 |
| | EFR-23 | 0.75 | 0.98 | 1.13 | 0.01 | 0.70 | 0.57 | 0.52 | 0.60 | 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 |
| | EFR-24 | 0.34 | 0.47 | 2.65 | 0.60 | 1.35 | 0.33 | 0.24 | 1.18 | 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 |
| | EFR-25 | 0.64 | 0.82 | 0.99 | 0.75 | 1.21 | 0.33 | 0.29 | 0.36 | 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 |
| | EFR-26 | 1.13 | 1.14 | 0.87 | 1.55 | 1.67 | 1.83 | 1.92 | 2.42 | 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 |
| | EFR-27 | 0.13 | 0.53 | 0.32 | 0.00 | 0.00 | 0.38 | 1.31 | 1.10 | 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 |
| | Total Free Product (ft) | 11.98 | 10.81 | 15.83 | 12.78 | 12.74 | 9.60 | 8.93 | 11.35 | 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 |
| | Total Free Product (gal) | 7.79 | 7.03 | 10.29 | 8.31 | 8.28 | 6.24 | 5.80 | 7.38 | 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 |
| East-Central Region of Free Product | EFR-8 | 0.22 | 0.01 | 0.04 | 0.07 | 0.10 | 0.05 | 0.07 | 0.00 | 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 |
| | EFR-9 | 0.32 | 0.29 | 0.45 | 0.32 | 0.32 | 0.28 | 0.11 | 0.35 | 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 |
| | EFR-10 | 2.91 | 2.02 | 3.32 | 3.48 | 2.77 | 2.64 | 3.39 | 3.16 | 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 |
| | EFR-11 | 2.90 | 2.89 | 2.58 | 2.12 | 0.99 | 0.87 | 1.01 | 1.54 | 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 |
| | EFR-12 | 0.21 | 0.26 | 0.11 | 0.10 | 0.15 | 0.00 | 0.06 | 0.30 | 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 |
| | EFR-13 | 0.44 | 0.84 | 0.44 | 0.87 | 0.68 | 1.71 | 1.11 | 0.55 | 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 |
| | Total Free Product (ft) | 7.00 | 6.31 | 6.94 | 6.96 | 5.01 | 5.55 | 5.75 | 5.90 | 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 |
| | Total Free Product (gal) | 4.55 | 4.10 | 4.51 | 4.52 | 3.26 | 3.61 | 3.74 | 3.84 | 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 |
| 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 |
| | EFR-15 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 | 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 |
| | 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 |
| | Total Free Product (ft) | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.20 | 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 |
| | Total Free Product (gal) | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.13 | 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 |
| TOTAL APPARENT FREE PRODUCT VOLUME (GAL) | | 19.29 | 19.21 | 22.01 | 19.38 | 16.84 | 16.97 | 16.78 | 16.32 | 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 |

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

MONTHLY EFR WELL GAUGING LOG

EFR #68 DATE 8-Jul-03

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| | | | |
| EFR-1 | 9.04 | 9.17 | 0.13 |
| EFR-2 | 9.53 | 11.14 | 1.61 |
| EFR-3 | 9.55 | 9.63 | 0.08 |
| EFR-4 | 10.95 | 10.95 | 0.00 |
| EFR-5 | 9.49 | 9.78 | 0.29 |
| EFR-6 | 8.75 | 8.87 | 0.12 |
| EFR-7 | 5.92 | 5.92 | 0.00 |
| EFR-8 | 5.06 | 5.06 | 0.00 |
| EFR-9 | 5.32 | 6.35 | 1.03 |
| EFR-10 | 6.11 | 6.65 | 0.54 |
| EFR-11 | 5.55 | 6.21 | 0.66 |
| EFR-12 | 4.64 | 4.65 | 0.01 |
| EFR-13 | 4.31 | 4.34 | 0.03 |
| EFR-14 | 4.08 | 4.08 | 0.00 |
| EFR-15 | 3.46 | 3.46 | 0.00 |
| EFR-16 | 4.35 | 4.35 | 0.00 |
| EFR-17 | 7.75 | 7.76 | 0.01 |
| EFR-18 | 8.41 | 8.41 | 0.00 |
| EFR-19 | 11.29 | 11.29 | 0.00 |
| EFR-20 | 8.94 | 11.35 | 2.41 |
| EFR-21 | 7.9 | 9.93 | 2.03 |
| EFR-22 | 11.38 | 11.38 | 0.00 |
| EFR-23 | 7.78 | 7.82 | 0.04 |
| EFR-24 | 10.75 | 10.75 | 0.00 |
| EFR-25 | 10.46 | 10.46 | 0.00 |
| EFR-26 | 12.24 | 12.39 | 0.15 |
| EFR-27 | 10.57 | 10.57 | 0.00 |
| EFR-28 | 9.46 | 9.55 | 0.09 |

Total Volume Of Free Standing Product (gal) 6.00

CEMCO FIELD TECHNICIAN: G. Pizzuti

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

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

**EFR #68** **8-Jul-03**

| 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 | 1.0 | 0.0167 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-2 | 8.0 | 0.1333 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-3 | 1.0 | 0.0167 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-4 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-5 | 2.0 | 0.0333 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-6 | 2.0 | 0.0333 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| 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 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-10 | 3.5 | 0.0583 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-11 | 3.5 | 0.0583 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-12 | 0.5 | 0.0083 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 0.5 | 0.0083 | 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 | 0.5 | 0.0083 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-18 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-19 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-20 | 10.0 | 0.1667 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-21 | 10.0 | 0.1667 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-22 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-23 | 1.0 | 0.0167 | 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 | 1.0 | 0.0167 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 2.0 | 0.0333 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| TOTAL EFR Time (hrs) | | 0.7833 | AVG ppm | 0.00 | | | TOTAL LBS | 0.0000 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 0.0000 |

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) | 13.00 |
| Groundwater Thickness (in) | 0.50 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 21.45 |
| Total Groundwater Volume (gal) | 0.83 |
| Ratio Groundwater to Free Product (gal/gal) | 0.04 |

| | | Y (gal) |
|---|---|---|
| Total Recovered Groundwater Volume (gal) | | 0.83 |
| Total Recovered Free Product Volume (gal) | | 21.45 |
| Total Recovered Fluids Volume (gal) | | 22.28 |
| TOTAL EFR PRODUCT VOLUME | | 21.45 GAL |

| | |
|---|---|
| Date | 8-Jul-03 |
| Project # | 3868.36 |
| Subcontractor | CEMCO |
| Vac Head Utilized | NORTECH Corp. 551B |

CEMCO Field Technician: Gary Pizzuti

RMT Project Manager: Nick Clevett

*NOTE: DUE TO LEL METER MALFUNCTION, LEL READINGS WERE UNABLE TO BE OBTAINED.*

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

MONTHLY EFR WELL GAUGING LOG

EFR #69 DATE 7-Aug-03

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| EFR-1 | 8.78 | 9.27 | 0.49 |
| EFR-2 | 9.36 | 10.68 | 1.32 |
| EFR-3 | 9.31 | 9.41 | 0.10 |
| EFR-4 | 10.23 | 10.23 | 0.00 |
| EFR-5 | 9.27 | 9.56 | 0.29 |
| EFR-6 | 9.55 | 9.55 | 0.00 |
| EFR-7 | 4.77 | 4.77 | 0.00 |
| EFR-8 | 4.92 | 4.92 | 0.00 |
| EFR-9 | 5.06 | 5.06 | 0.00 |
| EFR-10 | 5.94 | 5.94 | 0.00 |
| EFR-11 | 5.35 | 5.54 | 0.19 |
| EFR-12 | 4.45 | 4.45 | 0.00 |
| EFR-13 | 4.1 | 4.22 | 0.12 |
| EFR-14 | 3.87 | 3.87 | 0.00 |
| EFR-15 | 3.11 | 3.11 | 0.00 |
| EFR-16 | 3.98 | 3.98 | 0.00 |
| EFR-17 | 7.24 | 7.24 | 0.00 |
| EFR-18 | 8.08 | 8.08 | 0.00 |
| EFR-19 | 10.94 | 10.94 | 0.00 |
| EFR-20 | 8.78 | 8.78 | 0.00 |
| EFR-21 | 7.66 | 10.21 | 2.55 |
| EFR-22 | 11.76 | 11.76 | 0.00 |
| EFR-23 | 7.17 | 7.17 | 0.00 |
| EFR-24 | 10.58 | 10.58 | 0.00 |
| EFR-25 | 10.27 | 10.27 | 0.00 |
| EFR-26 | 12.08 | 12.08 | 0.00 |
| EFR-27 | 9.06 | 9.06 | 0.00 |
| EFR-28 | 9.04 | 9.12 | 0.08 |

Total Volume Of Free Standing Product (gal) 3.34

CEMCO FIELD TECHNICIAN: G. Pizzuti

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

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

**EFR #69** **7-Aug-03**

| 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 | 2.5 | 0.0417 | 3,319 | 51 | 17 | 100 | 15.34 | 0.6393 |
| EFR-2 | 8.0 | 0.1333 | 3,044 | 46 | 17 | 100 | 14.07 | 1.8761 |
| EFR-3 | 1.0 | 0.0167 | 564 | 9 | 17 | 100 | 2.61 | 0.0435 |
| EFR-4 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-5 | 2.0 | 0.0333 | 2,270 | 35 | 17 | 100 | 10.49 | 0.3497 |
| 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 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-9 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-10 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-11 | 2.0 | 0.0333 | 1,850 | 28 | 17 | 100 | 8.55 | 0.2851 |
| EFR-12 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 2.0 | 0.0333 | 4,067 | 62 | 17 | 100 | 18.80 | 0.6267 |
| 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 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-19 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-20 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-21 | 15.0 | 0.2500 | 5,405 | 82 | 17 | 100 | 24.99 | 6.2469 |
| 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 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 1.0 | 0.0167 | 964 | 15 | 17 | 100 | 4.46 | 0.0743 |
| Total EFR Time (hrs) | | 0.5583 | AVG PPM | 976.55 | | | TOTAL GAS | 10.1416 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 1.2988 |

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) | 6.50 |
| Groundwater Thickness (in) | 2.50 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 10.73 |
| Total Groundwater Volume (gal) | 4.13 |
| Ratio Groundwater to Free Product (gal/gal) | 0.38 |

| | Y (gal) |
|---|---|
| Total Recovered Groundwater Volume (gal) | 4.13 |
| Total Recovered Free Product Volume (gal) | 10.73 |
| Total Recovered Fluids Volume (gal) | 14.85 |
| TOTAL EFR PRODUCT VOLUME | 12.02 GAL |

| | |
|---|---|
| Date | 7-Aug-03 |
| Project # | 3868.36 |
| 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 #70 DATE 9-Sep-03

| WELL ID | DEPTH TO PRODUCT (ft) | DEPTH TO WATER (ft) | PRODUCT TICKNESS (ft) |
|---|---|---|---|
| EFR-1 | 10.22 | 10.91 | 0.69 |
| EFR-2 | 10.76 | 12.17 | 1.41 |
| EFR-3 | 10.75 | 10.94 | 0.19 |
| EFR-4 | 12.15 | 12.18 | 0.03 |
| EFR-5 | 10.62 | 11.34 | 0.72 |
| EFR-6 | 9.94 | 10.1 | 0.16 |
| EFR-7 | 6.28 | 6.28 | 0.00 |
| EFR-8 | 6.17 | 6.17 | 0.00 |
| EFR-9 | 6.34 | 6.36 | 0.02 |
| EFR-10 | 7.14 | 9.35 | 2.21 |
| EFR-11 | 6.58 | 10.15 | 3.57 |
| EFR-12 | 5.73 | 5.73 | 0.00 |
| EFR-13 | 5.29 | 5.47 | 0.18 |
| EFR-14 | 5.04 | 5.04 | 0.00 |
| EFR-15 | 4.37 | 4.37 | 0.00 |
| EFR-16 | 5.07 | 5.07 | 0.00 |
| EFR-17 | 8.95 | 8.95 | 0.00 |
| EFR-18 | 10.55 | 10.63 | 0.08 |
| EFR-19 | 10.46 | 10.46 | 0.00 |
| EFR-20 | 10.21 | 11.99 | 1.78 |
| EFR-21 | 9.08 | 11.27 | 2.19 |
| EFR-22 | 11.52 | 11.52 | 0.00 |
| EFR-23 | 8.86 | 8.97 | 0.11 |
| EFR-24 | 11.88 | 11.88 | 0.00 |
| EFR-25 | 11.59 | 11.65 | 0.06 |
| EFR-26 | 13.34 | 14.27 | 0.93 |
| EFR-27 | 11.75 | 11.75 | 0.00 |
| EFR-28 | 10.65 | 10.71 | 0.06 |

Total Volume Of Free Standing Product (gal) 9.35

CEMCO FIELD TECHNICIAN: G. Pizzuti

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

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

**EFR #70** **9-Sep-03**

| 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 | 4.0 | 0.0667 | 1,312 | 20 | 17 | 100 | 6.06 | 0.4043 |
| EFR-2 | 8.0 | 0.1333 | 1,286 | 20 | 17 | 100 | 5.94 | 0.7925 |
| EFR-3 | 3.0 | 0.0500 | 1,063 | 16 | 17 | 100 | 4.91 | 0.2456 |
| EFR-4 | 1.0 | 0.0167 | 918 | 14 | 17 | 100 | 4.25 | 0.0708 |
| EFR-5 | 4.0 | 0.0667 | 407 | 6 | 17 | 100 | 1.88 | 0.1253 |
| EFR-6 | 3.0 | 0.0500 | 1,706 | 26 | 17 | 100 | 7.88 | 0.3942 |
| 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 | 1.0 | 0.0167 | 787 | 12 | 17 | 100 | 3.64 | 0.0606 |
| EFR-10 | 12.0 | 0.2000 | 866 | 13 | 17 | 100 | 4.00 | 0.8006 |
| EFR-11 | 15.0 | 0.2500 | 1,338 | 20 | 17 | 100 | 6.19 | 1.5466 |
| EFR-12 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-13 | 2.0 | 0.0333 | 1,312 | 20 | 17 | 100 | 6.06 | 0.2022 |
| 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 | 2.0 | 0.0333 | 643 | 10 | 17 | 100 | 2.97 | 0.0991 |
| EFR-19 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-20 | 10.0 | 0.1667 | 1,273 | 19 | 17 | 100 | 5.88 | 0.9805 |
| EFR-21 | 8.0 | 0.1333 | 1,227 | 19 | 17 | 100 | 5.67 | 0.7561 |
| EFR-22 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-23 | 2.0 | 0.0333 | 2,362 | 36 | 17 | 100 | 10.92 | 0.3639 |
| EFR-24 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-25 | 2.0 | 0.0333 | 787 | 12 | 17 | 100 | 3.64 | 0.1213 |
| EFR-26 | 6.0 | 0.1000 | 912 | 14 | 17 | 100 | 4.22 | 0.4215 |
| EFR-27 | 0.0 | 0.0000 | 0 | 0 | 17 | 100 | 0.00 | 0.0000 |
| EFR-28 | 2.0 | 0.0333 | 827 | 13 | 17 | 100 | 3.82 | 0.1274 |
| Total EFR Time (hrs) | | 1.4167 | AVG ppm | 864.73 | | | TOTAL (LBS) | 7.5125 |
| | | | | | | | TOTAL VAPOR PHASE VOLUME (GAL) | 0.9621 |

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) | 10.00 |
| Groundwater Thickness (in) | 2.50 |
| Conversion @ 1.65 gal/inch | 1.65 |
| Total Product Volume (gal) | 16.50 |
| Total Groundwater Volume (gal) | 4.13 |
| Ratio Groundwater to Free Product (gal/gal) | 0.25 |

| | | Y (gal) |
|---|---|---|
| Total Recovered Groundwater Volume (gal) | | 4.13 |
| Total Recovered Free Product Volume (gal) | | 16.50 |
| Total Recovered Fluids Volume (gal) | | 20.63 |
| TOTAL EFR PRODUCT VOLUME | | 17.46 GAL |

| | |
|---|---|
| Date | 9-Sep-03 |
| Project # | 3868.36 |
| Subcontractor | CEMCO |
| Vac Head Utilized | NORTECH Corp. 551B |

CEMCO Field Technician Gary Pizzuti

RMT Project Manager Nick Clevett

# TABLE 4
## L.E. CARPENTER - WHARTON, NEW JERSEY
*QUARTERLY MONITORING PROTOCOL*

| Monitoring Well | Analytical Parameters | Rational | Comments |
|---|---|---|---|
| MW-14S | BTEX(1) DEHP(1) | Analytical results will identify the migration of the dissolved groundwater plume in the Shallow Aquifer Zone downgradient of the site (Wharton Enterprise property) | Monitoring Well added to quarterly sampling protocol beginning 1st Quarter 2002 the further assess groundwater quality and flow within the Wharton Enterprise property. |
| MW-14I | BTEX(1) DEHP(1) | Analytical results will identify the migration of the dissolved groundwater plume in the Intermediate Aquifer Zone downgradient of the site (Wharton Enterprise property) | Original Monitoring Well |
| MW-15S | BTEX(1) DEHP(1) | Analytical results will identify if the dissolved groundwater plume is migrating through this portion of the shallow aquifer zone (on the rail spur right-of-way) | Original Monitoring Well |
| MW-15I | BTEX(1) DEHP(1) | Analytical results will identify the migration of the dissolved groundwater plume through the Intermediate Aquifer Zone in the is area (on rail spur right-of-way) | Original Monitoring Well |
| MW-22R | BTEX(1) DEHP(1) | Analytical results will identify the movement of the dissolved groundwater plume in the shallow aquifer zone downgradient of the site (Wharton Enterprise property). | Original Monitoring Well. Beginning in 2nd quarter 2001, well will be analyzed for DEHP quarterly vs. semiannually |
| MW-25R | BTEX(1) DEHP(1) | Analytical results will identify the movement of the dissolved groundwater plume in the shallow aquifer zone downgradient of the site. East of MW-22R (Wharton Enterprise property). | DEHP sampling required quarterly as opposed to semi annually per Nov 23, 1998 NJDEP Letter. |
| MW-17S | BTEX(1) DEHP(1) | Analytical results from this well will also identify "background" conditions at the site in the shallow aquifer zone. | Original Monitoring Well |
| MW-4 | BTEX(1) DEHP(1) | Analytical results from this well will also identify "background" conditions at the site in the shallow aquifer zone (south portion of subject site, bordering on the Rockaway River) | Original Monitoring Well |
| MW-11D(R) | DEHP(1) | Analytical results from this well identify potential contamination of deep aquifer. This well lies in the center of the free product plume. | New well added to monitoring protocol as of May 21, 1999 NJDEP Letter (review of 1st quarter 1999 monitoring report). Well exhibited DEHP contamination potentially as the result of draw down during well installation. Well will be sampled for both monitoring program parameters (BTEX & DEHP) per NJDEP letter dated Aug 17, 1999. As of 4th Quarter 2000 (1 year of BTEX and DEHP sampling), approval was requested from NJDEP and USEPA to remove this well from the quarterly sampling program. NJDEP response letter dated April 5, 2001 following review of the 4th Quarter 2000 monitoring report requested that MW-11D(R) be sampled quarterly for DEHP ONLY. |
| MW-21 | BTEX(1) DEHP(1) | Analytical results from this well will also identify "background" conditions at the site in the shallow aquifer zone. Additionally, data from this well is used to track the potential migratory trend from MW-25 (Eastern most portion of the subject site) | New well added to monitoring protocol as of Nov 23, 1998 NJDEP Letter. |

**NOTES**
(1) Parameter analyzed every quarter
(2) Low flow sampling initiated 1st Quarter 2002 [Ref. Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater (RMT, May 2001]
(3) Beginning 1st Quarter 2002, both BTEX and DEHP will be analyzed every quarter

S: Shallow Hydrogeologic Unit
I: Intermediate Hydrogeologic
D: Deep Hydrogeologic Unit
R: Replacement well

**QA/QC PROTOCOL**
QA/QC procedures outlined in the Quality Assurance Project Plan (QAPP) included as Appendix A in the report entitled Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater (RMT, May 2001), and amended in the October 23, 2001 responses to agency comments regarding the "Workplan", will be followed during each sampling event.

Field Blank : BTEX & DEHP - USE TRIPLE DISTILLED WATER
Trip Blank: BTEX & DEHP - USE TRIPLE DISTILLED WATER
Rinsate Blank: BTEX & DEHP
Duplicate Sample: BTEX & DEHP

**FIELD ANALYSIS**
All quarterly monitoring wells will be field tested for pH, temperature, specific conductivity, & turbidity

# TABLE 5
## 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 | 3,000 |
| | | 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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS [6] | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 90 |
| | | 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 |

# TABLE 5
## 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-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 |

# TABLE 5
## 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-14Id | | 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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS [B] | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 93 | 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 |

# TABLE 5
## 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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS [6] | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS (6) | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 |
| | | 3 | 20-Aug-03 | < 0.2 | < 0.2 | < 0.2 | < 0.6 | J 2 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS [6] | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 280 | 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 | 65,000 | 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 | 2,810 | < 35 | 11,000 | NA |
| | | 4 | 20-Nov-98 | < 40 | 1,850 | < 28 | 7,230 | 1,100 |
| | 1999 | 1 | 21-Jan-99 | < 0.4 | 18 | < 0.28 | 84 | NA |
| | | 2 | 15-Apr-99 | < 31 | 1,600 | < 34 | 7,600 | 870 |
| | | 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 | < 7.6 | 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 | < 26 | 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 | 9,200 |
| Dilution Factor 100 | | 4 | 26-Oct-01 | < 26 | 980 | < 26 | 4,700 | 15,000 |
| Dilution Factor 100 | | 4 duplicate | 26-Oct-01 | < 26 | 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 | < 5.6 | 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, 3 for DEHP | | 2 | 3-Jun-03 | < 1 | 690 | < 1 | 2,600 | 170.0 |
| Dilution factors - 5 for BTEX, 10 for DEHP | | 3 | 20-Aug-03 | < 1 | 210 | < 1 | 1,200 | 260.0 |

Table 5 8.5x11

# TABLE 5
## 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 | 88 |
| | 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 | 83 |
| | | 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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS (6) | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 |

# TABLE 5
## 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 |
| RINAste -001 | | 3 | 13-Aug-02 | < 0.22 | < 0.18 | < 0.24 | < 0.2 | 4.5 |
| RINAste-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 |

# TABLE 5
## L.E. CARPENTER - Wharton, New Jersey
## Quarterly Groundwater Monitoring Data

| MONITORING WELLS | SAMPLING DATE | | | CHEMICAL ANALYSIS RESULTS [6] | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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. N087 (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 |

# TABLE 5
## 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 |

## 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 6
## L.E. Carpenter and Company, Wharton, New Jersey
### Quarterly Groundwater Elevations

| WELL LOCATION | WELL TYPE | WELL INSTALLATION AND CONSTRUCTION INFORMATION (7) | | | | | | | | | | PROFESSIONAL SURVEY INFORMATION | | | | ELEVATIONS (FT. MSL) | | | QUARTERLY MEASUREMENT INFORMATION (10) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MANAGING CONSULTANT | INSTALLATION DATE | TOTAL WELL DEPTH (FT) | WELL DIAMETER (IN) | SCREEN MATERIAL | SLOT SIZE (IN) | TOP OF SCREEN (FT) | BOTTOM OF SCREEN (FT) | SCREENED INTERVAL (FT) | AQUIFER SYSTEM | BASELINE LOCATION (feet) (8) (Y) North | (X) East | GEODETIC LOCATION LATITUDE | LONGITUDE | GROUND | OUTER CASING | INNER WELL | MEAS. DATE | PRODUCT DEPTH | WATER DEPTH | PRODUCT ELEVATION | WATER ELEVATION | PRODUCT THICKNESS (ft) | CORRECTED WATER LEVEL ELEVATIONS (12) |
| CW-1 | Caisson Well | ROY F. WESTON | - | - | - | - | - | - | - | - | - | 754247.22 | 471142.06 | 40° 54' 14.2" | 74° 34' 34.7" | 630.83 | 634.35 | | 19-Aug-03 | 6.65 | 7.03 | 627.70 | 623.80 | 0.38 | 624.16 |
| CW-3 | Caisson Well | ROY F. WESTON | - | - | - | - | - | - | - | - | - | 754203.93 | 471309.9 | 40° 54' 13.8" | 74° 34' 32.5" | 628.63 | 633.30 | | 19-Aug-03 | - | 7.07 | - | 621.56 | - | - |
| GEI-1I | Piezometer | ROY F. WESTON | April to October 1989 | 44.34 | 2.00 | PVC | 0.02 | 31.62 | 41.62 | 10.00 | I | 754767.14 | 471095.56 | 40° 54' 19.3" | 74° 34' 35.3" | 628.44 | 630.93 | 630.78 | 19-Aug-03 | - | 4.14 | - | 626.64 | - | - |
| GEI-2I | Piezometer | ROY F. WESTON | April to October 1989 | 46.28 | 2.00 | PVC | 0.02 | 31.50 | 41.50 | 10.00 | I | 754573.99 | 470499.76 | 40° 54' 17.4" | 74° 34' 43.1" | 635.92 | 638.35 | 638.20 | 19-Aug-03 | - | 10.42 | - | 627.78 | - | - |
| GEI-3I | Piezometer | ROY F. WESTON | April to October 1989 | 53.29 | 2.00 | PVC | 0.02 | 10.00 | 20.00 | 10.00 | S | 754566 | 470506.18 | 40° 54' 17.3" | 74° 34' 43.0" | 635.46 | 637.87 | 637.67 | 19-Aug-03 | - | 10.35 | - | 627.32 | - | - |
| MW-1(R) | Monitoring Well | ROY F. WESTON | February 3, 1995 | 22.50 | 4.00 | STEEL | 0.01 | 7.00 | 22.50 | 15.50 | S | 754311.79 | 470453.7 | 40° 54' 14.8" | 74° 34' 43.7" | 637.56 | 639.99 | 639.85 | 19-Aug-03 | - | 12.55 | - | 627.30 | - | - |
| MW-2(R) | Monitoring Well | ROY F. WESTON | January 30, 1995 | 13.00 | 2.00 | PVC | 0.01 | 2.00 | 12.00 | 10.00 | S | 754207.21 | 470825.97 | 40° 54' 13.8" | 74° 34' 38.8" | 635.79 | 635.78 | 635.47 | 19-Aug-03 | 9.07 | 9.61 | 626.40 | 625.86 | 0.54 | 626.37 |
| MW-3 | Monitoring Well | WEHRAN ENG. | May 15, 1980 | 27.00 | 2.00 | STEEL | 0.01 | 1.50 | 27.00 | 25.50 | S | 754272.74 | 471267.56 | 40° 54' 14.4" | 74° 34' 33.1" | 629.06 | 632.28 | 632.14 | 19-Aug-03 | - | 6.13 | - | 626.01 | - | - |
| MW-4 (9) | Monitoring Well | WEHRAN ENG. | May 20, 1980 | 27.00 | 2.00 | STEEL | 0.01 | 1.50 | 27.00 | 25.50 | S | 754227.41 | 471302.62 | 40° 54' 14.0" | 74° 34' 32.6" | 628.64 | 632.27 | 632.56 | 19-Aug-03 | 6.46 | 7.39 | 626.10 | 625.17 | 0.93 | 626.04 |
| MW-6(R) | Monitoring Well | ROY F. WESTON | January 25, 1995 | 10.98 | 2.00 | PVC | 0.02 | 0.98 | 10.98 | 10.00 | S | 754070.52 | 471162.53 | 40° 54' 12.4" | 74° 34' 34.4" | 628.86 | 632.31 | 632.50 | 19-Aug-03 | - | 6.22 | - | 626.28 | - | - |
| MW-8 (9) | Monitoring Well | GROUNDWATER TECHNOLOGIES | 1983 | 19.00 | 2.00 | STEEL | 0.02 | 0.00 | 19.00 | 19.00 | S | 754210.83 | 471191.61 | 40° 54' 13.8" | 74° 34' 34.1" | 629.82 | 632.64 | 632.42 | 19-Aug-03 | 6.00 | 6.03 | 626.42 | 626.39 | 0.03 | 626.42 |
| MW-9 (9) | Monitoring Well | GROUNDWATER TECHNOLOGIES | 1983 | 20.50 | 2.00 | STEEL | 0.02 | 0.50 | 20.00 | 19.50 | S | 754099.29 | 471251.06 | 40° 54' 12.7" | 74° 34' 33.3" | 627.99 | 630.56 | 628.79 | 19-Aug-03 | - | 4.86 | - | 623.93 | - | - |
| MW-11S | Monitoring Well | ROY F. WESTON | April to October 1989 | 14.73 | 4.00 | STEEL | 0.02 | 4.37 | 14.41 | 10.00 | S | 754075.94 | 471111.03 | 40° 54' 12.5" | 74° 34' 35.1" | 629.21 | 631.69 | 630.18 | 19-Aug-03 | - | 5.42 | - | 624.76 | - | - |
| MW-11I(R) | Monitoring Well | RMT, INC. | February 20, 1998 | 52.00 | 2.00 | STEEL | 0.01 | 42.00 | 52.00 | 10.00 | I | 754226.73 | 471126.83 | 40° 54' 14.0" | 74° 34' 34.9" | 631.23 | 633.26 | 632.96 | 19-Aug-03 | 6.88 | 12.78 | 626.08 | 620.18 | 5.90 | 625.70 |
| MW-11D(R) (9) | Monitoring Well | RMT, INC. | February 20, 1998 | 157.00 | 2.00 | STEEL | 0.01 | 147.00 | 157.00 | 10.00 | D | 754237.94 | 471128.05 | 40° 54' 14.1" | 74° 34' 34.9" | 630.89 | 633.67 | 633.33 | 19-Aug-03 | - | 7.12 | - | 626.21 | - | - |
| MW-12S(R) | Monitoring Well | ROY F. WESTON | May 7, 1996 | 14.45 | 4.00 | PVC | 0.02 | 2.45 | 14.45 | 12.00 | S | 754244.62 | 471124.66 | 40° 54' 14.2" | 74° 34' 34.9" | 630.66 | 633.35 | 633.09 | 19-Aug-03 | - | 4.64 | - | 628.45 | - | - |
| MW-13S | Monitoring Well | ROY F. WESTON | April to October 1989 | 16.39 | 4.00 | STEEL | 0.02 | 5.37 | 15.14 | 10.00 | S | 754055.97 | 471042.34 | 40° 54' 12.3" | 74° 34' 35.9" | 632.17 | 634.86 | 634.33 | 19-Aug-03 | - | 7.96 | - | 626.37 | - | - |
| MW-13S(R) | Monitoring Well | ROY F. WESTON | January 27, 1995 | 17.00 | 2.00 | PVC | 0.01 | 2.00 | 12.00 | 10.00 | S | 754353.97 | 471370.04 | 40° 54' 15.3" | 74° 34' 31.7" | 628.34 | 631.40 | 631.23 | 19-Aug-03 | - | 5.37 | - | 625.86 | - | - |
| MW-13I | Monitoring Well | ROY F. WESTON | July 31, 1989 | 46.30 | 2.00 | STEEL | 0.02 | 35.22 | 45.26 | 10.00 | I | 754333.07 | 471365.71 | 40° 54' 15.0" | 74° 34' 31.8" | 628.26 | 630.96 | 630.59 | 19-Aug-03 | - | 4.70 | - | 625.89 | - | - |
| MW-14S | Monitoring Well | ROY F. WESTON | April to October 1989 | 15.46 | 4.00 | STEEL | 0.02 | 3.42 | 13.46 | 10.00 | S | 754337.8 | 471360.31 | 40° 54' 15.1" | 74° 34' 31.9" | 628.36 | 630.88 | 630.66 | 19-Aug-03 | - | 4.58 | - | 626.08 | - | - |
| MW-14I (9) | Monitoring Well | ROY F. WESTON | April to October 1989 | 44.30 | 2.00 | STEEL | 0.02 | 33.22 | 43.26 | 10.00 | I | 754255.02 | 471423.66 | 40° 54' 14.3" | 74° 34' 31.0" | 625.78 | 628.63 | 628.41 | 19-Aug-03 | - | 2.14 | - | 626.27 | - | - |
| MW-15S (9) | Monitoring Well | ROY F. WESTON | April to October 1989 | 25.94 | 4.00 | STEEL | 0.02 | 9.37 | 19.41 | 10.00 | S | 754250.22 | 471409.52 | 40° 54' 14.2" | 74° 34' 31.2" | 625.93 | 628.32 | 628.23 | 19-Aug-03 | - | 2.31 | - | 625.92 | - | - |
| MW-15I (9) | Monitoring Well | ROY F. WESTON | July 17, 1989 | 43.92 | 2.00 | STEEL | 0.02 | 30.55 | 40.26 | 10.00 | I | 754326.58 | 470891.83 | 40° 54' 15.0" | 74° 34' 38.0" | 634.83 | 637.03 | 636.77 | 19-Aug-03 | - | 10.23 | - | 626.54 | - | - |
| MW-16S | Monitoring Well | ROY F. WESTON | April to October 1989 | 23.90 | 4.00 | STEEL | 0.02 | 7.37 | 17.41 | 10.00 | S | 754325.8 | 470901.47 | 40° 54' 15.0" | 74° 34' 37.9" | 634.74 | 636.88 | 636.66 | 19-Aug-03 | - | 10.05 | - | 626.61 | - | - |
| MW-16I | Monitoring Well | ROY F. WESTON | April to October 1989 | 46.53 | 2.00 | STEEL | 0.02 | 32.22 | 42.26 | 10.00 | I | 754424.11 | 470704.1 | 40° 54' 15.9" | 74° 34' 40.4" | 632.57 | 634.69 | 634.47 | 19-Aug-03 | - | 7.41 | - | 627.06 | - | - |
| MW-17S (9) | Monitoring Well | ROY F. WESTON | April to October 1989 | 15.04 | 4.00 | STEEL | 0.02 | 5.20 | 15.24 | 10.00 | S | 754435.1 | 470710.17 | 40° 54' 16.0" | 74° 34' 40.3" | 632.43 | 635.08 | 634.96 | 19-Aug-03 | - | 7.85 | - | 627.11 | - | - |
| MW-18S | Monitoring Well | ROY F. WESTON | April to October 1989 | 15.04 | 2.00 | STEEL | 0.02 | 4.37 | 14.41 | 10.00 | S | 754109.68 | 470759.85 | 40° 54' 12.8" | 74° 34' 39.7" | 632.95 | 634.92 | 634.79 | 19-Aug-03 | - | 7.97 | - | 626.82 | - | - |
| MW-18I | Monitoring Well | ROY F. WESTON | April to October 1989 | 44.69 | 2.00 | STEEL | 0.02 | 34.22 | 44.26 | 10.00 | I | 754677.95 | 471117.26 | 40° 54' 18.4" | 74° 34' 35.0" | 628.22 | 631.48 | 631.26 | 19-Aug-03 | - | 5.03 | - | 626.23 | - | - |
| MW-19 (9) | Monitoring Well | ROY F. WESTON | May 20, 1991 | 17.00 | 4.00 | STEEL | 0.02 | 7.00 | 17.00 | 10.00 | S | 754675.11 | 471106.07 | 40° 54' 18.4" | 74° 34' 35.2" | 628.35 | 631.19 | 631.04 | 19-Aug-03 | - | 4.51 | - | 626.53 | - | - |
| MW-19-1 (9) | Monitoring Well | RMT, INC. | February 17, 1998 | 17.00 | 4.00 | STEEL | 0.01 | 6.00 | 15.50 | 9.50 | S | 754537.15 | 470454.45 | 40° 54' 17.1" | 74° 34' 43.7" | 636.82 | 636.83 | 636.50 | 19-Aug-03 | - | 8.91 | - | 627.59 | - | - |
| MW-19-2 (9) | Monitoring Well | RMT, INC. | February 17, 1998 | 16.00 | 4.00 | STEEL | 0.01 | 6.00 | 16.00 | 10.00 | S | 754534.52 | 470427.63 | 40° 54' 17.0" | 74° 34' 44.0" | 636.53 | 636.56 | 636.24 | 19-Aug-03 | - | 8.64 | - | 627.60 | - | - |
| MW-19-3 (9) | Monitoring Well | RMT, INC. | February 18, 1998 | 16.00 | 4.00 | STEEL | 0.01 | 6.00 | 15.50 | 9.50 | S | 754551.81 | 470429.56 | 40° 54' 17.2" | 74° 34' 44.0" | 637.06 | 637.10 | 636.90 | 19-Aug-03 | - | 9.32 | - | 627.58 | - | - |
| MW-19-4 (9) | Monitoring Well | RMT, INC. | February 18, 1998 | 16.00 | 4.00 | STEEL | 0.01 | 6.00 | 15.50 | 9.50 | S | 754539.4 | 470394.2 | 40° 54' 17.1" | 74° 34' 44.5" | 637.57 | 637.66 | 637.30 | 19-Aug-03 | - | 9.55 | - | 627.75 | - | - |
| MW-19-5 (9) | Monitoring Well | RMT, INC. | February 18, 1998 | 16.00 | 2.00 | PVC | 0.01 | 6.00 | 15.50 | 9.50 | S | 754505.39 | 470432.08 | 40° 54' 16.7" | 74° 34' 44.0" | 636.29 | 636.36 | 636.03 | 19-Aug-03 | - | 8.21 | - | 627.82 | - | - |
| MW-19-6 (4)(9) | Monitoring Well | RMT, INC. | October 28, 1999 | 20.00 | 2.00 | STEEL | 0.02 | 10.00 | 20.00 | 10.00 | S | 754565.53 | 470470.75 | 40° 54' 17.3" | 74° 34' 43.5" | 636.53 | 636.53 | 636.16 | 19-Aug-03 | - | 8.71 | - | 627.45 | - | - |
| MW-19-7 (4)(9) | Monitoring Well | RMT, INC. | October 29, 1999 | 20.00 | 2.00 | STEEL | 0.02 | 10.00 | 20.00 | 10.00 | S | 754578.87 | 470443.1 | 40° 54' 17.5" | 74° 34' 43.8" | 636.77 | 636.76 | 636.42 | 19-Aug-03 | - | 8.89 | - | 627.53 | - | - |
| MW-19-8 (4)(9) | Monitoring Well | RMT, INC. | October 28, 1999 | 20.00 | 2.00 | STEEL | 0.02 | 11.00 | 20.00 | 9.00 | S | 754595.66 | 470501.7 | 40° 54' 17.6" | 74° 34' 43.1" | 635.91 | 635.96 | 635.60 | 19-Aug-03 | - | 8.18 | - | 627.42 | - | - |
| MW-19-9D (4)(9) | Monitoring Well | RMT, INC. | July 10, 2001 | 35.00 | 2.00 | STEEL | 0.02 | 25.00 | 35.00 | 10.00 | S | 754617.42 | 470493.65 | 40° 54' 17.8" | 74° 34' 43.2" | 636.42 | 636.42 | 635.96 | 19-Aug-03 | - | 8.59 | - | 627.37 | - | - |
| MW-20 | Monitoring Well | ROY F. WESTON | May 21, 1991 | 14.00 | 4.00 | STEEL | 0.02 | 4.00 | 14.00 | 10.00 | S | 754590 | 470442 | 40° 54' 17.9" | 74° 34' 42.4" | 636.99 | 637.01 | 636.70 | 19-Aug-03 | - | 8.63 | - | 628.07 | - | - |
| MW-21 (5) | Monitoring Well | ROY F. WESTON | May 22, 1991 | 15.00 | 4.00 | STEEL | 0.02 | 5.00 | 15.00 | 10.00 | S | 754550.52 | 470647.25 | 40° 54' 17.2" | 74° 34' 41.2" | 634.82 | 637.03 | 636.77 | 19-Aug-03 | - | 9.00 | - | 627.77 | - | - |
| MW-22(R) (6) | Monitoring Well | ROY F. WESTON | July 22, 1997 | 7.50 | 2.00 | STEEL | - | - | - | - | S | 754240.97 | 471645.78 | 40° 54' 14.1" | 74° 34' 28.2" | 625.17 | 629.09 | 628.80 | 19-Aug-03 | - | 3.08 | - | 625.72 | - | - |
| MW-23 | Monitoring Well | ROY F. WESTON | January 6, 1992 | 6.00 | 2.00 | STEEL | 0.02 | 1.00 | 6.00 | 5.00 | S | 754200.52 | 471409.13 | 40° 54' 13.7" | 74° 34' 31.2" | 625.94 | 628.31 | 628.13 | 19-Aug-03 | - | 2.68 | - | 625.45 | - | - |
| MW-23(R) (6) | Monitoring Well | ROY F. WESTON | July 22, 1997 | 10.00 | 2.00 | STEEL | - | - | - | - | S | 754413.43 | 471469.4 | 40° 54' 15.8" | 74° 34' 30.5" | 628.70 | 630.95 | 630.64 | 19-Aug-03 | - | 4.11 | - | 626.53 | - | - |
| MW-26 | Monitoring Well | ROY F. WESTON | May 8, 1996 | 11.80 | 4.00 | PVC | 0.02 | 1.80 | 11.80 | 10.00 | S | 754201.83 | 471518.21 | 40° 54' 13.7" | 74° 34' 29.8" | 625.25 | 627.37 | 627.22 | 19-Aug-03 | - | 2.10 | - | 625.12 | - | - |
| RW-1 | Recovery Well | ROY F. WESTON | June 17, 1991 | 30.00 | 8.00 | STEEL | 0.02 | 5.00 | 30.00 | 25.00 | S | 754401.17 | 471174.36 | 40° 54' 15.7" | 74° 34' 34.3" | 630.84 | 634.39 | 633.26 | 19-Aug-03 | - | 7.21 | - | 626.05 | - | - |
| RW-2 | Recovery Well | ROY F. WESTON | June 22, 1991 | 30.00 | 8.00 | STEEL | 0.02 | 3.00 | 30.00 | 27.00 | S | 754183.96 | 470802.1 | 40° 54' 13.6" | 74° 34' 39.1" | 635.19 | 637.81 | 637.38 | 19-Aug-03 | 10.82 | 11.79 | 626.56 | 625.59 | 0.97 | 626.50 |
| RW-3 | Recovery Well | ROY F. WESTON | June 21, 1991 | 28.00 | 8.00 | STEEL | 0.02 | 3.00 | 28.00 | 25.00 | S | 754245.98 | 471289.8 | 40° 54' 14.2" | 74° 34' 32.8" | 629.80 | 631.78 | 631.68 | 19-Aug-03 | - | 5.73 | - | 625.95 | - | - |
| SG-D1 (1) | Drainage Channel Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754315.59 | 471206.84 | 40° 54' 14.9" | 74° 34' 33.9" | 629.89 | 632.15 | 631.99 | 19-Aug-03 | - | 6.00 | - | 625.99 | - | - |
| SG-D2 (1) | Drainage Channel Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754428.57 | 471240.37 | - | - | 626.41 | - | - | 19-Aug-03 | - | 1.30 | - | 624.38 | - | - |
| SG-D3 (1) | Drainage Channel Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754285.43 | 471361.24 | - | - | 626.86 | - | - | 19-Aug-03 | - | 1.50 | - | 625.03 | - | - |
| SG-R1 (1) | Rockaway River Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754381.47 | 471548.31 | - | - | 626.43 | - | - | 19-Aug-03 | - | 1.56 | - | 624.66 | - | - |
| SG-R2 (1) | Rockaway River Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754313.99 | 470408.70 | - | - | 641.52 | - | - | 19-Aug-03 | - | 1.38 | - | 639.57 | - | - |
| SG-R3 (1) | Rockaway River Staff Gauge | RMT, INC. | November-98 | NA | NA | NA | NA | NA | NA | NA | NA | 754056.10 | 470949.16 | - | - | 628.84 | - | - | 19-Aug-03 | - | 0.49 | | 626.00 | - | - |
| | | | | | | | | | | | | 754113.47 | 471426.67 | - | - | 627.38 | - | - | 19-Aug-03 | - | 0.70 | | 624.75 | - | - |

# TABLE 6
## L.E. Carpenter and Company, Wharton, New Jersey
### Quarterly Groundwater Elevations

| WELL LOCATION | WELL TYPE | WELL INSTALLATION AND CONSTRUCTION INFORMATION (7) | | | | | | | | | | PROFESSIONAL SURVEY INFORMATION | | | | ELEVATIONS (FT. MSL) | | | QUARTERLY MEASUREMENT INFORMATION (10) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MANAGING CONSULTANT | INSTALLATION DATE | TOTAL WELL DEPTH (FT) | WELL DIAMETER (IN) | SCREEN MATERIAL | SLOT SIZE (IN) | TOP OF SCREEN (FT) | BOTTOM OF SCREEN (FT) | SCREENED INTERVAL (FT) | AQUIFER SYSTEM | BASELINE LOCATION (feet) (8) (X) North | (X) East | GEODETIC LOCATION LATITUDE | LONGITUDE | GROUND | OUTER CASING | INNER WELL | MEAS. DATE | PRODUCT DEPTH | WATER DEPTH | PRODUCT ELEVATION | WATER ELEVATION | PRODUCT THICKNESS (ft) | CORRECTED WATER LEVEL ELEVATIONS (2) |
| WP-A1 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754220.52 | 470825.71 | 40° 54' 13.9" | 74° 34' 38.8" | 636.29 | 636.32 | 635.81 | 19-Aug-03 | 9.13 | 10.56 | 626.68 | 625.25 | 1.43 | 626.59 |
| WP-A2 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754249.34 | 470813.05 | 40° 54' 14.2" | 74° 34' 39.0" | 637.31 | 639.62 | 639.19 | 19-Aug-03 | 12.70 | 13.11 | 626.49 | 626.08 | 0.41 | 626.46 |
| WP-A3 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754195.42 | 470717.12 | 40° 54' 13.7" | 74° 34' 40.3" | 635.97 | 635.97 | 635.56 | 19-Aug-03 | | 8.86 | - | 626.70 | - | - |
| WP-A4 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754229.46 | 470855.24 | 40° 54' 14.0" | 74° 34' 38.5" | 635.63 | 635.66 | 635.10 | 19-Aug-03 | 8.80 | 11.77 | 626.30 | 623.33 | 2.97 | 626.11 |
| WP-A5 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754266.54 | 470886.02 | 40° 54' 14.4" | 74° 34' 38.1" | 635.70 | | 637.85 | 19-Aug-03 | - | 11.02 | | 626.83 | - | - |
| WP-A6 | Area A Well Point | ROY F. WESTON | 1993 | 13.00 | 2.00 | PVC | - | 3.00 | 13.00 | 10.00 | S | 754184.69 | 470888.45 | 40° 54' 13.6" | 74° 34' 38.0" | 634.95 | | 637.28 | 19-Aug-03 | 10.81 | 13.39 | 626.47 | 623.89 | 2.58 | 626.31 |
| WP-A7 | Area A Well Point | ROY F. WESTON | 1993 | 11.00 | 2.00 | PVC | - | 1.00 | 11.00 | 10.00 | S | 754196.44 | 470999.43 | 40° 54' 13.7" | 74° 34' 36.6" | 632.94 | | 634.88 | 19-Aug-03 | 8.59 | 9.99 | 626.29 | 624.89 | 1.40 | 626.20 |
| WP-A8 | Area A Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754260.25 | 470998.97 | 40° 54' 14.3" | 74° 34' 36.6" | 634.70 | | 637.56 | 19-Aug-03 | 11.26 | 12.69 | 626.30 | 624.87 | 1.43 | 626.21 |
| WP-A9 | Area A Well Point | ROY F. WESTON | 1993 | 16.00 | 2.00 | PVC | - | 6.00 | 16.00 | 10.00 | S | 754184.12 | 470935.26 | 40° 54' 13.6" | 74° 34' 37.4" | 637.22 | | 639.32 | 19-Aug-03 | 12.45 | 14.54 | 626.87 | 624.78 | 2.09 | 626.74 |
| WP-B1 | Area B Well Point | ROY F. WESTON | 1993 | 11.00 | 2.00 | PVC | - | 1.00 | 11.00 | 10.00 | S | 754218.63 | 471068.54 | 40° 54' 13.9" | 74° 34' 35.7" | 631.85 | | 633.65 | 19-Aug-03 | 6.46 | 6.48 | 627.19 | 627.17 | 0.02 | 627.19 |
| WP-B2 | Area B Well Point | ROY F. WESTON | 1993 | 11.00 | 2.00 | PVC | - | 1.00 | 11.00 | 10.00 | S | 754282.8 | 471115.71 | 40° 54' 14.5" | 74° 34' 35.1" | 630.48 | 632.58 | 632.25 | 19-Aug-03 | - | 5.88 | | 626.37 | - | - |
| WP-B3 | Area B Well Point | ROY F. WESTON | 1993 | 11.00 | 2.00 | PVC | - | 1.00 | 11.00 | 10.00 | S | 754243.43 | 471088.51 | 40° 54' 14.2" | 74° 34' 35.4" | 631.71 | | 633.33 | 19-Aug-03 | - | 6.67 | | 626.66 | - | - |
| WP-B4 | Area B Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754275.31 | 471156.49 | 40° 54' 14.5" | 74° 34' 34.5" | 629.93 | | 632.56 | 19-Aug-03 | 6.38 | 8.41 | 626.18 | 624.15 | 2.03 | 626.05 |
| WP-B5 | Area B Well Point | ROY F. WESTON | 1993 | 11.00 | 2.00 | PVC | - | 1.00 | 11.00 | 10.00 | S | 754296.93 | 471181.49 | 40° 54' 14.7" | 74° 34' 34.2" | 630.03 | | 632.11 | 19-Aug-03 | - | 5.04 | - | 627.07 | - | - |
| WP-B6 | Area B Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754171.56 | 471223.53 | 40° 54' 13.4" | 74° 34' 33.7" | 629.72 | | 631.86 | 19-Aug-03 | - | 6.19 | - | 625.67 | - | - |
| WP-B7 | Area B Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754179.91 | 471330.82 | 40° 54' 13.5" | 74° 34' 32.3" | 627.62 | | 629.49 | 19-Aug-03 | - | 4.17 | - | 625.32 | - | - |
| WP-B10 | Area B Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754319.10 | 471144.76 | 40° 54' 14.9" | 74° 34' 34.7" | 630.42 | 633.12 | 632.74 | 19-Aug-03 | - | 6.58 | - | 626.16 | - | - |
| WP-C1 | Area C Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754087.66 | 471038.32 | 40° 54' 12.6" | 74° 34' 36.1" | 632.81 | | 633.51 | 19-Aug-03 | - | 7.14 | - | 626.37 | - | - |
| WP-C2 | Area C Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754075.97 | 471074.74 | 40° 54' 12.5" | 74° 34' 35.6" | 633.02 | | 634.46 | 19-Aug-03 | - | 8.24 | - | 626.22 | - | - |
| WP-C3 | Area C Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754066.60 | 471009.58 | 40° 54' 12.4" | 74° 34' 36.4" | 631.00 | | 632.64 | 19-Aug-03 | - | 6.39 | - | 626.25 | - | - |
| WP-C4 | Area C Well Point | ROY F. WESTON | 1993 | - | - | - | - | - | - | - | - | 754108.93 | 471050.74 | 40° 54' 12.8" | 74° 34' 35.9" | 632.44 | | 633.27 | 19-Aug-03 | - | 6.10 | - | 627.17 | - | - |

FOOTNOTES
(1) Elevation measured at the top of a 3.33 ft. 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

GENERAL NOTES
All WP series wells finished elevation is 2 feet above nominal grade. Total depth of well only accounts for subsurface structure
Wells MW-1A, MW5, MW-7, MW-10, MW-11I, MW-11D, MW-14D, MW-17D, MW-18D, MW-22, MW-24, MW-25, WP-B8, Wp-D1, PZ-6A, PZ-2A(R), PZ-2AS, RW-1 have been abandoned
Wells MW-11I(R), MW11-D(R), MW-1(R), MW-2(R), MW-6(R), MW-22(R), and MW-25(R) are replacement wells

LEGEND
S: Shallow Aquifer System
I: Intermediate Aquifer System
D: Deep Aquifer System
R: Replacement Well
NAS: Not Assessable
REM: Removed
-' : Value of 0.00. Free Product not encountered at well

# TABLE 7
## L.E. CARPENTER - Wharton, New Jersey
### Surface Water Monitoring Data

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

**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

**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 7
## L.E. CARPENTER - Wharton, New Jersey
### Surface Water Monitoring Data

| | SW-8 | | | | | | | | ROCKAWAY RIVER SW-9 | ROCKAWAY RIVER SW-10 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE | 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 | 08/28/90 | 08/28/90 |
| **VOLATILE ORGANIC COMPOUNDS (ug/l) [4]** | | | | | | | | | | |
| Methylene Chloride | [2] ND | ND | NA | NA | NA | NA | NA | NA | [2] ND | [2] ND |
| 1,1,1-Trichloroethane | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND |
| Ethylbenzene | ND | ND | ND | < 0.18 | < 0.18 | J 0.91 | J 0.2 | < 0.2 | ND | ND |
| Chlorobenzene | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND |
| Acetone | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND |
| Total Xylenes | ND | ND | ND | 0.43 | 0.32 | J 2.7 | J 1.2 | < 0.6 | ND | ND |
| Toluene | ND | ND | 1 | 0.54 | < 0.24 | < 0.2 | < 0.2 | < 0.2 | ND | ND |
| 1,1,2-Trichloro-2,2,1-Triflouroethane | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND |
| Benzene | | | ND | < 0.22 | < 0.22 | < 0.2 | < 0.2 | < 0.2 | | |
| **BASE NEUTRAL COMPOUNDS (ug/l) [4]** | | | | | | | | | | |
| Di-n-butyl phthalate [3] | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA |
| bis(2-Ethylhexyl) phthalate | NA | ND | 0.6 | 1.3 | B 0.4 | < 1 | < 1 | J 4 | J[2] 6 | NA |
| **METALS (ug/l) [4]** | | | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Arsenic | NA | NA | NA | NA | NA | NA | NA | NA | NA | J 3.9 |
| Cadmium | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Chromium | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Copper | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA | NA | J 4.6 |
| Mercury | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Nickel | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Selenium | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND |
| Zinc | NA | NA | NA | NA | NA | NA | NA | NA | NA | J 5.4 |
| **POLYCHLORINATED BIPHENYLS (PCBs) (ug/l) [6]** | | | | | | | | | | |
| Arochlor-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arochlor-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

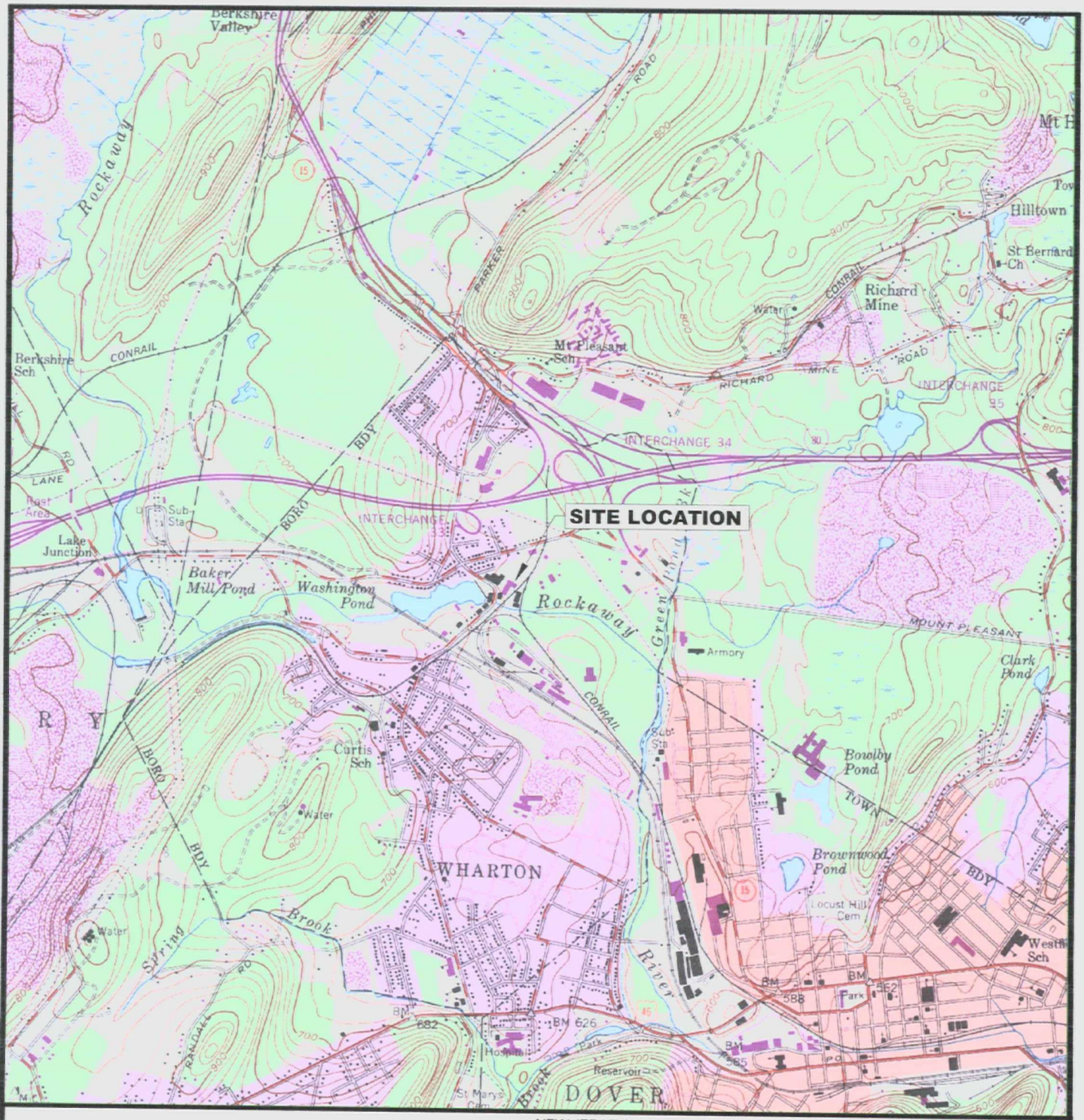
**LEGEND**

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

# 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

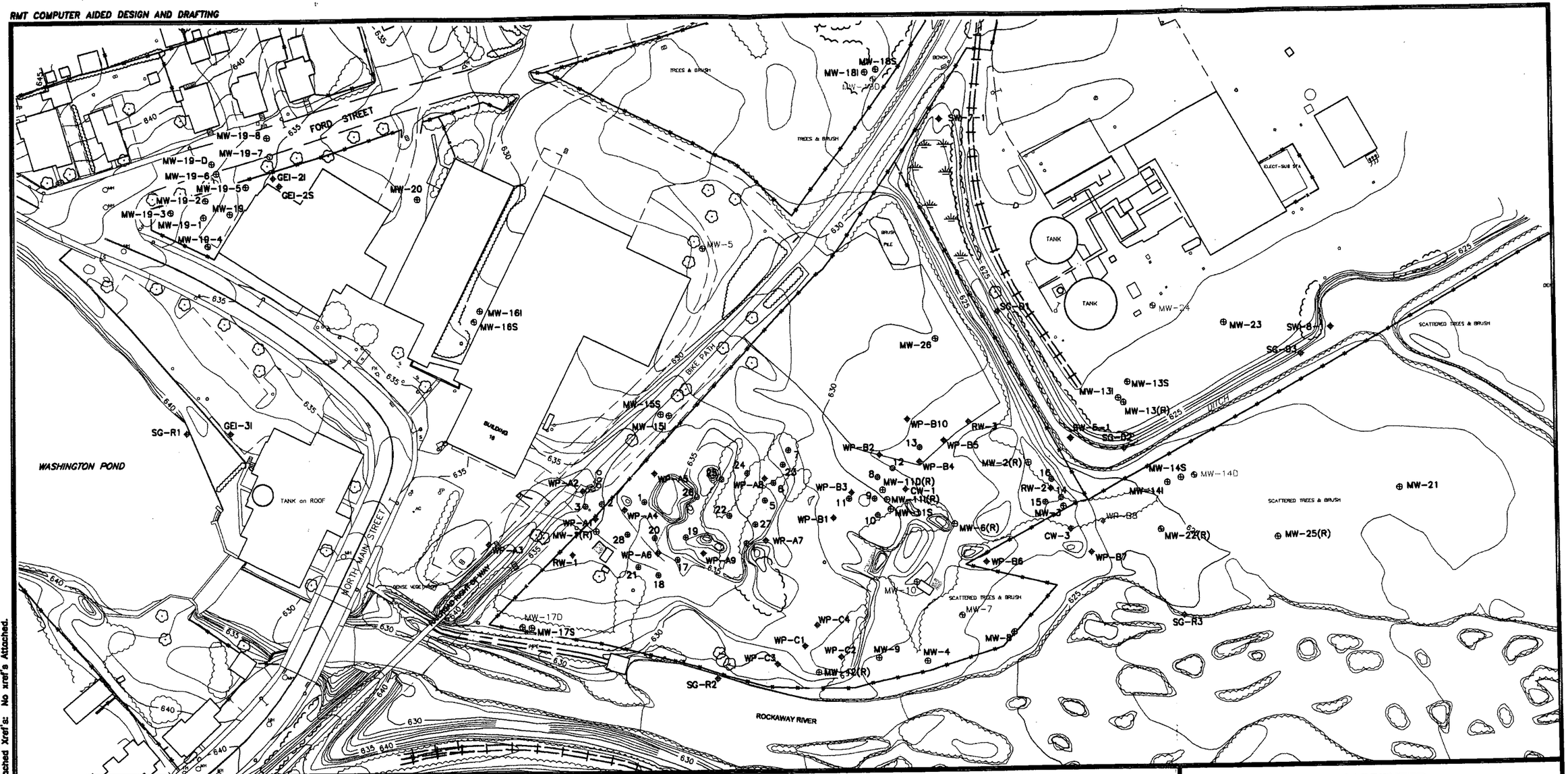
SITE LOCATION MAP
FOR 3rd QUARTER 2003

| | |
|---|---|
| DRAWN BY: | SJL |
| APPROVED BY: | NC |
| PROJECT NUMBER: | 3868.35 |
| FILE NUMBER: | 38683581.DWG |
| DATE: | OCTOBER 2003 |

**FIGURE 1**

PLOT DATA
Drawing Name: J:\03868\35\38683581.dwg
Scale: Operator Name: lucidos
Plot Date: Dwg Size: 81675 Bytes
Thursday, September 18, 2003
Attached Xref's: Plot Time: 3:36:5714 PM
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 |
| ⊕ MW-24 | ABANDONED WELL | ◆ GEI-2I | PIEZOMETERS |
| ⊕ 13 | ENHANCED FLUID RECOVERY WELL | ▣ SW-7-1 | SURFACE WATER SAMPLE |
| ◆ RW-2 | RECOVERY WELL | ◇ | TREATMENT BUILDING |
| ◆ CW-3 | CAISSON WELLS | | |

N

0 100' 200'

SCALE IN FEET

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

**SITE PLAN WITH WELL LOCATIONS FOR 3rd QUARTER 2003**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 3868.35 |
| CHECKED BY: | ES | FILE NUMBER: | 38683582.DWG |
| APPROVED BY: | NC | DATE: | OCTOBER 2003 |

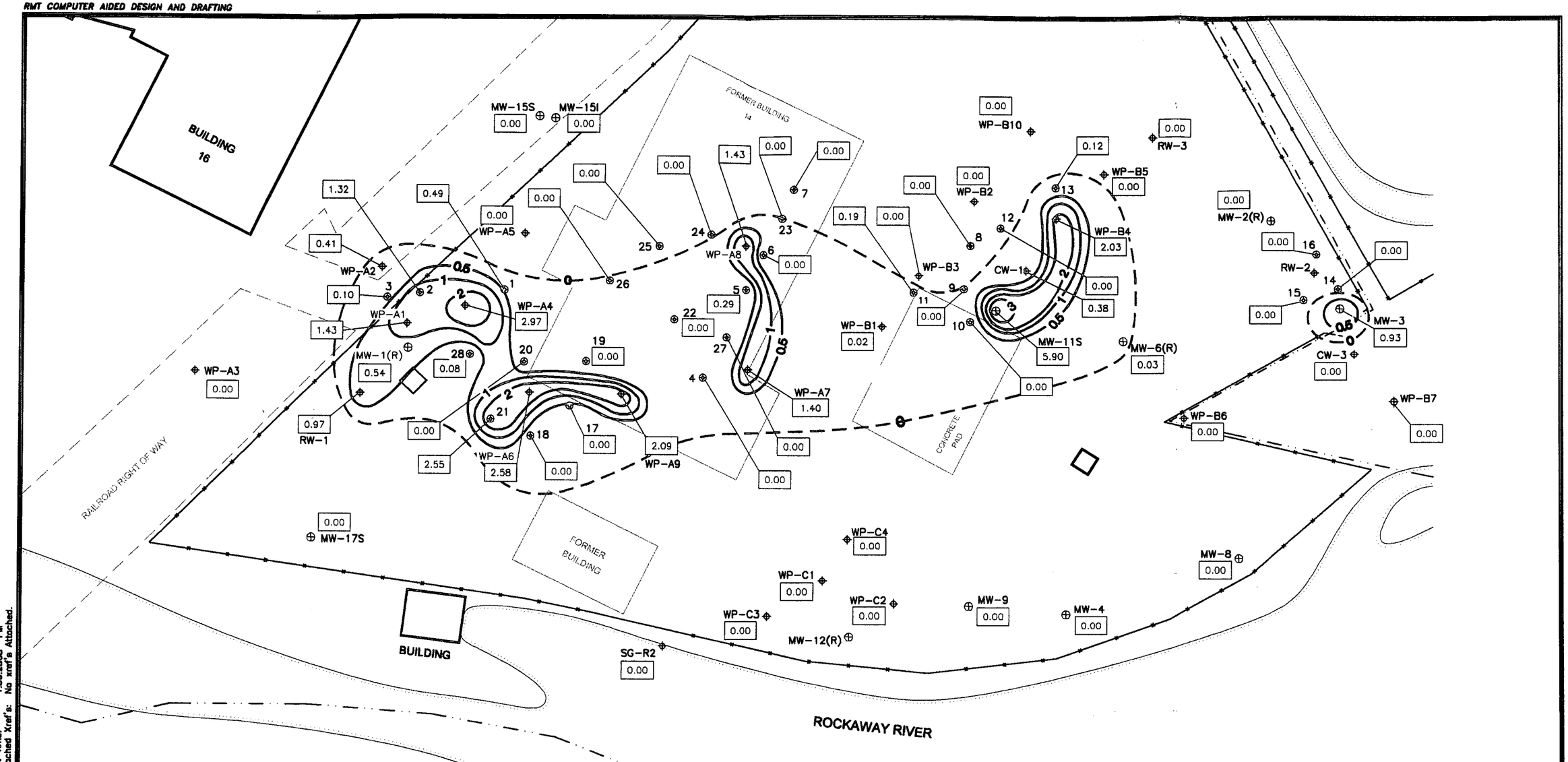
RMT INC.
1143 HIGHLAND DRIVE, SUITE B
ANN ARBOR, MI. 48108-2237
PHONE: 734-971-7080
FAX: 734-971-9022

FIGURE 2

PLOT DATA
Drawing Name: J:\03868\35\38683582.dwg
Operator Name: lucidos
Scale: 1"=1'
Dwg Size: 911919 Bytes
Plot Date: Thursday, September 18, 2003
Plot Time: 3:37:23:56 PM
Attached Xref's: No xref's Attached.

Layout Name: Site Plan (3rd Quarter 2003)

RMT COMPUTER AIDED DESIGN AND DRAFTING




## LEGEND

- SURFACE WATER FEATURE
- PROPERTY LINE
- FENCE
- 1 — APPARENT PRODUCT THICKNESS CONTOURS (FT)
- 0 — APPROXIMATE OUTER LIMIT OF FREE PRODUCT
- 0.00 — NO MEASURABLE PRODUCT
- 1.22 — PRODUCT THICKNESS MEASURED IN WELL (FT) (Measurements collected at monitoring wells and well points) on August 19, 2003 by RMT, Inc.) (Measurements collected at EFR wells on August 7, 2003 by CEMCO)
- MW-13S ⊕ MONITORING WELL
- MW-24 ⊕ ABANDONED WELL
- RW-2 ⌖ RECOVERY WELL
- CW-3 ⌖ CAISSON WELLS
- WP-B7 ⌖ WELL POINTS WITH ELEVATION
- ◇ TREATMENT BUILDING
- 13 ⊕ ENHANCED FLUID RECOVERY WELL (EFR)

N

0 50' 100'

SCALE IN FEET

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

**APPARENT FREE PRODUCT THICKNESS CONTOURS FOR 3rd QUARTER 2003**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 3868.35 |
| CHECKED BY: | JO | FILE NUMBER: | 38683583.DWG |
| APPROVED BY: | NC | DATE: | OCTOBER 2003 |


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:\03868\35\38683583.dwg
Operator Name: lucidos
Scale: 1"=50'
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Plot Date: October 2003
Plot Time: 1:38:25PM
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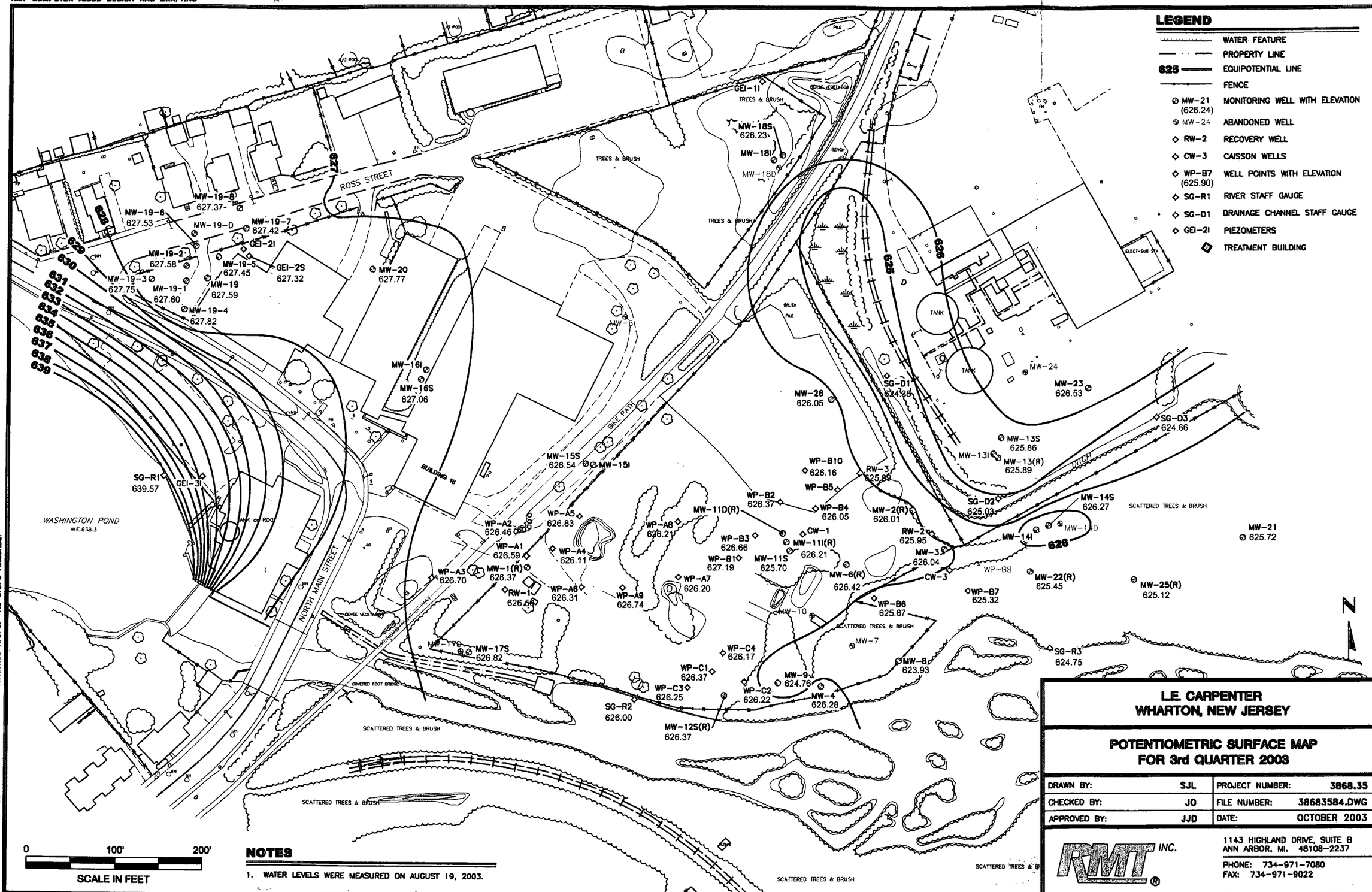
RMT COMPUTER AIDED DESIGN AND DRAFTING




LE CARPENTER
WHARTON, NEW JERSEY

POTENTIOMETRIC SURFACE MAP
FOR 3rd QUARTER 2003

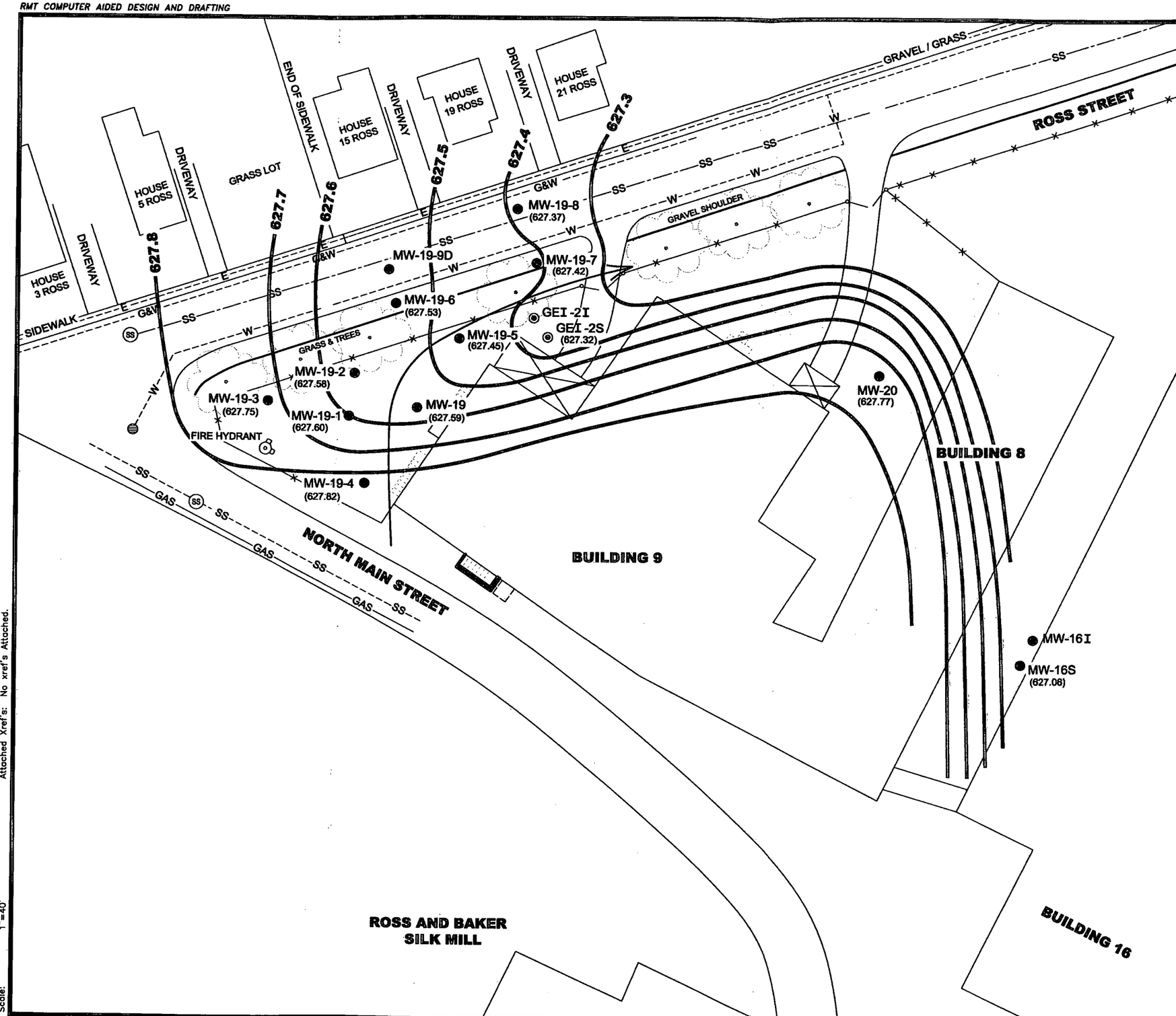
| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 3868.35 |
| CHECKED BY: | JO | FILE NUMBER: | 38683584.DWG |
| APPROVED BY: | JJD | DATE: | OCTOBER 2003 |

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

PLOT DATA
Drawing Name: J:\03868\35\38683584.dwg
Operator Name: lucidas
Scale: 1"=50'
Dwg Size: 5138008 Bytes
Plot Date: Thursday, October 23, 2003
Plot Time: 10:36:0027 AM
Attached Xref's: No xref's Attached.

Layout Name: Potentiometric Surface Map (3rd 2003)

FIGURE 4




## LEGEND

- FENCE LINE
- SS — APPROXIMATE LOCATION OF ROCKAWAY RIVER REGIONAL INTERCEPTOR SEWER
- 627 — GROUNDWATER ELEVATION CONTOUR
- MW-19-6 (627.53) — MONITORING WELL LOCATION AND NUMBER WITH GROUNDWATER ELEVATION
- GEI-2S (627.32) — GEOPROBE INSTALLED PIEZOMETER LOCATION AND NUMBER WITH GROUNDWATER ELEVATION
- 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 19, 2003

N

0 40' 80'

SCALE IN FEET

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

**MW-19 / HOT SPOT 1**
**GROUNDWATER ELEVATION CONTOURS**
**FOR 3rd QUARTER 2003**

| | | | |
|---|---|---|---|
| DRAWN BY: | SJL | PROJECT NUMBER: | 3868.35 |
| CHECKED BY: | JO | FILE NUMBER: | 38683585.DWG |
| APPROVED BY: | JJD | DATE: | OCTOBER 2003 |

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:\03868\35\38683585.dwg
Operator Name: lucidos
Scale: 1"=40'
Dwg Size: 129402 Bytes
Plot Date: Thursday, September 25, 2003
Plot Time: 2:05.5300 PM
Attached Xref's: No xref's Attached.

# 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 R Anderson

**SIGNATURE**

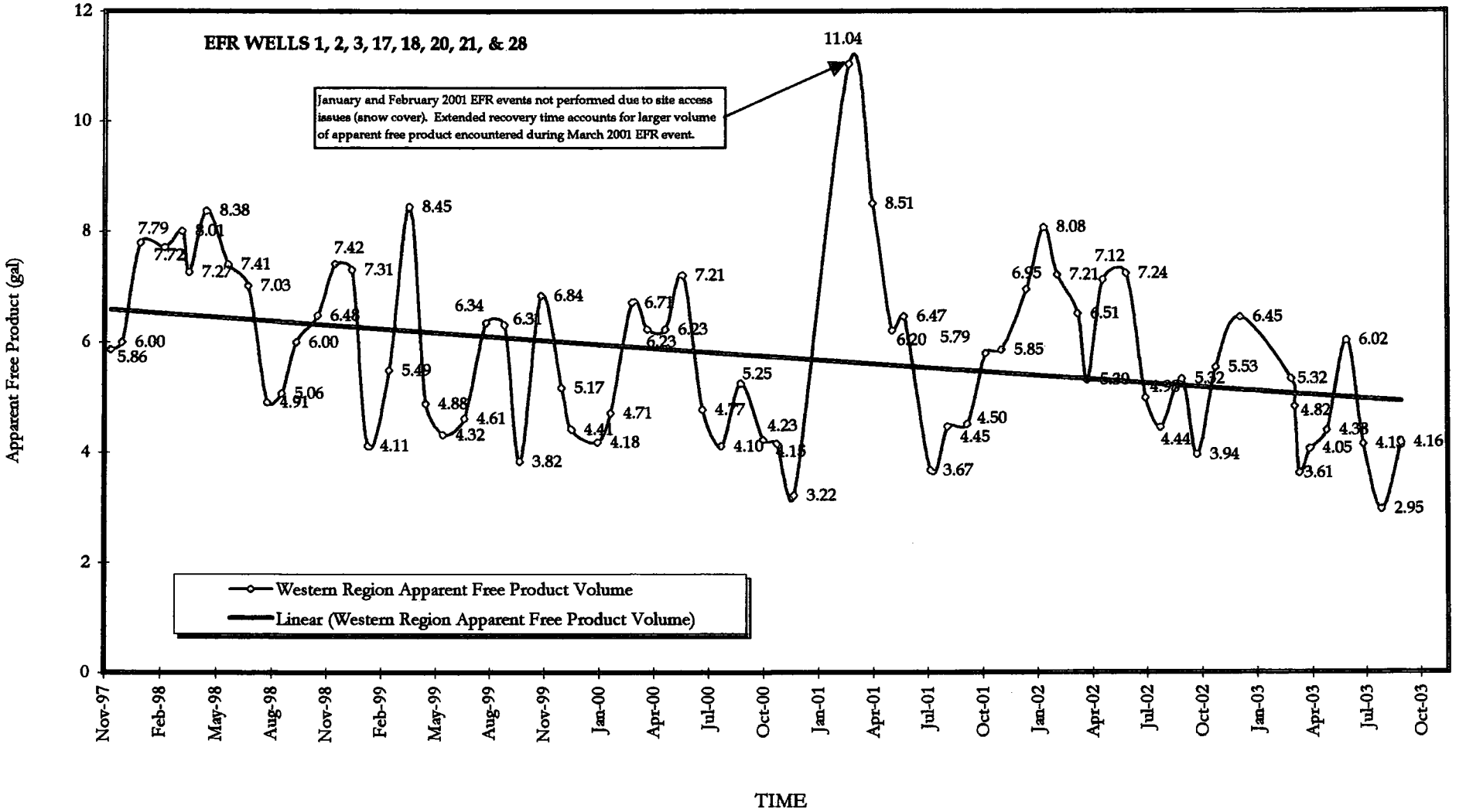
10/30/03

**DATE**

# Appendix B
# Apparent Free Product Volume Trend Charts

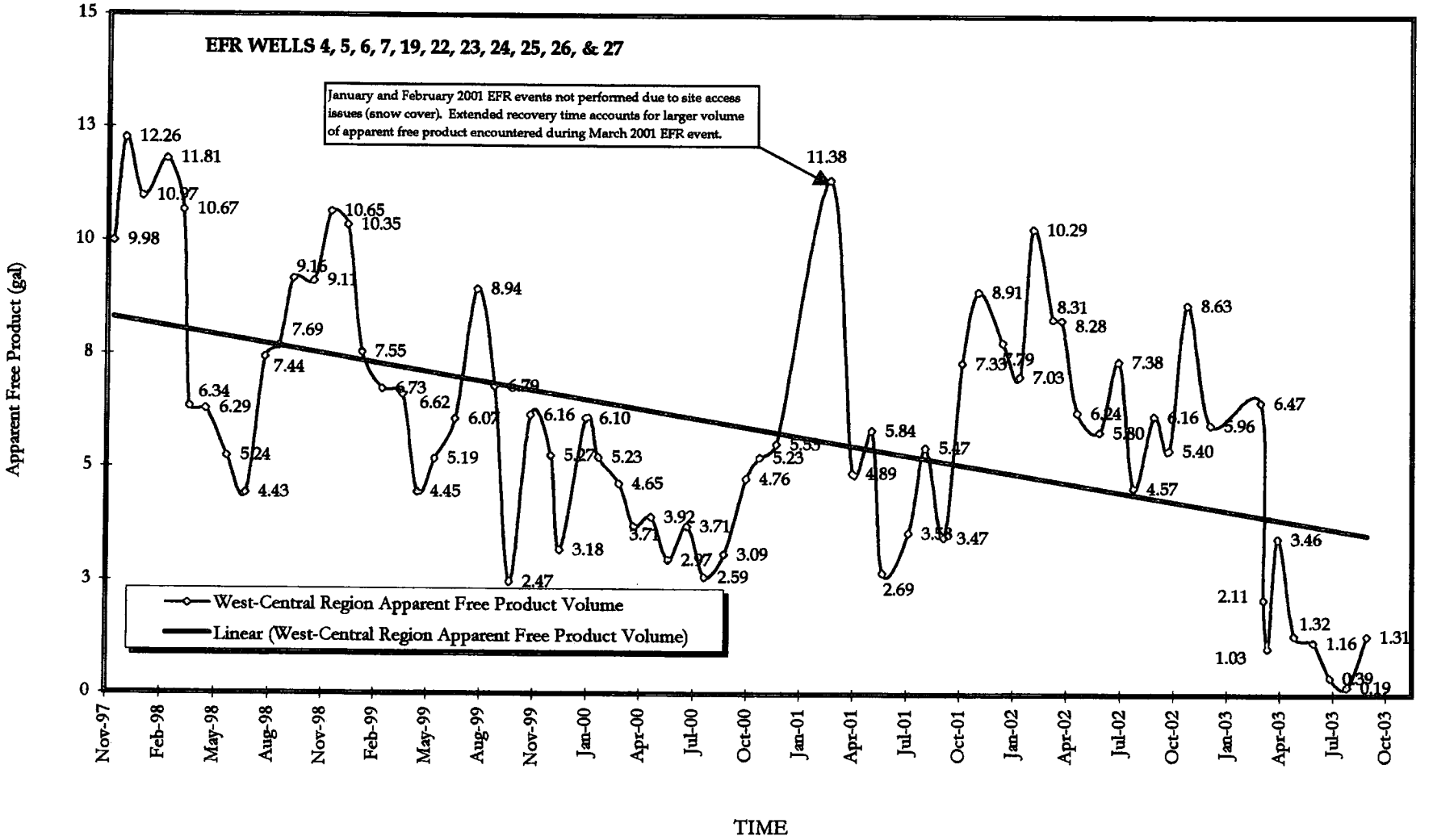
# L.E. Carpenter and Company
# Western Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2003**



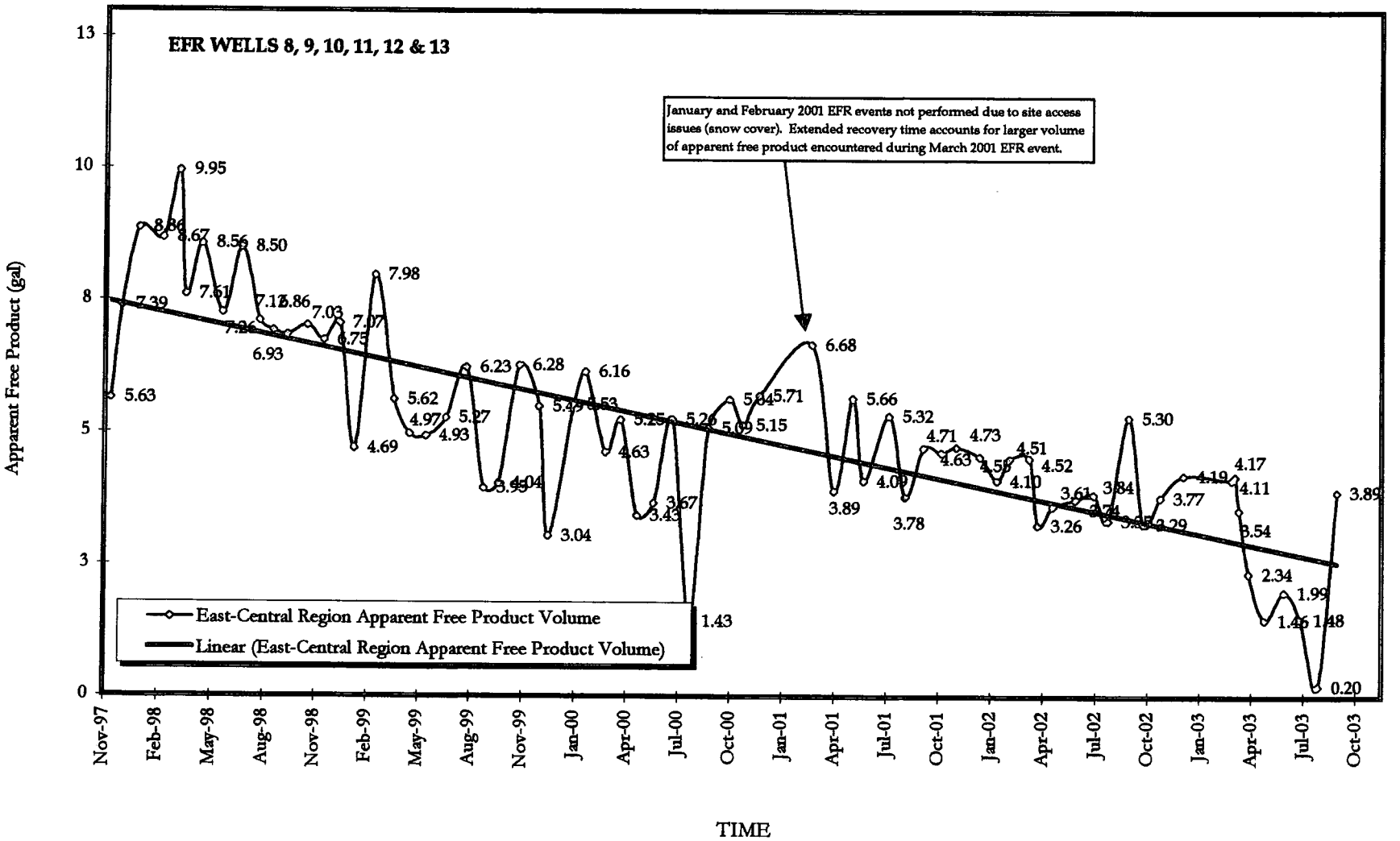
# L.E. Carpenter and Company
# West-Central Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2003**



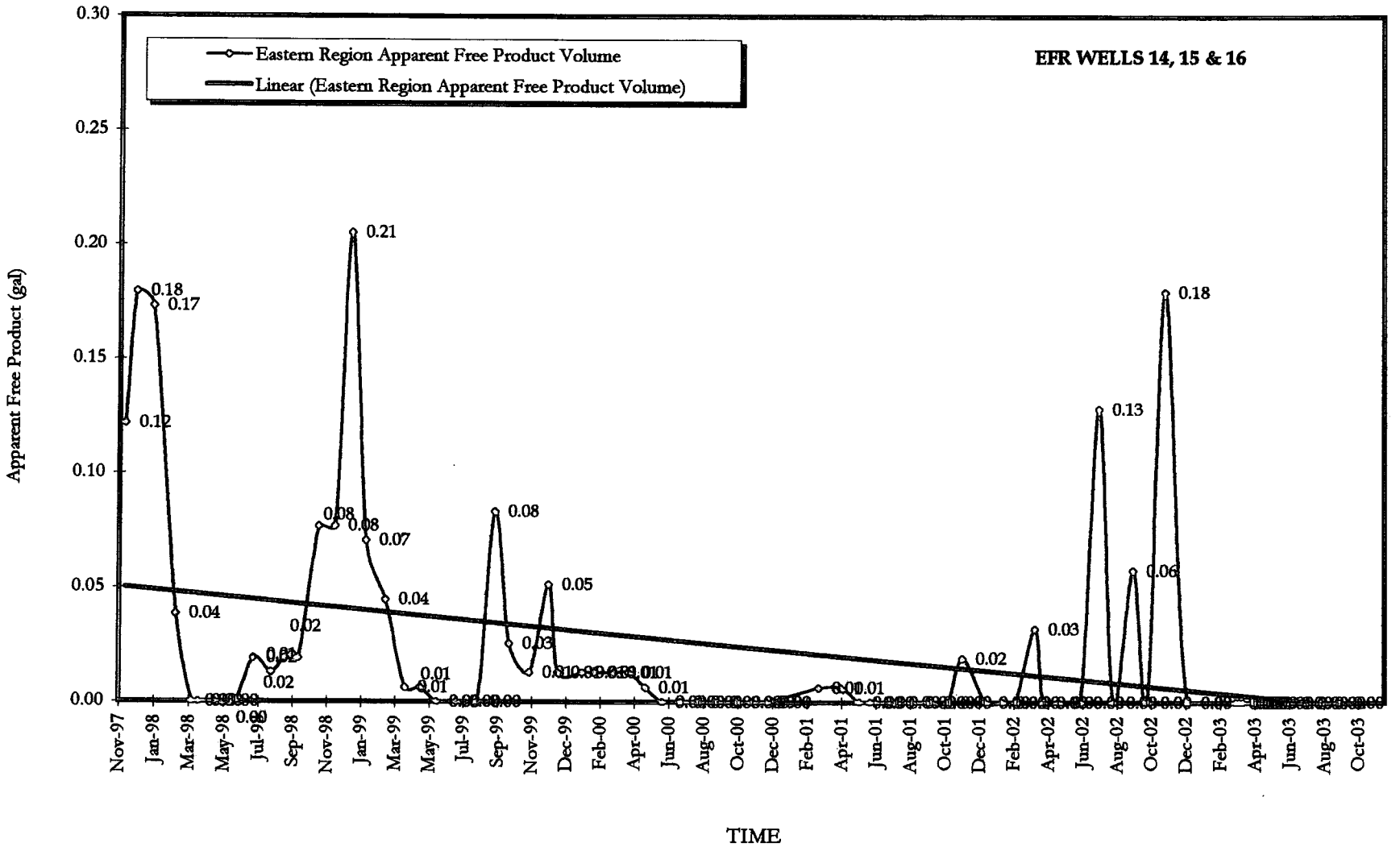
# L.E. Carpenter and Company
# East-Central Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2003**



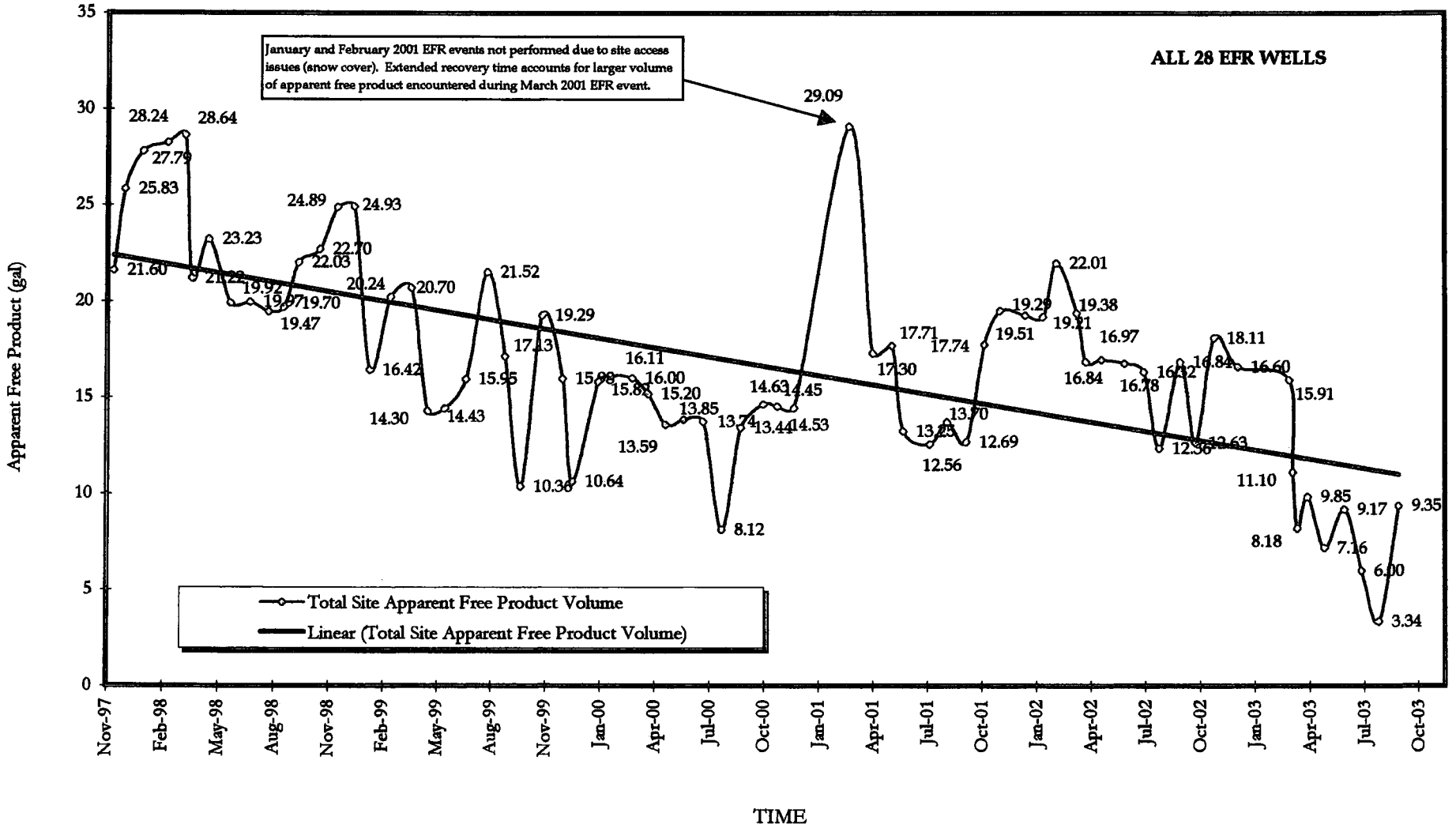
# L.E. Carpenter and Company
## Eastern Region of Free Product

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2003**



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

**Apparent Free Product Volume vs. Time**
**Through 3rd Quarter 2003**



# Appendix C
# 3rd Quarter 2003 Monitoring Well Sampling Data

RMT INC.

| | |
|---|---|
| PROJECT NAME: | LEC |
| PROJECT NUMBER: | 00-03868.35 |
| LOCATION: | Wharton, NJ |
| DATES OF FIELD WORK: | 8/19/03 - 8/21/03 |
| PURPOSE OF FIELD WORK: | 3rd Q 2003 GW Sampling |
| WORK PERFORMED BY: | John Mihalich + Sarah Lapka |

Signed 9-5-03 Date QC'd By 9-5-03 Date

REV 08/27/97

RMT

## GENERAL NOTES

PROJECT NAME: LEC
DATE: 8/19/03
PROJECT NUMBER: 00-03868.35
AUTHOR: SSL
TIME ARRIVED ON SITE: 10:00
TIME LEFT SITE: 19:00

WEATHER:
Temperature: 85 F°
Wind: calm MPH
Visibility: good

WORK/SAMPLING PERFORMED: Measuring water levels from all wells. Measured surface water locations

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:
Problem locating some of the wells due to the grass being overgrown.

COMMUNICATIONS:

Name/Representing: Dave Condon, LEC

Subject/Comments: site access

QC:

RMT

## GENERAL NOTES

PROJECT NAME: LEC
DATE: 8/20/03
PROJECT NUMBER: 00-03868.35
AUTHOR: SSL
TIME ARRIVED ON SITE: 7:00
TIME LEFT SITE: 18:45

WEATHER:
Temperature: 80-90 F°
Wind: Calm MPH
Visibility: good

WORK/SAMPLING PERFORMED: Sampled MW21, MW25, MW22, MW14I, MW14S, & MW4, Duplicate taken at MW4, MW4 MS/MSD, SW8, SW5, SW7

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:
Woods are extremely overgrown, bugs are really bad since it is very humid.

COMMUNICATIONS:

Name/Representing:

Subject/Comments:

QC:

RMT

## GENERAL NOTES

PROJECT NAME: LEC
DATE: 8/21/03
PROJECT NUMBER: 00-03868.35
AUTHOR: SSL
TIME ARRIVED ON SITE: 7:00
TIME LEFT SITE: 13:00

WEATHER:
Temperature: 80-90 F°
Wind: calm MPH
Visibility: good

WORK/SAMPLING PERFORMED: Sampled wells MW11D, MW17S, MW15I, MW15S, took the Rinsate sample + field blank at MW15I.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTION TAKEN:
The triple distilled water container was broken so we had to use the distilled water supplied by the lab for the Rinsate sample

COMMUNICATIONS:

Name/Representing:

Subject/Comments:

QC:

# METER CALIBRATION LOG

PROJECT NAME: LEC DATE: 8/20/03

PROJECT NUMBER: 003868.35 SAMPLER NAME: Sarah Lapka

MODEL: MP20 SERIAL NO.: NA 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 Pre-Calibration Reading |
|---|---|---|---|---|---|---|
| 8/20/03/7:38 | ( 3.82 / 4.00) | ( 4.0 / 4.00) | ( 6.86 / 7.00) | ( 7.00 / 7.00) | ( 9.78 / 10.00) | ( 10.0 / 10.00) |
| 8/21/03, 7:10 | ( 4.09 / 4.00) | ( 4.0 / 4.00) | ( 7.12 / 7.00) | ( 7.00 / 7.00) | ( 10.07 / 10.00) | ( 10.0 / 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) |
| | ( / 4.00) | ( / 4.00) | ( / 7.00) | ( / 7.00) | ( / 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) |
| | ( / 4.00) | ( / 4.00) | ( / 7.00) | ( / 7.00) | ( / 10.00) | ( / 10.00) |

Buffer Lot Numbers: pH 4: NA pH 7: NA pH 10: NA, Solution Source Pine Environmental

## CONDUCTIVITY CALIBRATION

| Date / Time | Conductivity Solution (units) | Pre-Calibration Reading (units) | Post Calibration Reading (units) |
|---|---|---|---|
| 8/20/03 7:42 | ms/cm (20°C) | 5.81 | 6.04 |
| 8/21/03, 7:15 | ms/cm (20°C) | 5.85 | 6.04 |
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Calibration Solution Lot Number: 11212 Calibration Range for Solution 39.9 - 113.8

Problems/Corrective Actions:

Signed 9-5-03 Date Reviewed By 9-5-03 Date 9/10/03

# Turbidity Meter

**MODEL:** Pocket Turbidimeter **SERIAL NO.:** 02050000442 1

| Date/Time | Pre-Calibration 1 NTU Reading | Post-Calibration 1 NTU Reading | Pre-Calibration 20 NTU Reading | Post-Calibration 20 NTU Reading |
|---|---|---|---|---|
| 8/20/03, 7:31 | 0.4 | 1.0 | 15.2 | 20.1 |
| 8/21/03, 7:18 | 1.2 | 1.0 | 16.5 | 20.2 |
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Calibration Solution Lot Number: A2067(1) A2093(20) Calibration Range for Solution NA

Problems/Corrective Actions:

Signed 9-5-03 Date Reviewed By 9-5-03 Date 9/10/03

RMT

# WATER LEVEL DATA

PROJECT NAME L.E. Carpenter

DATE: 8/19/03

PROJECT NUMBER: 00-03868.35

SAMPLER: SSL

| WELL ID | Time | Not Measured P.E. Sample | Historical Depth to Water | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Elevation (ft. MSL) |
|---|---|---|---|---|---|---|---|
| MW-4 | 18:00 | | 5.42 | | 6.22 | | |
| MW-8 | 18:05 | | 4.00 | | 4.86 (OC) | 3.08 | (FC) |
| MW-9 | 18:03 | | 3.90 | | 5.42 | | |
| MW-12R | 10:59 | | 6.42 | | 7.96 | | |
| L MW-14S | 18:24 | | 2.66 | | 2.14 | | |
| L MW-14I | 18:25 | | 1.78 | | 2.31 | | |
| L MW-15S | 17 ~~15~~:05 | | 9.42 | | 10.23 | | |
| L MW-15I | 17 ~~15~~:03 | | 9.45 | | 10.05 | | |
| MW-16S | 11:28 | | 4.89 | | 7.41 | | |
| MW-16I | 11:26 | | 7.27 | | 7.85 | | |
| L MW-17S | 18:48 | | 6.69 | | 7.97 | | |
| MW-18S | 19:08 | | 4.71 | | ~~4.51~~ 5.03 | | |
| MW-18I | 19:05 | | 4.05 | | ~~5.03~~ 4.51 | | |
| MW-20 | 11:33 | | 7.45 | | 9.00 | | |
| L MW-21 | 18:35 | | 2.70 | | 3.08 | | |
| L MW-22R | 18:20 | | 2.38 | | 2.68 | | |
| L MW-25 | 18:27 | | 2.05 | | 2.10 | | |
| MW-26 | 17:20 | | 6.56 | ~~7.21~~ SL | 7.21 | | |
| ~~BW-3~~ | | | | | | | |
| SGR-1 | 12:40 | | 2.44 | | 1.38 | | |
| SGR-2 | 18:46 | | 2.02 | | 0.49 | | |
| SGR-3 | 18:38 | | 1.50 | | 0.70 | | |

* 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: Solinst water level meter

Signed 9-5-03 Date

Qc'd By Overworde Date 9/10/03

SG-R1 (by GE1-3) 12:40 1.38

REV 09/98

I:\DATA\Projects\PolyOne\03868.35\LECWLForm.xls 5/27/2003

RMT

# WATER LEVEL DATA

PROJECT NAME L.E. Carpenter

DATE: 8/19/03

PROJECT NUMBER: 00-03868.35

SAMPLER: SSL

| Well ID | Time | Top of Casing Elevation | Historical Depth to Water (feet) | Depth to Product (feet) | Depth to Water (feet) | Depth to Bottom (feet) | Wtr. Elev. (MSL) |
|---|---|---|---|---|---|---|---|
| WP-C1 | 11:05 | | 5.63 | | 7.14 | | |
| WP-C2 | 11:08 | | 6.67 | | 8.24 | | |
| WP-C3 | 10:56 | | 4.68 | | 6.39 | | |
| WP-C4 | 17:50 | | 4.80 | | 6.10 | | |
| WP-A3 | 11:19 | | 7.74 | | 8.86 | | |
| WP-B6 | 18:16 | | 4.88 | | 6.19 | | |
| WP-B7 | 18:18 | | 3.50 | | 4.17 | | |
| WP-B10 | 17:23 | | 5.88 | | 6.58 | | |
| MW-19 | 12:00 | | 8.26 | | 8.91 | | |
| MW-19-1 | 11:51 | | 7.60 | | 8.64 | | |
| MW-19-2 | 12:05 | | 8.70 | | 9.32 | | |
| MW-19-3 | 11:46 | | 8.93 | | 9.55 | | |
| MW-19-4 | 11:41 | | 6.77 | | 8.21 | | |
| MW-19-5 | 12:09 | | 8.22 | | 8.71 | | |
| MW-19-6 | 12:33 | | 8.38 | | 8.89 | | |
| MW-19-7 | 12:22 | | 7.86 | | 8.18 | | |
| MW-19-8 | 12:17 | | 8.16 | | 8.59 | | |
| MW-19-9D | 12:28 | | 8.19 | | 8.63 | | |
| GEI-1I | 19:11 | | 3.79 | | 4.14 | | |
| GEI-2S | 15:57 | | 9.75 | | 10.35 | | |
| GEI-2I | 16:00 | | 9.90 | | 10.42 | | |
| GEI-3 | 12:38 | | 11.82 | | 12.55 | | |

* 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: Solinst water level meter

Signed 9-5-03 Date

QC'd By 9-5-03 Date 9/10/03

9.8.38

RMT

# WATER LEVEL DATA

PROJECT NAME L.E. Carpenter

DATE: 8/19/03

PROJECT NUMBER: 00-03868.35

SAMPLER: SSL

| 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) |
|---|---|---|---|---|---|---|---|
| WP-A1 | 12:19 | | 10.06 | 9.13 | 10.56 | | |
| L WP-A2 | 16:58 | | 11.75 | 12.70 | 13.11 | | |
| WP-A4 | 16:44 | | 11.18 | 8.80 | 11.17 | | |
| WP-A5 | 12:22 | | 9.25 | — | 11.02 | | |
| WP-A6 | 12:28 | | 9.96 | 10.81 | 13.39 | | |
| WP-A7 | 17:15 | | 8.11 | 8.59 | 9.99 | | |
| WP-A8 | 17:12 | | 12.05 | 11.26 | 12.69 | | |
| WP-A9 | 14:33 | | 12.04 | 12.45 | 14.54 | | |
| WP-B1 | 14:46 | | 5.55 | 6.46 | 6.48 | | |
| WP-B2 | 14:55 | | 5.14 | — | 5.88 | | |
| WP-B3 | 14:49 | | 5.58 | — | 6.67 | | |
| WP-B4 | 17:32 | | 8.36 | 6.38 | 8.41 | | |
| WP-B5 | 17:30 | | 4.38 | | 5.04 | | |
| RW-1 | 16:39 | | 9.89 | 10.82 | 11.79 | | |
| W2RS ~~RW-2~~ | 17:40 | | 5.12 | — | 6.13 | | |
| RW-3 | 17:26 | | 5.48 | — | 6.00 | | |
| CW-1 | 15:12 | | 5.75 | 6.65 | 7.03 | | |
| MW1R | 17:48 | | 9.32 | 9.07 | 9.61 | | |
| 2W-2 ~~MW2RSL~~ | 17:42 | | 5.60 | — | 5.73 | | |
| MW3 | 15:50 | | 6.17 | 6.46 | 7.39 | | |
| MW6R | 17:45 | | 4.82 | 6.00 | 6.03 | | |
| CW-2 MW1S | ~~15:00~~ SL 17:35 | | 12.18 | — 6.88 | ~~7.12~~ 12.78 SL | | |

* 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: Solinst interface meter Model 122

Signed 9-5-03 Date

QC'd By D Overwoude Date 9/10/03

P:\PolyOne\03868.35\LECWLForm.xls 8/18/2003

RMT

# WATER LEVEL DATA

PROJECT NAME L.E. Carpenter

DATE: 8/19/03

PROJECT NUMBER: 00-03868.35

SAMPLER: SSL

| | 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) |
|---|---|---|---|---|---|---|---|---|
| | MW11R | 15:00 | | 6.35 | | 7.12 | | |
| | MW11DR | 15:07 | | 4.08 | | 4.64 | | |
| AP | SG-D1 | 13:32 | | 2.50 | | 1.30 | | |
| AP | SG-D2 | 1324 | | 0.50 | | 1.50 | | |
| AP | SG-D3 | 13:08 | | 1.51 | | 1.56 | | |
| AP | MW-13R | 12:46 | | 4.16 | | 4.70 | | |
| AP | MW-13S | 12:48 | | 3.38 | | 5.37 | | |
| AP | MW-13I | 12:44 | | 3.97 | | 4.58 | | |
| | CW 3 | 18:14 | | 6.35 | | 7.07 | | |
| AP | MW23 | 12:50 | | 2.49 | | 4.11 | | |
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* 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: Solinst water level meter

Signed 9-5-03 Date

QC'd By [illegible] 9-5-03 Date 9/10/03

RMT

R 10
D 10
PSI 25



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: ~~MW-29~~ MW21 SL
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 4"
DATE: 8/20/03
SAMPLER: JPM
Type of pump used: QED submersible bladder
Pumping rate (milliliters/minute): 300
Water level before purging (nearest 0.01 ft. below reference point) 3.12 + T/
Depth to bottom of well (obtained from well logs) 15.00 + T/
Calculated volume of water in casing 7.76
Weather conditions Sunny, hot, 80s
Started pumping at 7:52

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity mS/cm (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP (mV) | Temp (°C) | Water Level (0.01 ft) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 7:57 | 300 | 5.28 | 0.404 | 92.2 | 4.81 | 4 | 14.06 | 3.12 | — |
| 8:02 | | 5.13 | 0.406 | 120 | 2.88 | 6 | 13.98 | 3.12 | 0.2 |
| 8:07 | | 5.08 | 0.410 | 86.3 | 2.43 | -15 | 13.83 | 3.12 | 0.4 |
| 8:12 | | 5.13 | 0.411 | 85.5 | 2.42 | -28 | 13.82 | 3.12 | 0.6 |
| 8:17 | | 5.12 | 0.411 | 85.8 | 2.41 | -38 | 13.73 | 3.12 | 0.8 |
| 8:23 | | 5.15 | 0.412 | 84.0 | 2.41 | -37 | 13.74 | 3.12 | 1.0 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date

QC'd By [illegible] Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 12 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 8:23 |

| WELL INFORMATION | WELL ID: MW21 | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 3.08 | TOTAL DEPTH: 15.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE portable compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: ~~MP20~~ Flow Cell MP20 ~~MP15~~ pom | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 2.41 UNITS mg/L | FINAL ORP -37 UNITS mV | FINAL TURBIDITY: 84.0 NTU |
| FINAL PH: 5.15 su | FINAL COND. 412 us/cm | FINAL TEMP.: 13.74 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9/5/03

F-186 (REV 09MAY2002)

P:\POLYONE\03868.29\WATERSAMPLELOG.DOC 08/18/03

RMT

R 10
D 10

10 psi



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW25
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 2"
DATE: 8/20/03
SAMPLER: JPM
Type of pump used: QED bladder
Pumping rate (milliliters/minute): 480
Water level before purging (nearest 0.01 ft. below reference point) 2.07+ T/
Depth to bottom of well (obtained from well logs) 10.0 + T/
Calculated volume of water in casing 1.29
Weather conditions Warm, 70s, sunny; calm.

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP (mV) | Temp (°C) | Water Level (ft BTOC) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 9:15 | 480 | 6.77 | 491 | 430 | 5.37 | -12 | 17.47 | 2.07 | — |
| 9:20 | | 6.93 | 501 | 389 | 1.91 | -64 | 15.68 | 2.10 | 0.32 |
| 9:25 | | 7.04 | 501 | 319 | 0.73 | -74 | 15.73 | 2.11 | 0.64 |
| 9:30 | | 7.03 | 500 | 259 | 0.94 | -80 | 15.65 | 2.11 | 0.96 |
| 9:35 | | 7.01 | 501 | 208 | 0.78 | -85 | 15.66 | 2.13 | 1.28 |
| 9:40 | | 7.04 | 500 | 167 | 0.81 | -89 | 15.65 | 2.15 | 1.60 |
| 9:45 | | 7.05 | 501 | 160 | 0.70 ~~0.78~~ SL | -93 | 15.64 | 2.16 | 1.92 |
| 9:50 | | 7.02 | 501 | 115 | 0.73 | -96 | 15.65 | 2.17 | 2.24 |
| 9:55 | | 7.06 | 501 | 109 | 0.70 | -97 | 15.59 | 2.18 | 2.56 |
| 10:00 | | 6.99 | 501 | 108 | 0.67 | -100 | 15.72 | 2.18 | 2.88 |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed — Date 9-503 — QC'd By D Demarde — Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 14 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 10:00 |

| WELL INFORMATION | WELL ID: MW25 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 2.10 | TOTAL DEPTH: 10.0 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE portable compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: ~~MP20~~ Flow Cell MP20 JPM ~~MP15~~ JPM | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.67 UNITS mg/L | FINAL ORP -100 UNITS mV | FINAL TURBIDITY: 108 NTU |
| FINAL PH: 6.99 su | FINAL COND. 501 uS/cm | FINAL TEMP.: 15.72 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative | Filtered | Number | Size | Type | Preservative | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 002259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: JPM DATE: 9-5-03

F-186 (REV 09MAY2002)

R 10 10psi
D 10



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW22
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 2"
DATE: 8/20/03
SAMPLER: JPM
Type of pump used: QED bladder
Pumping rate (milliliters/minute): 300
Water level before purging (nearest 0.01 ft. below reference point) 2.62 + T/
Depth to bottom of well (obtained from well logs) 7.5 + T/
Calculated volume of water in casing 0.795
Weather conditions sunny, warm, 70s

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (us/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or % | ORP mV | Temp (°C) | Water Level (to 0.01 ft) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 10:32 | 300 | 6.93 | 472 | 379 | 2.63 | -8 | 19.28 | 2.62 | — |
| 10:37 | | 6.92 | 504 | 248 | 2.50 | -39 | 16.34 | 2.83 | 0.2 |
| 10:42 | | 6.94 | 506 | 161 | 2.52 | -48 | 16.30 | 2.84 | 0.4 |
| 10:47 | | 6.91 | 506 | 90.0 | 2.01 | -54 | 16.34 | 2.84 | 0.6 |
| 10:52 | | 6.93 | 506 | 69.8 | 1.71 | -54 | 16.26 | 2.84 | 0.8 |
| 10:57 | | 6.95 | 506 | 43.3 | 1.55 | -59 | 16.19 | 2.86 | 1.0 |
| 11:02 | | 6.98 | 506 | 27.4 | 1.61 | -58 | 16.30 | 2.87 | 1.2 |
| 11:07 | | 6.95 | 506 | 23.4 | 1.44 | -63 | 16.20 | 2.89 | 1.4 |
| 11:12 | | 6.97 | 507 | 22.1 | 1.41 | -66 | 16.29 | 2.88 | 1.6 |
| 11:17 | | 6.95 | 506 | 21.6 | 1.38 | -71 | 16.13 | 2.88 | 1.8 |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date
QC'd By 9/10/03 Date

RMT

# WATER SAMPLE LOG

Sheet 15 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 11:17 |

| WELL INFORMATION | WELL ID: MW22 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 2.68 | TOTAL DEPTH: 7.5 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: none | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE portable compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: ~~MP20~~ ~~MP15~~ JPM Flow Cell MP20 | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.38 UNITS mg/L | FINAL ORP -71 UNITS mV | FINAL TURBIDITY: 21.6 NTU |
| FINAL PH: 6.95 su | FINAL COND. 506 µs/cm | FINAL TEMP.: 16.13 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: _____ DATE SHIPPED: 0029259 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: SW-8
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: NA
DATE: 8/20/03
SAMPLER: JPM
Type of pump used: NA
Pumping rate (milliliters/minute): NA
Water level before purging (nearest 0.01 ft. below reference point) NA + T/
Depth to bottom of well (obtained from well logs) NA + T/
Calculated volume of water in casing NA
Weather conditions Sunny, hot, 80s

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP (mV) | Temp (°C) | Water Level (0.01 ft) | Cumulative Purge Volume (gal.) |
|---|---|---|---|---|---|---|---|---|---|
| 13:08 | — | 7.11 | 0.778 | 306 | 3.20 | 18 | 29.67 | — | — |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date

Overwarde QC'd By 9/10/03 Date

RMT

# WATER SAMPLE LOG

Sheet 18 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 13:08 |

| WELL INFORMATION | ~~WELL ID~~: SW8 | WELL DIAMETER: — |
|---|---|---|
| WELL MATERIAL: — | WELL CONDITIONS: — | |
| STATIC WATER LEVEL: — | TOTAL DEPTH: | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: _____ ☐ EQUIP. COATING ☐ PURGE WATER | | |

| SAMPLE METHOD | PURGE METHOD: ~~low flow~~ grab (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED ~~submersible~~ pump | PNEUMATIC SOURCE — | |
| BLADDER TYPE: ~~PE~~ (new / used) | | |
| TUBING TYPE: ~~PE~~ | TUBING CONDITION: good | HOW STORED: — |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 3.20 UNITS mg/L | FINAL ORP 18 UNITS mV | FINAL TURBIDITY: 306 NTU |
| FINAL PH: 7.11 su | FINAL COND. 778 µS/cm | FINAL TEMP.: 29.67 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9/5/03

F-186 (REV 09MAY2002)

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RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: SW-5

PROJECT NUMBER: 0003868.35

WELL DIAMETER: NA

DATE: 8/20/03

SAMPLER: JBM

Type of pump used: NA

Pumping rate (milliliters/minute): NA

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

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

Calculated volume of water in casing NA

Weather conditions Sunny, hot, 80s

| 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) |
|---|---|---|---|---|---|---|---|---|---|
| 13:24 | – | 7.63 | 0.773 | 119 | 2.61 | 85 | 28.63 | – | – |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date

QC'd By Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 20 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 13:24 |

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

| SAMPLE METHOD | PURGE METHOD: ~~low flow~~ grab | (use purge form) |
|---|---|---|
| SAMPLING PUMP: ~~QED submersible pump~~ | PNEUMATIC SOURCE — | |
| BLADDER TYPE: ~~PE~~ (new / used) | | |
| TUBING TYPE: ~~PE~~ | TUBING CONDITION: ~~good~~ | HOW STORED: — |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. 2.61 UNITS mg/L | FINAL ORP 85 UNITS mV | FINAL TURBIDITY: 119 NTU |
| FINAL PH: 7.63 su | FINAL COND. 773 uS/cm | FINAL TEMP.: 28.63 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

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RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: SW-7

PROJECT NUMBER: 00-03868.35

WELL DIAMETER: NA

DATE: 8/20/03

SAMPLER: JPM/SSL

Type of pump used: NA

Pumping rate (milliliters/minute): NA

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

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

Calculated volume of water in casing NA

Weather conditions 80s, hot

| Time | Purge Rate (ml/min) | pH (S.U.) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) or (%) | ORP (mV) | Temp (°C) | Water Level (0.01 ft) | Cumulative Purge Volume (Gal) |
|---|---|---|---|---|---|---|---|---|---|
| 1332 | — | 7.35 | 558 | 124 | 2.62 | 13 | 24.68 | — | — |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date

QC'd By Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 22 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 13:32 |

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

| SAMPLE METHOD | PURGE METHOD: ~~low flow~~ grab | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED ~~submersible pump~~ | PNEUMATIC SOURCE — | |
| BLADDER TYPE: ~~PE~~ (new / used) | | |
| TUBING TYPE: ~~PE~~ | TUBING CONDITION: ~~good~~ | HOW STORED: — |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. 2.62 UNITS mg/L | FINAL ORP 13 UNITS mV | FINAL TURBIDITY: 124 NTU |
| FINAL PH: 7.35 su | FINAL COND. 558 µs/cm | FINAL TEMP.: 24.68 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

RMT

R 10
D 10
20 PSI



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW14I
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 2"
DATE: 8/20/03
SAMPLER: JPM/SSL
Type of pump used: QED submersible bladder
Pumping rate (milliliters/minute): 300
Water level before purging (nearest 0.01 ft. below reference point) 2.35+ T/
Depth to bottom of well (obtained from well logs) 44.3+ T/
Calculated volume of water in casing 6.84
Weather conditions sunny; hot (90s); calm

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (± 5% µS/cm) | Turbidity (± 10%) | Dissolved Oxygen (mg/L) (± 10%) | ORP (mV) | Temp (°C) | Water Level (0.01 ft) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 14:17 | 300 | 6.88 | 294 | >440 | 2.45 | -6 | 19.11 | 2.35 | — |
| 14:22 | | 6.78 | 320 | >440 | 1.69 | 23 | 15.38 | 2.44 | 0.2 |
| 14:27 | | 6.77 | 320 | >440 | 1.60 | 25 | 15.12 | 2.45 | 0.4 |
| 14:32 | | 6.80 | 320 | >440 | 1.45 | 25 | 14.45 | 2.45 | 0.6 |
| 14:37 | | 6.81 | 320 | 171 | 1.33 | 22 | 14.85 | 2.49 | 0.8 |
| 14:42 | | 6.82 | 320 | 124 | 1.26 | 20 | 14.65 | 2.47 | 1.0 |
| 14:47 | | 6.82 | 322 | 87.3 | 1.23 | 19 | 14.63 | 2.48 | 1.2 |
| 14:52 | | 6.85 | 322 | 70.2 | 1.21 | 17 | 14.68 | 2.50 | 1.4 |
| 14:57 | | 6.82 | 321 | 71.7 | 1.19 | 15 | 14.79 | 2.50 | 1.6 |
| 15:02 | | 6.85 | 321 | 45.4 | 1.21 | 12 | 14.75 | 2.50 | 1.8 |
| 15:07 | | 6.81 | 321 | 42.5 | 1.17 | 7 | 14.68 | 2.50 | 2.0 |
| 15:12 | | 6.83 | 322 | 44.1 | 1.17 | 3 | 14.70 | 2.50 | 2.2 |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed — Date 9-5-03
QC'd By — Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 24 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 15:12 |

| WELL INFORMATION | WELL ID: MW14I | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 2.31 | TOTAL DEPTH: 44.30 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP20 ~~compressor~~ compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.17 UNITS | FINAL ORP 3 UNITS mV | FINAL TURBIDITY: 44.1 NTU |
| FINAL PH: 6.83 su | FINAL COND. 322 uS/cm | FINAL TEMP.: 14.70 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 002929 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

P:\POLYONE\03868.29\WATERSAMPLELOG.DOC 08/18/03

R 10
D 10 10 psi



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW14S
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 4"
DATE: 8/20/03
SAMPLER: JPM/SSL
Type of pump used: QED bladder
Pumping rate (milliliters/minute): 300
Water level before purging (nearest 0.01 ft. below reference point) 3.03+ T/
Depth to bottom of well (obtained from well logs) 15.46+ T/
Calculated volume of water in casing 8.12
Weather conditions hot, 90s, sunny, humid

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (S/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP (mV) | Temp (°C) | Water Level (0.01 ft) | Number Times Purge Volume (#) |
|---|---|---|---|---|---|---|---|---|---|
| 15:43 | 300 | 7.11 | ~~250~~ 50 | 387 | 1.92 | -18 | 21.62 | 3.03 | — |
| 15:48 | | 7.08 | 530 | 152 | 1.35 | -32 | 16.90 | 3.03 | 0.2 |
| 15:53 | | 7.10 | 531 | 21.7 | 1.05 | -38 | 16.64 | 3.05 | 0.4 |
| 15:58 | | 7.13 | 530 | 18.8 | 0.99 | -43 | 16.51 | 3.06 | 0.6 |
| 16:03 | | 7.14 | 530 | 9.8 | 0.91 | -46 | 16.23 | 3.06 | 0.8 |
| 16:08 | | 7.09 | 531 | 13.7 | 0.89 | -48 | 16.18 | 3.05 | 1.0 |
| 16:13 | | 7.04 | 531 | 10.9 | 0.83 | -51 | 16.04 | 3.04 | 1.2 |
| 16:18 | | 7.07 | 529 | 9.6 | 0.82 | -55 | 16.13 | 3.04 | 1.4 |
| 16:23 | | 7.11 | 529 | 11.0 | 0.80 | -56 | 16.25 | 3.04 | 1.6 |
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date
QC'd By Overwarde 9/10/03 Date

RMT

# WATER SAMPLE LOG

Sheet 30 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 16:23 |

| WELL INFORMATION | WELL ID: MW14S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 2.14 | TOTAL DEPTH: 15.46 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP20 ~~controller~~ compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.8 UNITS mg/L | FINAL ORP -56 UNITS mV | FINAL TURBIDITY: 11.0 NTU |
| FINAL PH: 7.11 su | FINAL COND. 529 uS/cm | FINAL TEMP.: 16.25 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

RMT

Dupe 01 R 10 D 10 10 psi



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC

WELL NUMBER: MW4

PROJECT NUMBER: 00-03868.35

WELL DIAMETER: 2"

DATE: 8/20/03

SAMPLER: JPM/SSL

Type of pump used: QED bladder

Pumping rate (milliliters/minute): 480

Water level before purging (nearest 0.01 ft. below reference point) 6.31 + T/

Depth to bottom of well (obtained from well logs) 27 + T/

Calculated volume of water in casing 3.37

Weather conditions hot, 90s, breeze

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | ORP (mV) | Temp (°C) | Water Level (ft. BTOC) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 17:03 | 480 | 6.99 | 657 | 54.5 | 2.44 | -81 | 20.97 | 6.31 | — |
| 17:08 | | 6.93 | 666 | 23.0 | 1.50 | -83 | 19.50 | 6.31 | 0.32 |
| 17:13 | | 6.88 | 665 | 29.7 | 1.11 | -84 | 19.00 | 6.35 | 0.64 |
| 17:18 | | 6.85 | 665 | 25.3 | 1.03 | -87 | 18.82 | 6.34 | 0.96 |
| 17:23 | | 6.86 | 667 | 25.2 | 0.98 | -91 | 18.64 | 6.35 | 1.28 |
| 17:28 | | 6.86 | 667 | 26.4 | 0.96 | -96 | 18.63 | 6.36 | 1.60 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9503 Date

QC'd By 9/10/03 Date

RMT

# WATER SAMPLE LOG

Sheet 28 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/20/03 | SAMPLE TIME: 17:28 |

| WELL INFORMATION | WELL ID: MW4 | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 6.22 | TOTAL DEPTH: 27.00 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP 20 ~~controller~~ compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/20/03 7:38 | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: none |
|---|---|---|
| FINAL D.O. 0.96 UNITS mg/L | FINAL ORP -96 UNITS mV | FINAL TURBIDITY: 26.4 NTU |
| FINAL PH: 6.86 SU | FINAL COND. 667 µS/cm | FINAL TEMP.: 18.63 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029259 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

R 10
D 10
PSI 60



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW-11D
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 2"
DATE: 8-21-03
SAMPLER: JPM/SSL
Type of pump used: QED submersible bladder
Pumping rate (milliliters/minute): 480
Water level before purging (nearest 0.01 ft. below reference point) 4.39 + T/
Depth to bottom of well (obtained from well logs) 157 + T/
Calculated volume of water in casing 24.88
Weather conditions Calm; sunny; hot (70s)
Started pumping at 7:20

| 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) |
|---|---|---|---|---|---|---|---|---|---|
| 7:30 | 480 | 8.07 | 181 | 10.1 | 1.81 | 9 | 17.21 | 4.79 | — |
| 7:35 | ↓ | 8.07 | 181 | 19.9 | 1.53 | 10 | 17.24 | 4.79 | 0.32 |
| 7:40 | | 8.08 | 180 | 9.3 | 1.56 | 10 | 17.46 | 4.79 | 0.64 |
| 7:45 | | 8.02 | 180 | 18.0 | 1.55 | 9 | 17.64 | 4.79 | 0.96 |
| 7:50 | | 8.10 | 180 | 18.1 | 1.58 | 11 | 17.76 | 4.79 | 1.28 |
| 7:55 | ↓ | 8.09 | 181 | 18.5 | 1.58 | 9 | 17.85 | 4.79 | 1.60 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed — Date 9-5-03
QC'd By — Date 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 30 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/21/03 | SAMPLE TIME: 7:55 |

| WELL INFORMATION | WELL ID: MW11D | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 4.64 | TOTAL DEPTH: 157 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: none | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP20 ~~controller~~ SL compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: storage room |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/21/03 7:10 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.58 UNITS mg/L | FINAL ORP 9 UNITS mV | FINAL TURBIDITY: 18.5 NTU |
| FINAL PH: 8.09 su | FINAL COND. 181 µS/cm | FINAL TEMP.: 17.85 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 002926 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

P:\POLYONE\03868.29\WATERSAMPLELOG.DOC 08/18/03

RMT

R 10
D 10 15psi

Field Blank
(9:00)



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW17S
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 4"
DATE: 8/21/03
SAMPLER: JPM/SSL
Type of pump used: QED bladder
Pumping rate (milliliters/minute): 240
Water level before purging (nearest 0.01 ft. below reference point) 8.12+ T/
Depth to bottom of well (obtained from well logs) 15.04+ T/
Calculated volume of water in casing 4.52
Weather conditions Sunny, Warm, 70s ; Calm

| Time | Pump Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L) | ORP (mV) | Temp (°C) | Water Level (0.01 ft.) | Cumulative Purge Volume (Gal) |
|---|---|---|---|---|---|---|---|---|---|
| 8:34 | 240 | 6.24 | 268 | 18.2 | 1.24 | 49 | 21.50 | 8.12 | — |
| 8:39 | | 6.05 | 272 | 18.8 | 0.82 | 45 | 19.71 | 8.12 | 0.16 |
| 8:44 | | 6.09 | 275 | 11.5 | 0.88 | 41 | 19.68 | 8.14 | 0.32 |
| 8:49 | | 6.09 | 278 | 12.0 | 0.80 | 36 | 19.62 | 8.15 | 0.48 |
| 8:54 | | 6.12 | 280 | 11.8 | 0.86 | 31 | 19.65 | 8.14 | 0.64 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed
9-5-03 Date
D Vernarde QC'd By
9/10/03 Date

RMT

# WATER SAMPLE LOG

Sheet 32 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/21/03 | SAMPLE TIME: 8:54 |

| WELL INFORMATION | WELL ID: MW17S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 7.97 | TOTAL DEPTH: 15.04 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None | ☐ EQUIP. COATING ☐ PURGE WATER | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP 20 ~~controller~~ compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/21/03 7:10 | |

| SAMPLE DESCRIPTION | COLOR: Clear | ODOR: None |
|---|---|---|
| FINAL D.O. 0.86 UNITS mg/L | FINAL ORP 31 UNITS mV | FINAL TURBIDITY: 11.8 NTU |
| FINAL PH: 6.12 su | FINAL COND. 280 uS/cm | FINAL TEMP.: 19.65 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029261 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

F-186 (REV 09MAY2002)

P:\POLYONE\03868.29\WATERSAMPLELOG.DOC 08/18/03

K 10
D 10

50 psi



Sunsate

# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

**PROJECT NAME:** LEC **WELL NUMBER:** MW15I

**PROJECT NUMBER:** 00-03868.35 **WELL DIAMETER:** 2"

**DATE:** 8/21/03 **SAMPLER:** JPM/SSL

**Type of pump used:** QED submersible bladder

**Pumping rate (milliliters/minute):** 300

**Water level before purging (nearest 0.01 ft. below reference point)** 10.16+ T/

**Depth to bottom of well (obtained from well logs)** 43.97 T/

**Calculated volume of water in casing** ~~8~~ SL 5.50

**Weather conditions** Sunny, hot, 80s

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/l or %) | ORP (mV) | Temp (deg C) | Water Level (0.01 ft) | Cumulative Purge Volume (gal) |
|---|---|---|---|---|---|---|---|---|---|
| 10:13 | 300 | 7.11 | 270 | 246 | 0.59 | 5 | 27.93 | 10.16 | — |
| 10:18 | | 7.22 | 357 | 185 | 0.84 | -64 | 16.02 | 10.21 | 0.2 |
| 10:23 | | 7.28 | 360 | 72.7 | 0.94 | -73 | 15.84 | 10.19 | 0.4 |
| 10:28 | | 7.34 | 362 | 41.3 | 1.00 | -88 | 15.97 | 10.19 | 0.6 |
| 10:33 | | 7.41 | 364 | 39.7 | 1.03 ~~0.87~~ SL | -94 | 15.87 | 10.23 | 0.8 |
| 10:38 | | 7.39 | 366 | 38.2 | 1.06 | -97 | 15.68 | 10.22 | 1.0 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed: [signature] Date: 9-5-03 QC'd By: [signature] Date: 9/10/03

RMT

# WATER SAMPLE LOG

Sheet 34 of 38

| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/21/03 | SAMPLE TIME: 10:38 |

| WELL INFORMATION | WELL ID: MW15I | WELL DIAMETER: 2" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 10.05 | TOTAL DEPTH: 43.92 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: None ☐ EQUIP. COATING ☐ PURGE WATER | | |

| SAMPLE METHOD | PURGE METHOD: low flow | (use purge form) |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP 20 ~~compressor~~ SL compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/21/03 7:10 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.06 UNITS mg/L | FINAL ORP -97 UNITS mV | FINAL TURBIDITY: 38.2 NTU |
| FINAL PH: 7.39 su | FINAL COND. 366 us/cm | FINAL TEMP.: 15.68 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative | Filtered | Number | Size | Type | Preservative | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029261 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9-5-03

RMT



# LOW-FLOW GROUNDWATER SAMPLING STABILIZATION LOG

PROJECT NAME: LEC
WELL NUMBER: MW15S
PROJECT NUMBER: 00-03868.35
WELL DIAMETER: 4"
DATE: 8/21/03
SAMPLER: JPM/SSL
Type of pump used: QED bladder
Pumping rate (milliliters/minute): 480
Water level before purging (nearest 0.01 ft. below reference point) 10.29 + T/
Depth to bottom of well (obtained from well logs) 25.94 T/
Calculated volume of water in casing 10.22
Weather conditions hot, 80s, sunny

| Time | Purge Rate (ml/min) | pH (SU) | Conductivity (uS/cm) | Turbidity (NTU) | Dissolved Oxygen (mg/L or %) | ORP (mV) | Temp (°C) | Water Level (nearest 0.01 ft) | Cumulative Purge Volume (Gal) |
|---|---|---|---|---|---|---|---|---|---|
| 11:09 | 480 | 6.40 | 562 | 88 | 1.16 | 49 | 25.89 | 10.29 | — |
| 11:14 | | 6.19 | 558 | 46.5 | 1.20 | 23 | 18.24 | 10.31 | 0.32 |
| 11:19 | | 6.25 | 524 | 49.6 | 1.07 | 19 | 18.23 | 10.31 | 0.64 |
| 11:24 | | 6.27 | 498 | 39.3 | 1.08 | 17 | 18.20 | 10.32 | 0.96 |
| 11:29 | | 6.28 | 493 | 25.6 | 1.55 | 19 | 18.11 | 10.30 | 1.28 |
| 11:34 | | 6.30 | 488 | 23.8 | 1.52 | 25 | 18.02 | 10.31 | 1.60 |
| 11:39 | | 6.30 | 482 | 25.2 | 1.51 | 29 | 18.22 | 10.31 | 1.92 |

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS: pH - ±0.1 pH; COND. - ±5%, TEMP (CORRECTED); TEMP. - ±0.5°c; TURBIDITY ±10%

Signed 9-5-03 Date
QC'd By Overwarde 9/10/03 Date

RMT

# WATER SAMPLE LOG



| PROJECT INFORMATION | PROJECT NAME: L.E. Carpenter | EVENT NAME: 3rd Quarter, 2003 Sampling |
|---|---|---|
| SAMPLER NAME 1: JPM | SAMPLER NAME 2: SSL | PROJECT NO: 0003868.35 |
| SITE LOCATION: Wharton, NJ | SAMPLE DATE: 8/21/03 | SAMPLE TIME: 11:39 |

| WELL INFORMATION | WELL ID: MW15S | WELL DIAMETER: 4" |
|---|---|---|
| WELL MATERIAL: SS | WELL CONDITIONS: good | |
| STATIC WATER LEVEL: 10.23 | TOTAL DEPTH: 25.94 | |
| FREE PRODUCT: ☐ SHEEN ☐ MEAS. THICKNESS: none ☐ EQUIP. COATING ☐ PURGE WATER | | |

| SAMPLE METHOD | PURGE METHOD: low flow (use purge form) | |
|---|---|---|
| SAMPLING PUMP: QED submersible pump | PNEUMATIC SOURCE MP 20 compressor | |
| BLADDER TYPE: PE (new / used) | | |
| TUBING TYPE: PE | TUBING CONDITION: good | HOW STORED: in well |
| WATER QUALITY METER TYPE: MP20 Flow Cell | CALIBRATION DATE / TIME 8/21/03 7:10 | |

| SAMPLE DESCRIPTION | COLOR: clear | ODOR: none |
|---|---|---|
| FINAL D.O. 1.57 UNITS mg/L | FINAL ORP 29 UNITS mV | FINAL TURBIDITY: 25.2 NTU |
| FINAL PH: 6.30 su | FINAL COND. 482 uS/cm | FINAL TEMP.: 18.22 °C |
| COMMENTS: | | |

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

BOTTLES FILLED

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

| Number | Size | Type | Preservative* | Filtered | Number | Size | Type | Preservative* | Filtered |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 40 ml | VOA | E | ☐Y ☑N | | | | | ☐Y ☐N |
| 2 | 500 ml | amber | F | ☐Y ☑N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |
| | | | | ☐Y ☐N | | | | | ☐Y ☐N |

CHAIN-OF-CUSTODY NUMBER: 0029261 DATE SHIPPED: 8/21/03 METHOD: courier

AIRBILL NUMBER: N/A SIGNED: [signature] DATE: 9/5/03

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 9322 Group# 864130 Sample # 4106537-55

**COC # 0029259**

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

(1)
Client: 9322-RMT
Acct. #:
Project Name/#: LE Carpenter
PWSID #:
Project Manager: Nick Clevett
P.O.#:
Sampler: JPM/SSL
Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #:

(6)

| (2) Sample Identification | Date Collected | Time Collected | (3) Number of Containers | | | (4) Matrix | | | (5) Analyses Requested: BTEX | DeHP | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW21 | 8/20/03 | 8:23 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | temp 2-6°C |
| MW25 | | 10:00 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | TJB 8/21/03 |
| MW22 | | 11:17 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| SW8 | | 13:08 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| SW5 | | 13:24 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| SW7 | | 13:32 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW14 I | | 15:12 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW14S | | 16:23 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW4 | | 17:28 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW4 MS/MSD | | 17:28 | ✓ | | | ✓ | | 8 | ✓ | ✓ | | | | | | | | |

(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 |
|---|---|---|---|---|---|
| Sarah Lapka | 8/21/03 | 12:15 | Tony Lange | 8/21/03 | 12:15 |
| Tony Lange | 8/21/03 | 15:40 | | | |
| | | | | | |
| | | | | | |
| | | | Jessica Baron | 8/21/03 | 1540 |

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 9322 Group# 864130 Sample # 4106537-55

**COC # 0029261**

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

(1)
Client: 9322-RMT Acct. #:
Project Name/#: LE Carpenter PWSID #:
Project Manager: Nick Clevett P.O.#:
Sampler: JPM/SSL Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #: 7181170

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

| Sample Identification | Date Collected | Time Collected | Matrix | | | | Containers | BTEX | DEHP | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dupe 01 | | | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | temp 2-6°C |
| MW11 | 8/21/03 | 7:55 | ✓ | | | ✓ | 2 | | ✓ | | | | | | | | TB 8/21/03 |
| MW17S | | 8:54 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | |
| FB01 | | 9:00 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | |
| MW15I | | 10:38 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | |
| MW15S | | 11:39 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | |
| Trip Blank | | | ✓ | | | ✓ | 3 | ✓ | ✓ | | | | | | | | use large bottle for DEHP tripblank |
| Rinsate | | 9:40 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | |

(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:

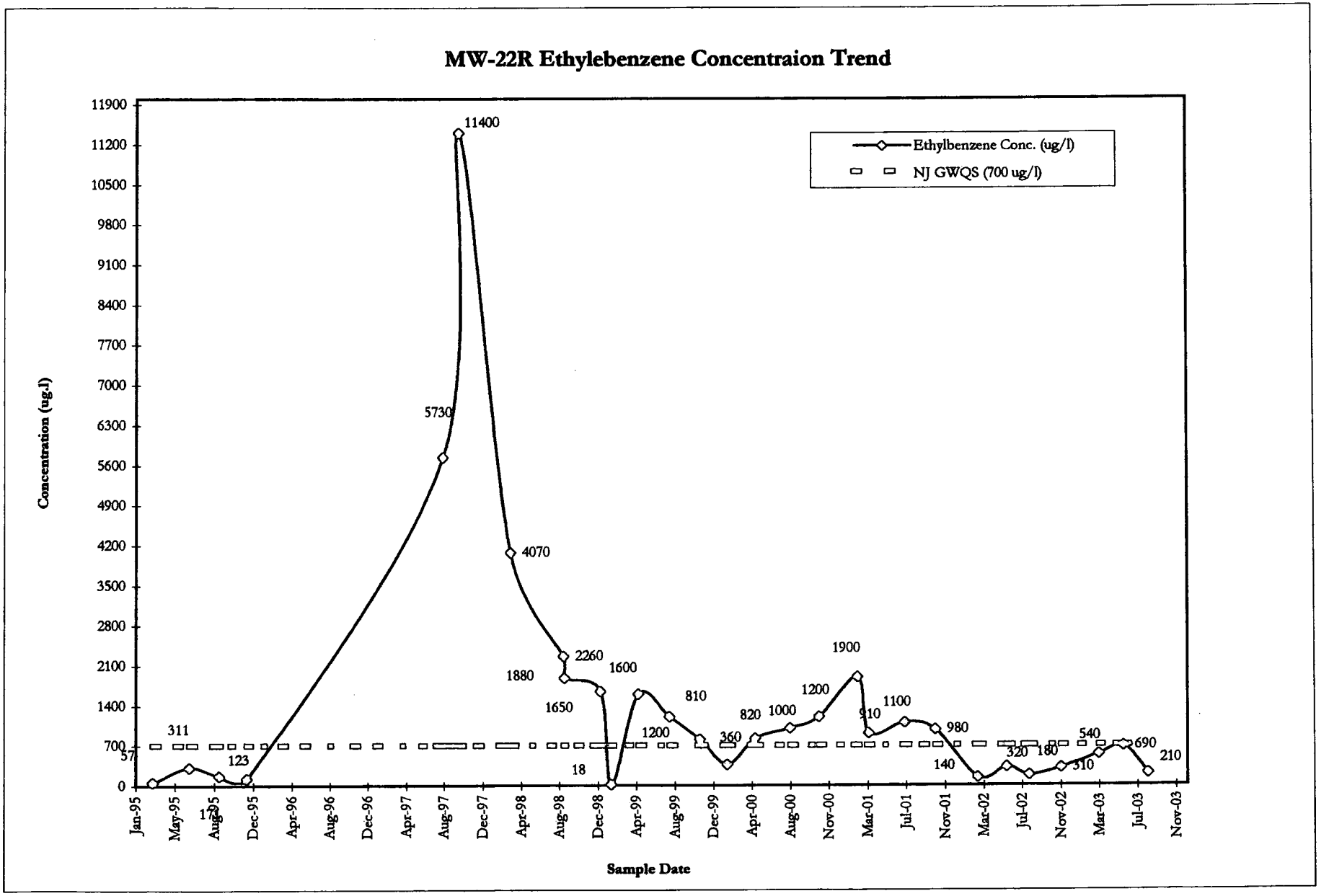
(8) **Data Package Options** (please circle if required)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

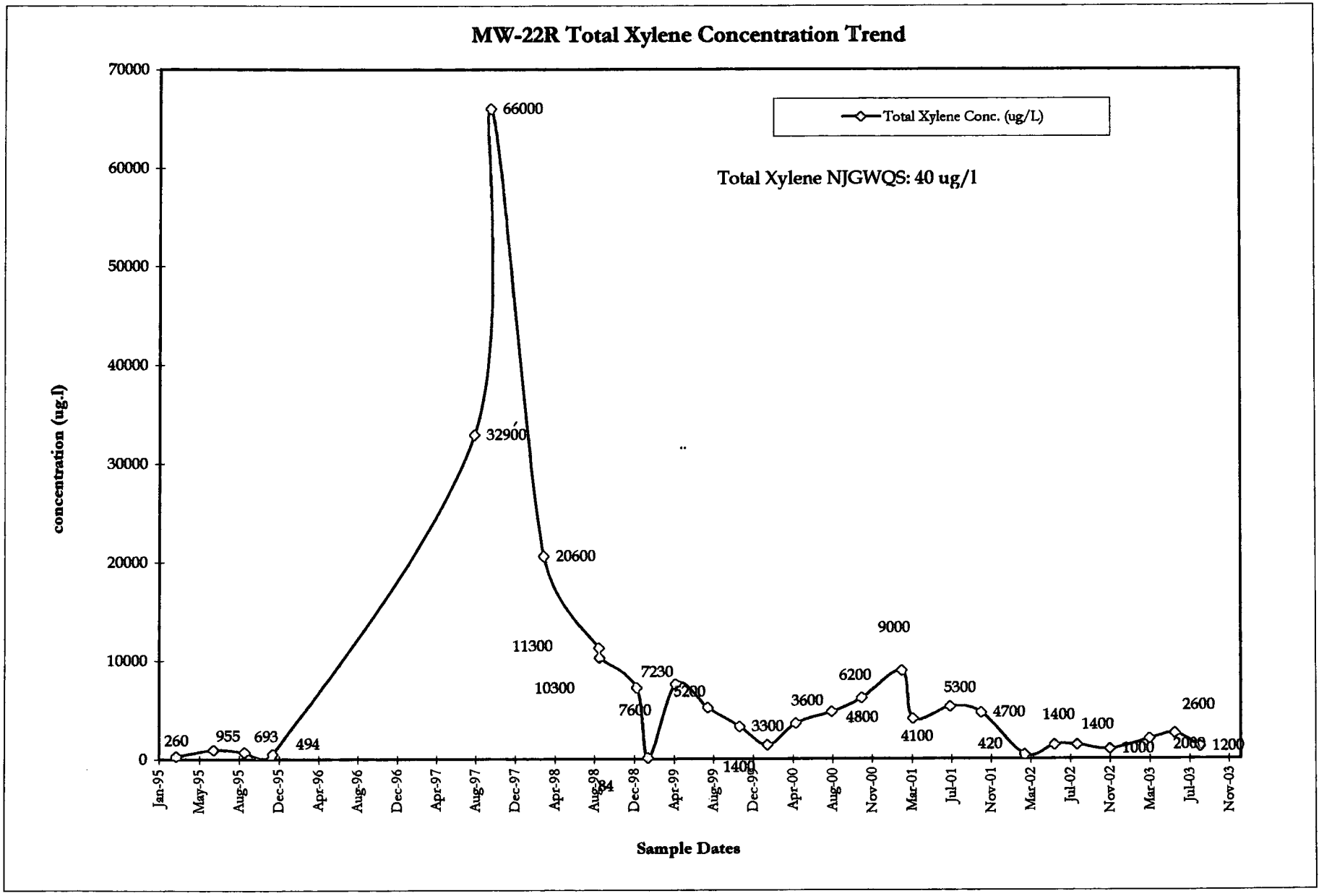
SDG Complete? Yes No
Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

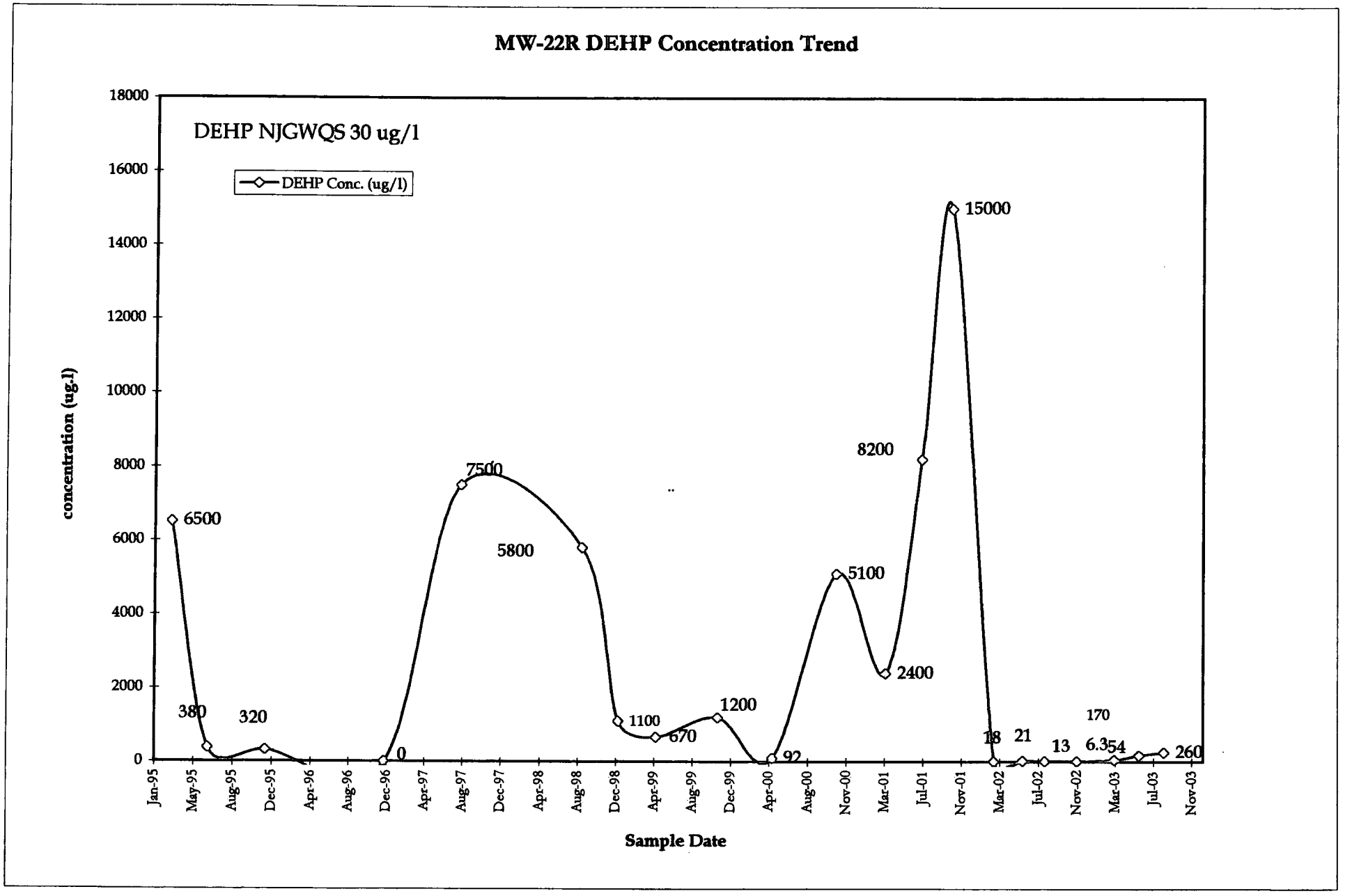
| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| K. [illegible] | 8/18/03 | 0845 | Sarah Lapka | 8/21/03 | 12:15 |
| Sarah Lapka | 8/21/03 | 12:15 | Tony [illegible] | 8/21/03 | 12:15 |
| Tony [illegible] | 8/21/03 | 15:00 | | | |
| | | | | | |
| | | | Jessica Barm | 8/21/03 | 1540 |

# Appendix D
# Groundwater Concentration Trend Analysis

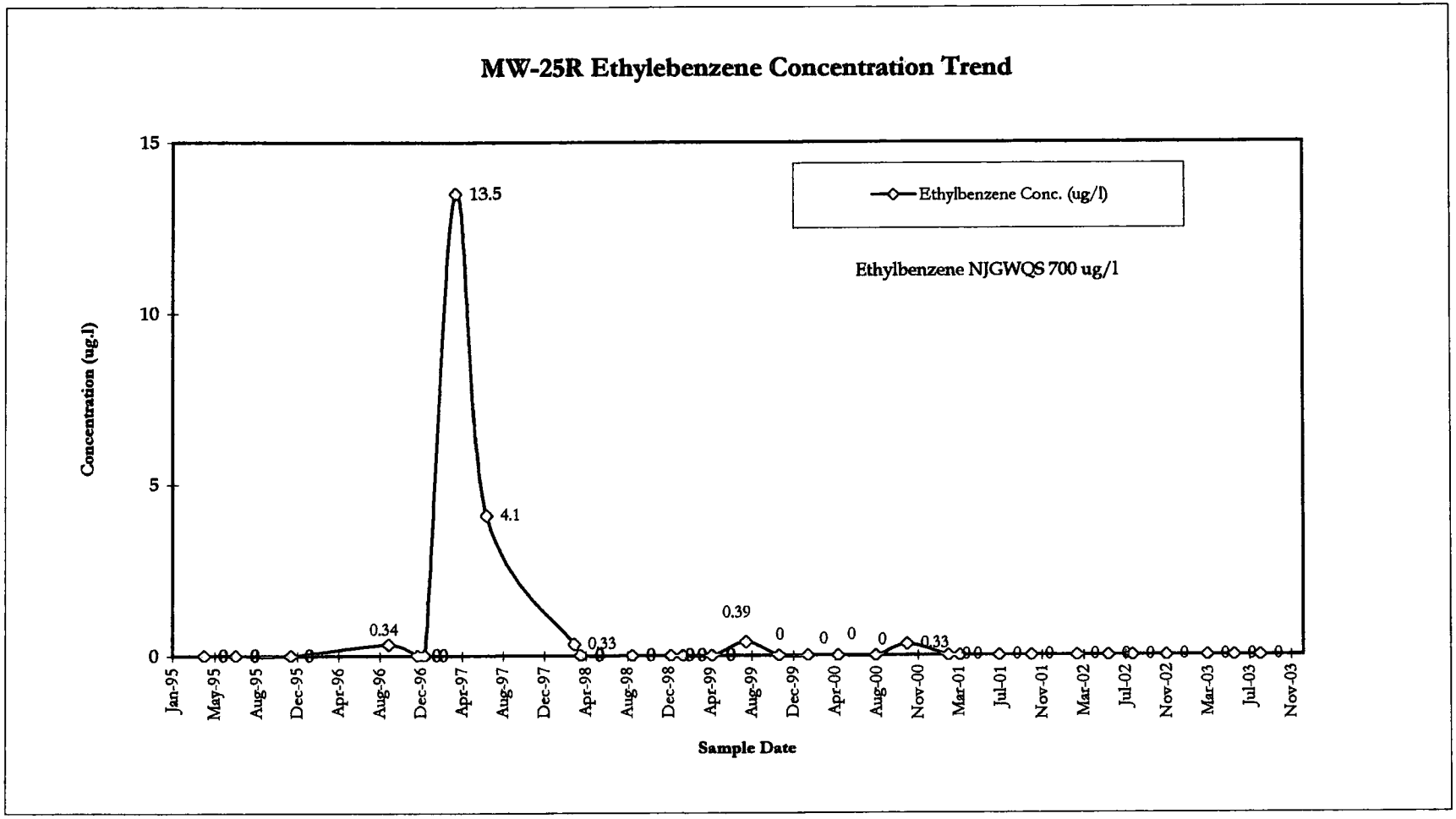

MW-22R Ethylebenzene Concentraion Trend
Ethylbenzene Conc. (ug/l)
NJ GWQS (700 ug/l)
Concentration (ug.l)
Sample Date
11900
11200
10500
9800
9100
8400
7700
7000
6300
5600
4900
4200
3500
2800
2100
1400
700
0
Jan-95
May-95
Aug-95
Dec-95
Apr-96
Aug-96
Dec-96
Apr-97
Aug-97
Dec-97
Apr-98
Aug-98
Dec-98
Apr-99
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
57
311
123
5730
11400
4070
1880
2260
1650
18
1600
1200
810
360
820
1000
1200
1900
910
1100
980
140
320
180
310
540
690
210

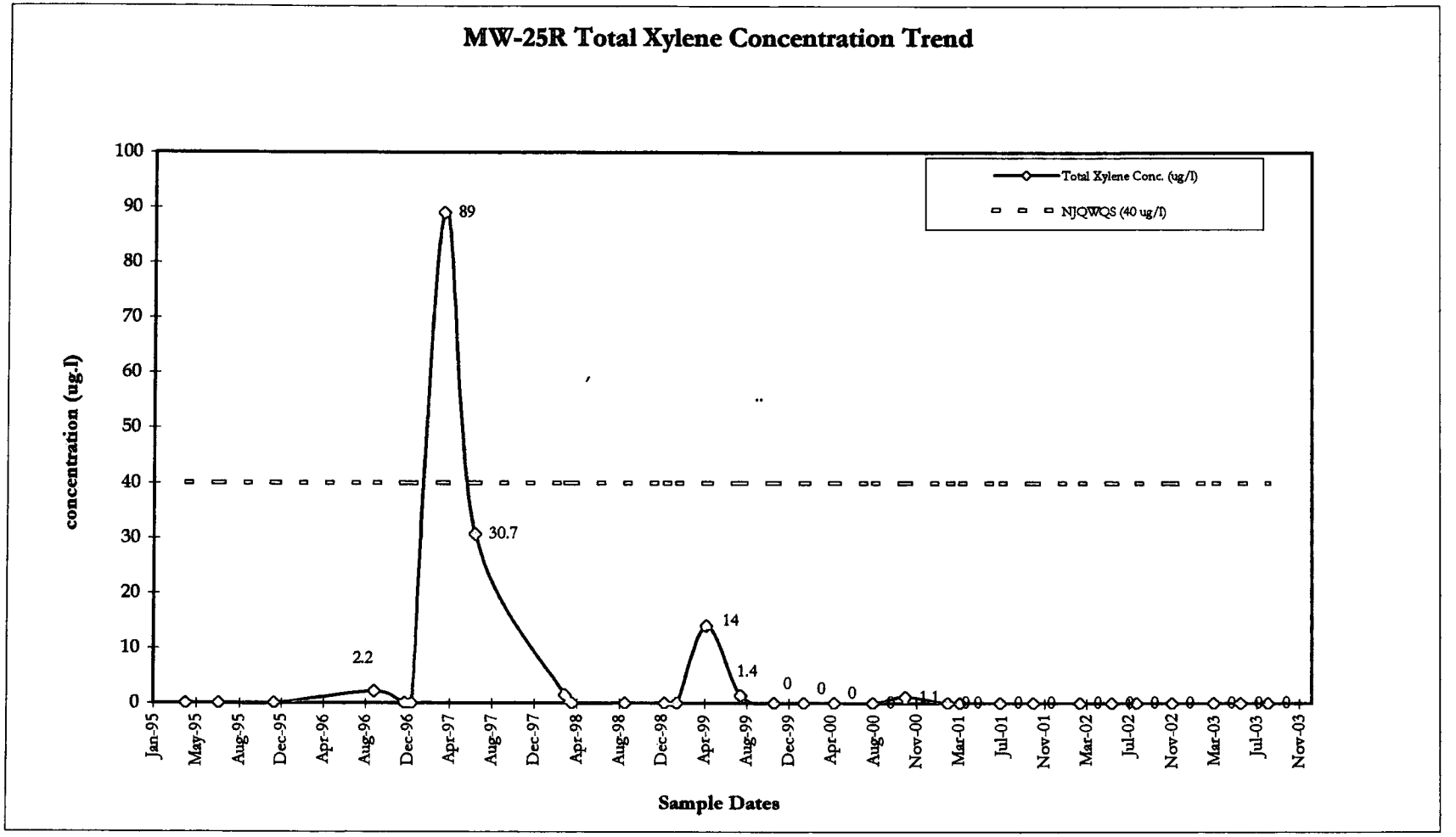


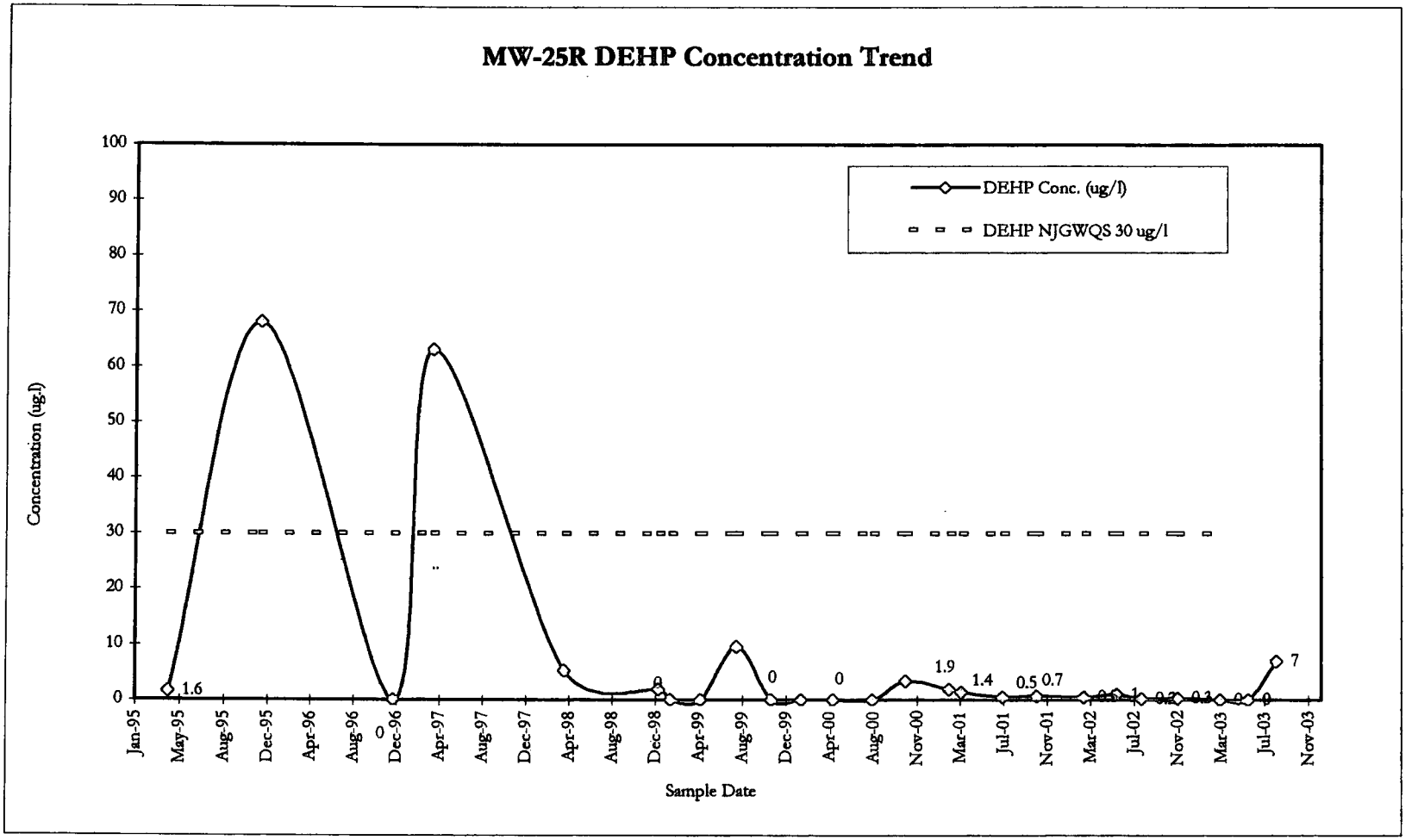

Prepared by RMT, Inc.

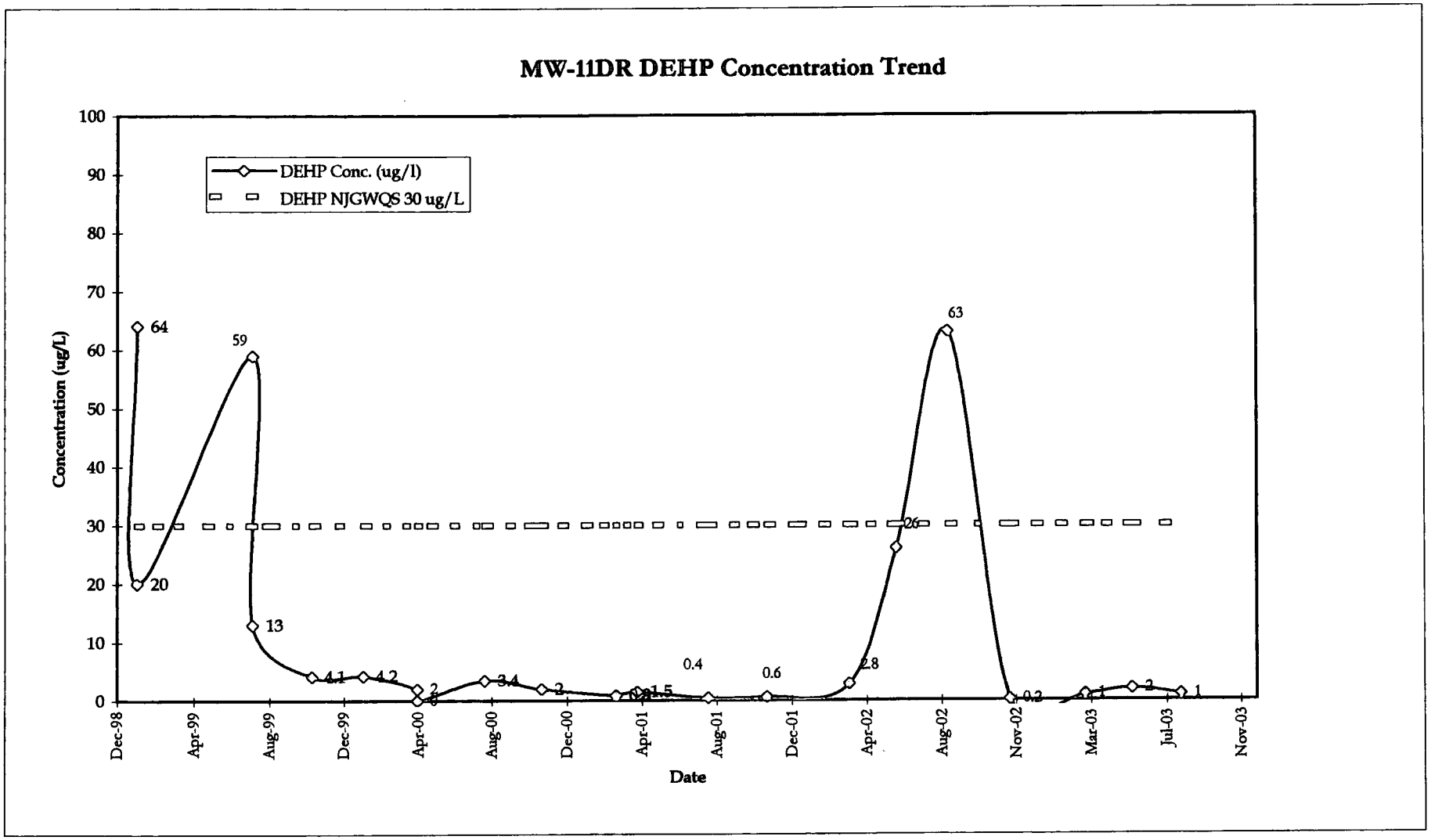



Prepared by RMT, Inc.


MW-25R Ethylebenzene Concentration Trend
Ethylbenzene Conc. (ug/l)
Ethylbenzene NJGWQS 700 ug/l
Concentration (ug/l)
Sample Date
15
10
5
0
13.5
4.1
0.34
0.33
0.39
0
0
0
0
0.33
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

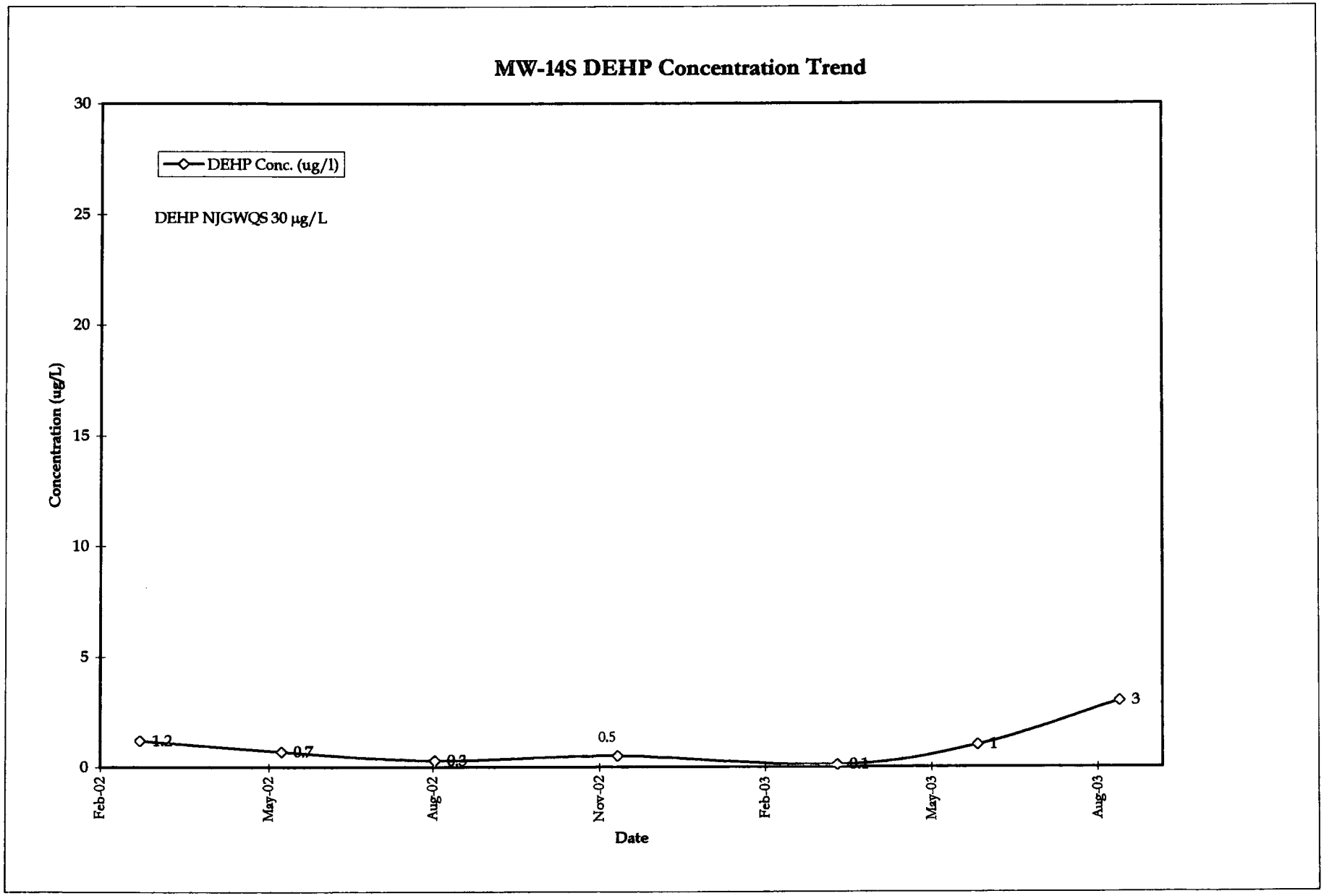

MW-25R Total Xylene Concentration Trend
Total Xylene Conc. (ug/l)
NJQWQS (40 ug/l)
concentration (ug/l)
Sample Dates
100
90
80
70
60
50
40
30
20
10
0
89
30.7
2.2
14
1.4
0
0
0
1.1
Jan-95
May-95
Aug-95
Dec-95
Apr-96
Aug-96
Dec-96
Apr-97
Aug-97
Dec-97
Apr-98
Aug-98
Dec-98
Apr-99
Aug-99
Dec-99
Apr-00
Aug-00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


MW-25R DEHP Concentration Trend
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
1.6
0
0
0
1.9
1.4
0.5
0.7
7




Prepared by RMT, Inc.

I:\WPGRM\PJT\00-03868\35\Appendix D 10/29/2003


MW-14S DEHP Concentration Trend
DEHP Conc. (ug/l)
DEHP NJGWQS 30 µg/L
Concentration (ug/L)
30
25
20
15
10
5
0
1.2
0.7
0.3
0.5
0.1
1
3
Feb-02
May-02
Aug-02
Nov-02
Feb-03
May-03
Aug-03
Date

# Appendix E
# 3rd Quarter 2003
# 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 864130. Samples arrived at the laboratory on Thursday, August 21, 2003. The PO# for this group is 00-03868.35.

| Client Description | Lancaster Labs Number |
|---|---|
| MW21 Grab Water Sample | 4106537 |
| MW25 Grab Water Sample | 4106538 |
| MW22 Grab Water Sample | 4106539 |
| SW8 Grab Water Sample | 4106540 |
| SW5 Grab Water Sample | 4106541 |
| SW7 Grab Water Sample | 4106542 |
| MW14I Grab Water Sample | 4106543 |
| MW14S Grab Water Sample | 4106544 |
| MW4 Unspiked Grab Water Sample | 4106545 |
| MW4 Matrix Spike Grab Water Sample | 4106546 |
| MW4 Matrix Spike Dup/Dup Grab Water Sample | 4106547 |
| Dupe01 Grab Water Sample | 4106548 |
| MW11 Grab Water Sample | 4106549 |
| MW17S Grab Water Sample | 4106550 |
| FB01 Grab Water Sample | 4106551 |
| MW15I Grab Water Sample | 4106552 |
| MW15S Grab Water Sample | 4106553 |
| Trip_Blank Water Sample | 4106554 |
| Rinsate Grab Water Sample | 4106555 |

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

Lancaster Laboratories

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Jeffrey S Moyer at (717) 656-2300.

Respectfully Submitted,

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 4106537**

Collected:08/20/2003 08:23 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:52
Discard: 10/04/2003
MW21 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

MW21- SDG#: LEC03-01

| 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 | 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 | 08/22/2003 18:29 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 21:09 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

MEMBER ACIL

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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 4106538**

Collected:08/20/2003 10:00 by JPM

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:52
Discard: 10/04/2003
MW25 Grab Water Sample

L.E. Carpenter, NJ

Account Number: 09322

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

MW25- SDG#: LEC03-02

| 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 | 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 | 7. | 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 | 08/22/2003 18:59 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 21:50 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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2425 New Holland Pike
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Lancaster, PA 17605-2425
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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106539**

Collected:08/20/2003 11:17 by JPM

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:52
Discard: 10/04/2003
MW22 Grab Water Sample

L.E. Carpenter, NJ

Account Number: 09322

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

MW22- SDG#: LEC03-03

| 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 | 1,200. | 3.0 | ug/l | 5 |
| 07029 | Benzene | 71-43-2 | N.D. | 1.0 | ug/l | 5 |
| 07030 | Toluene | 108-88-3 | N.D. | 1.0 | ug/l | 5 |
| 07031 | Ethylbenzene | 100-41-4 | 210. | 1.0 | ug/l | 5 |
| | The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system. | | | | | |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 260. | 10. | ug/l | 10 |
| | 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 | 08/22/2003 19:29 | K. Robert Caulfeild-James | 5 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 10:59 | Brian K Graham | 10 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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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 4106543**

Collected:08/20/2003 15:12 by JPM

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:53
Discard: 10/04/2003
MW14I Grab Water Sample

L.E. Carpenter, NJ

Account Number: 09322

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

M14I- SDG#: LEC03-07

| 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. | 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 | 08/23/2003 00:31 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 01:15 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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Lancaster Laboratories, Inc.
2425 New Holland Pike
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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106544**

Collected:08/20/2003 16:23 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:53
Discard: 10/04/2003
MW14S Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

M14S- SDG#: LEC03-08

| 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 | 3. | 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 | 08/23/2003 01:01 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 01:56 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | 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 4106545**

Collected:08/20/2003 17:28 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:54
Discard: 10/04/2003
MW4 Unspiked Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

--MW4 SDG#: LEC03-09BKG

| 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 | 3. | 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 | 08/22/2003 16:58 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 19:05 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | 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 4106547**

Collected:08/20/2003 17:28 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:54
Discard: 10/04/2003
MW4 Matrix Spike Dup/Dup Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

--MW4 SDG#: LEC03-09MSD

| 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 | 57. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | 19. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 19. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 19. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 100. | 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 | 08/22/2003 17:59 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 20:28 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | 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 4106546**

Collected:08/20/2003 17:28 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:54
Discard: 10/04/2003
MW4 Matrix Spike Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

--MW4 SDG#: LEC03-09MS

| 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 | 55. | 0.6 | ug/l | 1 |
| 07029 | Benzene | 71-43-2 | 18. | 0.2 | ug/l | 1 |
| 07030 | Toluene | 108-88-3 | 19. | 0.2 | ug/l | 1 |
| 07031 | Ethylbenzene | 100-41-4 | 18. | 0.2 | ug/l | 1 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | 120. | 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 | 08/22/2003 17:28 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 19:46 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

MEMBER ACIL

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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 4106548**

Collected: n.a. by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:54
Discard: 10/04/2003
Dupe01 Grab Water Sample
mW4
L.E. Carpenter, NJ

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

DUP01 SDG#: LEC03-10FD

| 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 | 7. | 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 | 08/23/2003 01:31 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 02:37 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106549**

Collected:08/21/2003 07:55 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:54
Discard: 10/04/2003
MW11 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

MW11- SDG#: LEC03-11

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Units | Dilution Factor |
|---|---|---|---|---|---|---|
| 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 |
|---|---|---|---|---|---|---|
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 03:18 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106550**

Collected:08/21/2003 08:54 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
MW17S Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

MW17S SDG#: LEC03-12

| 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 | 08/23/2003 02:01 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 04:00 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106552**

Collected:08/21/2003 10:38 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
MW15I Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

MW15I SDG#: LEC03-14

| 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. | 0.9 | 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 | 08/23/2003 02:31 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 06:47 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106553**

Collected:08/21/2003 11:39 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
MW15S Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

MW15S SDG#: LEC03-15

| 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 | 08/23/2003 03:02 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 07:28 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106540**

Collected:08/20/2003 13:08 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:53
Discard: 10/04/2003
SW8 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

SW8-- SDG#: LEC03-04

| 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 | 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 | 08/22/2003 20:30 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 23:12 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106541**

Collected:08/20/2003 13:24 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:53
Discard: 10/04/2003
SW5 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

SW5-- SDG#: LEC03-05

| 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 | 0.4 | 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 | 3. | 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 | 08/22/2003 21:00 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/25/2003 23:53 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106542**

Collected:08/20/2003 13:32 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:53
Discard: 10/04/2003
SW7 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

SW7-- SDG#: LEC03-06

| 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 | 1. | 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 | 08/22/2003 21:30 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 00:34 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106554**

Collected:08/21/2003 00:00

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
Trip_Blank Water Sample

L.E. Carpenter, NJ

Account Number: 09322

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

LECTB SDG#: LEC03-16TB

| 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 |
| 00554 | Base Neutrals (cont) | | | | | |
| 00669 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 1. | ug/l | 1 |

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

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 | 08/23/2003 00:01 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 09/01/2003 14:16 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/28/2003 09:30 | Denise L Trimby | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106551**

Collected:08/21/2003 09:00 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
FB01 Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

FB01- SDG#: LEC03-13FB

| 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 | 08/22/2003 23:31 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 04:41 | Linda M Hartenstine | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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# Analysis Report

Lancaster Laboratories



**Lancaster Laboratories Sample No. WW 4106555**

Collected:08/21/2003 09:40 by JPM

Account Number: 09322

Submitted: 08/21/2003 15:40
Reported: 09/03/2003 at 13:55
Discard: 10/04/2003
Rinsate Grab Water Sample

RMT, Inc.
PO Box 8923

Madison WI 53708-8923

L.E. Carpenter, NJ

LECRB SDG#: LEC03-17RB*

| 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. | 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 | 08/23/2003 03:32 | K. Robert Caulfeild-James | 1 |
| 00554 | Base Neutrals (cont) | EPA 625 | 1 | 08/26/2003 08:09 | Brian K Graham | 1 |
| 08108 | 625 Water Extraction | EPA 625 | 1 | 08/22/2003 17:00 | Elia R Botrous | 1 |

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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# 864130 Sample # 4106537-55

**COC # 0029259**

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

(1)
Client: 9322-RMT
Acct. #:
Project Name/#: LE Carpenter
PWSID #:
Project Manager: Nick Clevett
P.O.#:
Sampler: JPM/SSL
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 | Matrix | | | | | Analysis Requested | | | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | BTEX | DEHP | | | | | | | | | |
| MW21 | 8/20/03 | 8:23 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | temp 2-6°C |
| MW25 | | 10:00 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | TIB 8/21/03 |
| MW22 | | 11:17 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| SW8 | | 13:08 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| SW5 | | 13:24 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| SW7 | | 13:32 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| MW14I | | 15:12 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| MW14S | | 16:23 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| MW4 | | 17:28 | ✓ | | | ✓ | 5 | ✓ | ✓ | | | | | | | | | |
| MW4 MS/MSD | | 17:28 | ✓ | | | ✓ | 8 | ✓ | ✓ | | | | | | | | | |

(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 |
|---|---|---|---|---|---|
| Sarah Lapka | 8/21/03 | 12:15 | Tony Lange | 8/21/03 | 12:15 |
| Tony Lange | 8/21/03 | 15:40 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | Jessica Baron | 8/21/03 | 1540 |

# Analysis Request / Environmental Services Chain of Custody

Lancaster Laboratories
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For Lancaster Laboratories use only
Acct. # 9322 Group# 864130 Sample # 4106537-55

**COC # 0029261**

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

(1)
Client: 9322-RMT
Acct. #:
Project Name/#: LE Carpenter
PWSID #:
Project Manager: Nick Clevett
P.O.#:
Sampler: JPM/SSL
Quote #:
Name of state where samples were collected: NJ

For Lab Use Only
FSC:
SCR #: 1181170

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

| Sample Identification | Date Collected | Time Collected | Matrix | | | | | | BTEX | DEHP | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dupe 01 | | | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | temp 2-6°C |
| MW11 | 8/21/03 | 7:55 | ✓ | | | ✓ | | 2 | | ✓ | | | | | | | | TB 8/21/03 |
| MW17S | | 8:54 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| FB01 | | 9:00 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW15I | | 10:38 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| MW15S | | 11:39 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | |
| Trip Blank | | | ✓ | | | ✓ | | 3 | ✓ | ✓ | | | | | | | | use large bottle for DEHP |
| Rinsate | | 9:40 | ✓ | | | ✓ | | 5 | ✓ | ✓ | | | | | | | | triplblank |

(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 |
|---|---|---|---|---|---|
| [signature] | 8-18-03 | 0845 | Sarah Lapka | 8/21/03 | 12:15 |
| Sarah Lapka | 8/21/03 | 12:15 | Tony Lage | 8/21/03 | 12:16 |
| Tony Lage | 8/21/03 | 15:40 | | | |
| | | | | | |
| | | | Jessica Barron | 8/21/03 | 1540 |