RMT®
Integrated Environmental Solutions

222 South Riverside Plaza
Suite 820
Chicago, IL 60606
Telephone: 312-575-0200
Fax: 312-575-0300

QUARTERLY MONITORING REPORT
2ND QUARTER 2000

L.E.CARPENTER & COMPANY
WHARTON, NEW JERSEY

USEPA ID# NJD002168748

July 2000

Nicholas J. Clevett
Project Manager

Alan J. Schmidt, P.G
Senior Hydrogeologist

© 1998 RMT, Inc.
All Rights Reserved

346043

Final

Table of Contents

1.0 INTRODUCTION 1

2.0 MONTHLY EFR ACTIVITIES 2

2.1 INTRODUCTION 2
2.2 APPARENT OR FREESTANDING PRODUCT TRENDS 3
2.2.1 Western Plume Region 3
2.2.2 Central Plume Region 3
2.2.3 Eastern Plume Region 3
2.2.4 Site Total Apparent Free Product Plume 4
2.3 RECOVERED FREE PRODUCT VOLUME ESTIMATIONS 4

3.0 QUARTERLY GROUNDWATER MONITORING 5

4.0 WATER TABLE ELEVATIONS 7

5.0 SITE INVESTIGATION AND REMEDIAL ACTIONS 8

List of Figures

Figure 1 Site Location Map
Figure 2 Site Plan with Well Locations
Figure 3 EFR Summary Figures
Figure 4 Potentiometric Surface Map

List of Tables

Table 1 Free Product Recovery
Table 2 Regional Free Standing Product Trends
Table 3 Free Product Removal Estimates
Table 4 Current Quarterly Groundwater Monitoring Protocol
Table 5 Quarterly Groundwater Monitoring Data
Table 6 Water Level Elevations

List of Appendices

Appendix A Report Certification
Appendix B Apparent Free Product Volume Trend Charts
Appendix C Monitoring Well Sampling Data
Appendix D MW-22R and MW-25 Groundwater Concentration Trend Analysis
Appendix E Analytical Results - STL Envirotech Laboratory Report

Section 1
Introduction

L.E. Carpenter and Company (LEC) is pleased to submit this Quarterly Monitoring Report for the L.E. Carpenter site ("the site" or "the subject 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 issued to L.E. Carpenter by the New Jersey Department of Environmental Protection (NJDEP). This report provides a summary of activities completed during 2nd quarter 2000, to include routine quarterly groundwater monitoring and monthly free product recovery activities. In addition, this report includes summaries of additional site activities performed during 2nd quarter 2000, and activities scheduled for commencement during 3rd quarter 2000. This report has been certified as in accordance with requirements outlined in N.J.A.C 7:26E-1.5(a). The certification is presented as Appendix A.

During 2nd quarter 2000, RMT, on behalf of LEC, conducted the following:

- Continued monthly mobile free product recovery utilizing enhanced fluid recovery (EFR) or vacuum enhanced recovery (VER) techniques in accordance with the NJDEP approval letter dated August 20, 1997 (Ref. Section 2).
- Continued quarterly groundwater monitoring activities as required under the Administrative Consent Order (Ref. Section 3 and 4).
- Prepared and submitted responses regarding the following on-site issues (Ref. Section 5):
  - Volumetric analysis and continued remediation of the on-site free product plume located in the shallow aquifer east of the railroad right-of-way.
  - Evaluation of the lead impacted soils existing at Hot Spots B and C.
  - Delineation of BTEX and DEHP impacted groundwater downgradient of the MW19/Hot Spot 1 area located at the northwest corner of the subject site.
  - Evaluated the viability of Remediation by Natural Attenuation (RNA) as a possible remedial alternative for on-site dissolved phase shallow groundwater contamination.

A discussion of these activities is provided 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 rail spur 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 soils. Additionally, as the result of increased aeration, this procedure enhances any natural biodegredation that may be occurring in the soil and groundwater. The locations of the twenty-eight (28) EFR wells purged during each monthly EFR event and all groundwater monitoring wells are shown in Figure 2.

Monthly EFR events conducted by RMT during 2nd quarter 2000 were performed on April 19, 2000, May 18, 2000, and June 16, 2000. Prior to conducting EFR, the free product thickness in each recovery well (where applicable) was measured. Free product measurements were recorded to determine appropriate placement of the drop pipe or "stinger" in order to maximize free product recovery. Free product thickness measurements recorded during 2nd quarter 2000 are presented in Table 1. Additionally, Table 1 provides a cumulative breakdown of additional EFR specific information such as minimum and maximum free product thickness levels, associated costs, and extracted product volume (gallons) to date.

During 2nd quarter 2000, 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, braced to mobile 4-wheel drive vehicle. Use of this system has enabled the EFR subcontractor (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 resulted in a more efficient EFR event, minimizing the volume of groundwater extracted. During 2nd quarter 2000, the average ratio of extracted groundwater to free product was 0.03 gallons/gallon. Historically (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 is transferred to an on-site 550-gallon aboveground storage tank (AST) equipped with secondary containment

for satellite storage. The fluids generated during 1st quarter 2000, to include extracted EFR fluids and purged groundwater generated during groundwater monitoring activities, were managed by Cycle Chem/ Clean Venture on April 19, 2000. A total of 538 gallons waste fluids were removed during the April 19, 2000 event and transported to the CycleChem/ Clean Venture disposal facility in Elizabeth, New Jersey.

2.2 Apparent or Freestanding Product Trends

The following sections describe apparent or freestanding product trends in the western, central, and eastern portions of the free product plume. Apparent or freestanding product refers to a volume (gal) of free product occupying the casings of each EFR well. Total apparent free product represents the sum of product volumes from each EFR well within all three segregated regions (eastern, central and western). It should be noted that apparent product thickness is not necessarily representative of the "true" free product thickness or corresponding volume of free product that may exist within the formation. Refer to the RMT report entitled Free Product Volume Analysis (May 2000) for a more detailed evaluation of formation "true" free product thickness and volume.

2.2.1 Western Plume Region

In the western portion of the plume (EFR wells 1, 2, 3, 17, 18, 20, 21, and 28), there was an increase in the total volume of apparent free product measured throughout 2nd quarter 2000. Apparent free product volume increased from 6.23 gallons in April 2000 to 7.21 gallons in June 2000. Most noticeable free product thickness increases were found in EFR Wells 1 and 21. Apparent free product volume in the western portion of the plume appears to have increased throughout the first half of 2000.

2.2.2 Central Plume Region

In the central portion of the plume (EFR wells 4, 5, 6, 7, 19, 22, 23, 24, 25, 26, and 27), there was a decrease in the total volume of apparent free product measured throughout 2nd quarter 2000. Apparent free product volume decreased from 3.71 gallons in April 2000 to 2.97 gallons in June 2000. In general, apparent free product volume in the central portion of the plume appears to be decreasing.

2.2.3 Eastern Plume Region

In the eastern portion of the plume (EFR wells 8, 9, 10, 11, 12, 13, 14, 15, and 16), there was a decrease in the total volume of apparent free product measured throughout 2nd

quarter 2000. Apparent free product volume decreased from 5.26 gallons in April 2000 to 3.67 gallons in June 2000. In general, apparent free product volume in the eastern portion of the plume appears to be decreasing.

2.2.4 Site Total Apparent Free Product Plume

The total apparent free product volume on the site, accounting for all 28 EFR wells, decreased slightly over the course of the 2nd quarter from 15.20 gallons in April to 13.85 gallons in June. The total free standing product trend chart indicates a steady decrease in the volume of apparent free product existing on-site throughout the use of the monthly EFR (21.60 gallons in November 1997 to 13.85 gallons in June 2000). A cumulative breakdown of free product thickness and standing product volumes specific to each region is presented in Table 2. Additionally, charts for each free product plume region (western, central, and eastern), and for the site as a whole, that graphically display apparent free product volume fluctuations over time, and free standing product fluctuations trends are presented as Appendix B. Figure 3 displays the extent of apparent free product on-site for each of the three 2nd quarter EFR events.

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 thicknesses were converted to volumes based on a conversion of 1.65 gallons per inch of fluid thickness. Free product volume was determined by subtracting the volume of water from the total fluid volume. 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.

During 2nd quarter 2000, a total of 140 gallons of fluid were removed as the result of EFR activities, of which, approximately 136 gallons was measurable free phase product as determined by vacuum head drum gauging. Since initiation in December 1997, site EFR activities have removed approximately 13,698 gallons of total fluids, of which, approximately 2,617 gallons was measurable free phase product (Ref. Table 1).

Section 3
Quarterly Groundwater Monitoring

Groundwater monitoring activities were conducted on April 13, 2000, in accordance with the procedures contained in the NJDEP's "Field Sampling Procedures Manual" dated May 1992. Monitoring wells MW-4, MW-11D(R), MW-14I, MW-15S, MW-15I, MW-17S, MW-21, MW-22(R), and MW-25(R) were purged utilizing a peristaltic pump to remove at least three well volumes prior to sampling. During the well purge process, indicator parameters were monitored and recorded so that a representative sample of the formation water was collected for analysis. Monitoring well sample data for 2nd quarter 2000 is presented as Appendix C. Once the wells were purged, samples were collected using Teflon coated plastic bailers. Monitoring wells were sampled and analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) and bis (2-ethylhexyl) phthalate (DEHP) per the current groundwater monitoring protocol presented as Table 4. Locations of the quarterly monitoring wells are shown on Figure 2.

A sample duplicate, a field blank and a trip blank were collected to satisfy quality control requirements. 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-11D (duplicate sample No. MW-11DD) and analyzed for BTEX. The field blank was collected by pouring distilled water through a Teflon coated bailer to verify that the field equipment was not adversely impacting the samples and decontamination procedures were adequate. Any sampling equipment used at each well was decontaminated prior to each use utilizing a soap and water wash and distilled water rinse. No BTEX or DEHP concentrations were detected in either the trip or field blanks above method detection levels.

The results of the chemical analyses were compared to New Jersey Class IIa Groundwater Quality Standards (NJGQS) and the Discharge Criteria presented in the Record of Decision (ROD DC) dated April 20, 1994. The presence of BTEX and DEHP was not detected at concentrations above NJGQS in samples collected from MW-11D(R) and the duplicate sample MW-11DD, MW-14I, MW-15S, MW-15I, MW-17S, MW-21 and MW-25(R).

Monitoring well MW-4 exhibited a DEHP concentration of 480 μg/L, exceeding the NJGQS of 30 μg/L. Monitoring well MW-22(R) exhibited concentrations of total xylenes (3,600 μg/L), ethylbenzene (820 μg/L), and DEHP (92 μg/L), exceeding the NJGQS of 40 μg/L, 700 μg/L and 30 μg/L respectively. Evaluation of quarterly data collected after the contaminant concentration peaks revealed during the late 1997 and early 1998, indicates a steady decline in

contaminant concentrations at this sampling location. Additionally, concentrations of BTEX and DEHP at downgradient monitoring location MW-25(R) have not exceeded NJGQS since 1997, and contaminant concentration further downgradient at MW-21 have never exceeded NJGQS since sampling began at this location in 1st quarter 1999. Contaminant concentration trends at all three locations will continue to be closely monitored. Concentration trends for contaminants of concern detected at MW-22(R) and MW-25(R) are presented as Appendix D.

Historical groundwater monitoring data, to include the results from 2nd quarter 2000 sampling, are presented in Table 5 with corresponding analytical laboratory reports presented as Appendix E. STL Envirotech, Inc. of Edison, New Jersey performed all site sampling activities and laboratory analyses.

Section 4
Water Table Elevations

On April 13, 2000, STL Envirotech measured static groundwater levels from 72 different locations throughout the site (not to include the EFR wells) to evaluate the groundwater flow pattern in the shallow aquifer system (see Table 6). STL Envirotech noted that 12 of the 72 locations monitored contained a measurable thickness of free phase product. Figure 4 displays the water table 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). Groundwater flow direction in the shallow aquifer in the MW19/Hot Spot 1 area (northwest corner of the subject site) is towards the northeast.

Section 5
Site Investigation and Remedial Actions

The following section briefly outlines additional scopes of work performed in various on-site areas of concern during 2nd quarter 2000, and summarizes future activities associated with each area.

Three independent letters dated April 13, 2000 outlining NJDEP and EPA comments regarding 1) the free product plume volumetric model, 2) the Hot Spot B & C lead investigation issue, and 3) the MW19/Hot Spot 1 groundwater investigation were received in on April 17, 2000. RMT, on behalf of LEC, submitted responses to the agencies regarding all three of the above-mentioned issues, and also submitted two reports entitled Free Product Volume Analysis (May 2000), and Evaluation of Remediation of Groundwater by Natural Attenuation (May 2000).

Draft comments from both agencies regarding all five responses were received via facsimile on July 10, 2000. A conference call has been tentatively set for July 31, 2000 to discuss the comments issued by both the EPA and the NJDEP prior to issuing final comments.

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

EFR Event Date / Well No.	Development November 29, 1992 Feet of Product	EFR #1 December 1, 1992 Feet of Product	EFR #2 January 7, 1993 Feet of Product	EFR #3 January 21, 1993 Feet of Product	EFR #4 February 27, 1993 Feet of Product	EFR #5 March 13, 1993 Feet of Product	EFR #6 March 27, 1993 Feet of Product	EFR #7 April 24, 1993 Feet of Product	EFR #8 May 29, 1993 Feet of Product	EFR #9 June 26, 1993 Feet of Product	EFR #10 July 31, 1993 Feet of Product	EFR #11[8] August 24, 1993 Feet of Product	EFR #12 September 27, 1993 Feet of Product	EFR #13 December 16, 1993 Feet of Product	EFR #14 November 30, 1993 Feet of Product	EFR #15 December 16, 1993 Feet of Product	EFR #16 January 26, 1994 Feet of Product	EFR #17 February 28, 1994 Feet of Product	EFR #18 March 28, 1994 Feet of Product	EFR #19 April 18, 1994 Feet of Product	EFR #20 May 24, 1994 Feet of Product	EFR #21 June 22, 1994 Feet of Product	EFR #22 July 26, 1994 Feet of Product	EFR #23 [9] August 27, 1994 Feet of Product
EFR-1	1.64	1.53	1.94	0.36	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
EFR-2	1.55	1.50	1.86	0.06	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
EFR-3	0.85	1.02	1.27	--	1.58	1.19	0.03	0.24	0.19	0.77	0.72	0.93	1.03	1.01	1.19	1.18	1.14	1.01	1.63	0.36	0.25	0.86	0.88	1.03
EFR-4	1.03	2.27	0.54	0.07	0.30	--	--	--	--	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
EFR-5	4.03	3.74	4.25	0.32	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
EFR-6	0.72	1.00	1.24	--	2.27	1.71	1.17	2.23	1.55	1.56	1.96	1.86	1.42	1.25	1.29	1.38	0.49	0.84	0.88	0.61	1.07	1.16	1.51	0.91
EFR-7	0.17	0.09	0.16	--	--	--	--	--	--	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
EFR-8	0.00	0.00	0.00	--	0.08	--	--	--	--	0.03	0.04	0.08	0.13	0.09	0.07	0.03	0.12	--	0.03	0.03	0.03	0.09	0.39	0.27
EFR-9	0.00	1.10	1.79	1.15	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
EFR-10	5.20	5.80	6.42	2.34	7.47	7.05	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
EFR-11	3.07	4.04	4.28	5.64	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
EFR-12	0.04	0.03	0.00	--	0.07	--	--	--	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
EFR-13	0.48	0.55	1.33	0.05	1.28	1.07	1.07	0.67	--	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
EFR-14	0.10	0.16	0.00	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	-	0.00	0.00	0.00	0.00	0.00
EFR-15	0.09	0.12	0.27	--	0.06	--	--	--	--	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
EFR-16	0.00	0.00	0.00	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	0.00	0.00	0.00	0.00	0.00	0.00
EFR-17	0.04	0.17	1.56	0.39	0.17	0.08	--	0.09	--	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
EFR-18	0.10	0.10	0.09	--	--	--	--	--	--	0.01	0.08	0.14	0.49	0.68	0.98	1.08	0.56	0.11	-	0.06	0.16	0.46	0.96	1.37
EFR-19	0.54	2.80	1.89	0.49	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
EFR-20	0.40	0.34	0.95	0.47	0.27	--	--	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
EFR-21	2.36	2.40	2.71	2.74	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
EFR-22	3.78	4.10	0.05	4.81	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
EFR-23	0.00	0.06	0.06	--	0.02	--	--	--	--	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
EFR-24	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
EFR-25	2.95	3.00	3.55	0.26	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
EFR-26	2.20	2.05	2.66	0.29	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
EFR-27	0.15	0.02	2.71	0.02	0.74	--	--	0.03	--	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
EFR-28	2.20	2.30	1.78	0.48	2.60	3.20	3.49	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
MIN (ft)	0.00	0.00	0.00	0.02	0.02	0.08	0.03	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.07	0.03	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00
MAX (ft)	5.20	5.80	6.42	5.64	7.47	7.05	6.05	6.71	5.73	6.08	4.94	4.52	4.34	4.38	3.98	3.99	3.68	5.79	6.15	4.97	4.23	3.71	3.63	2.47
Average (ft)	1.20	1.44	1.55	1.17	1.92	2.79	2.21	2.01	1.94	1.25	1.22	1.23	1.36	1.34	1.47	1.48	0.97	1.25	1.22	0.79	0.79	0.88	1.18	0.94
Total Free Product (ft)	33.69	40.30	43.36	19.94	44.05	44.68	33.10	36.24	31.07	31.16	30.38	30.73	33.90	34.92	38.30	38.36	25.27	31.14	31.84	22.00	22.20	24.54	33.11	26.36
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	19.47	19.70	22.04	22.70	24.90	24.93	16.43	20.24	20.70	14.30	14.43	15.95	21.52	17.13
Estimated Total Free Product Removed from Vacuum Truck Gauging plus Vapor Phase Calcs (gal) [1]	315	250	210	80	120	130	100	110	95	105	76	55	60	15	25	51	23	74	40	59	47	39	54	36
Total EFR Extraction Volume (gal)	2,350	1,410	376	256	314	300	339	403	390	561	211	220	329	212	120	256	234	498	683	905	360	564	726	298
Groundwater Extraction Volume (gal) per each EFR Event																								
Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* [9]	-	-	-	-	-	338	150	600	70	110	71	-	110	-	-	110	-	235	-	139	-	-	374	-
Total Volume Removed from Site (gal) *(removed volume)* [6]	2,350	1,410	376	256	314	638	489	1,003	460	671	282	220	439	212	120	256	234	733	683	1,044	360	564	1,100	298
Cumulative Total Free Product Removed (gal)	315	565	775	855	975	1,105	1,205	1,315	1,410	1,515	1,591	1,646	1,706	1,721	1,746	1,797	1,820	1,894	1,934	1,993	2,040	2,079	2,133	2,169
Extraction, Transportation & Disposal Cost [5]	$ 3,976.37	$ 2,742.62	$ 1,130.50	$ 1,130.50	$ 1,219.12	$ 1,431.87	$ 1,541.31	$ 2,038.43	$ 1,240.75	$ 1,347.68	$ 1,324.62	$ 1,838.93	$ 1,383.18	$ 915.25	$ 915.00	$ 972.00	$ 1,156.62	$ 1,641.56	$ 1,703.44	$ 2,049.75	$ 930.31	$ 1,598.13	$ 2,165.75	$ 2,162.12
Unit Cost per gal [5]	$ 1.69	$ 1.95	$ 3.01	$ 4.42	$ 3.88	$ 2.24	$ 3.15	$ 2.03	$ 2.70	$ 2.01	$ 4.70	$ 8.36	$ 3.15	$ 4.32	$ 7.63	$ 3.80	$ 4.94	$ 2.24	$ 2.49	$ 1.96	$ 2.58	$ 2.83	$ 1.97	$ 7.26

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 removed was low due to significant quantities of product remaining emulsified as the result of a short vac truck standing time prior to gauging

Vac truck is now allowed to sit for a minimum of 1 hour prior to gauging on the ground

Product removed estimate does not take into account a % of product remaining emulsified due to high agitation

(1) Estimated free product (gal) based on Vacuum Truck gauging (interface probe) directly after each EFR Event.

(2) Total invoiced disposal cost for EFR event (product and groundwater) and monitoring well purge water from 1/4qr 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 drum volumes *(if applicable)*

(4) EFR # 11 free product volume was 55 gal and contained PCBs (approx. weight 45lbs 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 is being stored in an on-site 550-gallon AST equipped with secondary containment. AST contents will be drained with a vacuum truck and transported by CycleChem/CleanVentures every 90 days for appropriate management along with groundwater resulting from well purge activities

(7) Volume of ground water collected during each EFR event. Volume estimated using an oil/water interface probe on the 55-gal extraction drum. Method began 1st quarter of 2000, when the use of more efficient extraction equipment was utilized.

(8) Those totals that are totaled over a three month period (beginning 1st quarter 2000) is that volume specific to each of theEFR event & represents Waste disposed of every quarter and usually is representative of 3 EFR events.

(9) Purge water removal volume as of 1st quarter 2000 estimated by subtracting the free product volume and extracted groundwater volume from each of the representative EFR event from the total removed volume manifested for a specific disposal event

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

EFR Event Date / Well No.	EFR #24 September 22, 1999 Feet of Product	EFR #25 October 27, 1999 Feet of Product	EFR #26 November 29, 1999 Feet of Product	EFR #27 December 27, 1999 Feet of Product	EFR #28 January 26, 2000 Feet of Product	EFR #29 February 23, 2000 Feet of Product	EFR #30 March 28, 2000 Feet of Product	EFR #31 April 18, 2000 Feet of Product	EFR #32 May 9, 2000 Feet of Product	EFR #33 June 16, 2000 Feet of Product	EFR AVERAGES	EFR TOTALS
EFR-1	1.94	1.63	1.47	1.20	1.22	0.85	1.86	1.59	1.54	2.10		
EFR-2	0.63	1.35	1.28	1.40	0.05	1.04	2.25	2.00	1.64	1.89		
EFR-3	0.74	0.69	0.47	0.02	0.51	0.07	0.08	0.09	0.62	1.02		
EFR-4	0.51	0.11	0.03	0.58	0.51	0.48	0.11	0.11	0.41	0.22		
EFR-5	1.77	3.23	2.99	1.27	2.95	2.46	2.91	2.54	1.84	2.34		
EFR-6	0.15	0.86	0.63	0.33	1.07	0.77	0.29	0.31	0.49	0.27		
EFR-7	0.01	0.07	0.04	0.47	0.15	0.02	0.35	0.01	0.02	0.00		
EFR-8	0.09	0.13	0.05	0.11	0.05	0.06	0.08	0.03	0.05	0.03		
EFR-9	0.41	0.28	0.10	0.15	0.13	0.08	0.19	0.02	0.06	0.06		
EFR-10	3.02	5.18	3.95	3.07	4.50	3.55	3.50	4.50	1.36	2.50		
EFR-11	1.93	3.20	3.11	1.07	3.44	4.95	2.41	2.95	2.93	2.49		
EFR-12	0.03	0.09	0.67	0.01	0.03	0.49	0.46	0.10	0.19	0.01		
EFR-13	0.74	0.78	0.57	0.26	0.36	0.34	0.48	0.47	0.69	0.55		
EFR-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
EFR-15	0.04	0.02	0.08	0.02	0.02	0.02	0.02	0.02	0.01	0.00		
EFR-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
EFR-17	0.10	0.05	0.24	0.25	0.11	0.32	0.04	0.16	0.65	0.04		
EFR-18	0.61	0.36	0.77	0.05	0.20	0.05	0.12	0.04	0.32	0.01		
EFR-19	0.51	1.54	0.84	0.69	1.67	1.73	0.25	0.60	0.98	0.17		
EFR-20	0.47	1.92	1.36	0.75	1.08	2.58	0.64	0.42	0.54	0.33		
EFR-21	1.01	2.32	1.40	1.70	1.92	1.34	3.04	2.86	2.47	3.02		
EFR-22	0.17	2.22	1.76	0.53	0.82	0.58	0.09	0.16	0.05	0.05		
EFR-23	0.12	0.53	0.64	0.24	0.23	0.31	0.46	0.06	0.06	0.01		
EFR-24	0.00	0.00	0.04	0.13	0.11	0.07	0.58	0.02	0.03	0.00		
EFR-25	0.21	0.39	0.19	0.05	0.31	0.39	0.58	0.21	0.10	0.03		
EFR-26	0.29	0.52	0.94	0.59	1.54	1.10	1.33	1.68	2.02	1.44		
EFR-27	0.06	0.01	0.01	0.01	0.02	0.14	0.20	0.01	0.03	0.04		
EFR-28	0.38	2.19	0.96	1.42	1.33	1.00	2.30	2.42	1.81	2.68		
MIN (ft)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
MAX (ft)	3.02	5.18	3.95	3.07	4.50	4.95	3.50	4.50	2.93	3.02		
Average (ft)	0.57	1.06	0.88	0.58	0.87	0.89	0.88	0.84	0.75	0.76		
Total Free Product (ft)	15.94	29.68	24.59	16.37	24.34	24.79	24.62	23.38	20.91	21.30		
Total Standing Free Product Volume (gal)	10.36	19.29	15.98	10.64	15.82	16.11	16.00	15.20	13.59	13.85		
Estimated Total Free Product Removed from Vacuum Truck Gauging plus Vapor Phase Calcs (gal) [1]	44	55	45	49	37	44	38	45	46	45	77	2,617
Total EFR Extraction Volume (gal)	239	265	249	350	41	46	53	47	46	47	403	13,698
Groundwater Extraction Volume (gal) per each EFR Event					3.96	2.48	14.85	1.65	0.99	0.83	4	25
Estimated Volume Removed Resulting from Drum Purging (GW purge water) *if applicable* [2]	-	199	82	-	377			-	-	-	212	2,963
Total Volume Removed from Site (gal) *(involved volume)* [3]	239	464	331	350	538			On-Site Satellite Storage [3]			567	16,434
Cumulative Total Free Product Removed (gal)	2,213	2,268	2,313	2,362	2,399	2,443	2,481	2,526	2,572	2,617	N/A	N/A
Extraction, Transportation & Disposal Cost [4]	$ 995.81	$ 1,288.50	$ 1,028.93	$ 968.87	$ 1,045.62			-	-	-	$ 1,313.26	$ 43,884.54
Unit Cost per gal [5]	$ 4.17	$ 2.78	$ 3.11	$ 2.77	$ 1.94			-	-	-	$ 3.45	N/A

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

	EFR Event Date	11/21/97	12/9/97	1/7/98	2/16/98	3/16/98	3/27/98	4/24/98	5/29/98	6/30/98	7/31/98	8/24/98	9/17/98	10/22/98	11/20/98	12/18/98	1/13/99	2/17/99	3/23/99
	Well No.																		
		11/21/97	12/9/97	1/7/98	2/16/98	3/16/98	3/27/98	4/24/98	5/29/98	6/30/98	7/31/98	8/24/98	9/17/98	10/22/98	11/20/98	12/18/98	1/13/99	2/17/99	3/23/99
	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
	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
	EFR-3	0.85	1.02	1.27	1.58	1.19	0.03	0.24	0.19	0.77	0.72	0.93	1.03	1.01	1.19	1.18	1.14	1.01	1.63
	EFR-17	0.04	0.17	1.56	0.17	0.08	--	0.09	--	0.02	0.37	0.29	0.46	0.56	0.71	0.53	0.26	0.08	0.06
	EFR-18	0.10	0.10	0.09	--	--	--	--	--	0.01	0.08	0.14	0.48	0.68	0.98	1.08	0.56	0.11	0.00
	EFR-20	0.40	0.34	0.95	0.27	--	--	0.04	0.24	0.37	0.65	0.63	0.79	1.24	1.85	2.11	0.65	1.33	0.88
	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
Western Plume	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
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
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
		11/21/97	12/9/97	1/7/98	2/16/98	3/16/98	3/27/98	4/24/98	5/29/98	6/30/98	7/31/98	8/24/98	9/17/98	10/22/98	11/20/98	12/18/98	1/13/99	2/17/99	3/23/99
	EFR-4	1.03	2.27	0.54	0.30	--	--	--	--	0.03	0.38	1.23	2.40	2.17	1.75	1.79	0.73	0.10	0.14
	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
	EFR-6	0.72	1.00	1.24	2.27	1.71	1.17	2.23	1.55	1.56	1.96	1.56	1.42	1.25	1.29	1.38	0.49	0.84	0.88
	EFR-7	0.17	0.09	0.16	--	--	--	--	--	0.02	0.02	0.03	0.07	0.05	0.20	0.16	0.02	0.04	0.04
	EFR-19	0.54	2.80	1.89	1.95	1.63	1.44	0.88	0.65	0.42	0.9	1.26	1.68	1.95	2.31	2.44	1.83	1.68	0.52
	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
	EFR-23	0.00	0.06	0.06	0.02	--	--	--	--	0.05	0.11	0.08	0.27	1.03	3.07	2.29	1.55	0.91	0.47
	EFR-24	0.00	0.00	0.00	--	--	--	--	--	--	-	--	--	0.03	0.12	0.14	0.38	0.06	0.00
	EFR-25	2.95	3.00	3.55	4.15	3.11	0.72	0.82	0.79	0.78	0.6	0.41	0.29	0.41	1.33	1.58	1.05	1.75	1.19
	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
Central Plume	EFR-27	0.15	0.02	2.71	0.74	--	--	0.03	--	0.02	0.33	0.45	1.49	0.54	0.47	0.51	0.09	0.12	0.00
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
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
		11/21/97	12/9/97	1/7/98	2/16/98	3/16/98	3/27/98	4/24/98	5/29/98	6/30/98	7/31/98	8/24/98	9/17/98	10/22/98	11/20/98	12/18/98	1/13/99	2/17/99	3/23/99
	EFR-8	0.00	0.00	0.00	0.08	--	--	--	--	0.03	0.04	0.08	0.13	0.09	0.07	0.03	0.12	--	0.03
	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
	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
	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
	EFR-12	0.04	0.03	0.00	0.07	--	--	--	0.02	0.28	0.22	0.28	0.24	0.15	0.29	0.17	0.04	0.11	0.05
	EFR-13	0.48	0.56	1.33	1.28	1.07	1.07	0.67	--	0.9	0.56	0.48	0.66	0.82	1.13	1.30	0.22	1.19	0.15
	EFR-14	0.10	0.16	0.00	--	--	--	--	--	--	-	--	--	--	--	--	--	--	-
	EFR-15	0.09	0.12	0.27	0.06	--	--	--	--	0.03	0.02	0.03	0.03	0.12	0.12	0.32	0.11	0.07	0.01
Eastern Plume	EFR-16	0.00	0.00	0.00	--	--	--	--	--	--	-	--	--	--	--	--	--	--	-
Total Free Product (ft)		8.98	11.81	14.09	13.59	15.53	11.87	13.36	11.33	13.29	11.12	10.84	10.58	10.93	10.50	11.19	7.33	12.34	8.66
Total Free Product (gal)		5.76	7.57	9.03	8.71	9.95	7.61	8.56	7.26	8.52	7.13	6.95	6.88	7.10	6.83	7.27	4.76	8.02	5.63
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	22.04	22.70	24.90	24.93	16.43	20.24	20.70

TABLE 2

L.E. CARPENTER - WHARTON, NEW JERSEY

REGIONAL APPARENT FREE PRODUCT TRENDS

	EFR Event Date	4/19/99	5/18/99	6/22/99	7/28/99	8/27/99	9/22/99	10/27/99	11/30/99	12/16/99	1/28/00	2/18/00	3/24/00	4/19/00	5/18/00	6/16/00
	Well No.															
		4/19/99	5/18/99	6/22/99	7/28/99	8/27/99	9/22/99	10/27/99	11/30/99	12/16/99	1/28/00	2/18/00	3/24/00	4/19/00	5/18/00	6/16/00
	EFR-1	1.13	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
	EFR-2	1.46	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
	EFR-3	0.36	0.25	0.86	0.88	1.03	0.74	0.69	0.47	0.02	0.51	0.07	0.08	0.09	0.62	1.02
	EFR-17	0.06	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
	EFR-18	0.06	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
	EFR-20	0.43	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
	EFR-21	2.35	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
Western Plume	EFR-28	1.65	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
Total Free Product (ft)		7.50	6.64	7.09	9.76	9.71	5.88	10.52	7.95	6.79	6.43	7.25	10.33	9.58	9.59	11.09
Total Free Product (gal)		4.88	4.32	4.61	6.34	6.31	3.82	6.84	5.17	4.41	4.18	4.71	6.71	6.23	6.23	7.21
		4/19/99	5/18/99	6/22/99	7/28/99	8/27/99	9/22/99	10/27/99	11/30/99	12/16/99	1/28/00	2/18/00	3/24/00	4/19/00	5/18/00	6/16/00
	EFR-4	0.08	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
	EFR-5	2.65	2.61	2.66	2.66	1.57	1.77	3.23	2.99	1.27	2.95	2.46	2.91	2.54	1.84	2.34
	EFR-6	0.61	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
	EFR-7	0.07	0.02	0.08	0.28	0.05	0.01	0.07	0.04	0.47	0.15	0.02	0.35	0.01	0.02	-
	EFR-19	0.44	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
	EFR-22	0.95	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
	EFR-23	0.22	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
	EFR-24	0.00	0.00	0.08	0.08	0.05	0.00	0.00	0.04	0.13	0.11	0.07	0.58	0.02	0.03	-
	EFR-25	1.08	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
	EFR-26	0.75	1.29	1.28	1.23	0.72	0.29	0.52	0.94	0.59	1.54	1.10	1.33	1.68	2.02	1.44
Central Plume	EFR-27	0.00	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
Total Free Product (ft)		6.85	7.98	9.34	13.76	10.44	3.80	9.48	8.11	4.89	9.38	8.05	7.15	5.71	6.03	4.57
Total Free Product (gal)		4.45	5.19	6.07	8.94	6.79	2.47	6.16	5.27	3.18	6.10	5.23	4.65	3.71	3.92	2.97
		4/19/99	5/18/99	6/22/99	7/28/99	8/27/99	9/22/99	10/27/99	11/30/99	12/16/99	1/28/00	2/18/00	3/24/00	4/19/00	5/18/00	6/16/00
	EFR-8	0.03	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
	EFR-9	0.11	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
	EFR-10	4.97	4.23	3.71	3.63	2.47	3.02	5.18	3.95	3.07	4.50	3.55	3.50	4.50	1.36	2.50
	EFR-11	2.02	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
	EFR-12	0.02	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
	EFR-13	0.49	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
	EFR-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EFR-15	0.01	-	-	-	0.13	0.04	0.02	0.08	0.02	0.02	0.02	0.02	0.02	0.01	-
Eastern Plume	EFR-16	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Free Product (ft)		7.65	7.58	8.11	9.59	6.21	6.26	9.68	8.53	4.69	8.53	9.49	7.14	8.09	5.29	5.64
Total Free Product (gal)		4.97	4.93	5.27	6.23	4.04	4.07	6.29	5.54	3.05	5.54	6.17	4.64	5.26	3.44	3.67
TOTAL APPARENT FREE PRODUCT VOLUME (GAL)		14.30	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

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

MONTHLY EFR WELL GAUGING LOG

EFR #31 DATE 19-Apr-00

WELL ID	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	PRODUCT TICKNESS (ft)
EFR-1	9.68	11.27	1.59
EFR-2	10.22	12.22	2.00
EFR-3	10.32	10.41	0.09
EFR-4	11.74	11.85	0.11
EFR-5	10.03	12.57	2.54
EFR-6	9.73	10.04	0.31
EFR-7	6.29	6.3	0.01
EFR-8	5.72	5.75	0.03
EFR-9	5.92	5.94	0.02
EFR-10	6.56	11.06	4.50
EFR-11	6.21	9.16	2.95
EFR-12	5.26	5.36	0.10
EFR-13	4.81	5.28	0.47
EFR-14	4.64	4.64	0.00
EFR-15	3.81	3.83	0.02
EFR-16	4.64	4.64	0.00
EFR-17	9.03	9.19	0.16
EFR-18	9.09	9.13	0.04
EFR-19	11.98	12.58	0.60
EFR-20	10.14	10.56	0.42
EFR-21	8.59	11.45	2.86
EFR-22	12.05	12.21	0.16
EFR-23	8.33	8.39	0.06
EFR-24	11.44	11.46	0.02
EFR-25	11.12	11.33	0.21
EFR-26	12.82	14.5	1.68
EFR-27	11.43	11.44	0.01
EFR-28	9.07	11.49	2.42

Total Volume Of Free Standing Product (gal) 15.20

CEMCO FIELD TECHNICIAN: Gary Pizzuti

07/17/2000 1:56 PM
Prepared By: Nicholas J. Clevett
RMT Project Manager

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

MONTHLY EFR
VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

EFR #31 — **19-Apr-00**

WELL ID	EXTRACTION TIME		VAPOR PHASE CONCENTRATION		SYSTEM RECOVERY DATA			
	TOTAL TIME (min)	TOTAL TIME (hrs)	PPM	LEL (%)	VACUUM In Hg	CFM	lbs/hr	Total lbs
EFR-1	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-2	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-3	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-4	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-5	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-6	4.0	0.0667	6,560	100	17	100	32.01	2.1343
EFR-7	0.5	0.0083	6,560	100	17	100	32.01	0.2668
EFR-8	1.0	0.0167	1,378	21	17	100	6.72	0.1120
EFR-9	0.5	0.0083	131	2	17	100	0.64	0.0053
EFR-10	15.0	0.2500	4,592	70	17	100	22.41	5.6025
EFR-11	15.0	0.2500	6,560	100	17	100	32.01	8.0036
EFR-12	1.0	0.0167	1,050	16	17	100	5.12	0.0854
EFR-13	2.0	0.0333	1,050	16	17	100	5.12	0.1707
EFR-14		0.0000	0		17	100	0.00	0.0000
EFR-15	1.0	0.0167	0	0	17	100	0.00	0.0000
EFR-16		0.0000	0		17	100	0.00	0.0000
EFR-17	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-18	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-19	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-20	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-21	10.0	0.1667	6,560	100	17	100	32.01	5.3357
EFR-22	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-23	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-24	1.0	0.0167	0	100	17	100	0.00	0.0000
EFR-25	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-2b	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-27	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-28	10.0	0.1667	6,560	100	17	100	32.01	5.3357
Total EFR Time (hrs)		1.6000	AVG ppm	5692.29			TOTAL (LBS)	45.7270
							TOTAL VAPOR PHASE VOLUME (GAL)	5.8559

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)	350	
Molar Mass (MM) =	Molecular Weight (lb/lb-mole) =	292	(2)
IGC =	Ideal Gas Constant (359 ft^3/lb-mole) =	359	
LEL =	Free Product Mixture =	0.656	(1)
SG =	Specific Gravity =	0.9363	(3)

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

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

Free Product & Groundwater Gauging (55-Gal Drum)	
Product Thickness (in)	24.00
Groundwater Thickness (in)	1.00
Conversion @ 1.65 gal/inch	1.65
Total Product Volume (gal)	39.60
Total Groundwater Volume (gal)	1.65
Ratio Groundwater to Free Product (gal/gal)	0.04

		Y (gal)
Total Recovered Groundwater Volume (gal)		1.65
Total Recovered Free Product Volume (gal)		39.60
Total Recovered Fluids Volume (gal)		41.25
TOTAL EFR PRODUCT VOLUME		47.11 GAL

Date	19-Apr-00
Project #	3868.18
Subcontractor	CEMCO
Vac Head Utilized	NORTECH Corp. 551B

CEMCO Field Technician Gary Pizzuti

RMT Project Manager Nick Clevett

07/17/2000 1:56 PM
Prepared By: Nicholas J. Clevett
RMT Project Manager

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

MONTHLY EFR WELL GAUGING LOG

EFR #32 DATE 18-May-00

WELL ID	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	PRODUCT TICKNESS (ft)
EFR-1	10	11.54	1.54
EFR-2	10.57	12.21	1.64
EFR-3	10.59	11.21	0.62
EFR-4	12.12	12.53	0.41
EFR-5	10.4	12.24	1.84
EFR-6	10.02	10.51	0.49
EFR-7	6.87	6.89	0.02
EFR-8	6	6.05	0.05
EFR-9	6.25	6.31	0.06
EFR-10	7.02	8.38	1.36
EFR-11	6.5	9.43	2.93
EFR-12	5.53	5.72	0.19
EFR-13	5.06	5.75	0.69
EFR-14	4.93	4.93	0.00
EFR-15	4.29	4.3	0.01
EFR-16	4.93	4.93	0.00
EFR-17	9.42	10.07	0.65
EFR-18	9.4	9.72	0.32
EFR-19	12.31	13.29	0.98
EFR-20	10.5	11.04	0.54
EFR-21	8.93	11.4	2.47
EFR-22	12.39	12.44	0.05
EFR-23	8.75	8.81	0.06
EFR-24	11.75	11.78	0.03
EFR-25	11.46	11.56	0.10
EFR-26	13.07	15.09	2.02
EFR-27	11.76	11.79	0.03
EFR-28	9.42	11.23	1.81

Total Volume Of Free Standing Product (gal) 13.59

CEMCO FIELD TECHNICIAN: Gary Pizzuti

07/17/2000 1:56 PM
Prepared By: Nicholas J. Clevett
RMT Project Manager

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

MONTHLY EFR
VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

EFR #32 **18-May-00**

WELL ID	EXTRACTION TIME		VAPOR PHASE CONCENTRATION		SYSTEM RECOVERY DATA			
	TOTAL TIME (min)	TOTAL TIME (hrs)	PPM	LEL (%)	VACUUM In Hg	CFM	lbs/hr	Total lbs
EFR-1	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-2	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-3	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-4	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-5	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-6	4.0	0.0667	6,560	100	17	100	32.01	2.1343
EFR-7	0.5	0.0083	6,560	100	17	100	32.01	0.2668
EFR-8	1.0	0.0167	1,706	26	17	100	8.32	0.1387
EFR-9	0.5	0.0083	197	3	17	100	0.96	0.0080
EFR-10	15.0	0.2500	4,461	68	17	100	21.77	5.4424
EFR-11	15.0	0.2500	6,560	100	17	100	32.01	8.0036
EFR-12	1.0	0.0167	787	12	17	100	3.84	0.0640
EFR-13	2.0	0.0333	1,115	17	17	100	5.44	0.1814
EFR-14		0.0000	0	0	17	100	0.00	0.0000
EFR-15	1.0	0.0167	0	0	17	100	0.00	0.0000
EFR-16		0.0000	0	0	17	100	0.00	0.0000
EFR-17	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-18	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-19	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-20	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-21	10.0	0.1667	6,560	100	17	100	32.01	5.3357
EFR-22	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-23	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-24	2.0	0.0333	0	100	17	100	0.00	0.0000
EFR-25	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-26	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-27	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-28	15.0	0.2500	6,560	100	17	100	32.01	8.0036
Total EFR Time (hrs)		1.7333	AVG ppm	5707.20			TOTAL (LBS)	49.3206
							TOTAL VAPOR PHASE VOLUME (GAL)	6.3161

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)	350	
Molar Mass (MM) =	Molecular Weight (lb/lb-mole) =	292	(2)
IGC =	Ideal Gas Constant (359 ft^3/lb-mole) =	359	
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)	23.75
Groundwater Thickness (in)	0.60
Conversion @ 1.65 gal/inch	1.65
Total Product Volume (gal)	39.19
Total Groundwater Volume (gal)	0.99
Ratio Groundwater to Free Product (gal/gal)	0.03

		Y (gal)
Total Recovered Groundwater Volume (gal)		0.99
Total Recovered Free Product Volume (gal)		39.19
Total Recovered Fluids Volume (gal)		40.18
TOTAL EFR PRODUCT VOLUME		46.49 GAL

Date	19-Apr-00
Project #	3868.18
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 #33 DATE 16-Jun-00

WELL ID	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	PRODUCT TICKNESS (ft)
EFR-1	9.11	11.21	2.10
EFR-2	9.73	11.62	1.89
EFR-3	9.73	10.75	1.02
EFR-4	10.9	11.12	0.22
EFR-5	9.6	11.94	2.34
EFR-6	9.23	9.5	0.27
EFR-7	5.49	5.49	0.00
EFR-8	5.25	5.28	0.03
EFR-9	5.47	5.53	0.06
EFR-10	6.2	8.7	2.50
EFR-11	5.75	8.24	2.49
EFR-12	4.81	4.82	0.01
EFR-13	4.36	4.91	0.55
EFR-14	4.16	4.16	0.00
EFR-15	4.53	4.53	0.00
EFR-16	4.35	4.35	0.00
EFR-17	8.49	8.53	0.04
EFR-18	8.6	8.61	0.01
EFR-19	11.43	11.6	0.17
EFR-20	9.67	10	0.33
EFR-21	8.02	11.04	3.02
EFR-22	11.39	11.44	0.05
EFR-23	7.74	7.75	0.01
EFR-24	10.89	10.89	0.00
EFR-25	10.49	10.52	0.03
EFR-26	12.33	13.77	1.44
EFR-27	10.88	10.92	0.04
EFR-28	8.55	11.23	2.68

Total Volume Of Free Standing Product (gal) 13.85

CEMCO FIELD TECHNICIAN: Gary Pizzuti

07/17/2000 1:56 PM
Prepared By: Nicholas J. Clevett
RMT Project Manager

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

MONTHLY EFR
VAPOR AND LIQUID PHASE VOLUMETRIC CALCULATION LOG

EFR #33 **16-Jun-00**

WELL ID	EXTRACTION TIME		VAPOR PHASE CONCENTRATION		SYSTEM RECOVERY DATA			
	TOTAL TIME (min)	TOTAL TIME (hrs)	PPM	LEL (%)	VACUUM In Hg	CFM	lbs/hr	Total lbs
EFR-1	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-2	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-3	3.0	0.0500	6,560	100	17	100	32.01	1.6007
EFR-4	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-5	5.0	0.0833	6,560	100	17	100	32.01	2.6679
EFR-6	3.0	0.0500	6,560	100	17	100	32.01	1.6007
EFR-7	0.0	0.0000	0	0	17	100	0.00	0.0000
EFR-8	1.0	0.0167	262	4	17	100	1.28	0.0213
EFR-9	1.0	0.0167	0	0	17	100	0.00	0.0000
EFR-10	10.0	0.1667	5,642	86	17	100	27.53	4.5887
EFR-11	10.0	0.1667	6,560	100	17	100	32.01	5.3357
EFR-12	1.0	0.0167	787	12	17	100	3.84	0.0640
EFR-13	1.0	0.0167	918	14	17	100	4.48	0.0747
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	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-18	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-19	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-20	2.0	0.0333	6,560	100	17	100	32.01	1.0671
EFR-21	10.0	0.1667	6,560	100	17	100	32.01	5.3357
EFR-22	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-23	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-24	0.0	0.0000	0	0	17	100	0.00	0.0000
EFR-25	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-26	3.0	0.0500	6,560	100	17	100	32.01	1.6007
EFR-27	1.0	0.0167	6,560	100	17	100	32.01	0.5336
EFR-28	10.0	0.1667	6,560	100	17	100	32.01	5.3357
Total EFR Time (hrs)		1.3167	AVG ppm	5379.20			TOTAL (LBS)	39.4309
							TOTAL VAPOR PHASE VOLUME (GAL)	5.0496

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)	350	
Molar Mass (MM) =	Molecular Weight (lb/lb-mole) =	292	(2)
IGC =	Ideal Gas Constant (359 ft^3/lb-mole) =	359	
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)	23.40
Groundwater Thickness (in)	0.50
Conversion @ 1.65 gal/inch	1.65
Total Product Volume (gal)	38.61
Total Groundwater Volume (gal)	0.83
Ratio Groundwater to Free Product (gal/gal)	0.02

		Y (gal)
Total Recovered Groundwater Volume (gal)		0.83
Total Recovered Free Product Volume (gal)		38.61
Total Recovered Fluids Volume (gal)		39.44
TOTAL EFR PRODUCT VOLUME		44.48 GAL

Date	16-Jun-00
Project #	3868.18
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

REVISED QUARTERLY MONITORING PROTOCOL

Per NJDEP Letter Dated Aug 17, 1999

Monitoring Well	Bottom of Well (ft)	Analytical Parameters	Rational	Comments
MW-14I	40.96', 2"	BTEX(1) DEHP(2)	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	17.47', 4"	BTEX(1) DEHP(2)	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	38.34', 2"	BTEX(1) DEHP(2)	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	11', 2"	BTEX(1) DEHP(2)	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
MW-25R	11', 2"	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(3)	13.4', 4"	BTEX DEHP	Analytical results from this well will also identify "background" conditions at the site in the shallow aquifer zone.	Original Monitoring Well
MW-4	27', 2"	BTEX(1) DEHP(2)	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)	161'	BTEX(1) 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 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
MW-21	15.0'	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) Sample Collected Every Quarter
(2) Sample Collected Bi-annually, 2nd and 4th quarter.
(3) Well sampled bi-annually, 2nd and 4th quarter.

QA/QC PROTOCOL
One (1) field blank will be collected for each parameter per each event (an additional 8 samples - 4 BTEX and 4 DEHP)
One (1) trip blank will be collected, alternating parameters per each event (an additional 4 samples - 2 BTEX and 2 DEHP)
One (1) duplicate sample will be collected from alternating wells and analyzed for alternating parameters (2 BTEX and 2 DEHP)

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
MW-4	1995	1	ND	26	ND	32	25,000	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES
		2	ND	16	ND	13	46,000	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		3	ND	9.7	ND	8.7	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	8.8	ND	11	17,000	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
	1996	1	ND	24	ND	47	NS	NO	NO	NO	YES	--	NO	NO	NO	YES	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	6.8	ND	4.3	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	2.3	ND	ND	11,000	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
	1997	1	ND	3.5	ND	1.8	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	1.2	ND	4.2	120	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		3	ND	2.2	ND	12.6	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	1.0	ND	1.4	710	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		3	ND	1.9	ND	1.2	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	9.3	ND	3.3	650	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
	1999	1	ND	1.1	ND	2.5	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	0.66	ND	ND	3,000	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		2 duplicate	ND	0.43	ND	ND	4,400	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		3	ND	3.10	ND	2.9	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	0.51	ND	ND	4,000	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
	2000	1	ND	0.54	ND	1.6	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	0.3	ND	ND	480	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
MW-11(DR) (2)(3)	1999	1	ND	ND	ND	ND	64	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		1 duplicate	ND	ND	ND	ND	20	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3(3)	NS	NS	NS	NS	59	--	--	--	--	YES	--	--	--	--	YES
		3 duplicate	NS	NS	NS	NS	13	--	--	--	--	NO	--	--	--	--	NO
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Field ID: MW-11DD	2 duplicate	ND	ND	ND	ND	NR	NO	NO	NO	NO	--	NO	NO	NO	NO	--
MW-14I	1995	1	ND	0.4	ND	1.2	140	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
		2	ND	ND	ND	ND	1.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
		4	ND	ND	ND	ND	2.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1996	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	2.7	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	1.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	1.2	22.1	ND	176	NS	YES	NO	NO	YES	--	YES	NO	NO	YES	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	0.34	ND	2	24	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MW-15S	1995	1	ND	ND	ND	ND	2.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1996	1	ND	33	ND	83	NS	NO	NO	NO	YES	--	NO	NO	NO	YES	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	0.21	ND	1.7	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	1.2	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	1.4	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	1.3	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MW-15I	1995	1	ND	ND	ND	ND	250	NO	NO	NO	NO	**YES**	NO	NO	NO	NO	**YES**
		2	ND	ND	ND	ND	7.2	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	2.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1996	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	1.7	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4 duplicate	ND	ND	ND	ND	1.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	2.2	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	1.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2 duplicate	ND	ND	ND	ND	3.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	0.53	11	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4 duplicate	ND	0.2	ND	0.8	9.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	4.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MW-17S (4)	1995	1	ND	0.6	0.3	1.9	11	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	0.2	ND	0.18	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		4	ND	ND	ND	0.63	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1996	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
		3	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		4	ND	ND	ND	ND	1.5	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		3	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	ND	ND	1.2	6.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		4	ND	ND	ND	ND	6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		4	ND	ND	ND	ND	40	NO	NO	NO	NO	**YES**	NO	NO	NO	NO	**YES**
	2000	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MW-21 (1)	1999	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		1 duplicate	NS	NS	NS	NS	ND	--	--	--	--	NO	--	--	--	--	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MW-22(R)	1995	1	ND	57	ND	260	6,500	NO	NO	NO	**YES**	**YES**	NO	NO	NO	**YES**	**YES**
		2	ND	311	ND	955	380	NO	NO	NO	**YES**	**YES**	NO	NO	NO	**YES**	**YES**
		3	ND	171	ND	693	NS	NO	NO	NO	**YES**	--	NO	NO	NO	**YES**	--
		4	ND	123	ND	494	320	NO	NO	NO	**YES**	**YES**	NO	NO	NO	**YES**	**YES**
	1996	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	359	ND	1,320	NS	NO	NO	NO	**YES**	--	NO	**YES**	NO	**YES**	--
		4	ND	320	ND	1,330	ND	NO	NO	NO	**YES**	NO	NO	NO	NO	**YES**	NO
	1997	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	5,730	ND	32,900	7,500	NO	**YES**	NO	**YES**	**YES**	NO	**YES**	NO	**YES**	**YES**
		3	ND	11,400	348	66,000	NS	NO	**YES**	NO	**YES**	--	NO	**YES**	NO	**YES**	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
	1998	1	ND	4,070	348	20,600	NS	NO	YES	NO	YES	--	NO	YES	NO	YES	--
		2	ND	2,260	ND	11,300	5,800	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		3duplicate	ND	2,510	ND	11,000	NS	NO	YES	NO	YES	--	NO	YES	NO	YES	--
		4	ND	1,650	ND	7,230	1,100	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
	1999	1	ND	18	ND	84	NS	NO	NO	NO	YES	--	NO	NO	NO	YES	--
		2	ND	1,600	ND	7,600	670	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
		3	ND	1,200	42	5,200	NS	NO	YES	NO	YES	--	NO	YES	NO	YES	--
		4	ND	810	ND	3,300	1200	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
		4duplicate	ND	840	ND	3,400	1600	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
	2000	1	ND	360	ND	1,400	NS	NO	NO	NO	YES	--	NO	YES	NO	YES	--
Dilution Factor 50		2	ND	820	ND	3,600	92	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES
MW-25(R)	1995	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	ND	ND	ND	ND	1.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	68	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
	1996	1	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	0.34	ND	2.2	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	13.5	ND	89	63	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES
		3	ND	4.1	ND	30.7	NS	NO	NO	NO	NO	--	NO	NO	NO	YES	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	0.33	ND	1.5	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		1duplicate	ND	0.39	ND	0.94	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	5.3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	1.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	14	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	0.39	ND	1.4	9.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

Prepared By: RMT, Inc - Chicago
Nicholas J. Clevett
Project Manager

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
Trip Blank	1995	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
	1996	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
	1997	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	NS	1.3	NO	NO	NO	--	NO	NO	NO	NO	--	NO
	1999	1	ND	ND	ND	NS	ND	NO	NO	NO	--	NO	NO	NO	NO	--	NO
		2	ND	ND	ND	NS	ND	NO	NO	NO	--	NO	NO	NO	NO	--	NO
		3	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
	2000	1	NS	NS	NS	NS	ND	--	--	--	--	NO	--	--	--	--	NO
		1	NS	NS	NS	NS	ND	--	--	--	--	NO	--	--	--	--	NO
		2	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
Field Blank	1995	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	0.73	ND	ND	1.3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1996	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1997	1	ND	ND	0.2	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	NS	NS	NS	NS	NS	--	--	--	--	--	--	--	--	--	--
	1998	1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		2	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--

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

MONITORING WELLS	SAMPLING DATE		CHEMICAL ANALYSIS RESULTS					ABOVE NJGWQS ?					ABOVE ROD DISCHARGE CRITERIA ?				
	YEAR	QUARTER	Benzene ug/l	Ethylbenzene ug/l	Toluene ug/l	Total Xylenes ug/l	bis-2-Ethylhexylphthalate (DEHP) ug/l	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)	Benzene	Ethylbenzene	Toluene	Total Xylenes	bis-2-Ethylhexylphthalate (DEHP)
NJDEP GWQS			1	700	1,000	40	30										
ROD DISCHARGE CRITERIA			1	350	500	20	30										
		3	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		4	ND	ND	ND	ND	1.3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1999	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		3	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		4	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2000	1	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
		1	ND	ND	ND	ND	NS	NO	NO	NO	NO	--	NO	NO	NO	NO	--
		1	NS	NS	NS	NS	3.2	--	--	--	--	NO	--	--	--	--	NO
		2	ND	ND	ND	ND	ND	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

LEGEND
mg/L = micrograms per liter
NJGWQS = New Jersey Groundwater Quality Standards
ROD: Record of Decision
NA = Not Applicable
NS = Not Sampled
ND: No Detection
duplicate = Duplicate sample
NR = Not Run

Values in BOLD BLUE FONT are above BOTH the NJDEP GWQS and the ROD Discharge Criteria
-- Used when comparison against known standards does not apply as the well was not sampled (NS) for a specific as

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.
(4) Well sampled Biannually - 2nd and 4th Quarter Only as of the beginning of 1998

Table 6
Water Level Elevations - 2nd QUARTER 2000
L.E. Carpenter, Wharton, New Jersey

WELL LOCATION	WELL TYPE	BASELINE LOCATION				WELL INSTALLATION AND CONSTRUCTION INFORMATION										GEODETIC LOCATION		ELEVATIONS (FT. MSL)			QUARTERLY MEASUREMENT INFORMATION						
						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	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]
CW-1	Caisson Well	North	162.39	East	203.83	ROY F. WESTON	-	-	-	-	-	-	-	-	-	40° 54' 14.2"	74° 34' 34.7"	630.83	634.35		13-Apr-00	6.90	-	-	-	-	All Product
CW-3	Caisson Well	North	198.46	East	373.37	ROY F. WESTON		-	-	-	-	-	-	-	-	40° 54' 13.8"	74° 34' 32.5"	628.63	633.30		13-Apr-00	-	7.23	-	621.40	-	-
GEI-1I	Piezometer	North	607.06	West	69.57	ROY F. WESTON	April to October 1989	44.34	2.00	PVC	0.02	31.62	41.62	10.00	I	40° 54' 19.3"	74° 34' 35.3"	628.44	630.93	630.78	13-Apr-00	-	4.52	-	626.26	-	-
GEI-2I	Piezometer	North	168.56	West	516.79	ROY F. WESTON	April to October 1989	46.28	2.00	PVC	0.02	31.50	41.50	10.00	I	40° 54' 17.4"	74° 34' 43.1"	635.92	638.35	638.20	13-Apr-00	-	10.67	-	627.53	-	-
GEI-2S	Piezometer	North	164.27	West	507.48	ROY F. WESTON	April to October 1989	22.21	2.00	PVC	0.02	10.00	20.00	10.00	S	40° 54' 17.3"	74° 34' 43.0"	635.46	637.87	637.67	13-Apr-00	-	10.63	-	627.04	-	-
GEI-3I	Piezometer	South	86.67	West	441.14	ROY F. WESTON	April to October 1989	53.29	2.00	PVC	0.02	30.00	40.00	10.00	I	40° 54' 14.8"	74° 34' 43.7"	637.56	639.99	639.85	13-Apr-00	-	12.79	-	627.06	-	-
MW-1(R)	Monitoring Well	South	13.7	West	61.04	ROY F. WESTON	February 3, 1995	22.50	4.00	STEEL	0.01	7.00	22.50	15.50	S	40° 54' 13.8"	74° 34' 38.8"	635.79	635.78	635.47	13-Apr-00	9.24	9.55	626.23	625.92	0.31	626.21
MW-2(R)	Monitoring Well	North	241.17	East	304.79	ROY F. WESTON	January 30, 1995	13.00	2.00	PVC	0.01	2.00	12.00	10.00	S	40° 54' 14.4"	74° 34' 33.1"	629.06	632.28	632.14	13-Apr-00	-	6.31	-	625.83	-	-
MW-3	Monitoring Well	North	216.23	East	356.38	WEHRAN ENG.	May 15, 1980	27.00	2.00	STEEL	0.01	1.50	27.00	25.50	S	40° 54' 14.0"	74° 34' 32.6"	628.64	632.27	632.56	13-Apr-00	6.57	7.42	625.99	625.14	0.85	625.94
MW-4 [1]	Monitoring Well	North	13.34	East	300.92	WEHRAN ENG.	May 20, 1980	27.00	2.00	STEEL	0.01	1.50	27.00	25.50	S	40° 54' 12.4"	74° 34' 34.4"	628.86	632.31	632.50	13-Apr-00	-	6.33	-	626.17	-	-
MW-5(R)	Monitoring Well	North	151.9	East	264.4	ROY F. WESTON	January 25, 1995	10.98	2.00	PVC	0.02	0.98	10.98	10.00	S	40° 54' 13.8"	74° 34' 34.1"	629.82	632.64	632.42	13-Apr-00	-	5.81	-	626.61	-	-
MW-8 [1]	Monitoring Well	North	78.56	East	367.34	GROUNDWATER TECHNOLOGIES	1983	19.00	2.00	STEEL	0.02	0.00	19.00	19.00	S	40° 54' 12.7"	74° 34' 33.3"	627.99	630.56	628.79	13-Apr-00	-	2.77	-	626.02	-	-
MW-9 [1]	Monitoring Well	South	4.77	East	252.41	GROUNDWATER TECHNOLOGIES	1983	20.50	2.00	STEEL	0.02	0.50	20.00	19.50	S	40° 54' 12.5"	74° 34' 35.1"	629.21	631.69	630.18	13-Apr-00	-	3.85	-	626.33	-	-
MW-11S	Monitoring Well	North	137.25	East	199.33	ROY F. WESTON	April to October 1989	14.73	4.00	STEEL	0.02	4.37	14.41	10.00	S	40° 54' 14.0"	74° 34' 34.9"	631.23	633.26	632.96	13-Apr-00	7.07	12.99	625.89	619.97	5.92	625.51
MW-11I(R)	Monitoring Well	North	147.83	East	195.43	RMT, INC.	February 20, 1998	52.00	2.00	STEEL	0.01	42.00	52.00	10.00	I	40° 54' 14.1"	74° 34' 34.9"	630.89	633.67	633.33	13-Apr-00	-	7.28	-	626.05	-	-
MW-11D(R) [1]	Monitoring Well	North	152.3	East	189.41	RMT, INC.	February 20, 1998	157.00	2.00	STEEL	0.01	147.00	157.00	10.00	D	40° 54' 14.2"	74° 34' 34.9"	630.66	633.35	633.09	13-Apr-00	-	4.77	-	628.32	-	-
MW-12S(R)	Monitoring Well	South	43.27	East	206.69	ROY F. WESTON	May 7, 1996	14.45	4.00	PVC	0.02	2.45	14.45	12.00	S	40° 54' 12.3"	74° 34' 35.9"	632.17	634.86	634.33	13-Apr-00	-	7.57	-	626.76	-	-
MW-13S	Monitoring Well	North	359.87	East	360.32	ROY F. WESTON	April to October 1989	16.39	4.00	STEEL	0.02	5.37	15.14	10.00	S	40° 54' 15.3"	74° 34' 31.7"	628.34	631.40	631.23	13-Apr-00	-	5.05	-	626.18	-	-
MW-13S(R)	Monitoring Well	North	238.93	East	365.76	ROY F. WESTON	January 27, 1995	17.00	2.00	PVC	0.01	2.00	12.00	10.00	S	40° 54' 15.0"	74° 34' 31.8"	628.26	630.96	630.59	13-Apr-00	-	4.89	-	625.70	-	-
MW-13I	Monitoring Well	North	340.76	East	358.82	ROY F. WESTON	July 31, 1989	46.30	2.00	STEEL	0.02	35.22	45.26	10.00	I	40° 54' 15.1"	74° 34' 31.9"	628.36	630.88	630.66	13-Apr-00	-	4.82	-	625.84	-	-
MW-14S	Monitoring Well	North	294.9	East	452.42	ROY F. WESTON	April to October 1989	15.46	4.00	STEEL	0.02	3.42	13.46	10.00	S	40° 54' 14.3"	74° 34' 31.0"	625.78	628.63	628.41	13-Apr-00	-	3.15	-	625.26	-	-
MW-14I [3]	Monitoring Well	North	294.3	East	441.91	ROY F. WESTON	April to October 1989	44.30	2.00	STEEL	0.02	33.22	43.26	10.00	I	40° 54' 14.2"	74° 34' 31.2"	625.93	628.32	628.23	13-Apr-00	-	2.56	-	625.67	-	-
MW-15S [3]	Monitoring Well	North	121.88	West	55.54	ROY F. WESTON	April to October 1989	25.94	4.00	STEEL	0.02	9.37	19.41	10.00	S	40° 54' 15.0"	74° 34' 38.0"	634.83	637.03	636.77	13-Apr-00	-	10.46	-	626.31	-	-
MW-15I [3]	Monitoring Well	North	125.49	West	46.56	ROY F. WESTON	July 17, 1989	43.92	2.00	STEEL	0.02	30.55	40.26	10.00	I	40° 54' 15.0"	74° 34' 37.9"	634.74	636.88	636.66	13-Apr-00	-	10.31	-	626.35	-	-
MW-16S	Monitoring Well	North	125.49	West	267.06	ROY F. WESTON	April to October 1989	23.90	4.00	STEEL	0.02	7.37	17.41	10.00	S	40° 54' 15.9"	74° 34' 40.4"	632.57	634.69	634.47	13-Apr-00	-	7.69	-	626.78	-	-
MW-16I	Monitoring Well	North	138.04	West	266.53	ROY F. WESTON	April to October 1989	46.53	2.00	STEEL	0.02	32.22	42.26	10.00	I	40° 54' 16.0"	74° 34' 40.3"	632.43	635.08	634.96	13-Apr-00	-	8.01	-	626.95	-	-
MW-17S [3]	Monitoring Well	South	131.11	West	76.99	ROY F. WESTON	April to October 1989	15.04	4.00	STEEL	0.02	5.20	15.24	10.00	S	40° 54' 12.8"	74° 34' 39.7"	632.95	634.92	634.79	13-Apr-00	-	8.21	-	626.58	-	-
MW-18S	Monitoring Well	North	536.89	West	10.38	ROY F. WESTON	April to October 1989	15.04	2.00	STEEL	0.02	4.37	14.41	10.00	S	40° 54' 18.4"	74° 34' 35.0"	628.22	631.48	631.26	13-Apr-00	-	5.32	-	625.94	-	-
MW-18I	Monitoring Well	North	529.37	West	19.13	ROY F. WESTON	April to October 1989	44.69	2.00	STEEL	0.02	34.22	44.26	10.00	I	40° 54' 18.4"	74° 34' 35.2"	628.35	631.19	631.04	13-Apr-00	-	4.84	-	626.20	-	-
MW-19	Monitoring Well	North	115.39	West	540.93	ROY F. WESTON	May 20, 1991	17.00	4.00	STEEL	0.02	7.00	17.00	10.00	S	40° 54' 17.1"	74° 34' 43.7"	636.72	639.24	638.88	13-Apr-00	-	11.74	-	627.14	-	-
MW-19-1	Monitoring Well	North	101.08	West	563.76	RMT, INC.	February 17, 1998	17.00	4.00	STEEL	0.01	6.00	15.50	9.50	S	40° 54' 17.0"	74° 34' 44.0"	636.50	639.26	638.86	13-Apr-00	-	11.66	-	627.20	-	-
MW-19-2	Monitoring Well	North	117.42	West	569.74	RMT, INC.	February 17, 1998	16.00	4.00	STEEL	0.01	6.00	16.00	10.00	S	40° 54' 17.2"	74° 34' 44.0"	637.05	639.36	638.76	13-Apr-00	-	11.64	-	627.12	-	-
MW-19-3	Monitoring Well	North	90.55	West	595.86	RMT, INC.	February 18, 1998	16.00	4.00	STEEL	0.01	6.00	15.50	9.50	S	40° 54' 17.1"	74° 34' 44.5"	637.54	640.04	639.65	13-Apr-00	-	12.41	-	627.24	-	-
MW-19-4	Monitoring Well	North	76.99	West	546.79	RMT, INC.	February 18, 1998	16.00	4.00	STEEL	0.01	6.00	15.50	9.50	S	40° 54' 16.7"	74° 34' 44.0"	636.27	638.44	637.74	13-Apr-00	-	10.38	-	627.36	-	-
MW-19-5	Monitoring Well	North	148.06	West	538.99	RMT, INC.	February 18, 1998	16.00	2.00	PVC	0.01	6.00	15.50	9.50	S	40° 54' 17.3"	74° 34' 43.5"	636.39	639.07	638.74	13-Apr-00	-	11.75	-	626.99	-	-
MW-19-6 [4]	Monitoring Well	North	147.68	West	569.68	RMT, INC.	October 28, 1999	20.00	2.00	STEEL	0.02	10.00	20.00	10.00	S	40° 54' 17.5"	74° 34' 43.8"	636.78	636.78	636.44	13-Apr-00	-	9.40	-	627.04	-	-
MW-19-7 [4]	Monitoring Well	North	188.83	West	524.71	RMT, INC.	October 29, 1999	20.00	2.00	STEEL	0.02	10.00	20.00	10.00	S	40° 54' 17.6"	74° 34' 43.1"	636.00	636.00	635.60	13-Apr-00	-	8.75	-	626.85	-	-
MW-19-8 [4]	Monitoring Well	North	204.72	West	541.62	RMT, INC.	October 28, 1999	20.00	2.00	STEEL	0.02	11.00	20.00	9.00	S	40° 54' 17.8"	74° 34' 43.2"	636.44	636.44	635.96	13-Apr-00	-	9.03	-	626.93	-	-
MW-20	Monitoring Well	North	213.31	West	374.3	ROY F. WESTON	May 21, 1991	14.00	4.00	STEEL	0.02	4.00	14.00	10.00	S	40° 54' 17.2"	74° 34' 41.2"	634.82	637.03	636.77	13-Apr-00	-	9.63	-	627.14	-	-
MW-21 [5]	Monitoring Well	North	381.34	East	657.52	ROY F. WESTON	May 22, 1991	15.00	4.00	STEEL	0.02	5.00	15.00	10.00	S	40° 54' 14.1"	74° 34' 28.2"	625.17	629.09	628.80	13-Apr-00	-	3.39	-	625.41	-	-
MW-22(R) [5]	Monitoring Well	North	239.64	East	463.71	ROY F. WESTON	July 22, 1997	7.50	2.00	STEEL	-	-	-	-	S	40° 54' 13.7"	74° 34' 31.2"	625.94	628.31	628.13	13-Apr-00	-	2.95	-	625.18	-	-
MW-23	Monitoring Well	North	457.09	East	422.75	ROY F. WESTON	January 6, 1992	6.00	2.00	STEEL	0.02	1.00	6.00	5.00	S	40° 54' 15.8"	74° 34' 30.5"	628.70	630.95	630.64	13-Apr-00	-	NAS	-	NAS	-	-
MW-25(R) [5]	Monitoring Well	North	239.44	East	560.77	ROY F. WESTON	July 22, 1997	10.00	2.00	STEEL	-	-	-	-	S	40° 54' 13.7"	74° 34' 29.8"	625.25	627.37	627.22	13-Apr-00	-	2.09	-	625.13	-	-
MW-26	Monitoring Well	North	314.59	East	164.12	ROY F. WESTON	May 8, 1996	11.80	4.00	PVC	0.02	1.80	11.80	10.00	S	40° 54' 15.7"	74° 34' 34.3"	630.84	634.39	633.26	13-Apr-00	-	7.33	-	625.93	-	-
RW-1	Recovery Well	South	45.79	West	72.28	ROY F. WESTON	June 17, 1991	30.00	8.00	STEEL	0.02	5.00	30.00	25.00	S	40° 54' 13.6"	74° 34' 39.1"	635.19	637.81	637.38	13-Apr-00	11.03	11.48	626.35	625.90	0.45	626.32
RW-2	Recovery Well	North	227.13	East	336.63	ROY F. WESTON	June 22, 1991	30.00	8.00	STEEL	0.02	3.00	30.00	27.00	S	40° 54' 14.2"	74° 34' 32.6"	629.80	631.78	631.68	13-Apr-00	-	5.91	-	625.77	-	-
RW-3	Recovery Well	North	252.47	East	231.34	ROY F. WESTON	June 21, 1991	28.00	8.00	STEEL	0.02	3.00	28.00	25.00	S	40° 54' 14.9"	74° 34' 33.9"	629.89	632.15	631.99	13-Apr-00	-	6.11	-	625.88	-	-
SG-D1 [1]	Drainage Channel Staff Guage	North	368.55	East	210.99	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	626.41	-	-	13-Apr-00	-	1.58	-	624.66	-	-
SG-D2 [1]	Drainage Channel Staff Guage	North	294.3	East	383	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	626.86	-	-	13-Apr-00	-	1.12	-	624.65	-	-
SG-D3 [1]	Drainage Channel Staff Guage	North	463.66	East	507.64	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	626.43	-	-	13-Apr-00	-	1.56	-	624.66	-	-
SG-R1 [1]	Rockaway River Staff Guage	South	104.76	West	482.39	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	641.52	-	-	13-Apr-00	-	1.78	-	639.97	-	-
SG-R2 [1]	Rockaway River Staff Guage	South	94.68	East	116.36	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	628.84	-	-	13-Apr-00	-	1.46	-	626.97	-	-
SG-R3 [1]	Rockaway River Staff Guage	North	169.54	East	518.22	RMT, INC.	November-98	NA	NA	NA	NA	NA	NA	NA	NA	-	-	627.38	-	-	13-Apr-00	-	1.02	-	625.07	-	-
WP-A1	Area A Well Point	South	2.54	West	67.45	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 13.9"	74° 34' 38.8"	636.29	636.32	635.81	13-Apr-00	9.31	10.57	626.50	625.24	1.26	626.42
WP-A2	Area A Well Point	North	17.42	West	91.63	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.2"	74° 34' 39.0"	637.31	639.62	639.19	13-Apr-00		BENT WELL CASING - NOT EVALUATED				
WP-A3	Area A Well Point	South	73.41	West	153.46	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 13.7"	74° 34' 40.3"	635.97	635.97	635.56	13-Apr-00	-	9.05	-	626.51	-	-
WP-A4	Area A Well Point	North	18.63	West	45	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.0"	74° 34' 38.5"	635.63	635.66	635.10	13-Apr-00	10.37	13.06	624.73	622.04	2.69	624.56
WP-A5	Area A Well Point	North	69.54	West	33.98	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.4"	74° 34' 38.1"	635.70		637.85	13-Apr-00	-	11.41	-	626.44	-	-
WP-A6	Area A Well Point	South	6.64	East	4.69	ROY F. WESTON	1993	13.00	2.00	PVC	-	3.00	13.00	10.00	S	40° 54' 13.6"	74° 34' 38.0"	634.95		637.28	13-Apr-00	10.89	14.79	626.39	622.49	3.90	626.14
WP-A7	Area A Well Point	North	53.35	East	98.79	ROY F. WESTON	1993	11.00	2.00	PVC	-	1.00	11.00	10.00	S	40° 54' 13.7"	74° 34' 36.6"	632.94		634.88	13-Apr-00	8.84	9.74	626.04	625.14	0.90	625.98
WP-A8	Area A Well Point	North	110.26	East	69.94	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.3"	74° 34' 36.6"	634.70		637.56	13-Apr-00	11.41	12.22	626.15	625.34	0.81	626.10
WP-A9	Area A Well Point	North	13.71	East	46.84	ROY F. WESTON	1993	16.00	2.00	PVC	-	6.00	16.00	10.00	S	40° 54' 13.6"	74° 34' 37.4"	637.22		639.32	13-Apr-00	12.98	14.00	626.34	625.32	1.02	626.28
WP-B1	Area B Well Point	North	104.02	East	150.76	ROY F. WESTON	1993	11.00	2.00	PVC	-	1.00	11.00	10.00	S	40° 54' 13.9"	74° 34' 35.7"	631.85		633.65	13-Apr-00	-	6.11	-	627.54	-	-
WP-B2	Area B Well Point	North	182.49	East	164.38	ROY F. WESTON	1993	11.00	2.00	PVC	-	1.00	11.00	10.00	S	40° 54' 14.5"	74° 34' 35.1"	630.48	632.58	632.25	13-Apr-00	-	6.20	-	626.05	-	-
WP-B3	Area B Well Point	North	138.12	East	157.54	ROY F. WESTON	1993	11.00	2.00	PVC	-	1.00	11.00	10.00	S	40° 54' 14.2"	74° 34' 35.4"	631.71		633.33	13-Apr-00	-	6.45	-	626.88	-	-
WP-B4	Area B Well Point	North	193.87	East	204.21	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.5"	74° 34' 34.5"	629.93		632.56	13-Apr-00	6.31	-	-	-	-	All Product
WP-B5	Area B Well Point	North	226.46	East	216.97	ROY F. WESTON	1993	11.00	2.00	PVC	-	1.00	11.00	10.00	S	40° 54' 14.7"	74° 34' 34.2"	630.03		632.11	13-Apr-00	-	5.16	-	626.95	-	-

Prepared By: Nicholas J. Clevett
RMT, Inc. Project Manager

Table 6
Water Level Elevations - 2nd QUARTER 2000
L.E. Carpenter, Wharton, New Jersey

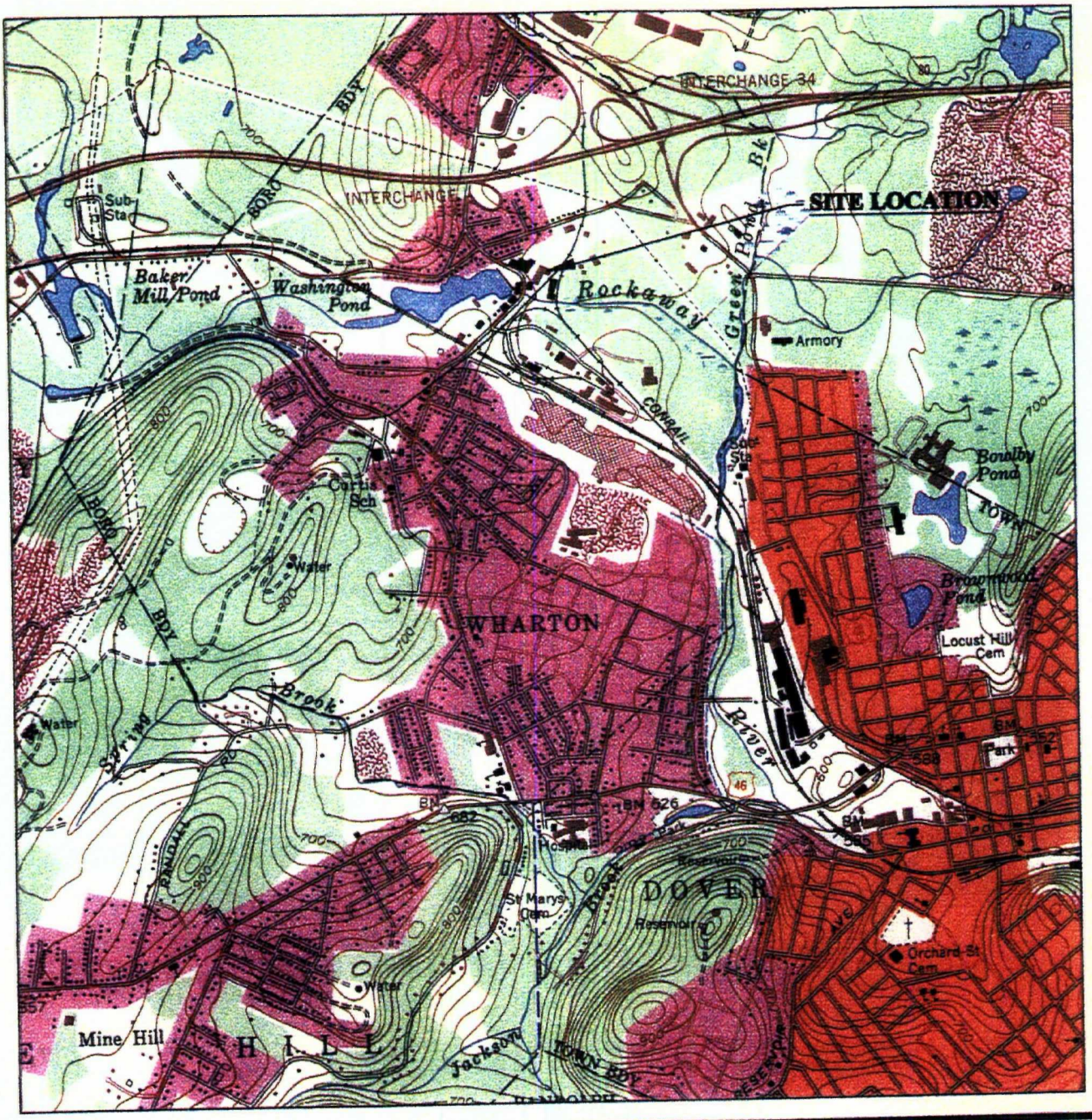
WELL LOCATION	WELL TYPE	BASELINE LOCATION				WELL INSTALLATION AND CONSTRUCTION INFORMATION										GEODETIC LOCATION		ELEVATIONS (FT. MSL)			QUARTERLY MEASUREMENT INFORMATION						
						MANAGING CONSULTANT	INSTALLATION DATE	TOTAL WELL DEPTH (FT)	WELL DIAMETER (IN)	SCREEN MATERIAL	SLOT SIZE (IN)	TOP OF SCREEN (FT)	BOTTOM OF SCREEN (FT)	SCREENED INTERVAL (FT)	AQUIFER SYSTEM	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-B6	Area B Well Point	North	130.98	East	310.48	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 13.4"	74° 34' 33.7"	629.72		631.86	13-Apr-00	-	5.84	-	626.02	-	-
WP-B7	Area B Well Point	North	186.28	East	402.8	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 13.5"	74° 34' 32.3"	627.62		629.49	13-Apr-00	-	4.19	-	625.30	-	-
WP-B10	Area B Well Point	North	228.07	East	174.18	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 14.9"	74° 34' 34.7"	630.42	633.12	632.74	13-Apr-00	-	7.98	-	624.76	-	-
WP-C1	Area C Well Point	South	26.69	East	182.1	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 12.6"	74° 34' 36.1"	632.81		633.51	13-Apr-00	-	6.87	-	626.64	-	-
WP-C2	Area C Well Point	South	20.92	East	219.91	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 12.5"	74° 34' 35.6"	633.02		634.46	13-Apr-00	-	7.71	-	626.75	-	-
WP-C3	Area C Well Point	South	58.35	East	165.76	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 12.4"	74° 34' 36.4"	631.00		632.64	13-Apr-00	-	5.81	-	626.83	-	-
WP-C4	Area C Well Point	South	2.11	East	183.73	ROY F. WESTON	1993	-	-	-	-	-	-	-	-	40° 54' 12.8"	74° 34' 35.9"	632.44		633.27	13-Apr-00	-	6.98	-	626.29	-	-

(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

S: Shallow Aquifer System
I: Intermediate Aquifer System
D: Deep Aquifer System
R: Replacement Well
NAS: Not Assessable

All WP series wells finished elevation is 2 feet above nominal grade. Total depth of well only accounts for subsurface structure
Blank Cells for Roy F. Weston wells indicates that no information was available for review by RMT, Inc.
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

Prepared By: Nicholas J. Clevett
RMT, Inc. Project Manager



NOTE:

MAP OBTAINED FROM UNITED STATES GEOLOGICAL SURVEY DOVER, NEW JERSEY 7.5 MINUTE SERIES QUADRANGLE (TOPOGRAPHIC), 1981.

N

0 2000 4000

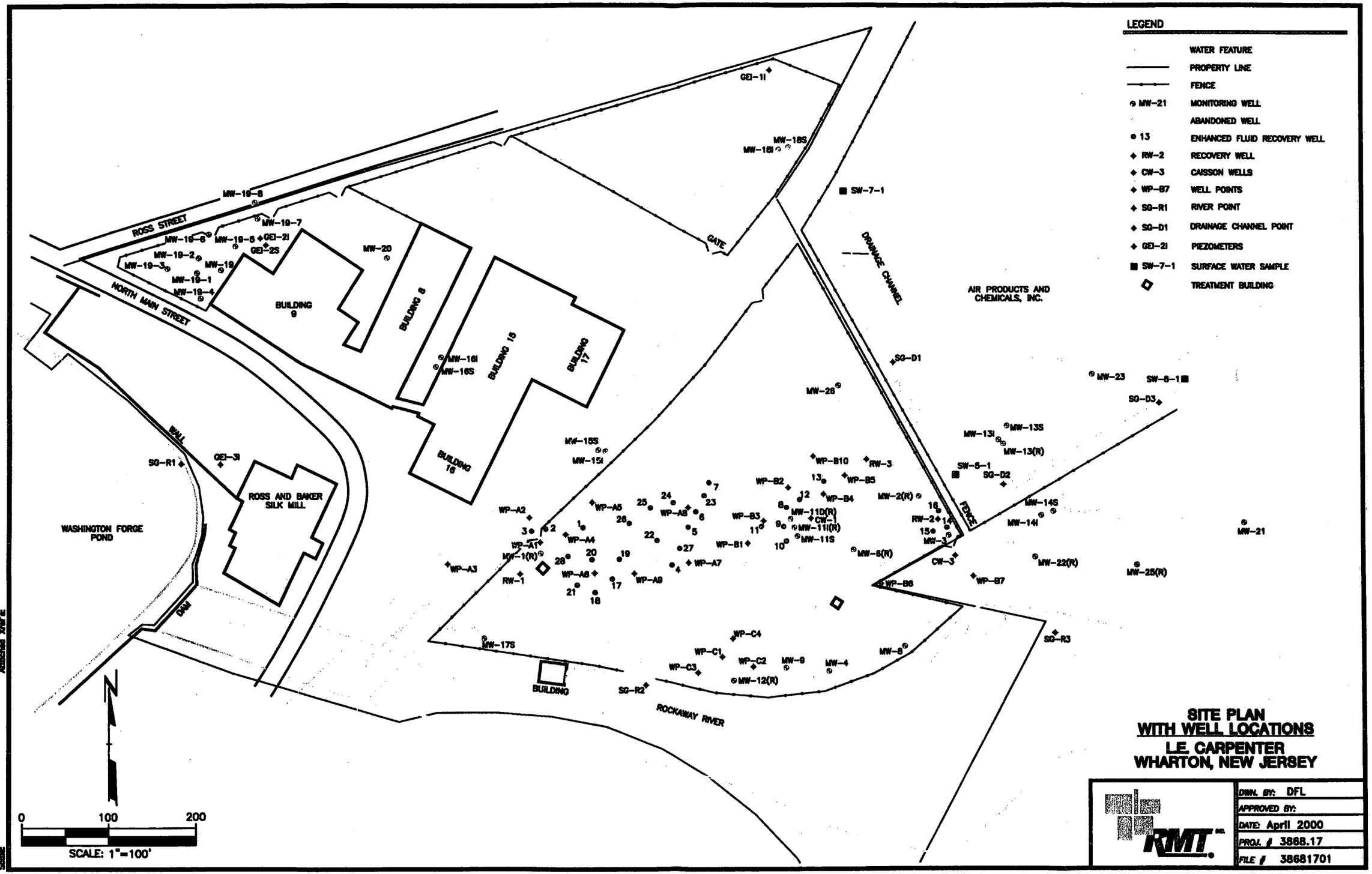
SCALE: 1"=2000'

SITE LOCATION MAP
LE CARPENTER AND COMPANY
WHARTON, NEW JERSEY

RMT

DWN. BY:	DAY
APPROVED BY:	G. Kenoyer
DATE:	5/2/00
PROJ. #	3863.17
FILE #	38681704

FIGURE 1



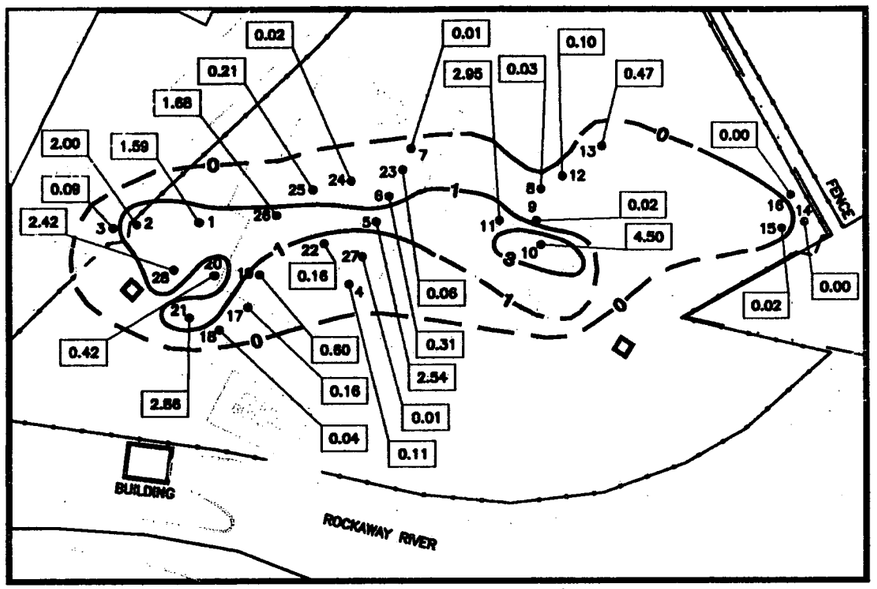
SITE PLAN
WITH WELL LOCATIONS
L.E. CARPENTER
WHARTON, NEW JERSEY

RMT INC.

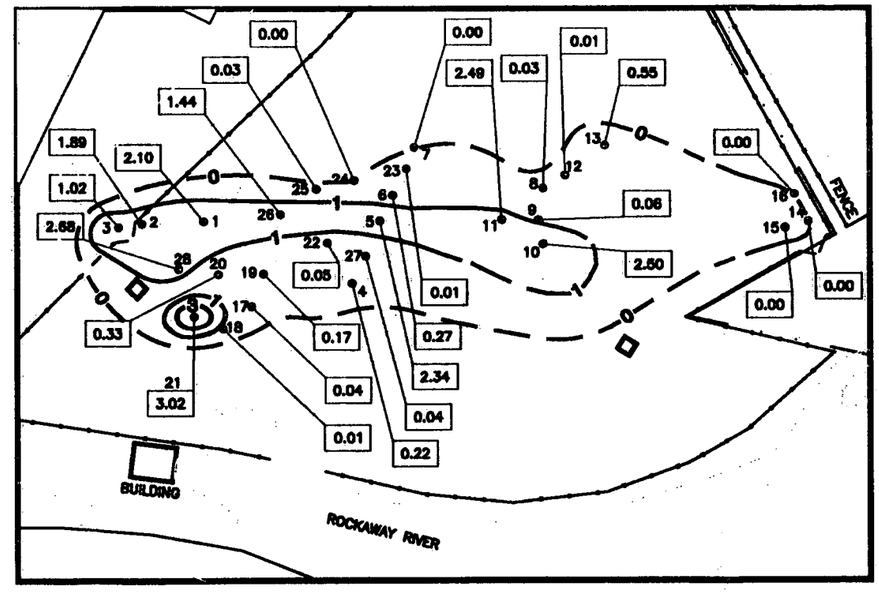
DWN. BY:	DFL
APPROVED BY:	
DATE:	April 2000
PROJ. #	3868.17
FILE #	38681701

FIGURE 2

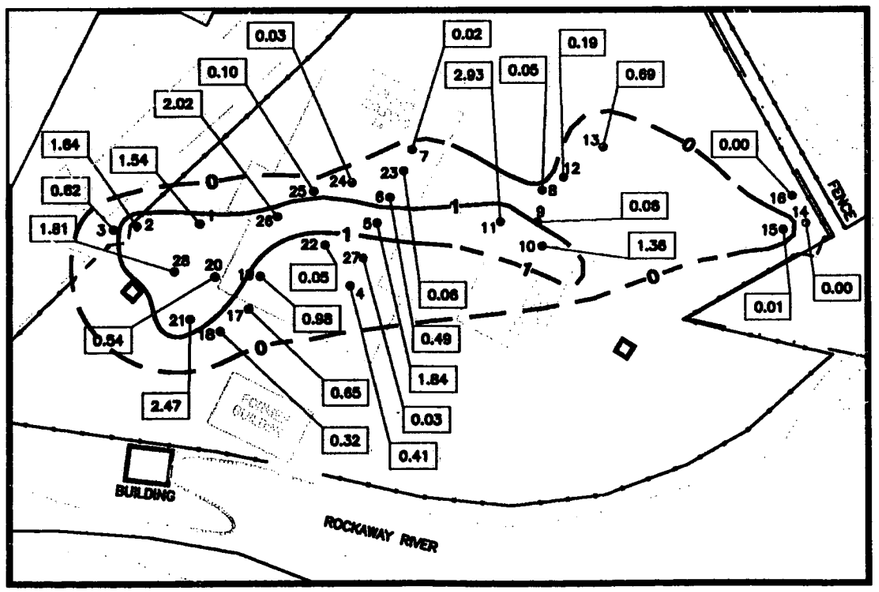
PLOT DATA
Drawing Name:
Operator Name:
Scale:
Dwg Size:
Plot Date:
Plot Time:
Attached Xref's:



PRODUCT THICKNESS (FT), APRIL 19, 2000



PRODUCT THICKNESS (FT), JUNE 16, 2000



PRODUCT THICKNESS (FT), MAY 18, 2000

LEGEND

- WATER FEATURE
- PROPERTY LINE
- FENCE
- • 13 ENHANCED FLUID RECOVERY WELL (EFR)
- 1.22 PRODUCT THICKNESS MEASURED IN WELL (FT)
- ◇ TREATMENT BUILDING
- 1 —— PRODUCT THICKNESS CONTOURS (FT)

N

0 100 200

SCALE: 1"=100'

MONTHLY EFR WELL GAUGING
2nd QUARTER 2000
LE CARPENTER
WHARTON, NEW JERSEY

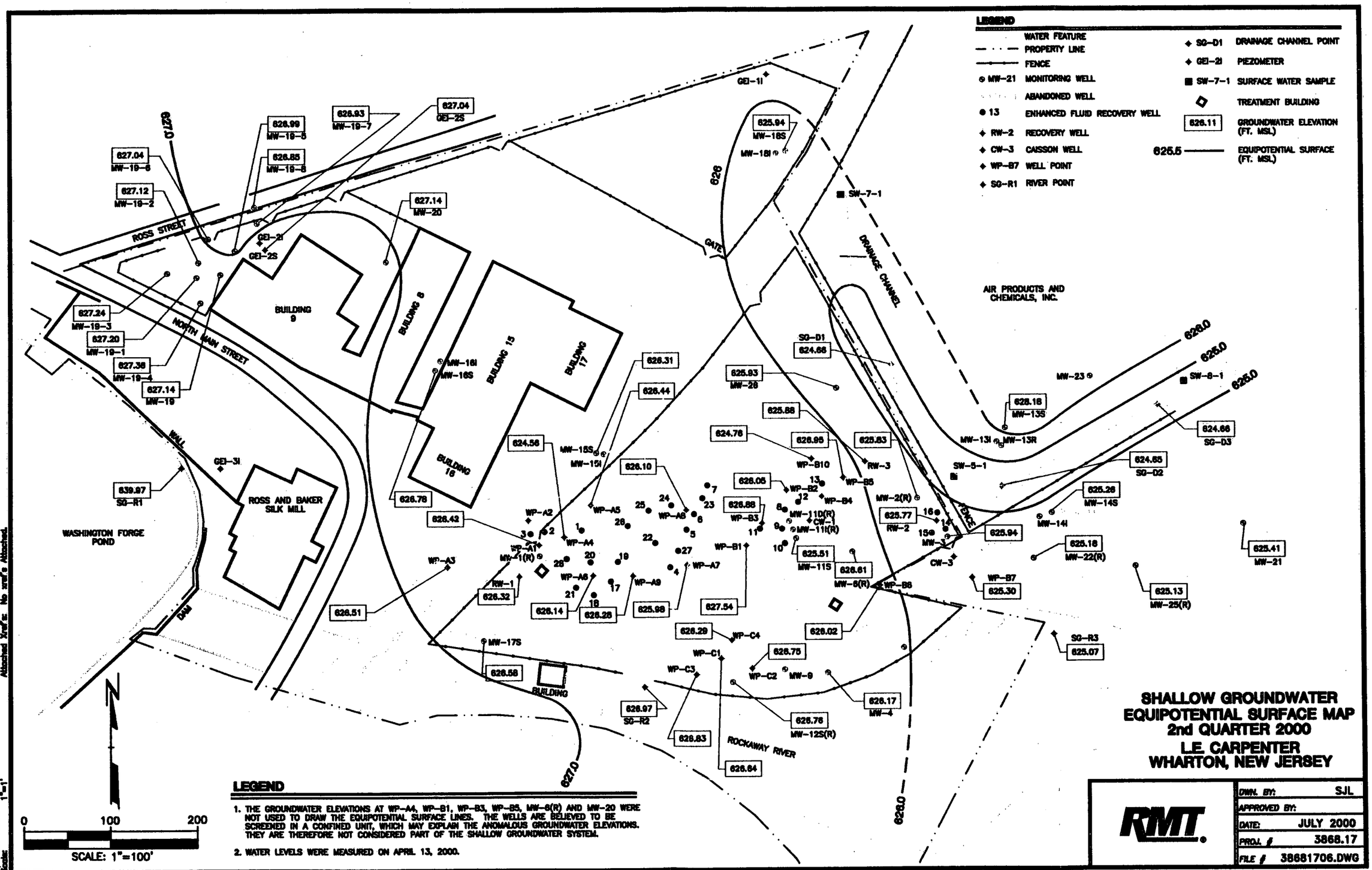
RMT

DWN. BY:	SJL
APPROVED BY:	
DATE:	JULY 2000
PROJ. #	3868.17
FILE #	38681705.DWG

FIGURE 3

Attached Xref's:

$$PLOTTER$$ 324599 Bytes
$$SCALE$$ Wednesday, July 19, 2000
$$DATE$$ 09:40:32 AM
$$STYLESHEET$$ No snap & Attached
$$PROFILE$$ 1:\03868\17\38681705.dwg
Hidden
1"=200'
PLOT AREA
$$DWG$$
$$USER$$
$$PAGE$$
$$PROFILE$$



LEGEND

1. THE GROUNDWATER ELEVATIONS AT WP-A4, WP-B1, WP-B3, WP-B5, MW-6(R) AND MW-20 WERE NOT USED TO DRAW THE EQUIPOTENTIAL SURFACE LINES. THE WELLS ARE BELIEVED TO BE SCREENED IN A CONFINED UNIT, WHICH MAY EXPLAIN THE ANOMALOUS GROUNDWATER ELEVATIONS. THEY ARE THEREFORE NOT CONSIDERED PART OF THE SHALLOW GROUNDWATER SYSTEM.
2. WATER LEVELS WERE MEASURED ON APRIL 13, 2000.

SHALLOW GROUNDWATER EQUIPOTENTIAL SURFACE MAP
2nd QUARTER 2000
LE CARPENTER
WHARTON, NEW JERSEY

RMT

DWN. BY:	SJL
APPROVED BY:	
DATE:	JULY 2000
PROJ. #	3868.17
FILE #	38681706.DWG

FIGURE 4

AUTOCAD
Drawing Name: 4:\03868\17\38681706.dwg
Operator Name: Mcadoo
Scale: 1"=1'
Dwg Size: 223704 Bytes
Plot Date: Wednesday, July 19, 2000
Plot Time: 3:07:37PM
Attached Xref's: No xref's Attached.

Appendix A
Report Certification

CERTIFICATION

In accordance with N.J.A.C. 7:26C-1.2(b):

"I certify under penalty of law that the information provided in this document 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 personably liable for the penalties."

In accordance with N.J.A.C. 7:26C-1.2(c):

"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 Affairs

TITLE

L.E. Carpenter Company

COMPANY

Cristopher Anderson

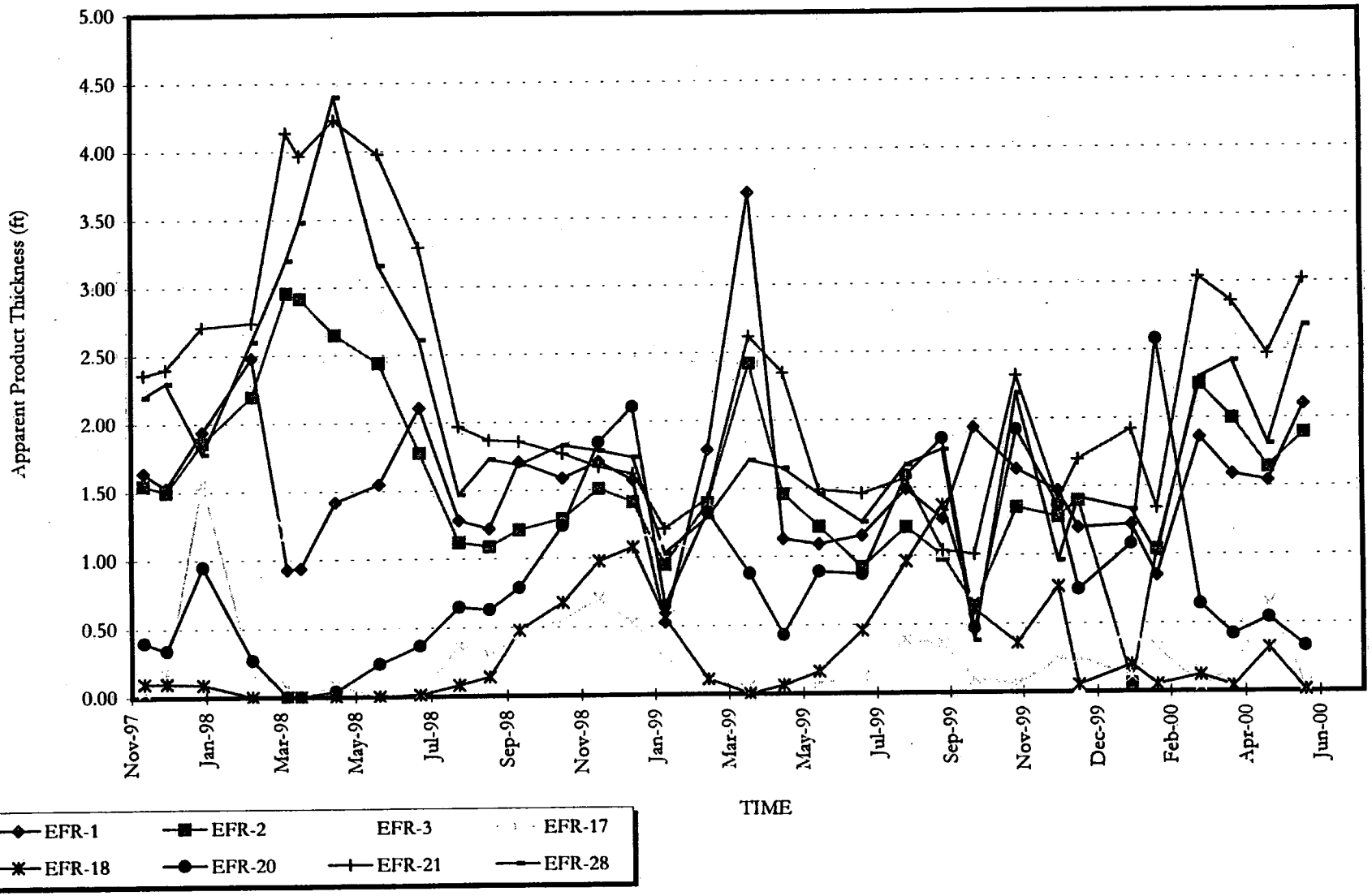
SIGNATURE

7/25/00

DATE

Appendix B
Apparent Free Product Volume Trend Charts

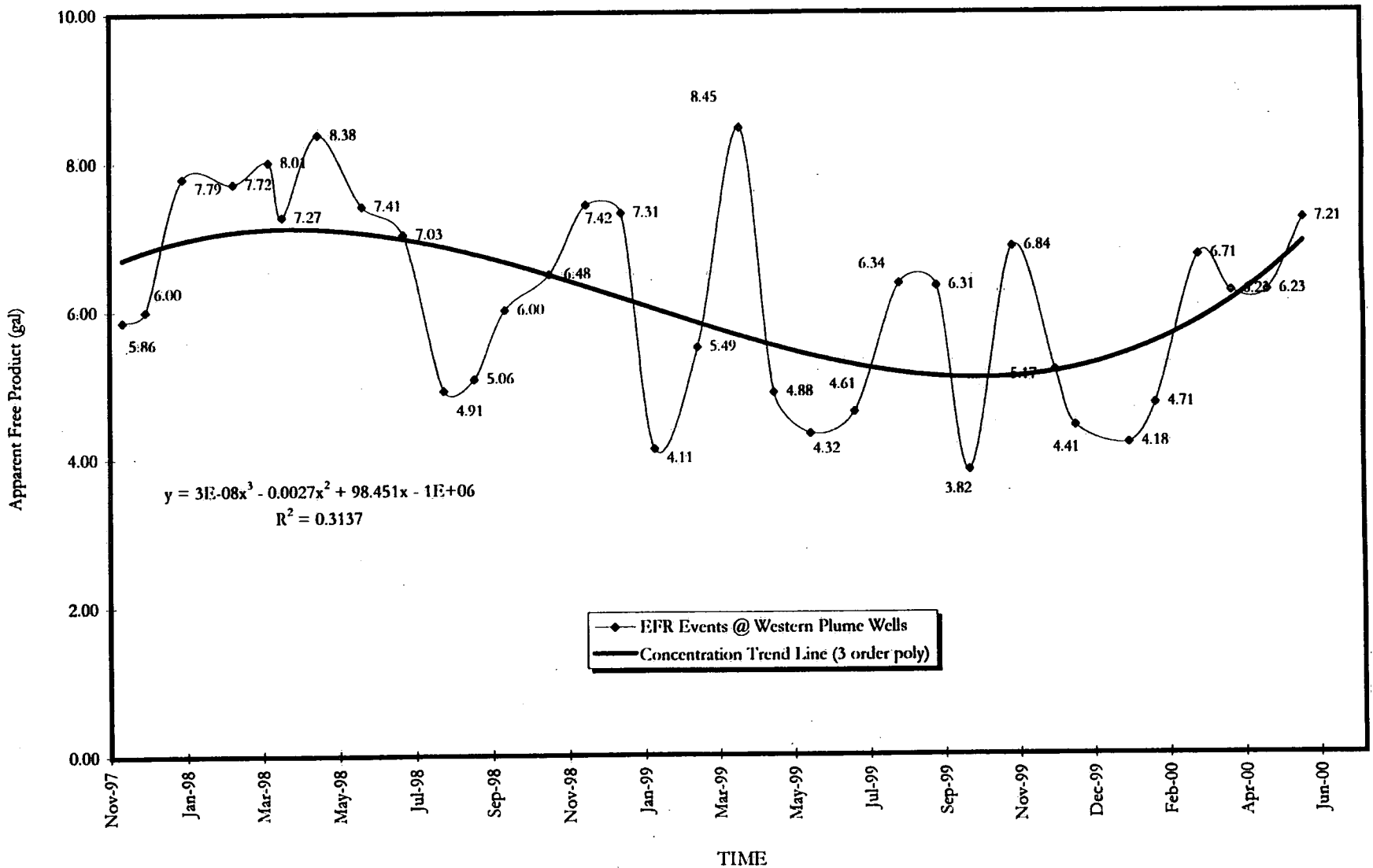
Apparent Free Product Thickness vs. Time
Western Portion of Plume
L.E. Carpenter, Wharton, New Jersey
Through 2nd Quarter 2000



07/17/2000 1:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

H:/data/projects/lecarpen/quarters/Freeprdt.xls/Chart (Western)

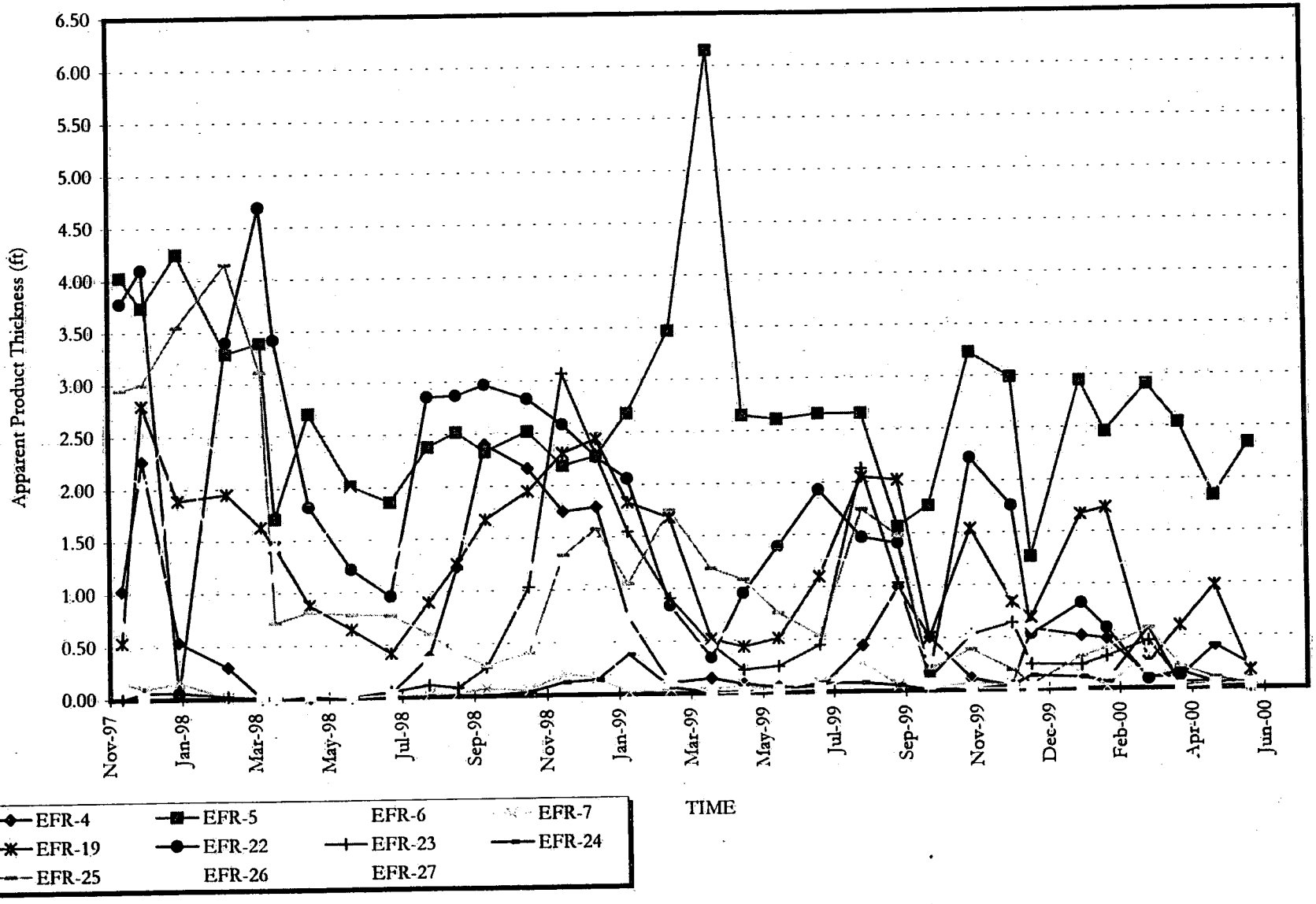
Apparent Free Product Volume vs. Time
Western Portion of Plume
L.E. Carpenter, Wharton, New Jersey
Through 2nd Quarter 2000



07/17/20001:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

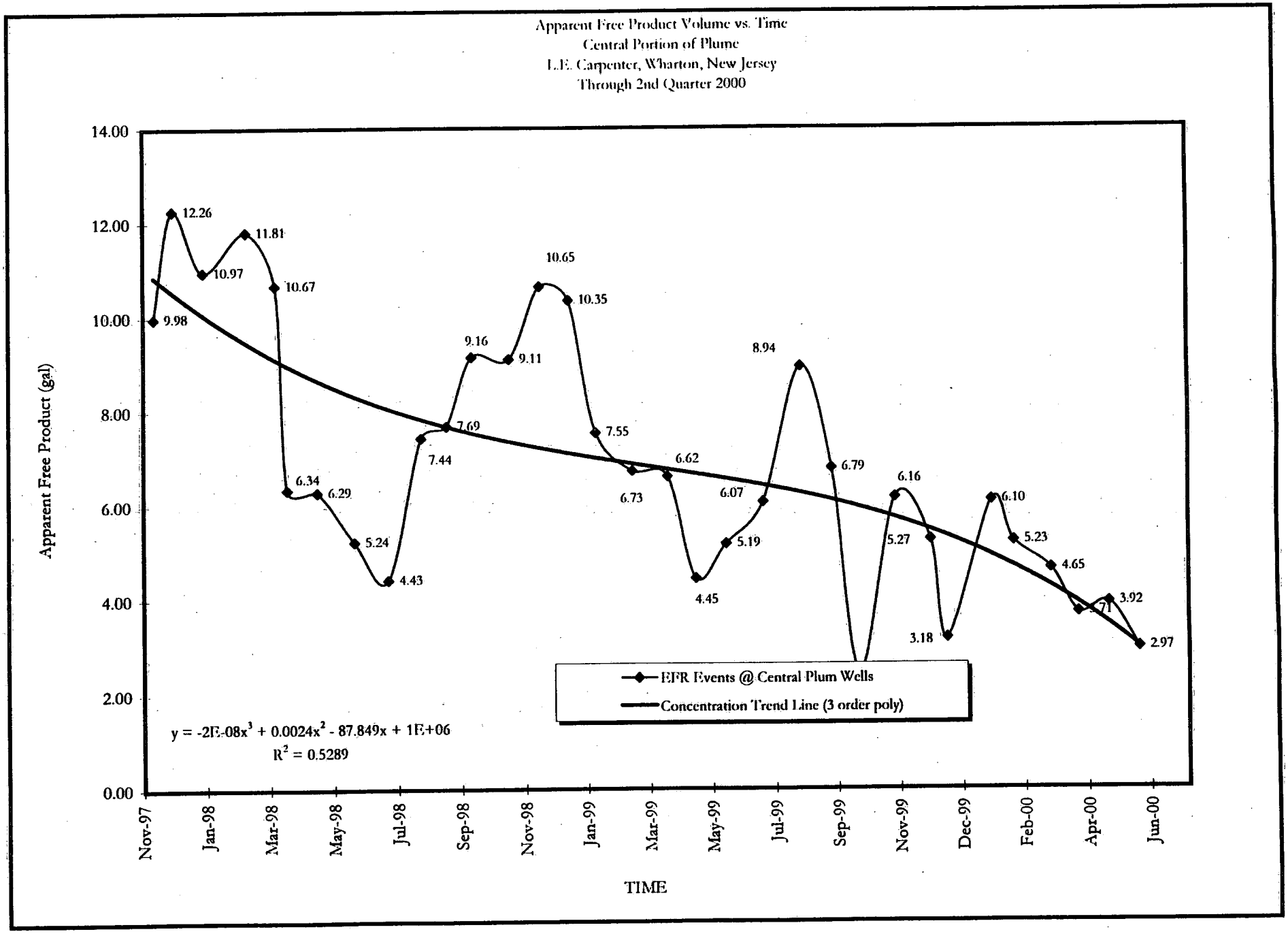
H:/data/projects/lecarpen/quarters/Freepdt.xls/stand_prod_western trend

Apparent Free Product Thickness vs. Time
Central Portion of Plume
L.E. Carpenter, Wharton, New Jersey
Through 2nd Quarter 2000



07/17/20001:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

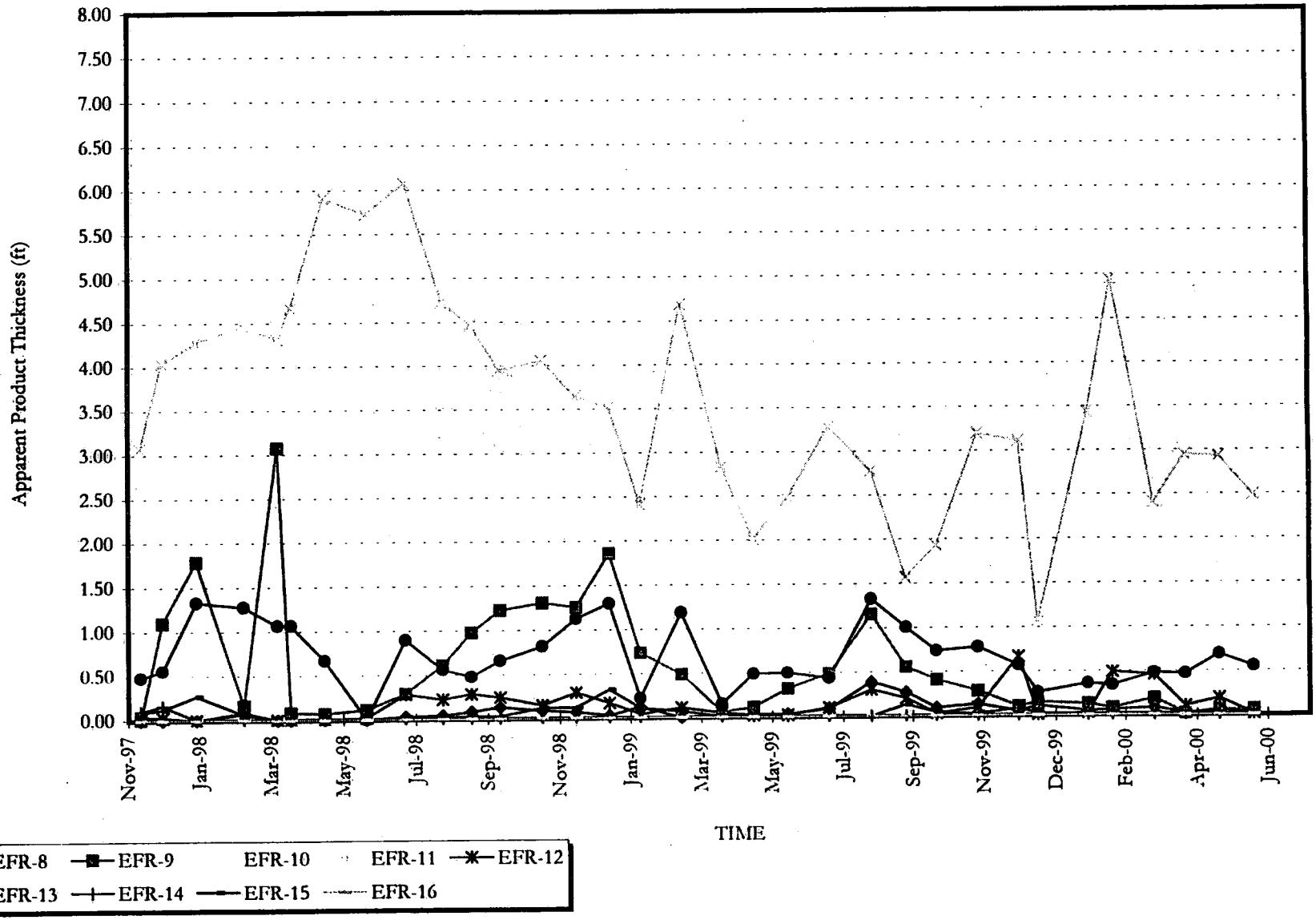
T000386817-001.DOCChart (Central)



07/17/2000 1:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

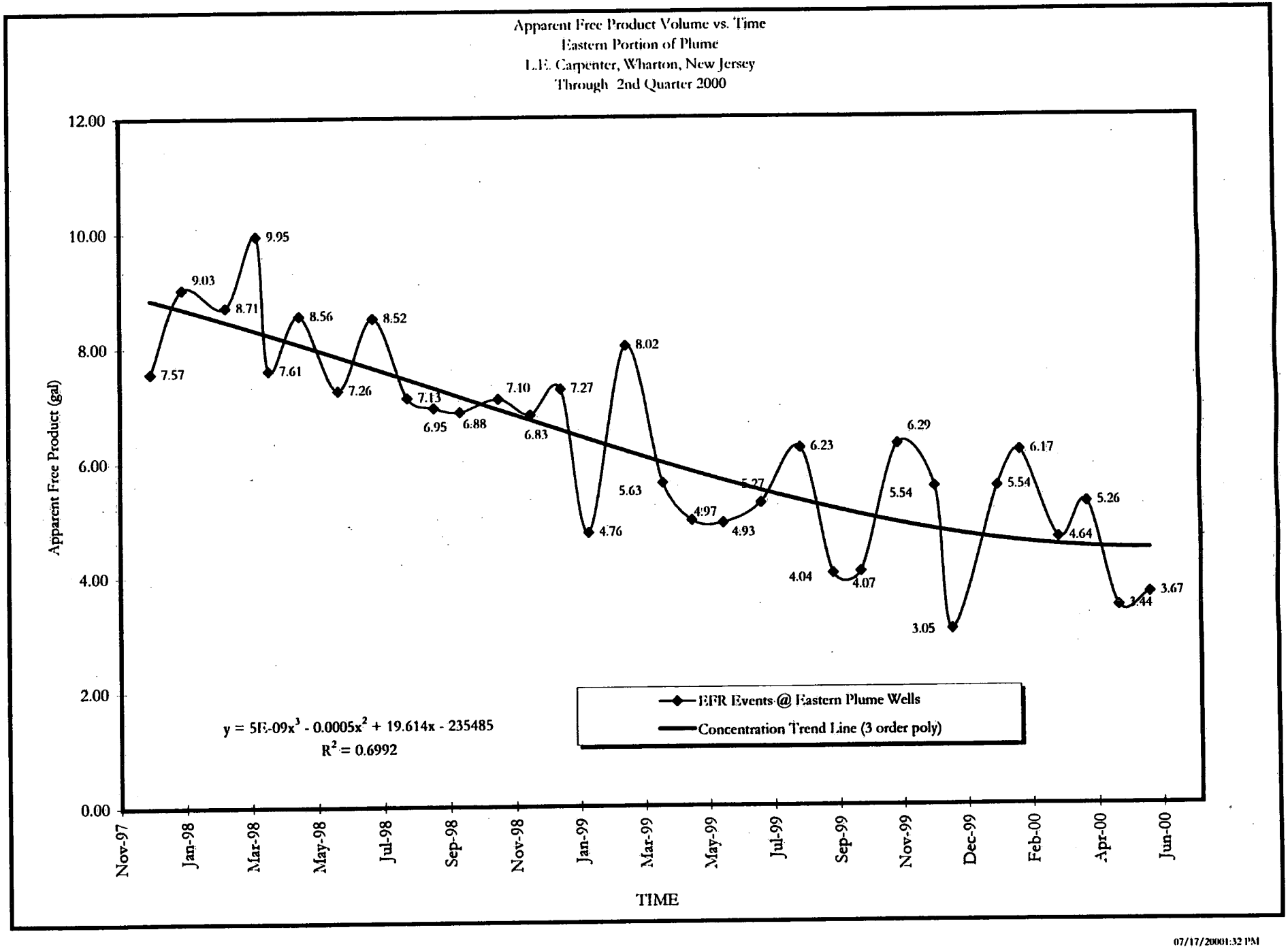
H:/data/projects/lecarpen/quarters/Freeprdt.xls/stand_prod_central trend

Apparent Free Product Thickness vs. Time
Eastern Portion of Plume
L.E. Carpenter, Wharton, New Jersey
Through 2nd Quarter 2000



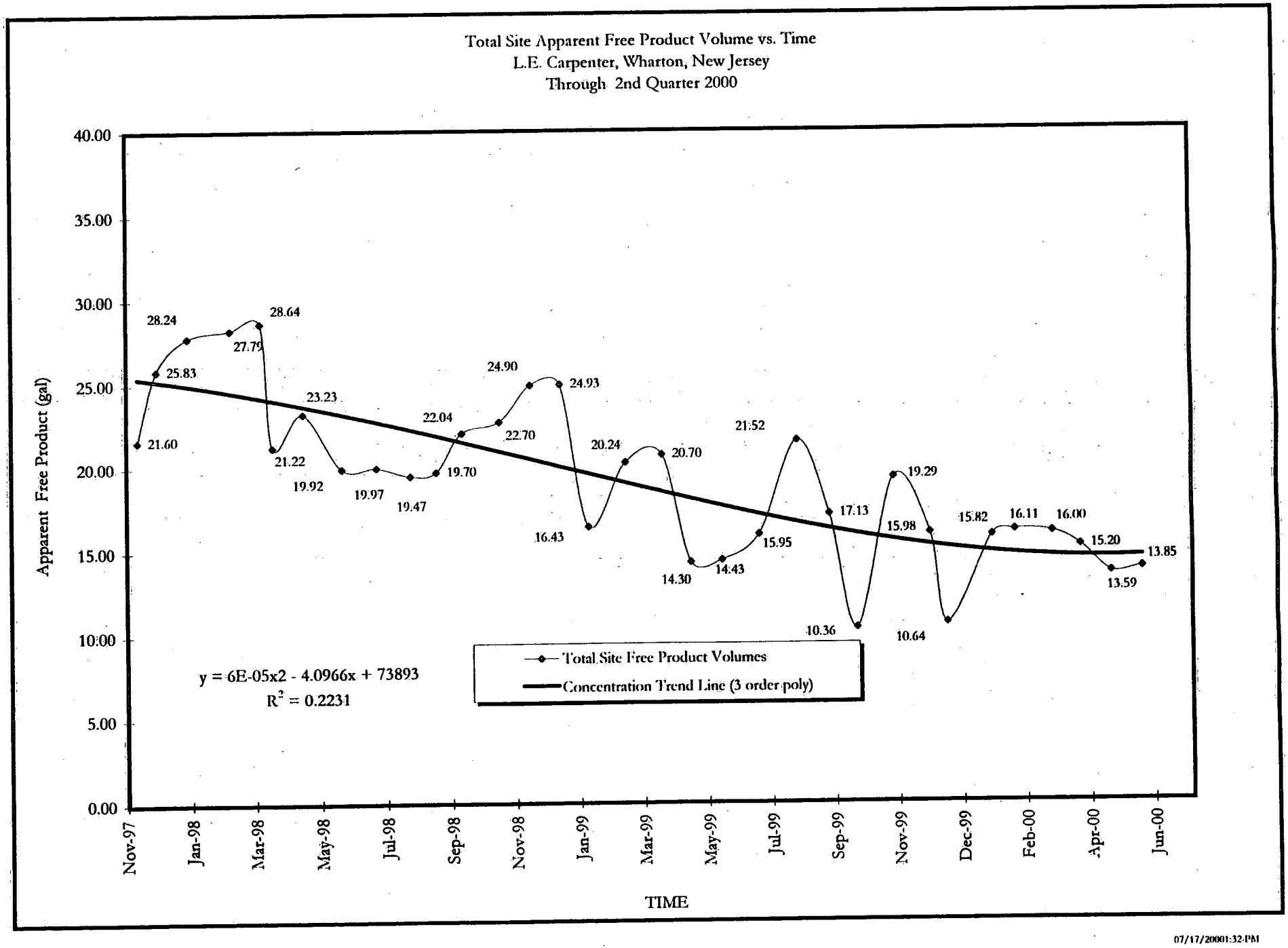
07/17/2000 1:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

H:/data/projects/lecarpen/quarters/Freeprdt.xls/Chart (Eastern)



07/17/2000 1:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

H:/data/projects/lecarpen/quarters/Freeprdt.xls/stand_prod_eastern trend



07/17/20001:32 PM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

H:/data/projects/lecarpen/quarters/Freeprdt.xls/Total Site Product Trend

Monitoring Well Data

Client: RMT Project: LE Carpenter

Job No: Z 281 Date Sampled: 4/13/00 Analyst: M. Morse

Well ID	MW 15S	MW 15I	MW 11D	MW 4	MW 17S	MW 22R	MW 25R	MW 14I	MW 21
Depth to Water From TOC feet (before purging)	10.46	10.31	4.77	6.33	8.21	2.95	2.09	2.56	3.39
Depth to Water From TOC feet (after purging)	10.51	10.41	4.91	6.95	8.32	4.33	4.43	2.67	3.44
Depth to Water From TOC feet (before sampling)	10.47	10.31	4.81	6.39	8.23	2.96	2.31	2.56	3.39
Depth to Bottom From TOC feet	19.48	40.14	161.25	18.31	15.00	8.81	9.11	43.32	14.68
PID Reading from Well Casing (ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH before Purge	6.60	7.38	9.12	6.70	6.65	7.00	7.21	7.93	7.37
Temp. before Purge (°C)	8.2	8.8	8.8	8.7	7.8	9.5	9.6	10.5	10.2
Diss. Oxygen before Purge (ppm)	0.5	0.9	2.9	0.0	3.2	0.2	0.0	2.6	0.6
Cond. before Purge (umhos/cm)	174.3	298	318	340	260	411	449	287	566
Water Volume in Well (gal.)	5.7	5.4	28.1	2.2	4.4	1.1	1.3	7.3	7.3
Purge Method	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump
Purge Start Time	9:56	9:52	10:45	13:00	13:23	13:59	14:18	13:56	14:51
Purge End Time	10:16	10:12	12:12	13:08	13:40	14:08	14:24	14:15	15:07
Purge Rate (gpm)	0.9	0.8	0.9	0.9	0.8	0.4	0.6	1.1	1.4
Volume Purged (gal.)	18	17	85	7	14	4	4	22	22
pH after Purge	6.65	7.02	8.14	6.74	6.70	6.93	6.84	7.83	7.44
Temp. after Purge (°C)	8.8	10.2	10.5	8.4	7.3	8.8	9.1	11.3	10.8
Diss. Oxygen after Purge (ppm)	0.6	0.2	2.8	0.0	2.9	0.0	0.2	1.9	0.2
Cond. after Purge (umhos/cm)	385	354	252	322	263	413	409	315	729
pH at Sample	6.72	7.08	8.25	6.76	6.69	7.02	7.06	7.82	7.44
Temp. at Sample (°C)	9.1	9.8	9.7	8.7	7.1	9.1	9.1	11.1	11.2
Diss. Oxygen at Sample (ppm)	1.0	0.5	2.8	0.0	3.2	0.2	0.5	2.2	0.7
Cond. at Sample (umhos/cm)	343	358	244	314	260	410	424	310	756
Sampling Method	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer
Time of Sampling	10:25	10:20	12:40	13:15	13:45	14:38	14:48	14:30	15:15

Appendix D
MW-22R & MW-25R Groundwater Concentration Trend Analysis

MW-22R
BTEX and DEHP Concentration(s) Trend Analysis

	ANALYTE				
Sampling Date(s)	Benzene (ug/L)	Ethylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	DEHP (ug/L)
21-Feb-95	ND	57	ND	260	6500
13-Jun-95	ND	311	ND	955	380
13-Sep-95	ND	171	ND	693	NS
07-Dec-95	ND	123	ND	494	320
17-Sep-96	ND	359	ND	1320	NS
12-Dec-96	ND	320	ND	1330	ND
14-Aug-97	ND	5,730	ND	32,900	7,500
03-Oct-97	ND	11,400	348	66,000	NS
12-Mar-98	ND	4,070	348	20,600	NS
26-Aug-98	ND	2,260	ND	11,300	5,800
28-Aug-98	ND	1,880	ND	10,300	NS
18-Dec-98	ND	1,650	ND	7,230	1,100
21-Jan-99	ND	18	ND	84	NS
15-Apr-99	ND	1,600	ND	7,600	670
22-Jul-99	ND	1,200	ND	5,200	NS
25-Oct-99	ND	810	ND	3,300	1,200
17-Jan-00	ND	360	ND	1,400	NS
13-Apr-00	ND	820	ND	3,600	92
NJGWQS (ug/l)	1	700	1000	40	30
ROD Discharge Criteria (ug/l)	1	350	500	20	30

NOTES

Concentrations in bold exceed both the ROD discharge criteria and NJDEP GWQS

ND = Not detected above method detection limits

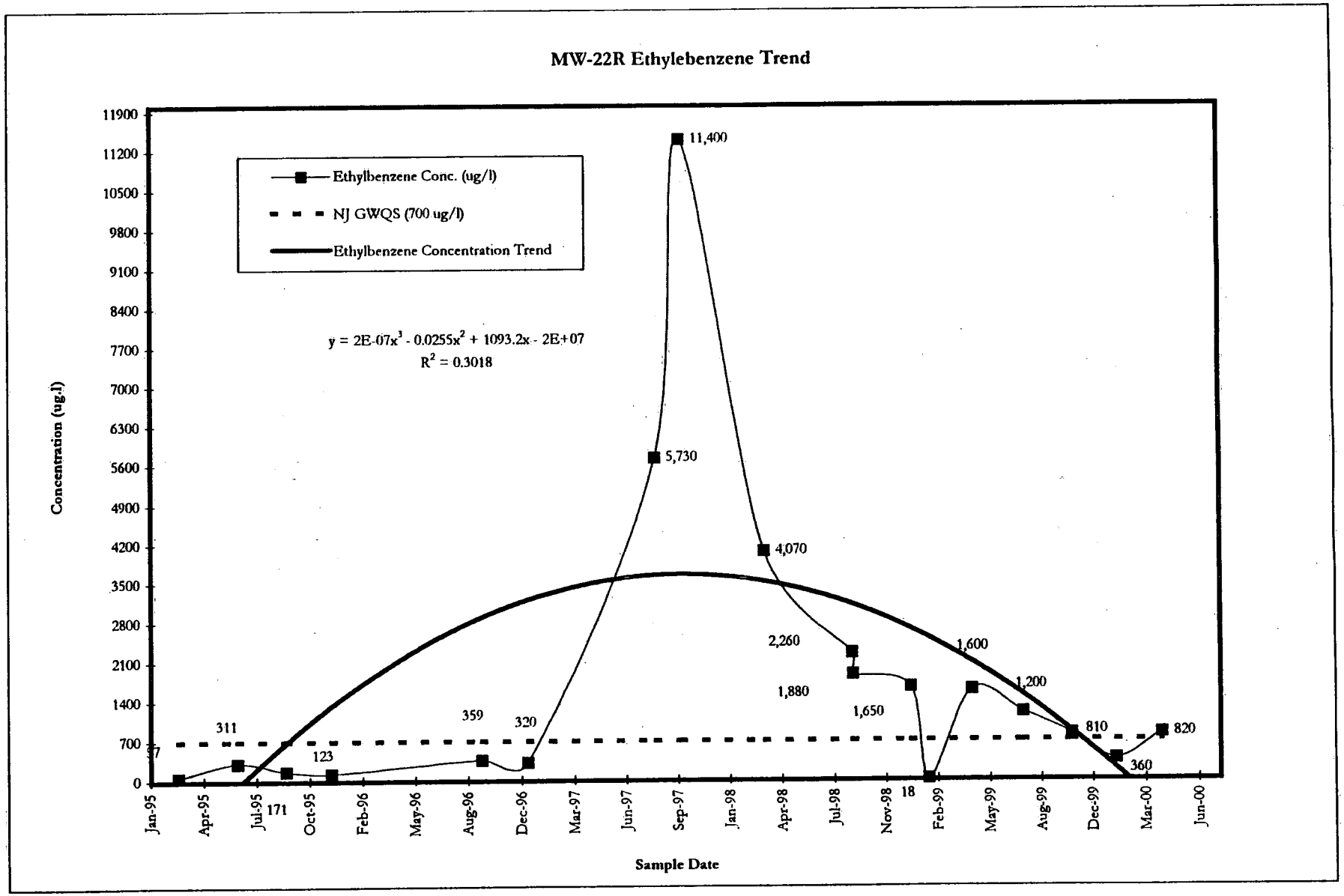
NS = Not Sampled

07/18/2000 10:12 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. Project Manager

MW-22R

CONTAMINANT OF CONCERN

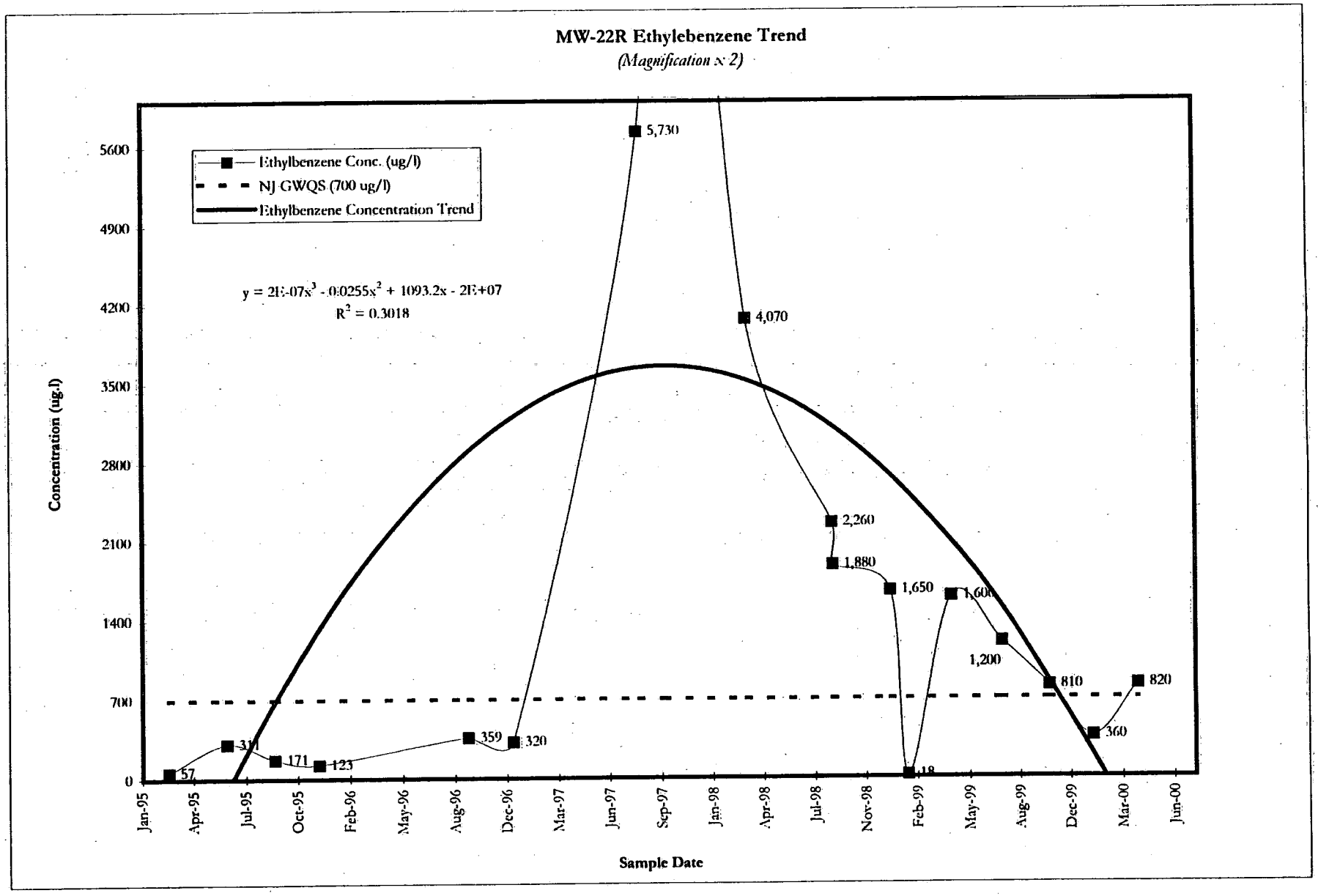
Concentration vs. Time



07/18/200010:12 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

T000386817-005.DOCMW-22(R) Ethylbenz Conc. Chart Chart 3

MW-22R
CONTAMINANT OF CONCERN
Concentration vs. Time



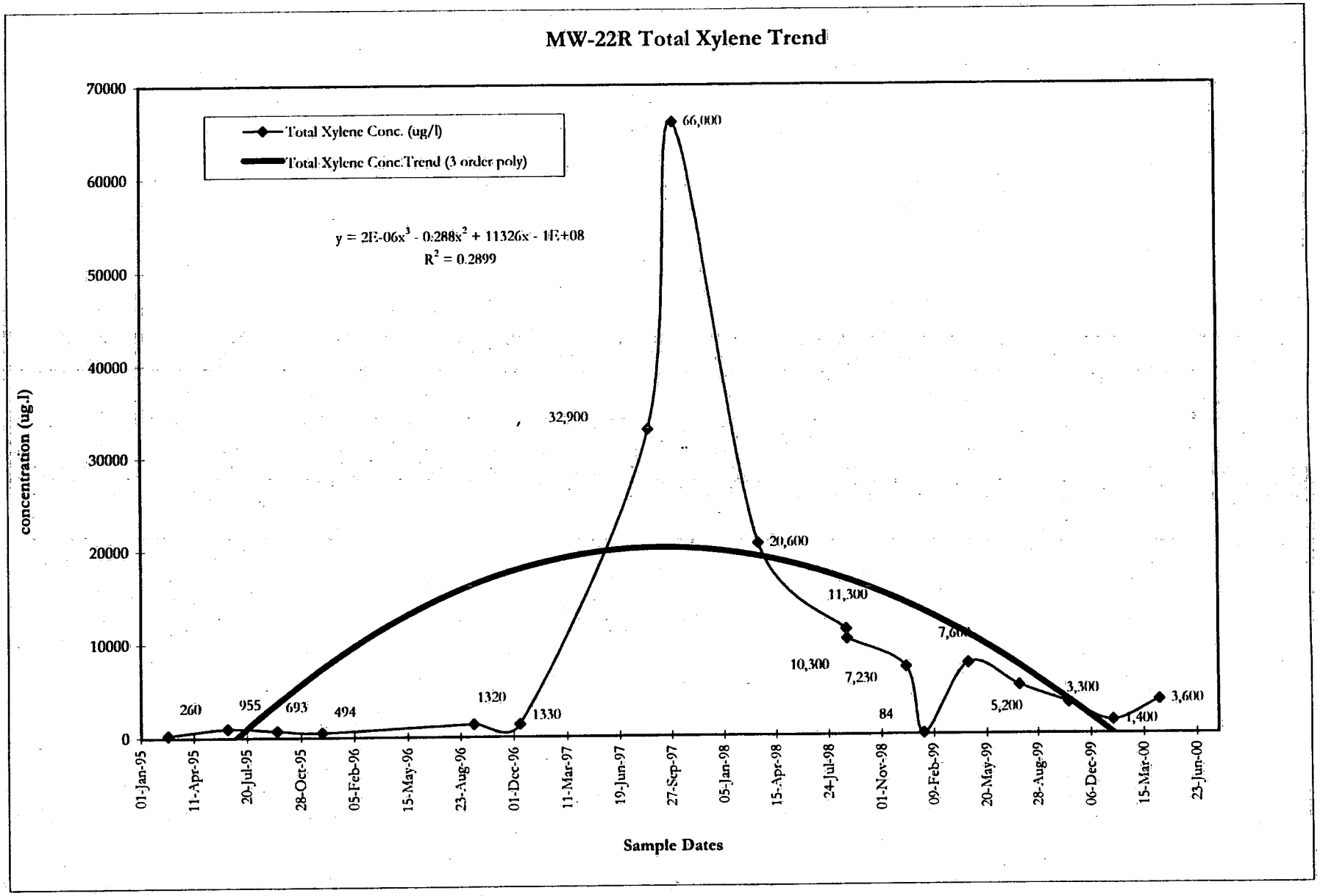
07/18/200010:12 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

MW-22(R) Ethylbenz Conc. Chart Chart 4MW-22(R) Ethylbenz Conc. Chart Chart 4

MW-22R

CONTAMINANTS OF CONCERN

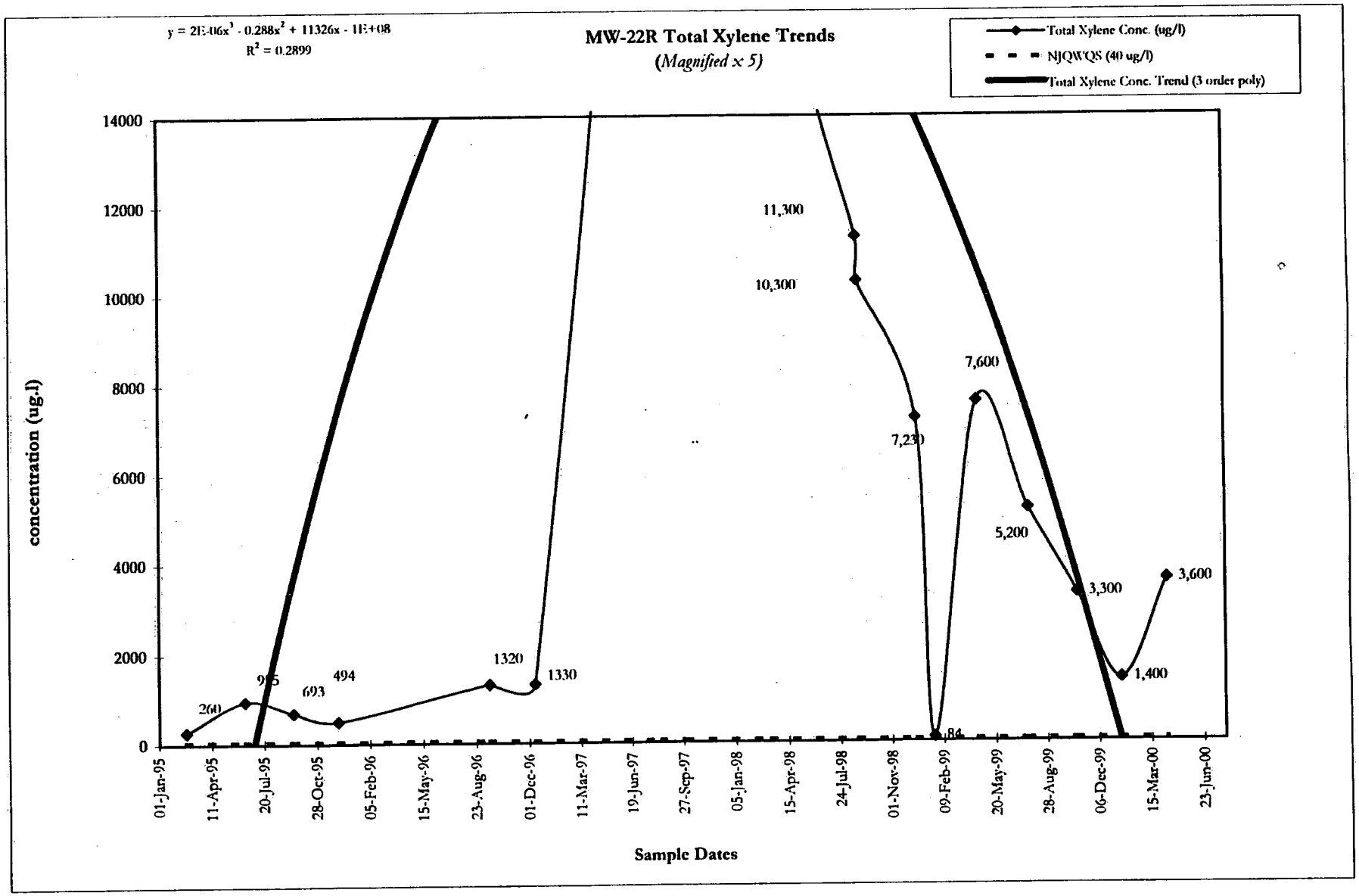
Concentration vs. Time



07/18/2000 10:12 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

T000386817-005.DOCMW-22R Total Xylene Conc. Chart Chart 1025

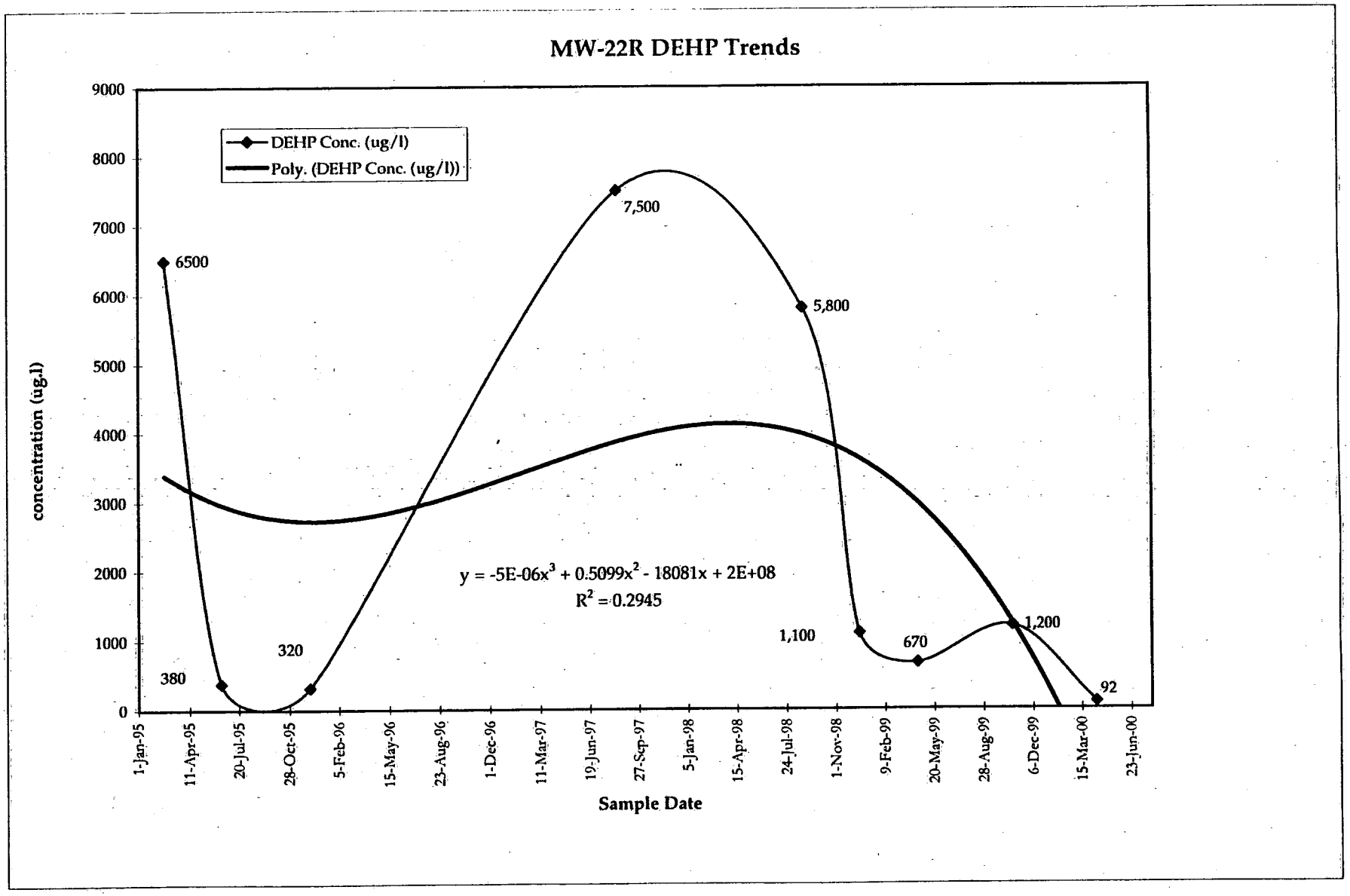
MW-22R
CONTAMINANTS OF CONCERN
Concentration vs. Time



07/18/2000 10:12 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

h:\data\projects\lecarpen\quarters\gwresult\qtrqwsam\MW-22R Total Xylene Conc. Chart Chart 1026\MW-22R Total Xylene Conc. Chart Chart 1026.

MW-22R
Contaminants of Concern
Concentration vs. Time



MW-25R
BTEX and DEHP Concentration(s) Trend Analysis

	ANALYTE				
Sampling Date(s)	Benzene (ug/L)	Ethylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	DEHP (ug/L)
01-Apr-95	ND	ND	ND	ND	1.6
01-Jul-95	ND	ND	ND	ND	NS
07-Dec-95	ND	ND	ND	ND	68
17-Sep-96	ND	0.34	ND	2.2	NS
12-Dec-96	ND	ND	ND	ND	ND
01-Jan-97	ND	ND	ND	ND	NS
01-Apr-97	ND	13.5	ND	89	63
01-Jul-97	ND	4.1	ND	30.7	NS
12-Mar-98	ND	0.33	ND	1.5	NS
01-Apr-98	ND	ND	ND	ND	5.3
28-Aug-98	ND	ND	ND	ND	NS
18-Dec-98	ND	ND	ND	ND	1.9
21-Jan-99	ND	ND	ND	ND	ND
15-Apr-99	ND	ND	ND	14	ND
22-Jul-99	ND	0.39	ND	1.4	9.6
25-Oct-99	ND	ND	ND	ND	ND
17-Jan-00	ND	ND	ND	ND	ND
13-Apr-00	ND	ND	ND	ND	ND
NJGWQS (ug/l)	NA	700	1000	40	30
ROD Discharge Criteria (ug/l)	NA	350	500	20	30

NOTES

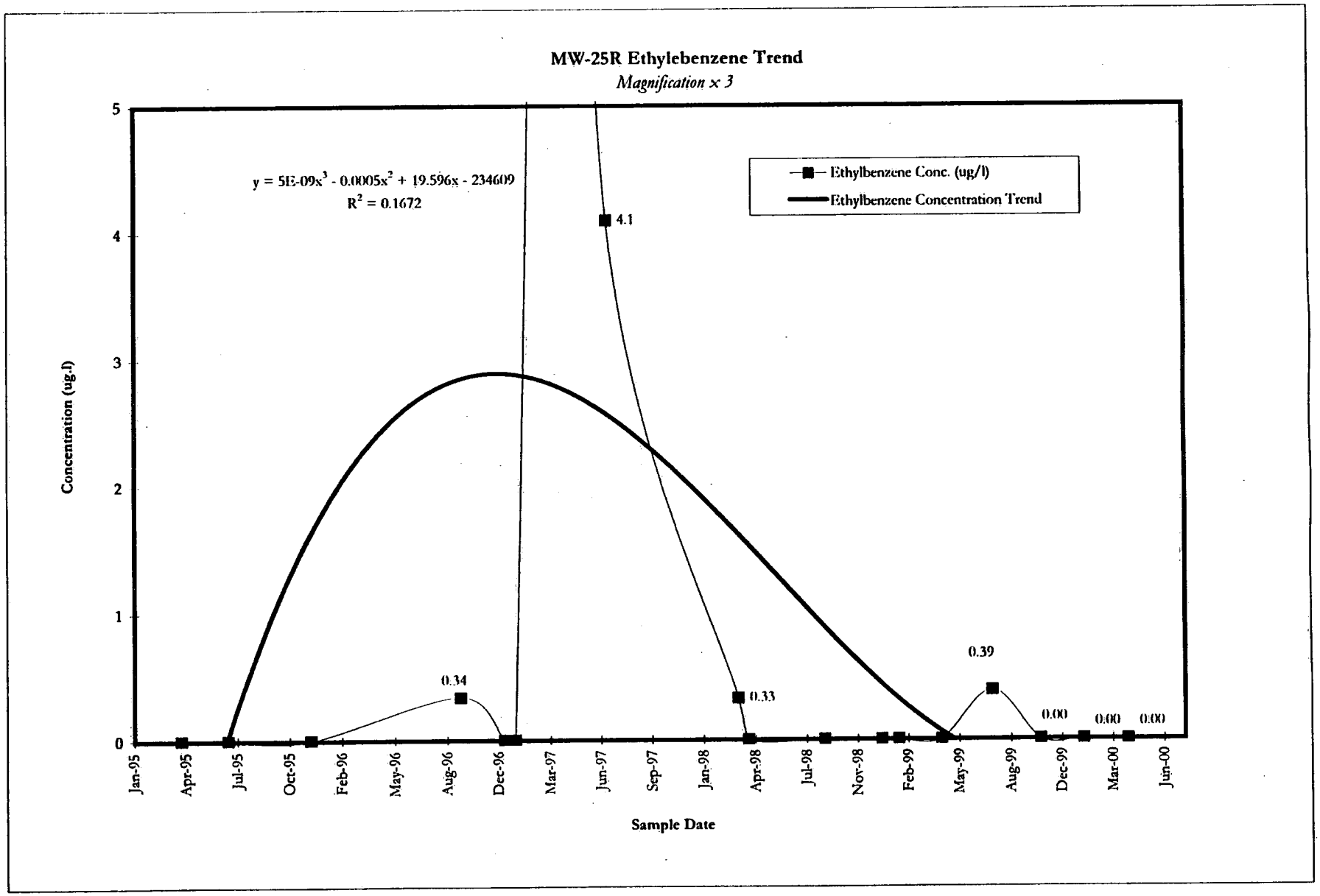
Concentrations in bold exceed both the ROD discharge criteria and NJDEP GWQS

ND = Not detected above method detection limits

NS = Not Sampled

07/18/2000 10:13 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

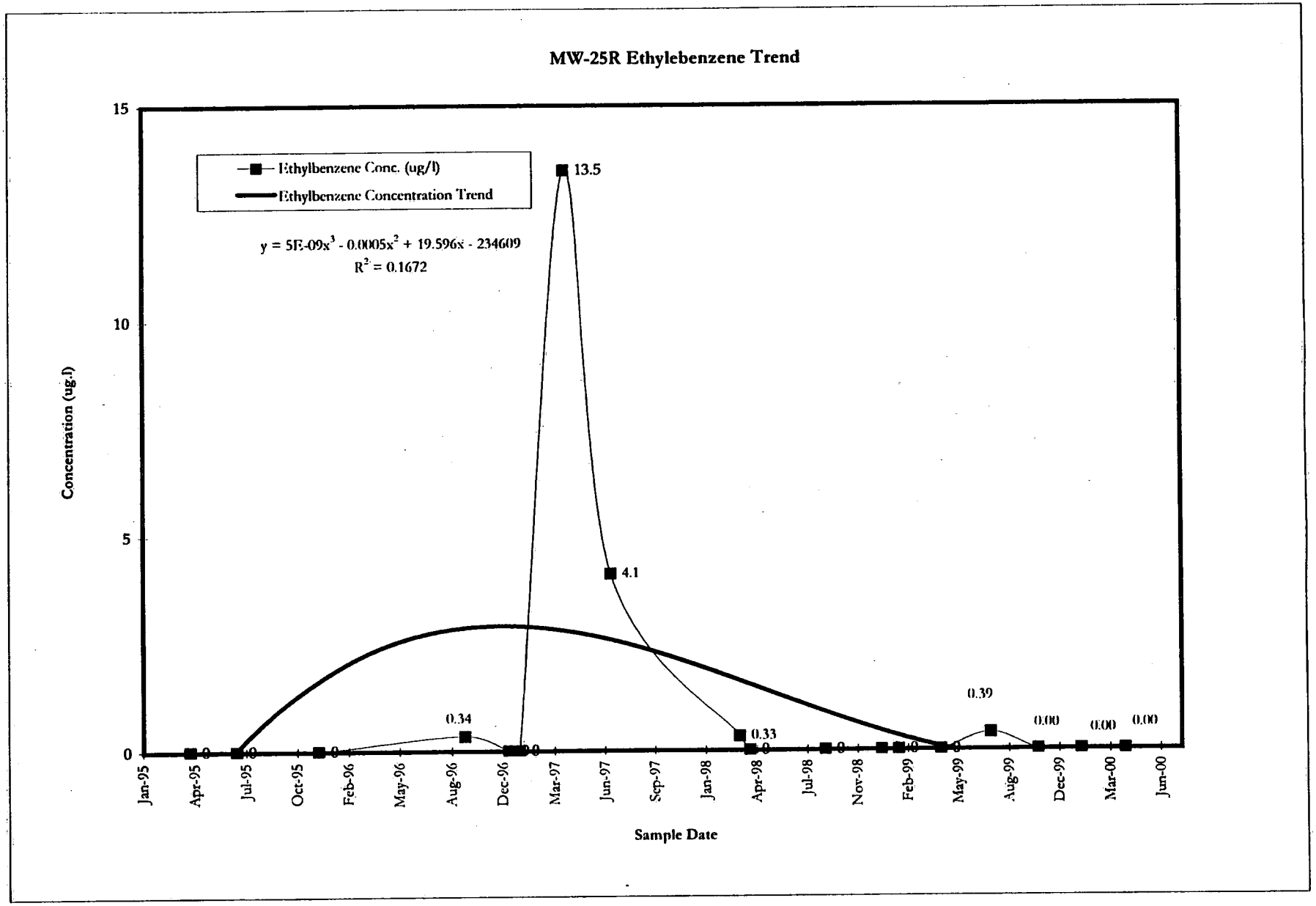
MW-25R
CONTAMINANT OF CONCERN
Concentration vs. Time



07/18/200010:13 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

MW-25R Ethylbenzene Conc. Chart Chart 3MW-25R Ethylbenzene Conc. Chart Chart 3

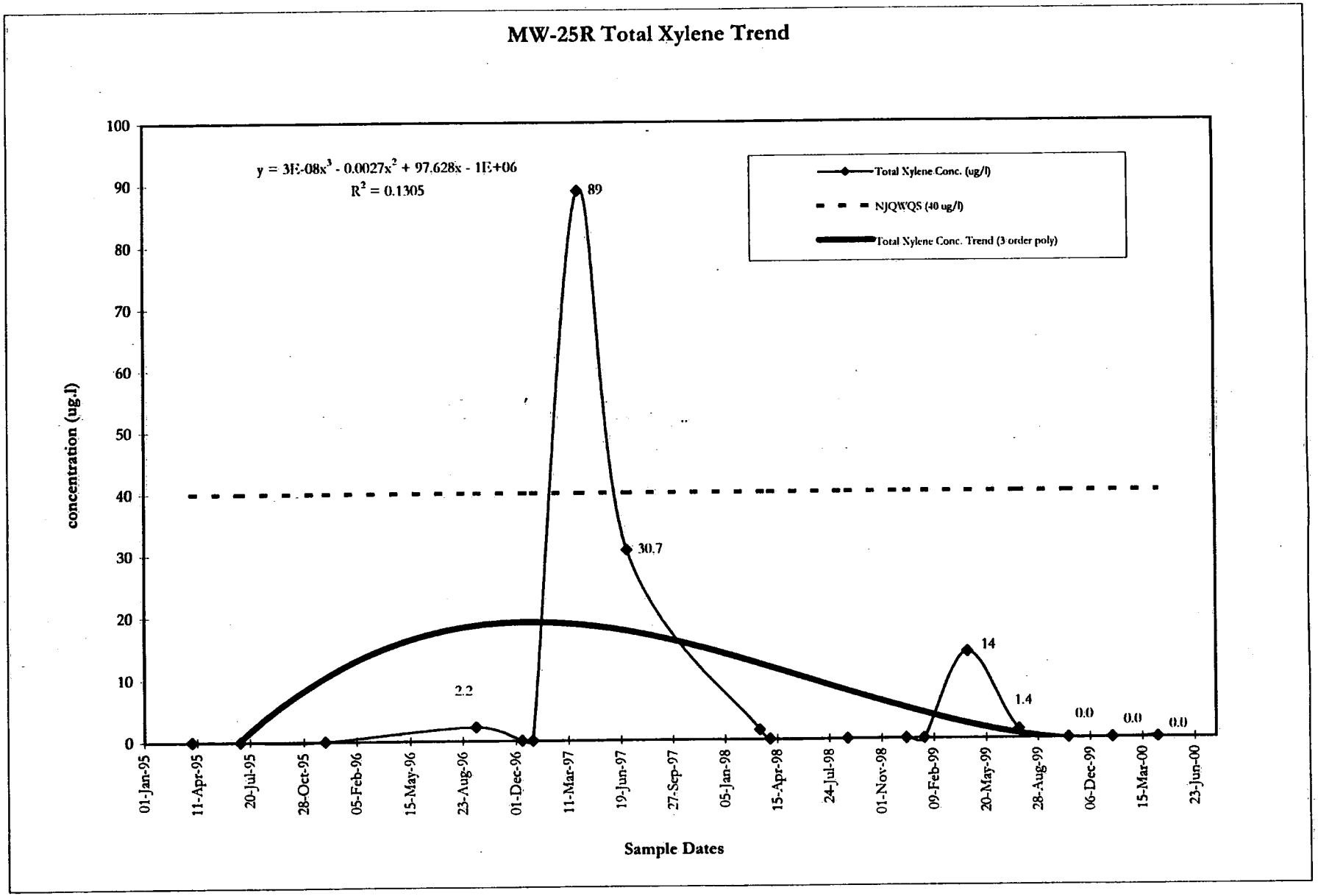
MW-25R
CONTAMINANT OF CONCERN
Concentration vs. Time



07/18/200010:14 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

MW-25R Ethylbenzene Conc. Chart Chart4MW-25R Ethylbenzene Conc. Chart Chart 4

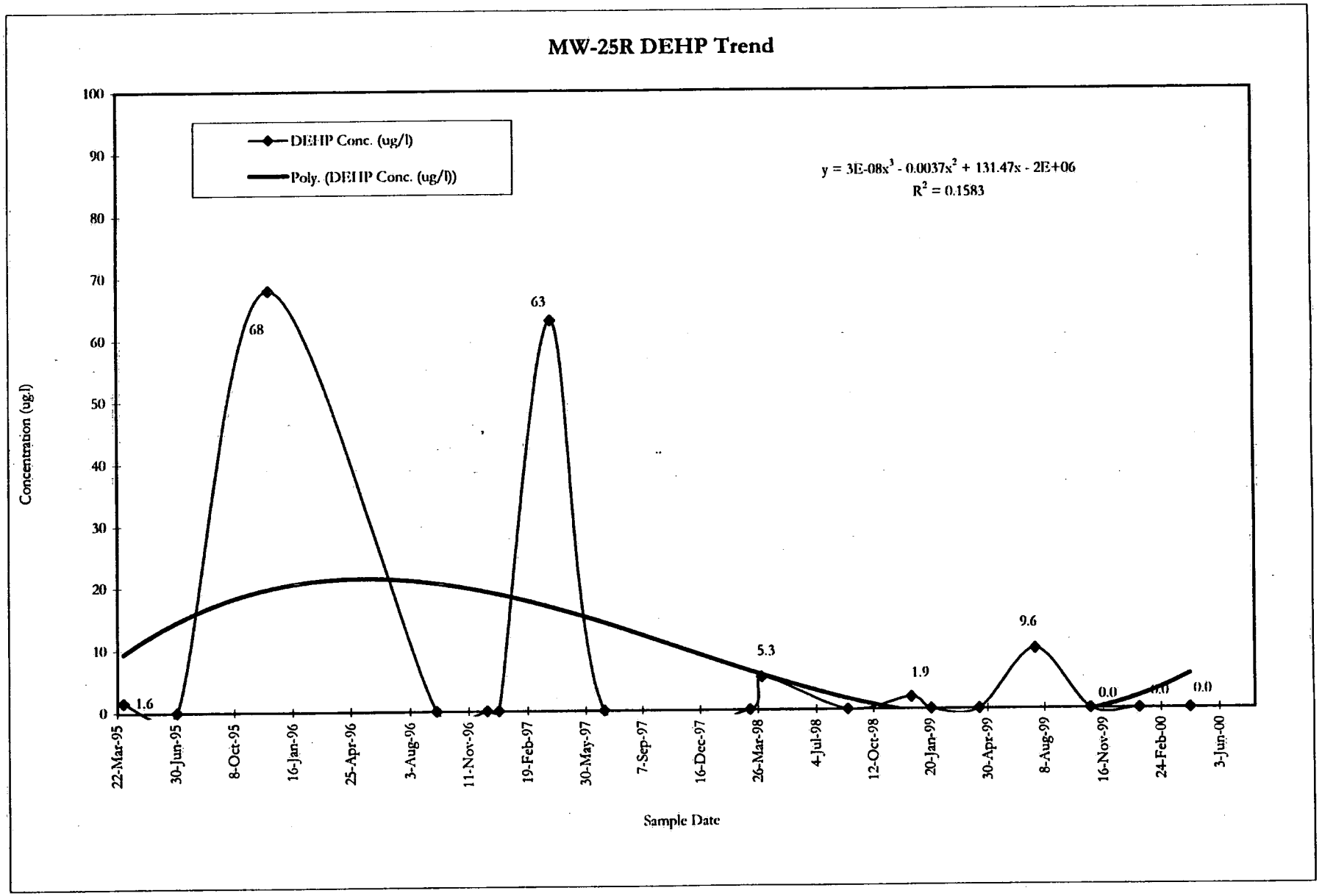
MW-25R
CONTAMINANTS OF CONCERN
Concentration vs. Time



07/18/2000 10:14 AM
Prepared By; Nicholas J. Clevett
RMT, Inc. - Project Manager

h:\data\projects\lecarpen\quarters\gwresult\qtrqwsam\MW-25R Total Xylene Conc. Chart Chart 2\MW-25R Total Xylene Conc. Chart Chart 2

MW-25R
CONTAMINANT OF CONCERN
Concentration vs. Time



07/18/2000 10:14 AM
Prepared By: Nicholas J. Clevett
RMT, Inc. - Project Manager

h:\data\projects\lecarpen\quarters\gwresult\qtrqwsam\MW-25R DEHP Conc. Chart Chart 1\MW-25R DEHP Conc. Chart Chart 1

Appendix E
Analytical Results
STL Envirotech Laboratory Report

STL Envirotech
a division of Severn Trent Laboratories, Inc.

STL Envirotech
777 New Durham Road
Edison, NJ 08817
Tel: (732) 549-3900
Fax: (732) 549-3679
www.stl-inc.com

May 11, 2000

Residuals Management Technologies, Inc.
222 South Riverside Plaza
Suite 280
Chicago, IL 60606

Attention: Mr. Nick Clevett

Re: Job No. Z281 - L.E. Carpenter

Dear Mr. Clevett:

Enclosed are the results you requested for the following sample(s) received at our laboratory on April 13, 2000:

Lab No.	Client ID	Analysis Required
197715	Trip_Blank	BTEX (GC)
197716	Field_Blank	BTEX (GC), DEHP
197717	MW_11DD	BTEX (GC)
197718	MW_15S	BTEX (GC), DEHP
197719	MW_15I	BTEX (GC), DEHP
197720	MW_11D	BTEX (GC), DEHP
197721	MW_4	BTEX (GC), DEHP
197722	MW_17S	BTEX (GC), DEHP
197723	MW_22R	BTEX (GC), DEHP
197724	MW_25R	BTEX (GC), DEHP
197725	MW_14I	BTEX (GC), DEHP
197726	MW_21	BTEX (GC), DEHP

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, Paul Simms, at (732) 549-3900.

2ND 1/4 2000 NC RMI, Inc.

Very truly yours,

Michael J. Urban
Laboratory Manager

Envirotech
a division of Severn Trent Laboratories, Inc

TABLE OF CONTENTS

	Section	Page
Analytical Results Summary	1	1
General Information	2	
Chain of Custody		23
Laboratory Chronicles		28
Methodology Review		30
Data Reporting Qualifiers		33
Non-Conformance Summary		34
GC/MS Forms and Data (Semivolatiles)	3	
Results Summary and Chromatograms		36
Tuning Results Summary		78
Method Blank Results Summary		101
Calibration Summary		108
Surrogate Compound Recovery Summary		129
Spike Recovery Summary		130
Internal Standard Area Summary		132
GC/PID Forms and Data	4	
Results Summary and Chromatograms		138
Method Blank Results Summary		162
Standards Summary		168
Surrogate Compound Recovery Summary		186
Spike Recovery Summary		187

Envirotech

Client ID: Trip_Blank
Site: L.E. Carpenter

Lab Sample No: 197715
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/17/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3649.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

STL Envirotech

Client ID: Field_Blank
Site: L.E. Carpenter

Lab Sample No: 197716
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1174.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

STL Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Field_Blank**
Site: L.E. Carpenter

Lab Sample No: **197716**
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/17/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3650.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

STL Envirotech
a division of Severn Trent Laboratories, Inc

Client ID: MW_11DD
Site: L.E. Carpenter

Lab Sample No: 197717
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3651.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW_15S
Site: L.E. Carpenter

Lab Sample No: 197718
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1175.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_15S
Site: L.E. Carpenter

Lab Sample No: 197718
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3652.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_15I
Site: L.E. Carpenter

Lab Sample No: 197719
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1176.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

a part of
Severn Trent Services Inc.

Client ID: MW_15I
Site: L.E. Carpenter

Lab Sample No: 197719
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3653.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Client ID: MW_11D
Site: L.E. Carpenter

Lab Sample No: 197720
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1177.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Envirotech

Client ID: MW_11D
Site: L.E. Carpenter

Lab Sample No: 197720
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3654.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_4
Site: L.E. Carpenter

Lab Sample No: 197721
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/09/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1243.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	480	9.9

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc

Client ID: MW_4
Site: L.E. Carpenter

Lab Sample No: 197721
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3655.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	0.31	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_17S
Site: L.E. Carpenter

Lab Sample No: 197722
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1210.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW_17S
Site: L.E. Carpenter

Lab Sample No: 197722
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3656.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_22R
Site: L.E. Carpenter

Lab Sample No: 197723
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/09/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1244.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	92	2.0

a part of
Severn Trent Services Inc.

Client ID: MW_22R
Site: L.E. Carpenter

Lab Sample No: 197723
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3667.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 50.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	12
Toluene	ND	14
Ethylbenzene	820	14
Xylene (Total)	3600	12

a part of
Severn Trent Services Inc.

Envirotech

Client ID: MW_25R
Site: L.E. Carpenter

Lab Sample No: 197724
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1212.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

a part of
Severn Trent Services Inc.

Client ID: MW_25R
Site: L.E. Carpenter

Lab Sample No: 197724
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3668.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc

Client ID: MW_14I
Site: L.E. Carpenter

Lab Sample No: 197725
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1213.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW_14I
Site: L.E. Carpenter

Lab Sample No: 197725
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3669.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc

Client ID: MW_21
Site: L.E. Carpenter

Lab Sample No: 197726
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1214.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.1

a part of
Severn Trent Services Inc.

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW_21
Site: L.E. Carpenter

Lab Sample No: 197726
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3670.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

a part of
Severn Trent Services Inc.

STL - Envirotech
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Nick Clevett
Company: RMT
Address: 222 South Riverside Plaza
City: Chicago State: IL 60606
Phone: (312) 575-0200 Fax:

Samplers Name (Printed): M. Morse / R Toogood
P.O. #

Site/Project Identification: LE Carpenter - Quarterly
State (Location of site): NJ: [X] NY: [ ] Other:
Regulatory Program:

Analysis Turnaround Time
Standard [X]
Rush Charges Authorized For:
2 Week [ ]
1 Week [ ]
Other [ ] _____

LAB USE ONLY
Project No: 801080
Job No: Z281

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of. Cont.	BTEX	DEHP	Sample Numbers
Trip Blank	4/13/00	6:30	water	2	X		197715
Field Blank		12:30		3	X	X	197716
MW 11 DD		–		3	X		197717
MW 15S		10:25		4	X	X	197718
MW 15I		10:50		4	X	X	197719
MW 11D		12:40		4	X	X	197720
MW 4		13:15		4	X	X	197721
MW 17S		13:45		4	X	X	197722
MW 22R		14:38		4	X	X	197723
MW 25R		14:48		4	X	X	197724

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:
Water: 2 1

Water Metals Filtered (Yes/No)? _____

Special Instructions _____

Relinquished by	Company	Date / Time	Received by	Company
1) [signature]	STL	4/13/00 1:16:30	1) [signature]	STL-ENVIROTECH
2)			2)	
3)			3)	
4)			4)	

Connecticut (PH-0200) Rhode Island (132).

STL - Envirotech
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Nick Clevett
Company: RMT
Address: 222 South Riverside Plaza Suite 820
City: Chicago State: IL 60606
Phone: (312) 575-0200 Fax:

Samplers Name (Printed): M. Morse / R. Toogood
P.O. #:

Site/Project Identification: LE Carpenter - Quarterly
State (Location of site): NJ: [X] NY: [ ] Other:
Regulatory Program:

Analysis Turnaround Time
Standard [X]
Rush Charges Authorized For:
2 Week [ ]
1 Week [ ]
Other [ ] ________

LAB USE ONLY
Project No: 801080
Job No: Z281

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	BTEX	DEHP										Sample Numbers
MW 14 I	4/13/00	14:30	water	4	X	X										197725
MW 21	4/13/00	15:15	water	4	X	X										197726

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other ________, 7 = Other ________

Soil:
Water: BTEX 2, DEHP 1

Special Instructions ________

Water Metals Filtered (Yes/No)? ________

Relinquished by	Company	Date / Time	Received by	Company
1) M. Morse	STL	4/13/00 / 16:30	1) [signature]	STL-Envirotech
2)			2)	
3)			3)	
4)			4)	

Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132),

Monitoring Well Data

Client: RMT

Project: LE Carpenter

Date Sampled: 4/13/00

Job No.: Z 281

Name of Analyst: Matt Morse

Names & Signatures of Samplers: Matt Morse

Matt Morse

Rick Toogood

R. Toogood

Water Levels / L.E. Carpenter Site Date: 4/13/00

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-1 (R)	9.24	9.55
MW-2 (R)		6.31
MW-3	6.57	7.42
MW-4		6.33
MW-6 (R)		5.81
MW-8		2.77
MW-9		3.85
MW-11S	7.07	12.99
MW-11IR		7.28
MW-11DR		4.77
MW-12R		7.57
MW-13S		5.05
MW-13(R)		4.89
MW-13I		4.82
MW-14S		3.15
MW-14I		2.56
MW-15S		10.46
MW-15I		10.31
MW-16S		7.69
MW-16I		8.01
MW-17S		8.21
MW-18S		5.32
MW-18I		4.84
MW-19		11.74
MW-19-1		11.66
MW-19-2		11.64
MW-19-3		12.41
MW-19-4		10.38
MW-19-5		11.75
MW-19-6		9.40
MW -19-7		8.75
MW-19-8		9.03
MW-20		9.63
MW-21		3.39

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-22 (R)		2.95
MW-23		new lock
MW-25 (R)		2.09
MW-26		7.33
RW-1	11.03	11.48
RW-2		5.91
RW-3		6.11
CW-1	6.90	all product
CW-3		7.23
GEI-1I	4.52	4.52
GEI-2S		10.63
GEI-2I		10.67
GEI-3I		12.79
WP-A1	9.31	10.57
WP-A2	NA	NA
WP-A3		9.05
WP-A4	10.37	13.06
WP-A5		11.41
WP-A6	10.89	14.79
WP-A7	8.84	9.74
WP-A8	11.41	12.22
WP-A9	12.98	14.00
WP-B1		6.11
WP-B2		6.20
WP-B3		6.45
WP-B4	6.31	all product
WP-B5		5.16
WP-B6		5.84
WP-B7		4.19
WP-B10		7.98
WP-C1		6.87
WP-C2		7.71
WP-C3		5.81
WP-C4		6.98

Well ID	Depth to Product (ft)	Depth to Water (ft)
SG-D1		1.58
SG-D2		1.12
SG-D3		1.56
SG-R1		1.78
SG-R2		1.46
SG-R3		1.02
EFR-1	*	*
EFR-2	*	*
EFR-3	*	*
EFR-4	*	*
EFR-5	*	*
EFR-6	*	*
EFR-7	*	*
EFR-8	*	*
EFR-9	*	*
EFR-10	*	*
EFR-11	*	*
EFR-12	*	*
EFR-13	*	*
EFR-14	*	*
EFR-15	*	*
EFR-16	*	*
EFR-17	*	*
EFR-18	*	*
EFR-19	*	*
EFR-20	*	*
EFR-21	*	*
EFR-22	*	*
EFR-23	*	*
EFR-24	*	*
EFR-25	*	*
EFR-26	*	*
EFR-27	*	*
EFR-28	*	*

* Measurements Collected by RMT on later date

Monitoring Well Data

Client: RMT Project: LE Carpenter

Job No: Z 281 Date Sampled: 4/13/00 Analyst: M. Morse

Well ID	MW 15S	MW 15I	MW 11D	MW 4	MW 17S	MW 22R	MW 25R	MW 14I	MW 21
Depth to Water From TOC feet (before purging)	10.46	10.31	4.77	6.33	8.21	2.95	2.09	2.56	3.39
Depth to Water From TOC feet (after purging)	10.51	10.41	4.91	6.95	8.32	4.33	4.43	2.67	3.44
Depth to Water From TOC feet (before sampling)	10.47	10.31	4.81	6.39	8.23	2.96	2.31	2.56	3.39
Depth to Bottom From TOC feet	19.48	40.14	161.25	18.31	15.00	8.81	9.11	43.32	14.68
PID Reading from Well Casing (ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
pH before Purge	6.60	7.38	9.12	6.70	6.65	7.00	7.21	7.93	7.37
Temp. before Purge (°C)	8.2	8.8	8.8	8.7	7.8	9.5	9.6	10.5	10.2
Diss. Oxygen before Purge (ppm)	0.5	0.9	2.9	0.0	3.2	0.2	0.0	2.6	0.6
Cond. before Purge (umhos/cm)	174.3	298	318	340	260	411	449	287	566
Water Volume in Well (gal.)	5.7	5.4	28.1	2.2	4.4	1.1	1.3	7.3	7.3
Purge Method	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump	peristaltic pump
Purge Start Time	9:56	9:52	10:45	13:00	13:23	13:59	14:18	13:56	14:51
Purge End Time	10:16	10:12	12:12	13:08	13:40	14:08	14:24	14:15	15:07
Purge Rate (gpm)	0.9	0.8	0.9	0.9	0.8	0.4	0.6	1.1	1.4
Volume Purged (gal.)	18	17	85	7	14	4	4	22	22
pH after Purge	6.65	7.02	8.14	6.74	6.70	6.93	6.84	7.83	7.44
Temp. after Purge (°C)	8.8	10.2	10.5	8.4	7.3	8.8	9.1	11.3	10.8
Diss. Oxygen after Purge (ppm)	0.6	0.2	2.8	0.0	2.9	0.0	0.2	1.9	0.2
Cond. after Purge (umhos/cm)	385	354	252	322	263	413	409	315	729
pH at Sample	6.72	7.08	8.25	6.76	6.69	7.02	7.06	7.82	7.44
Temp. at Sample (°C)	9.1	9.8	9.7	8.7	7.1	9.1	9.1	11.1	11.2
Diss. Oxygen at Sample (ppm)	1.0	0.5	2.8	0.0	3.2	0.2	0.5	2.2	0.7
Cond. at Sample (umhos/cm)	343	358	244	314	260	410	424	310	756
Sampling Method	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer	teflon bailer
Time of Sampling	10:25	10:20	12:40	13:15	13:45	14:38	14:48	14:30	15:15

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Envirotech

777 New Durham Road, Edison, New Jersey 08817

Job No: Z281 **Site:** LE Carpenter-Qrtrly

Client: RMT, Inc

~~VOAMS~~ VOAGC

WATER - ~~624~~ 602

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
197715	4/13/2000	4/13/2000			4.17.00	SP	7007
197716	4/13/2000	4/13/2000			↓		
197717	4/13/2000	4/13/2000			4/18.00		
197718	4/13/2000	4/13/2000					
197719	4/13/2000	4/13/2000					
197720	4/13/2000	4/13/2000					
197721	4/13/2000	4/13/2000					
197722	4/13/2000	4/13/2000					
197723	4/13/2000	4/13/2000					7009
197724	4/13/2000	4/13/2000					
197725	4/13/2000	4/13/2000					
197726	4/13/2000	4/13/2000					

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Envirotech

777 New Durham Road, Edison, New Jersey
08817

Job No: Z281 **Site:** LE Carpenter-Qrtrly

Client: RMT, Inc

BNAMS

WATER - 625

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
197716	4/13/2000	4/13/2000	4-18-00	OF	5-16-00	EM	5363
197718	4/13/2000	4/13/2000			5-4-00		
197719	4/13/2000	4/13/2000					
197720	4/13/2000	4/13/2000					
197721	4/13/2000	4/13/2000			5-9-00	LD	
197722	4/13/2000	4/13/2000			5-5-00	LD	
197723	4/13/2000	4/13/2000			5-9-00	LD	
197724	4/13/2000	4/13/2000			5-5-00	LD	
197725	4/13/2000	4/13/2000					
197726	4/13/2000	4/13/2000					

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

	Water Test Method		Solid Test Method	
Element	Flame	Furnace	Flame	Furnace
Aluminum	202.1	202.2	7020	--
Antimony	204.1	204.2	7040	7041
Arsenic	--	206.2	--	7060
Barium	208.1	--	7080	--
Beryllium	210.1	210.2	7090	7091
Cadmium	213.1	213.2	7130	7131
Calcium	215.1	--	7140	--
Chromium, Total	218.1	218.2	7190	7191
Chromium, (+6)	218.4	218.5	7197	7195
Cobalt	219.1	219.2	7200	7201
Copper	220.1	220.2	7210	--
Iron	236.1	236.2	7380	--
Lead	239.1	239.2	7420	7421
Magnesium	242.1	--	7450	--
Manganese	243.1	243.2	7460	--
Nickel	249.1	249.2	7520	--
Potassium	258.1	--	7610	--
Selenium	--	270.2	--	7740
Silver	272.1	272.2	7760	--
Sodium	273.1	--	7770	--
Tin	283.1	283.2	7870	--
Thallium	279.1	279.2	7840	7841
Vanadium	286.1	286.2	7910	7911
Zinc	289.1	289.2	7950	--

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability	- Method 1020A
Corrosivity	- Water pH Method 9040B Soil pH Method 9045C
Reactivity	- Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release
Toxicity	- TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NON-CONFORMANCE SUMMARY

STL Envirotech Job Number: 2281

Volatile Organics Analysis:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Base/Neutral and/or Acid Extractable Organics:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

PCBs and/or Organochlorine Pesticides:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Non-conformance Summary, Page 2 of 2
STL Envirotech Job Number: 7281

Metals Analysis:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Total Petroleum Hydrocarbons:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

General Chemistry/Disposal Parameters:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Signature of
Laboratory Manager: _____ Date: 5/26/00

Client ID: **Field_Blank**
Site: L.E. Carpenter

Lab Sample No: **197716**
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1174.d

Matrix: WATER
Level: LOW
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1174.d
Report Date: 18-May-2000 16:47

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/04-28-00/03may00.b/t1174.d
Lab Smp Id: 197716 Client Smp ID: Field_Blank
Inj Date : 04-MAY-2000 00:13 Inst ID: BNAMS3.i
Operator : BNAMS 1
Smp Info : 197716;970;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/04-28-00/03may00.b/BNA625b.m
Meth Date : 03-May-2000 12:06 eddie Quant Type: ISTD
Cal Date : 28-APR-2000 13:47 Cal File: t1073.d
Als bottle: 17
Dil Factor: 1.00000 Compound Sublist: Bis2phb.sub
Integrator: HP RTE
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	970.00000	Volume of sample extracted (mL)

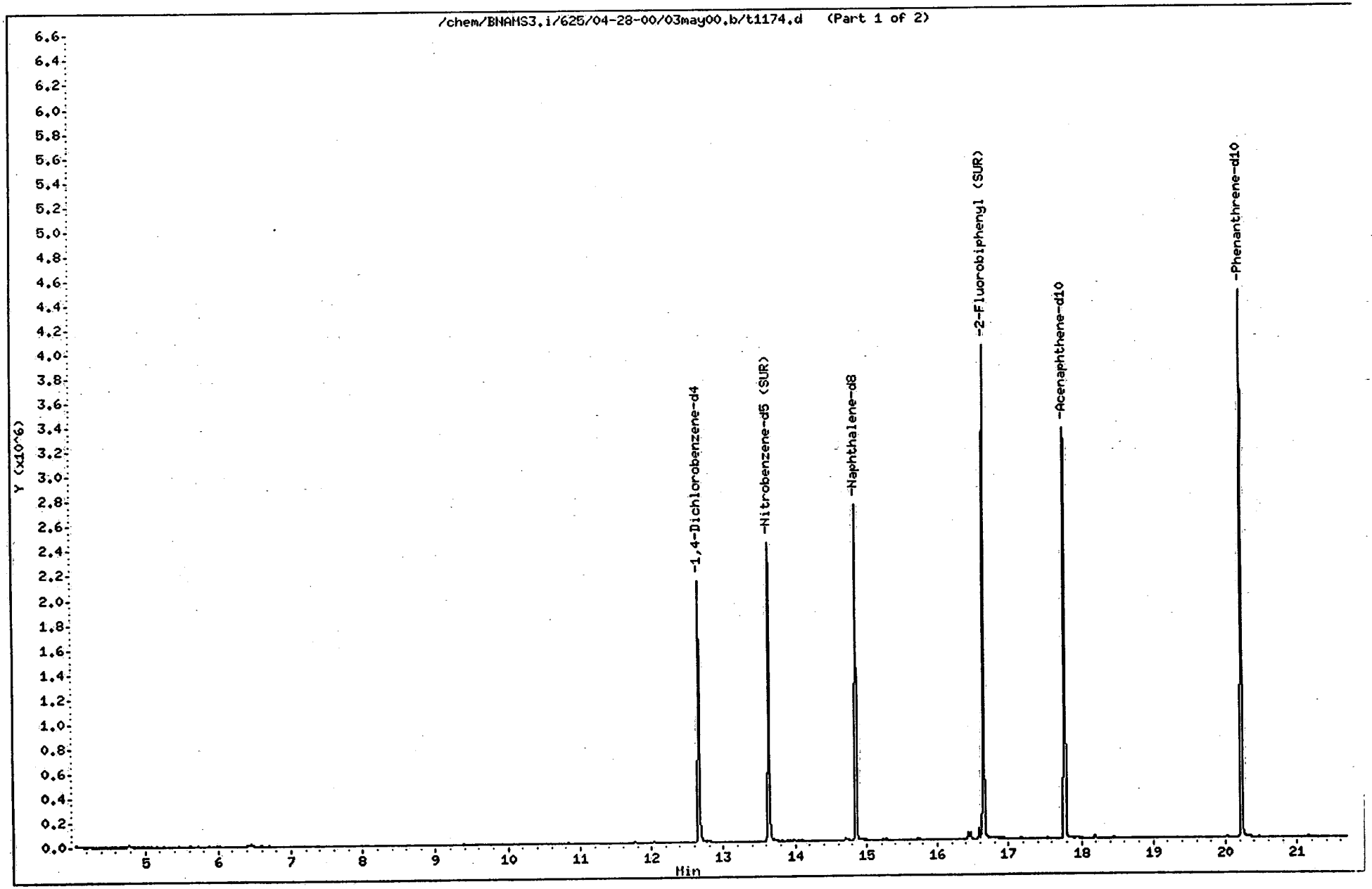
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.662	12.669	(1.000)	275308	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.635	13.647	(0.918)	1037601	40.9289	84
* 80 Naphthalene-d8	136	14.852	14.864	(1.000)	936218	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.648	16.658	(0.937)	1161612	38.2753	79
* 82 Acenaphthene-d10	164	17.773	17.785	(1.000)	809109	40.0000	
* 83 Phenanthrene-d10	188	20.232	20.242	(1.000)	2026880	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.849	22.851	(0.929)	2738695	51.9435	110
* 81 Chrysene-d12	240	24.594	24.612	(1.000)	2196244	40.0000	
* 84 Perylene-d12	264	27.752	27.773	(1.000)	1723340	40.0000	

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1174.d
Date : 04-MAY-2000 00:13
Client ID: Field_Blank
Sample Info: 197716;970;2;1;;
Purge Volume: 970.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

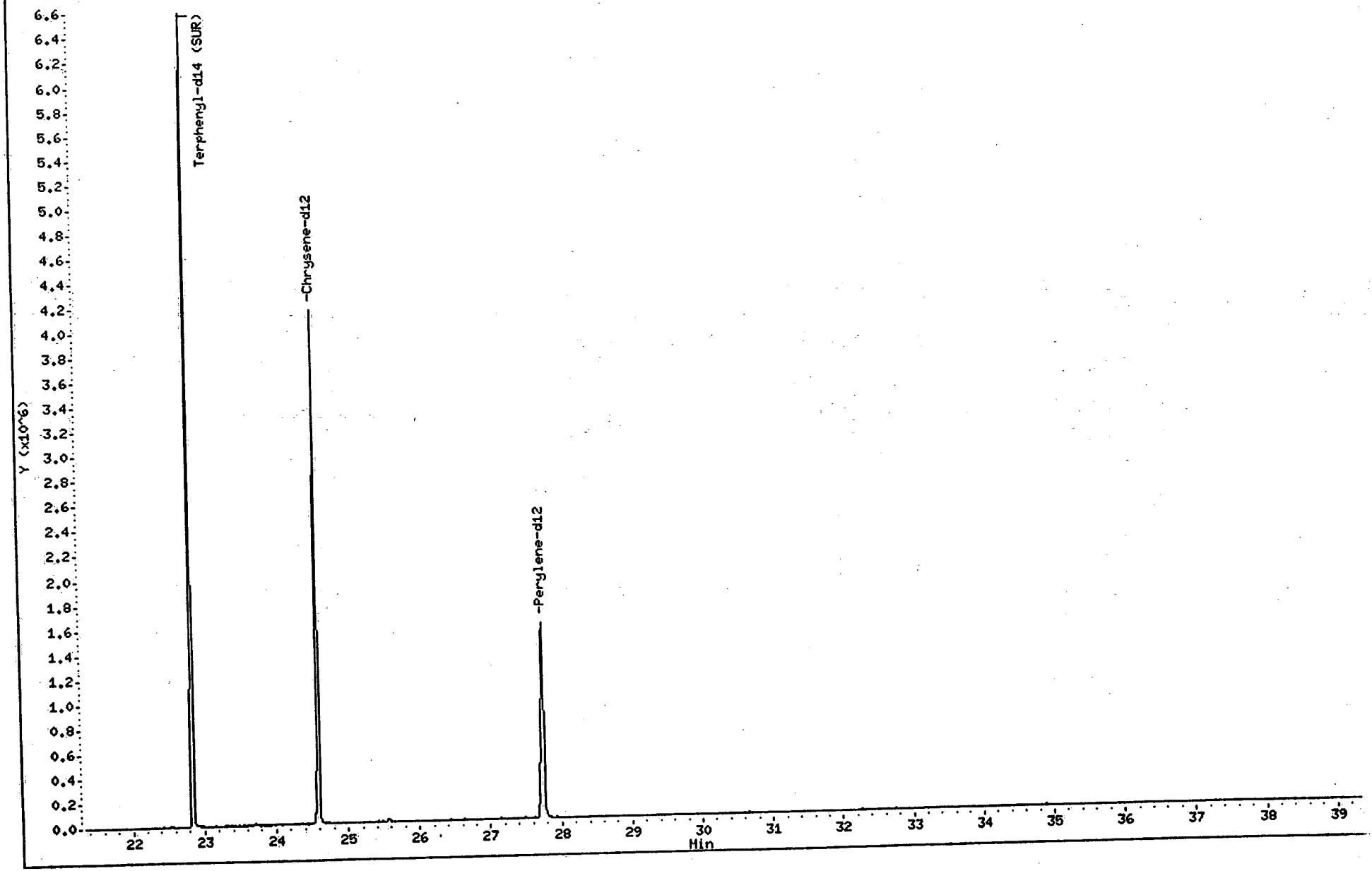


Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1174.d
Date : 04-MAY-2000 00:13
Client ID: Field_Blank
Sample Info: 197716;970;2;1;;
Purge Volume: 970.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

/chem/BNAMS3.i/625/04-28-00/03may00.b/t1174.d (Part 2 of 2)



Client ID: MW_15S
Site: L.E. Carpenter

Lab Sample No: 197718
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1175.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1175.d
Report Date: 18-May-2000 16:47

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/04-28-00/03may00.b/t1175.d
Lab Smp Id: 197718 Client Smp ID: MW_15S
Inj Date : 04-MAY-2000 01:02
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197718;980;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/04-28-00/03may00.b/BNA625b.m
Meth Date : 03-May-2000 12:06 eddie Quant Type: ISTD
Cal Date : 28-APR-2000 13:47 Cal File: t1073.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)

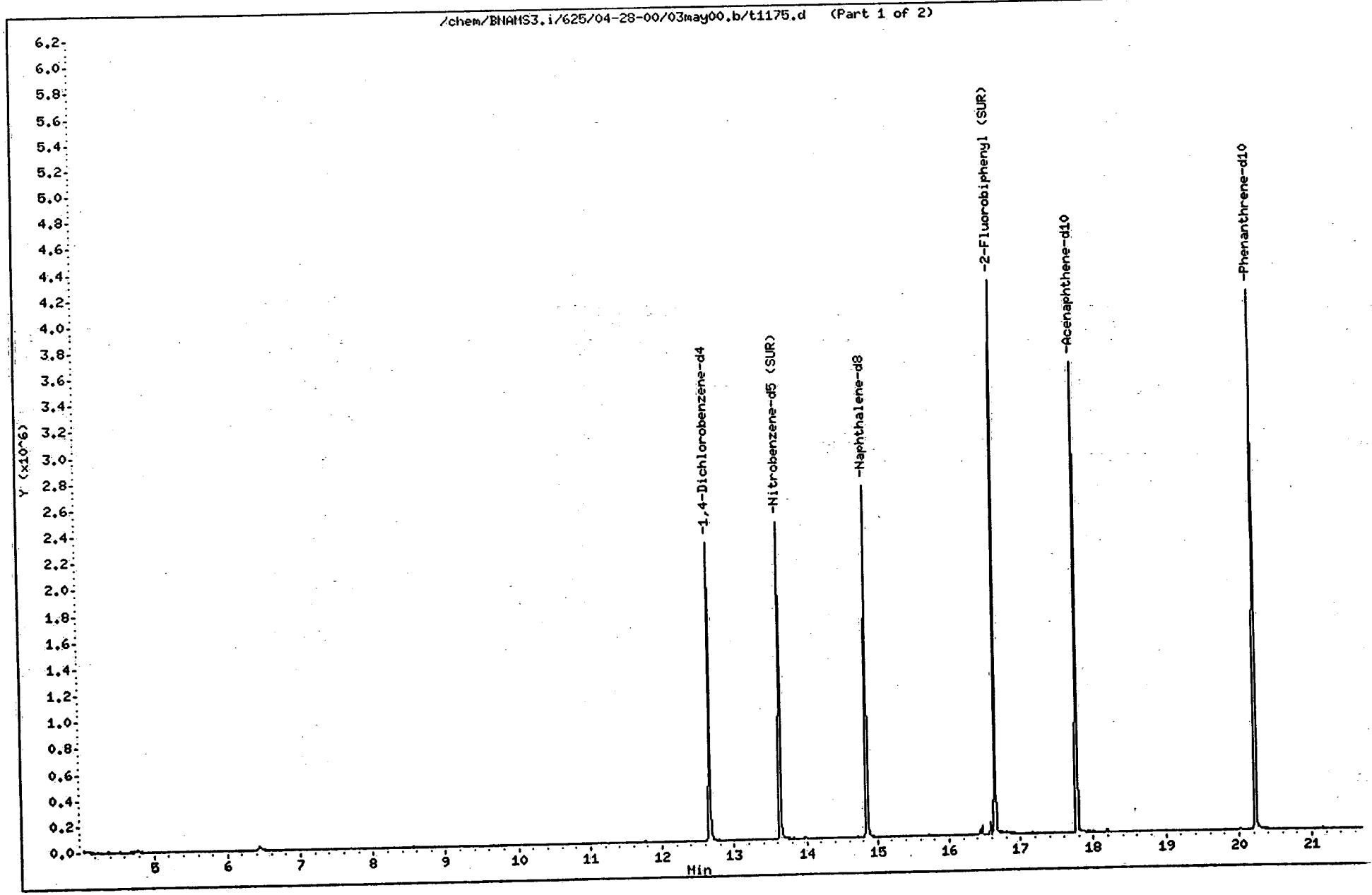
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.659	12.669	(1.000)	273337	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.639	13.647	(0.918)	1037350	40.7849	83
* 80 Naphthalene-d8	136	14.855	14.864	(1.000)	939295	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.650	16.658	(0.937)	1190329	38.6255	79
* 82 Acenaphthene-d10	164	17.775	17.785	(1.000)	821595	40.0000	
* 83 Phenanthrene-d10	188	20.234	20.242	(1.000)	1986799	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.844	22.851	(0.929)	2619690	50.1528	100
* 81 Chrysene-d12	240	24.589	24.612	(1.000)	2175818	40.0000	
* 84 Perylene-d12	264	27.753	27.773	(1.000)	1763459	40.0000	

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1175.d
Date : 04-MAY-2000 01:02
Client ID: MW_15S
Sample Info: 197718;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

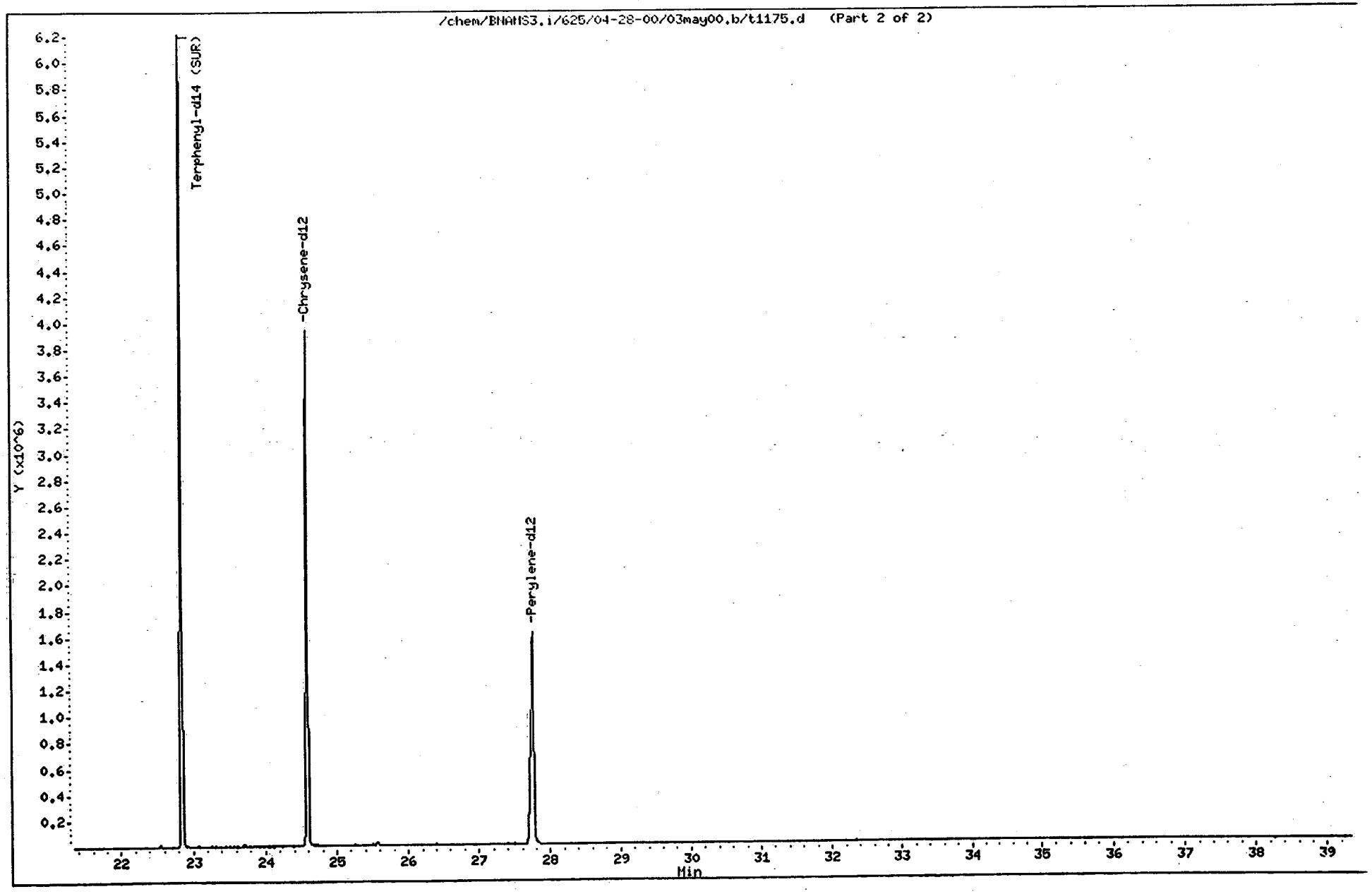
Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1175.d
Date : 04-MAY-2000 01:02
Client ID: MW_15S
Sample Info: 197718;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



Client ID: MW_15I
Site: L.E. Carpenter

Lab Sample No: 197719
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1176.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1176.d
Report Date: 18-May-2000 16:47

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/04-28-00/03may00.b/t1176.d
Lab Smp Id: 197719 Client Smp ID: MW_15I
Inj Date : 04-MAY-2000 01:50
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197719;980;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/04-28-00/03may00.b/BNA625b.m
Meth Date : 03-May-2000 12:06 eddie Quant Type: ISTD
Cal Date : 28-APR-2000 13:47 Cal File: t1073.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

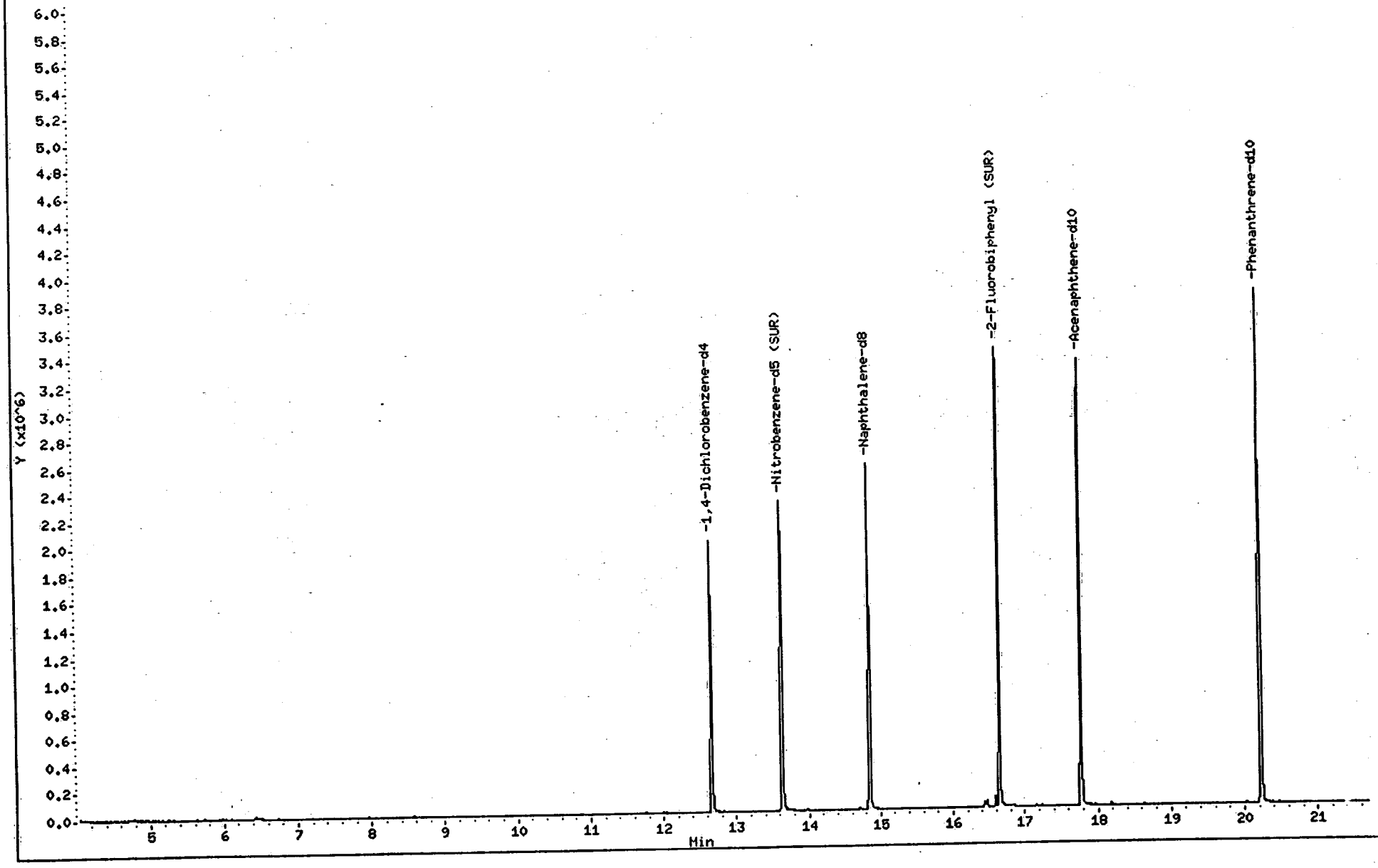
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.661	12.669	(1.000)	247599	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.634	13.647	(0.918)	953323	39.7796	81
* 80 Naphthalene-d8	136	14.851	14.864	(1.000)	885026	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.652	16.658	(0.937)	1034643	36.3356	74
* 82 Acenaphthene-d10	164	17.777	17.785	(1.000)	759143	40.0000	
* 83 Phenanthrene-d10	188	20.229	20.242	(1.000)	1925927	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.845	22.851	(0.929)	2443131	47.6881	97
* 81 Chrysene-d12	240	24.590	24.612	(1.000)	2134051	40.0000	
* 84 Perylene-d12	264	27.752	27.773	(1.000)	1714546	40.0000	

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1176.d
Date : 04-MAY-2000 01:50
Client ID: MW_15I
Sample Info: 197719;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

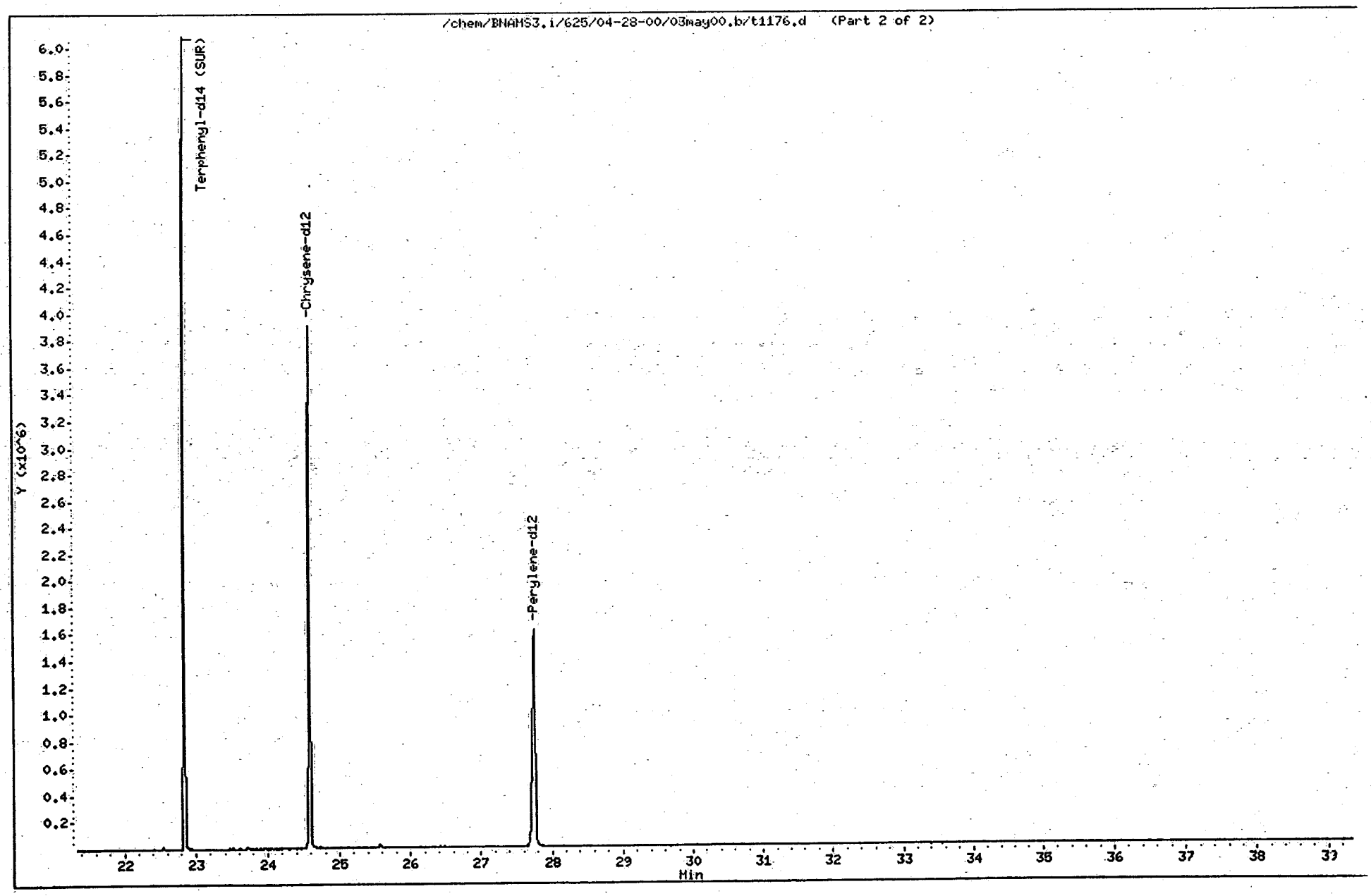
/chem/BNAMS3.i/625/04-28-00/03may00.b/t1176.d (Part 1 of 2)



Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1176.d
Date : 04-MAY-2000 01:50
Client ID: MW_15I
Sample Info: 197719;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



Client ID: **MW_11D**
Site: L.E. Carpenter

Lab Sample No: **197720**
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/04/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1177.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d
Report Date: 18-May-2000 16:47

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d
Lab Smp Id: 197720 Client Smp ID: MW_11D
Inj Date : 04-MAY-2000 02:39
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197720;990;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/04-28-00/03may00.b/BNA625b.m
Meth Date : 03-May-2000 12:06 eddie Quant Type: ISTD
Cal Date : 28-APR-2000 13:47 Cal File: t1073.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	990.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

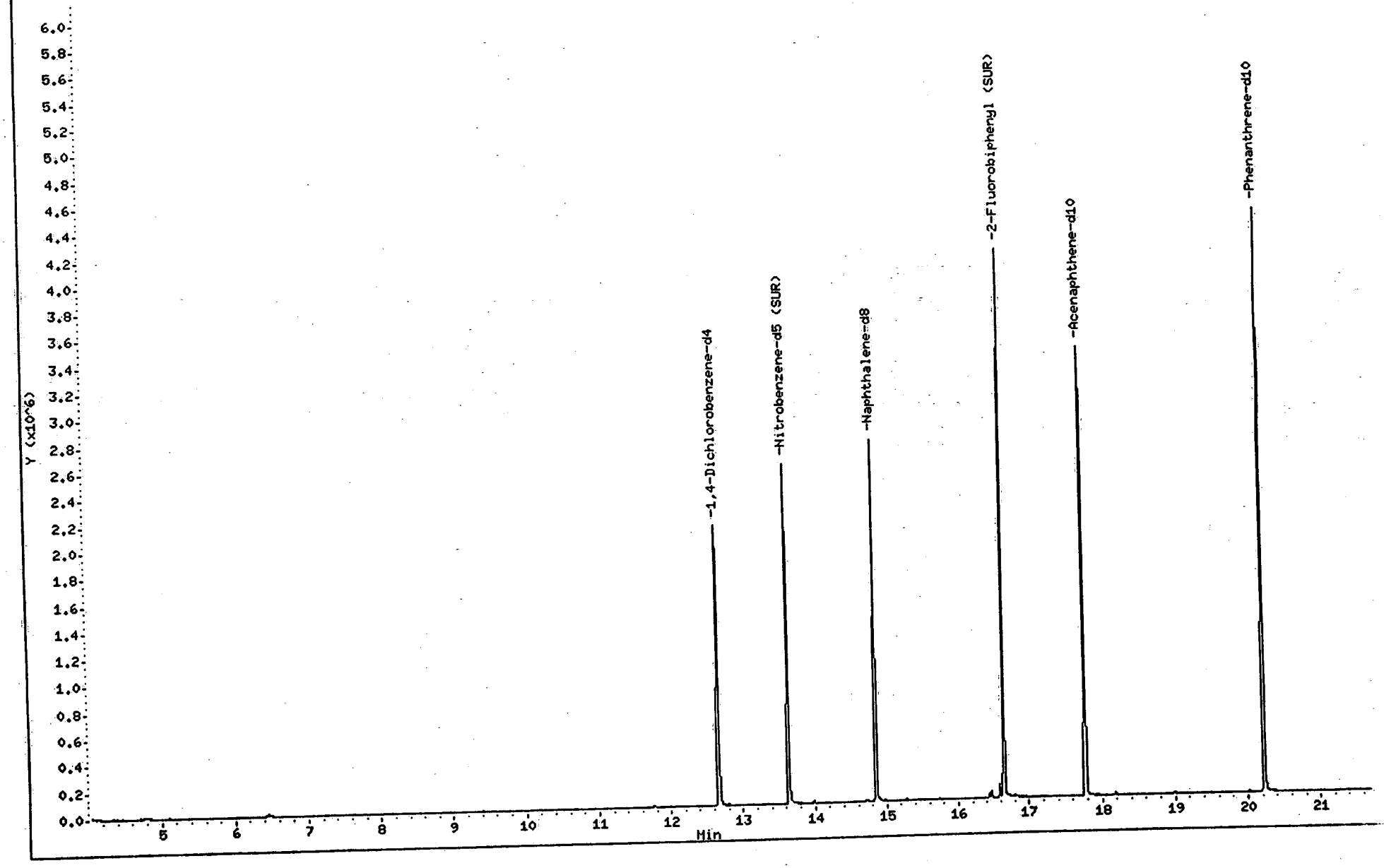
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.658	12.669	(1.000)	264375	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.638	13.647	(0.918)	1035763	43.2294	87
* 80 Naphthalene-d8	136	14.854	14.864	(1.000)	884825	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.649	16.658	(0.937)	1174486	40.0173	81
* 82 Acenaphthene-d10	164	17.774	17.785	(1.000)	782465	40.0000	
* 83 Phenanthrene-d10	188	20.232	20.242	(1.000)	1982130	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.848	22.851	(0.929)	2592226	49.5311	100
* 81 Chrysene-d12	240	24.592	24.612	(1.000)	2180032	40.0000	
* 84 Perylene-d12	264	27.755	27.773	(1.000)	1750456	40.0000	

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d
Date : 04-MAY-2000 02:39
Client ID: MW_11D
Sample Info: 197720;990;2;1;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

/chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d (Part 1 of 2)

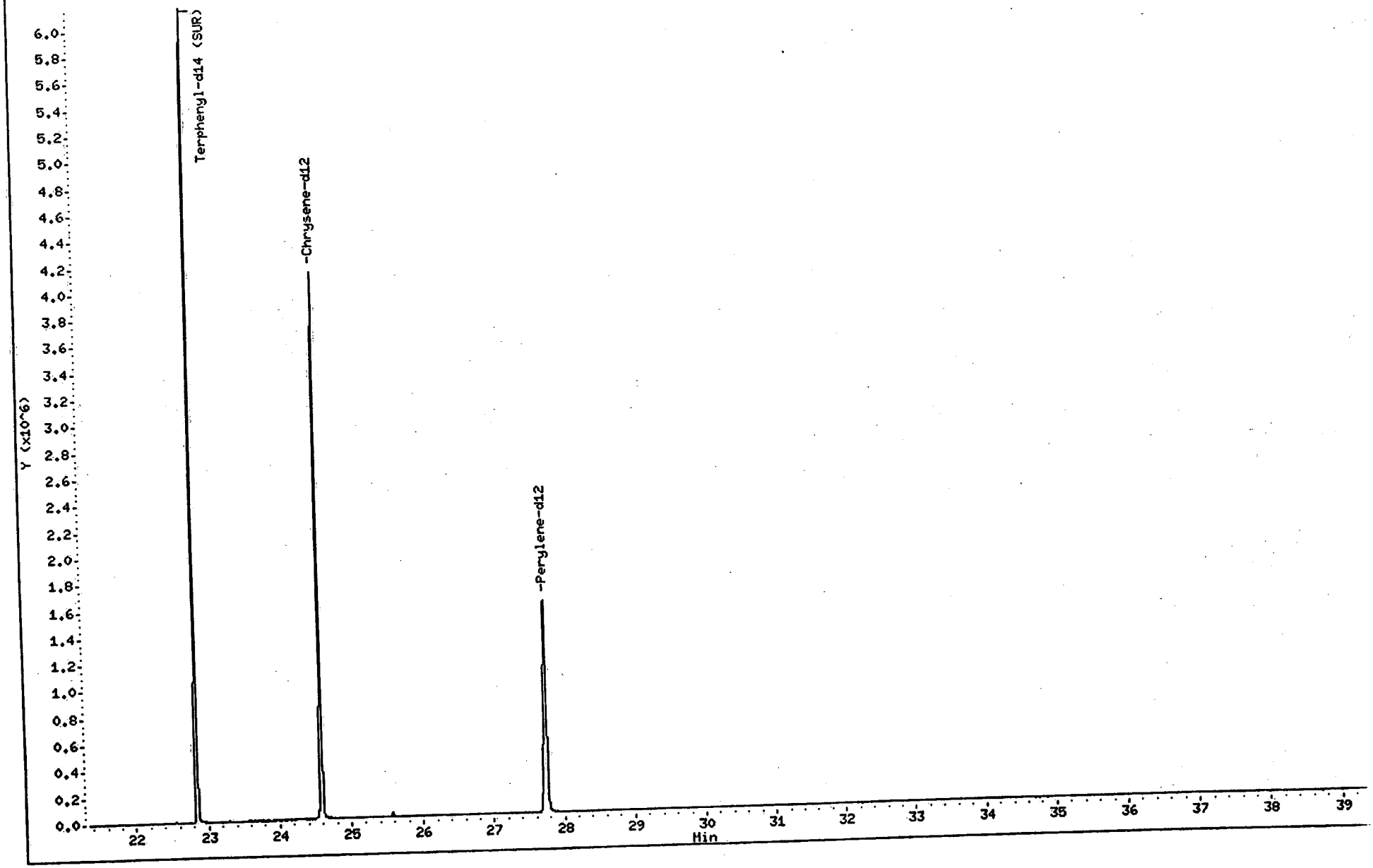


Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d
Date : 04-MAY-2000 02:39
Client ID: MW_11D
Sample Info: 197720;990;2;1;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

/chem/BNAMS3.i/625/04-28-00/03may00.b/t1177.d (Part 2 of 2)



Client ID: MW_4
Site: L.E. Carpenter

Lab Sample No: 197721
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/09/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1243.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	480	9.9

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1243.d
Report Date: 09-May-2000 10:22

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-08-00/08may00.b/t1243.d
Lab Smp Id: 197721 Client Smp ID: MW_4
Inj Date : 09-MAY-2000 02:49
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197721;990;2;5;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-08-00/08may00.b/BNA625b.m
Meth Date : 09-May-2000 10:21 lily Quant Type: ISTD
Cal Date : 08-MAY-2000 18:32 Cal File: t1233.d
Als bottle: 11
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	990.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	13.154	13.155	(1.000)	391761	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	14.102	14.122	(0.919)	226124	9.33024	94
* 80 Naphthalene-d8	136	15.338	15.348	(1.000)	1501025	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	17.128	17.139	(0.937)	282111	9.30352	94
* 82 Acenaphthene-d10	164	18.280	18.282	(1.000)	988403	40.0000	
* 83 Phenanthrene-d10	188	20.747	20.760	(1.000)	2009856	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	23.356	23.370	(0.927)	467623	11.9558	120
63 bis(2-Ethylhexyl)phthalate	149	25.114	25.117	(0.997)	1617318	47.6061	480(H)
* 81 Chrysene-d12	240	25.188	25.212	(1.000)	1629388	40.0000	
* 84 Perylene-d12	264	28.862	28.887	(1.000)	1733495	40.0000	

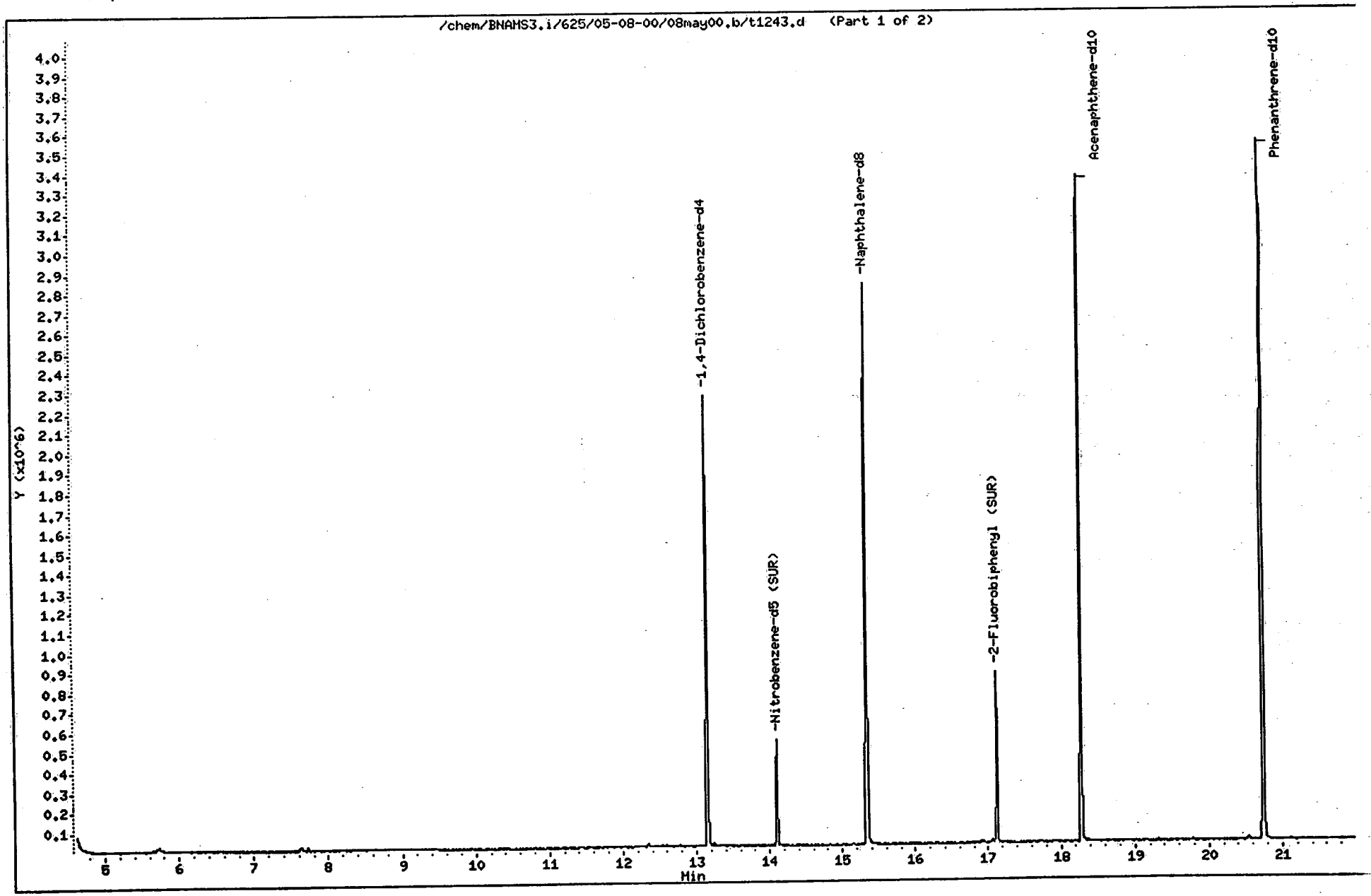
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1243.d
Date : 09-MAY-2000 02:49
Client ID: MW_4
Sample Info: 197721;990;2;5;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

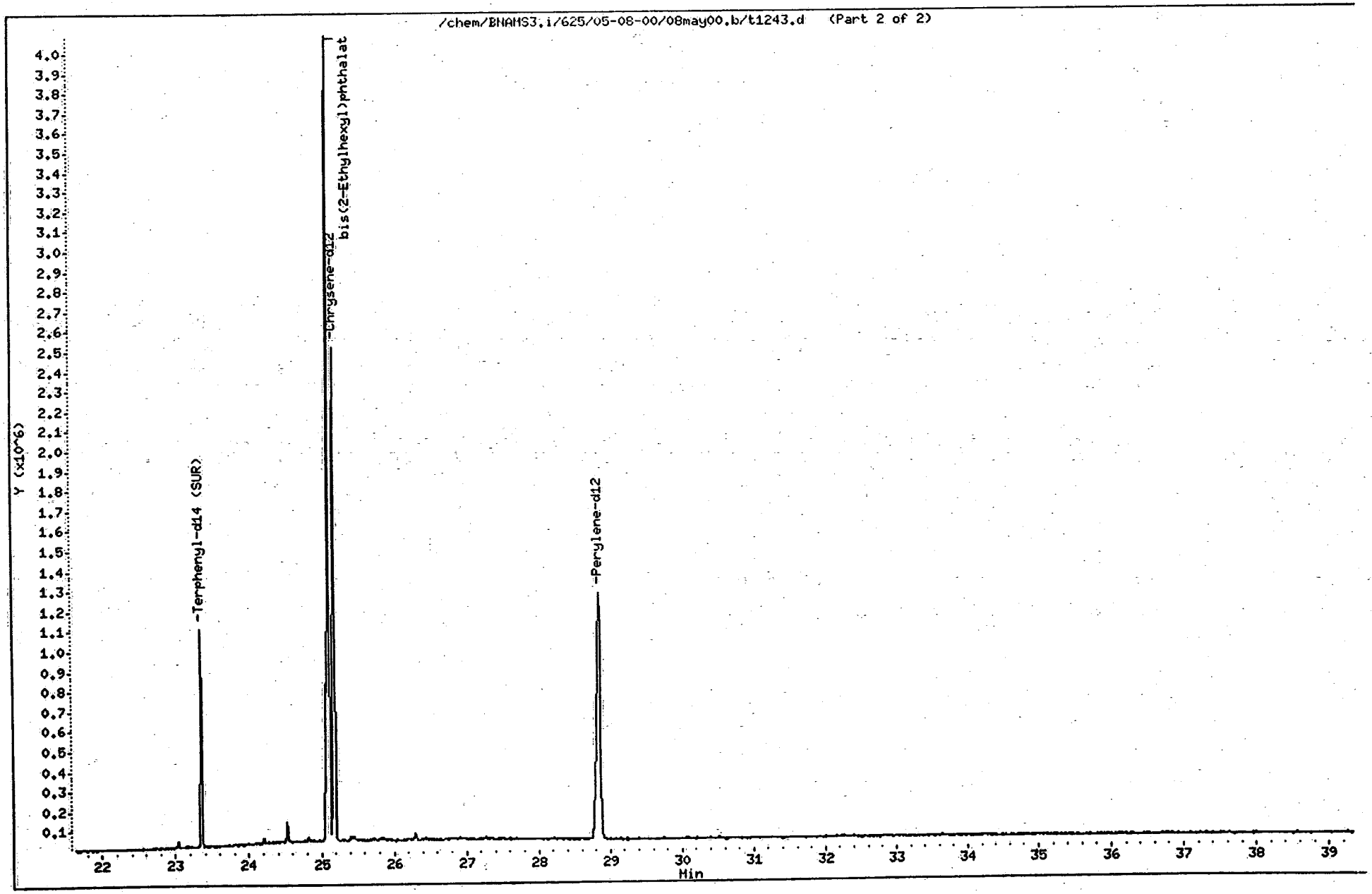
Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1243.d
Date : 09-MAY-2000 02:49
Client ID: MW_4
Sample Info: 197721;990;2;5;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1243.d

Date : 09-MAY-2000 02:49

Client ID: MW_4

Instrument: BNAMS3.i

Sample Info: 197721;990;2;5;;

Purge Volume: 990.0

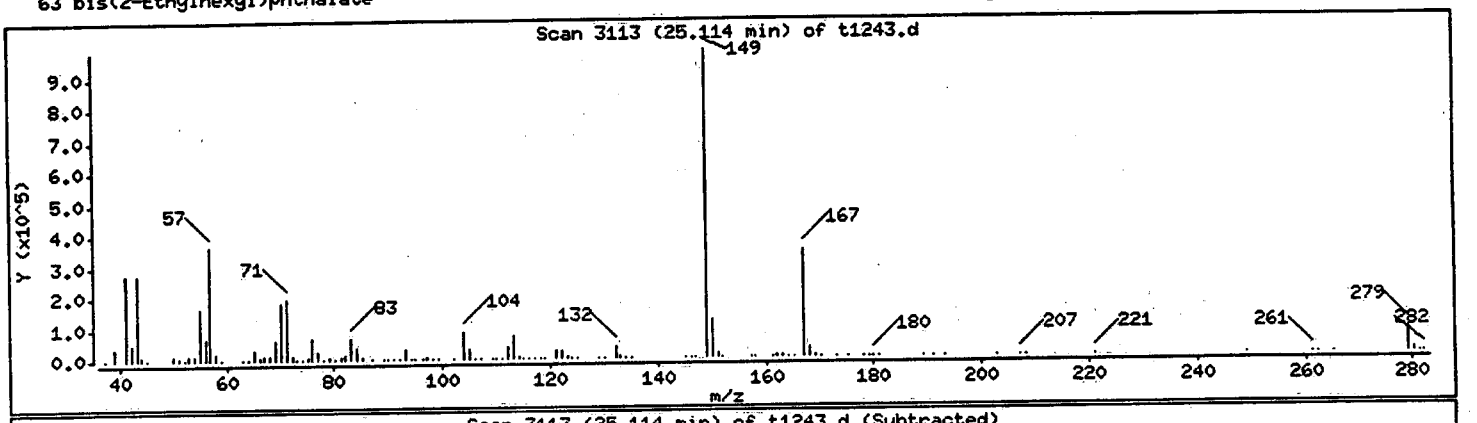
Operator: BNAMS 1

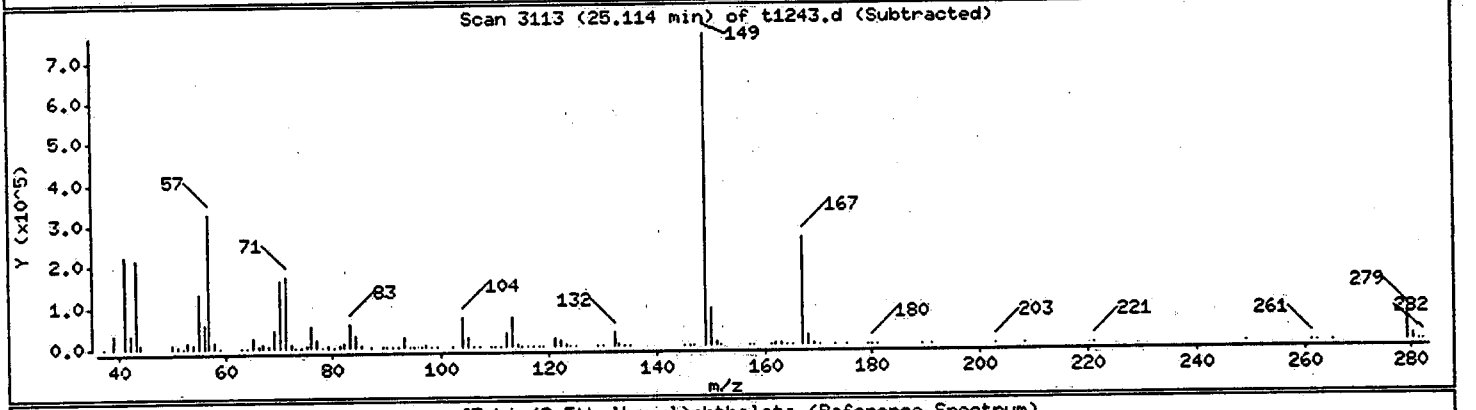
Column phase: DB-5

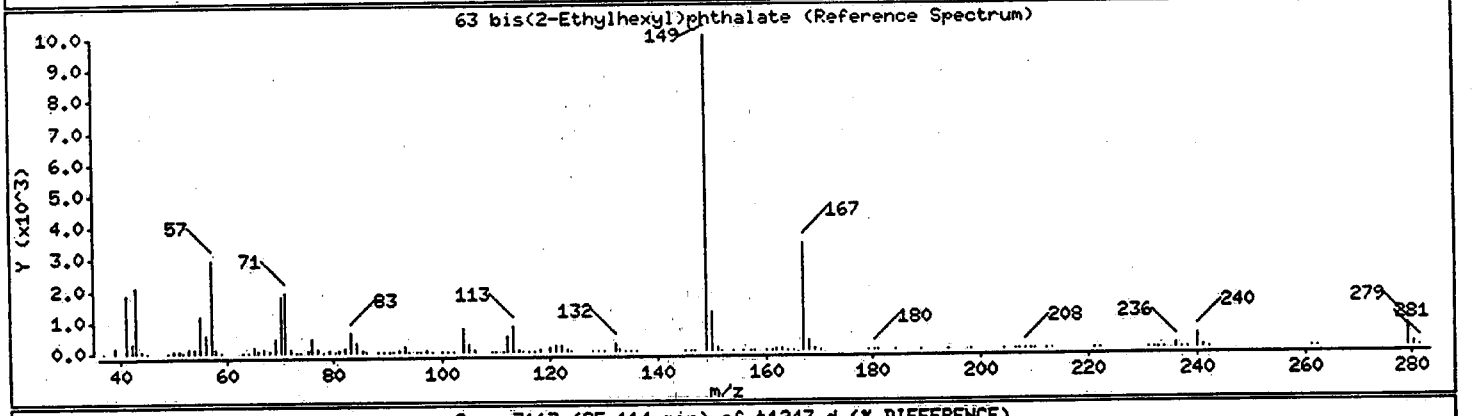
Column diameter: 0.53

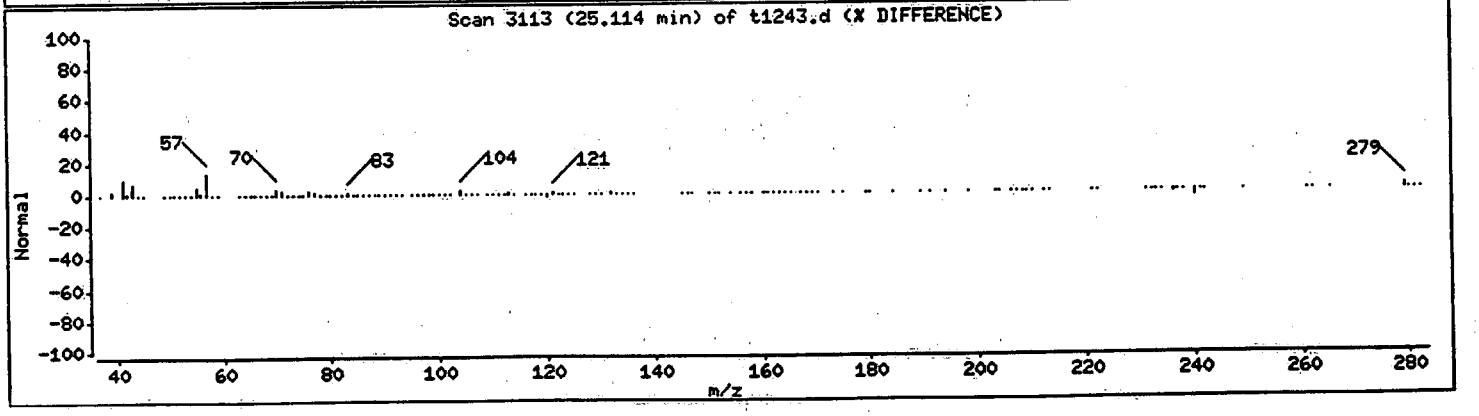
63 bis(2-Ethylhexyl)phthalate

Concentration: 480 ug/L









Client ID: MW_17S
Site: L.E. Carpenter

Lab Sample No: 197722
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1210.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1210.d
Report Date: 05-May-2000 11:36

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-04-00/04may00.b/t1210.d
Lab Smp Id: 197722 Client Smp ID: MW_17S
Inj Date : 05-MAY-2000 03:07
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197722;990;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-04-00/04may00.b/BNA625b.m
Meth Date : 05-May-2000 11:11 lily Quant Type: ISTD
Cal Date : 04-MAY-2000 13:55 Cal File: t1195.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	990.00000	Volume of sample extracted (mL)

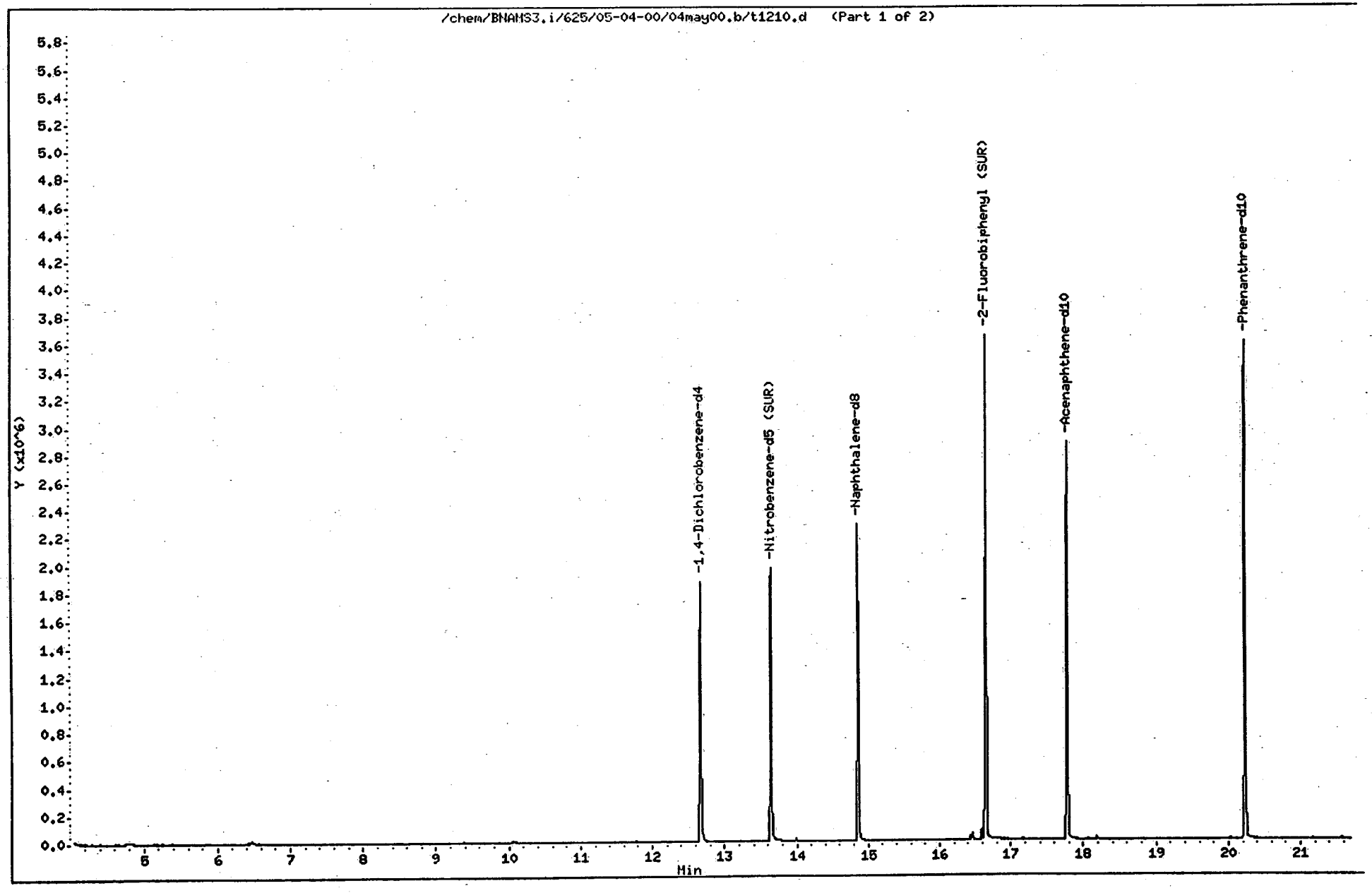
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.665	12.658	(1.000)	209199	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.645	13.634	(0.918)	828109	46.2251	93
* 80 Naphthalene-d8	136	14.861	14.855	(1.000)	728542	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.656	16.651	(0.937)	957583	40.7795	82
* 82 Acenaphthene-d10	164	17.780	17.781	(1.000)	644303	40.0000	
* 83 Phenanthrene-d10	188	20.238	20.236	(1.000)	1567832	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.849	22.841	(0.929)	2170253	58.9048	120
* 81 Chrysene-d12	240	24.596	24.604	(1.000)	1525575	40.0000	
* 84 Perylene-d12	264	27.765	27.761	(1.000)	1054708	40.0000	

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1210.d
Date : 05-MAY-2000 03:07
Client ID: MW_17S
Sample Info: 197722;990;2;1;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

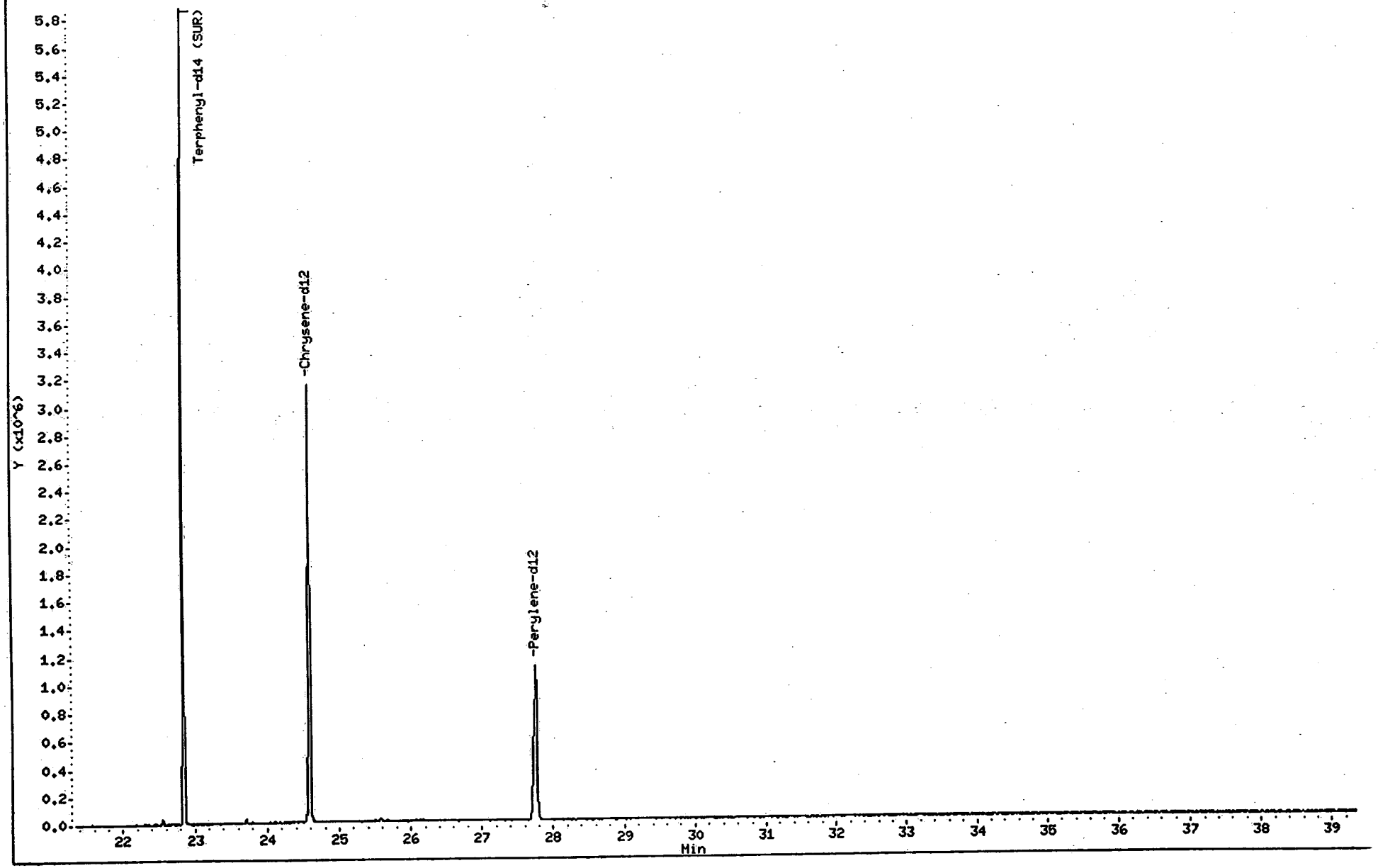


Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1210.d
Date : 05-MAY-2000 03:07
Client ID: MW_17S
Sample Info: 197722;990;2;1;;
Purge Volume: 990.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

/chem/BNAMS3.i/625/05-04-00/04may00.b/t1210.d (Part 2 of 2)



Client ID: MW_22R
Site: L.E. Carpenter

Lab Sample No: 197723
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/09/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1244.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	92	2.0

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1244.d
Report Date: 09-May-2000 10:22

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-08-00/08may00.b/t1244.d
Lab Smp Id: 197723 Client Smp ID: DEHP
Inj Date : 09-MAY-2000 03:39
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197723;980;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-08-00/08may00.b/BNA625b.m
Meth Date : 09-May-2000 10:21 lily Quant Type: ISTD
Cal Date : 08-MAY-2000 18:32 Cal File: t1233.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)

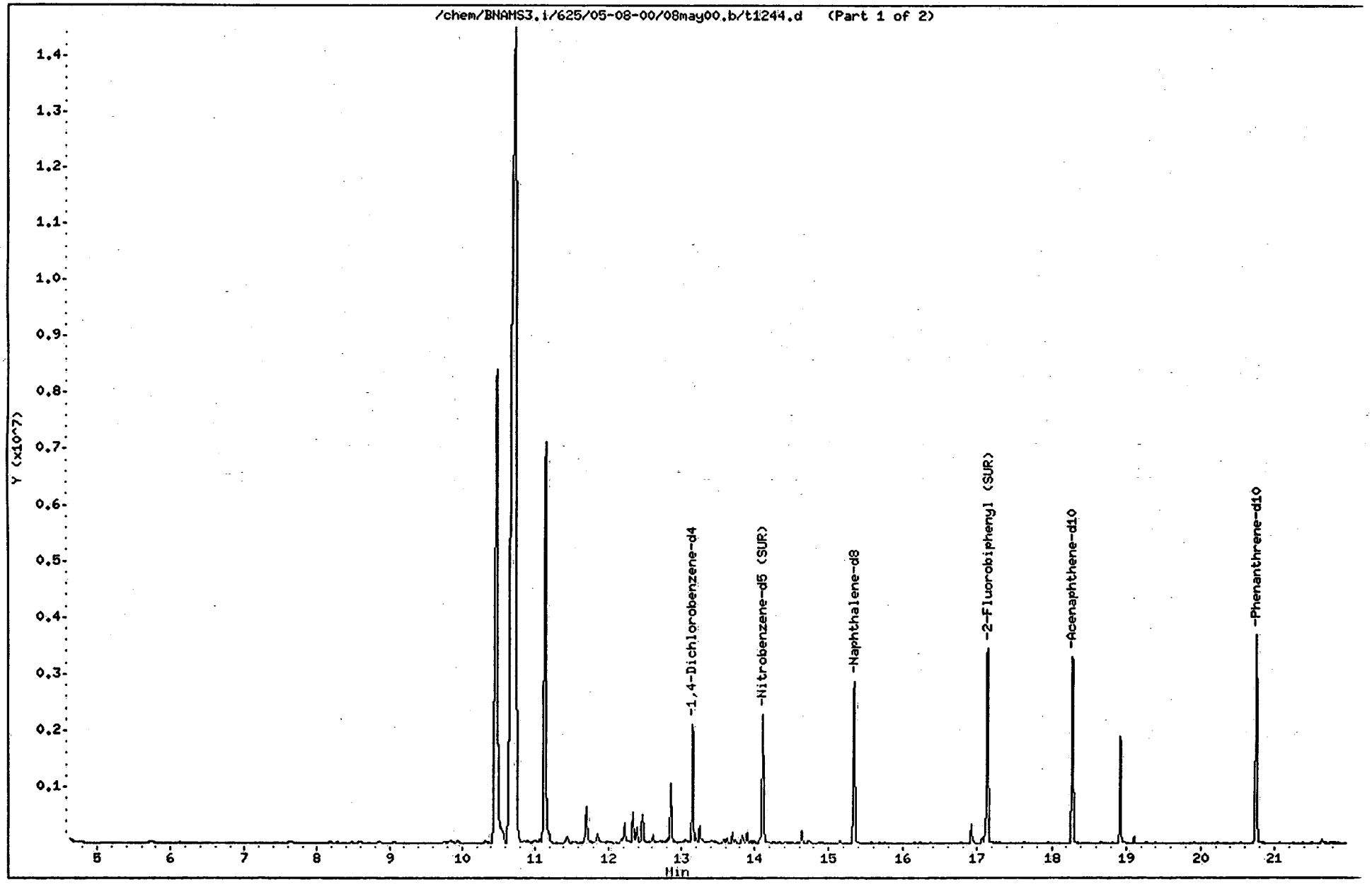
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	13.153	13.155	(1.000)	374488	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	14.111	14.122	(0.920)	1040043	43.2535	88
* 80 Naphthalene-d8	136	15.344	15.348	(1.000)	1489240	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	17.136	17.139	(0.938)	1318114	42.0421	86
* 82 Acenaphthene-d10	188	18.275	18.282	(1.000)	1021951	40.0000	
* 83 Phenanthrene-d10	188	20.751	20.760	(1.000)	2076686	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	23.368	23.370	(0.928)	2099053	50.0921	100
63 bis(2-Ethylhexyl)phthalate	149	25.113	25.117	(0.997)	1636729	44.9683	92
* 81 Chrysene-d12	240	25.194	25.212	(1.000)	1745667	40.0000	
* 84 Perylene-d12	264	28.866	28.887	(1.000)	1815163	40.0000	

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1244.d
Date : 09-MAY-2000 03:39
Client ID: DEHP
Sample Info: 197723;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

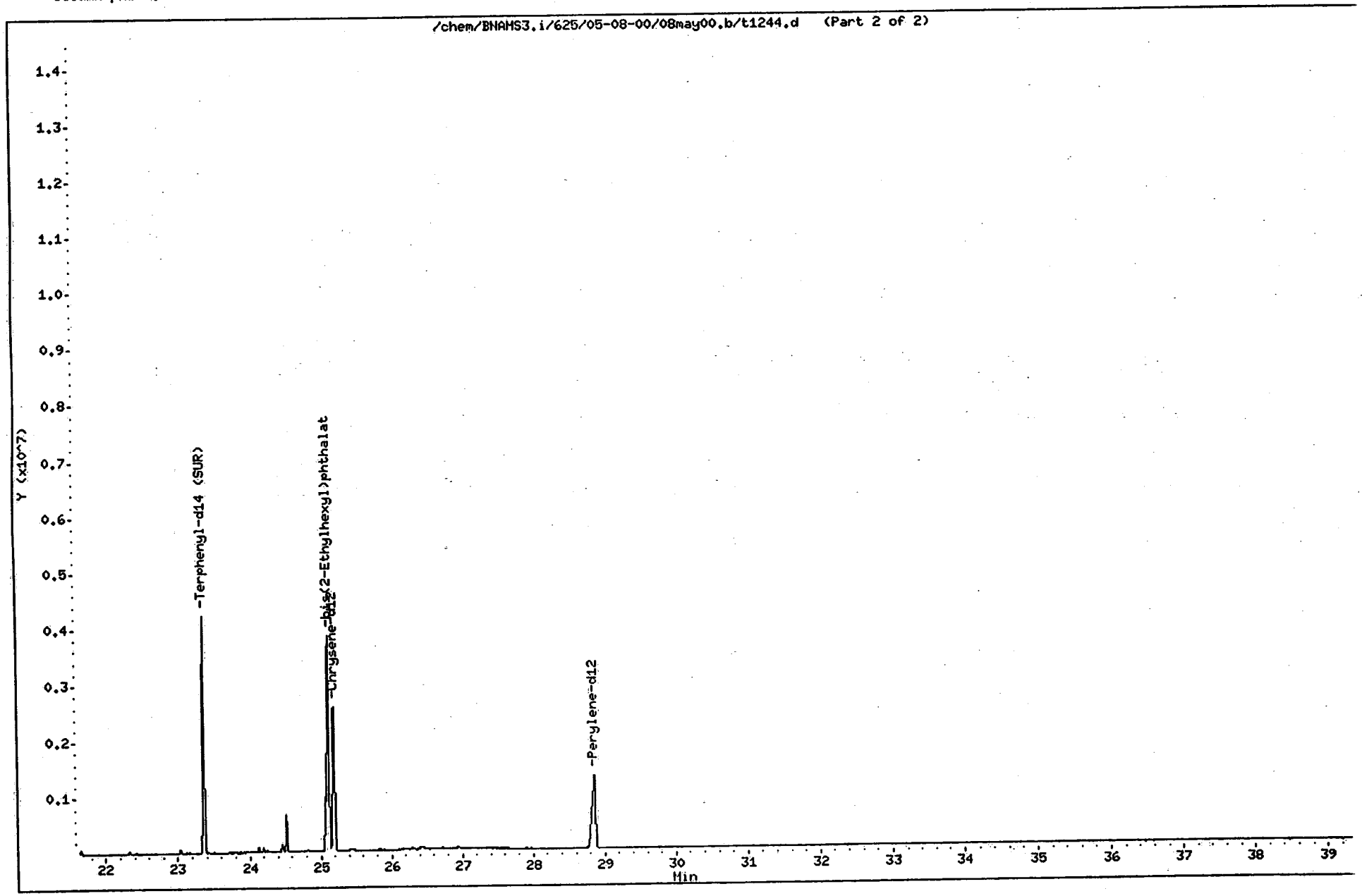
Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1244.d
Date : 09-MAY-2000 03:39
Client ID: DEHP
Sample Info: 197723;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-08-00/09may00.b/t1244.d

Date : 09-MAY-2000 03:39

Client ID: DEHP

Instrument: BNAMS3.i

Sample Info: 197723;980;2;1;;

Purge Volume: 980.0

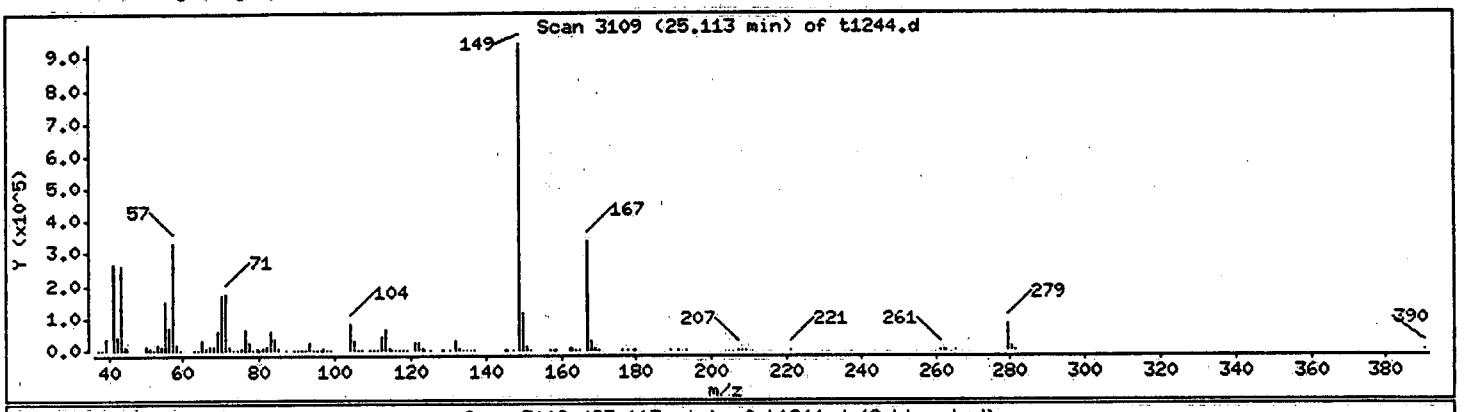
Operator: BNAMS 1

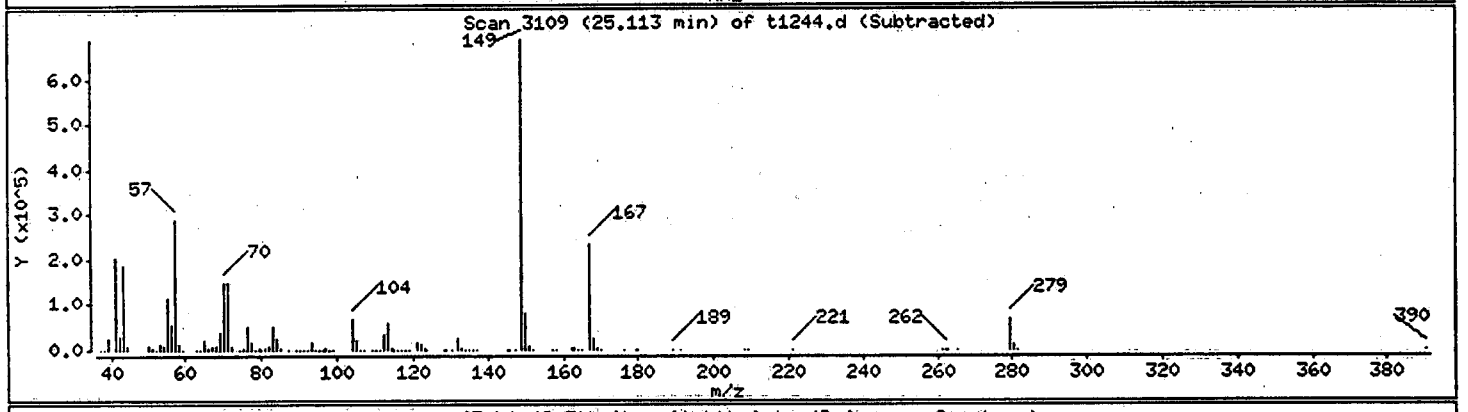
Column phase: DB-5

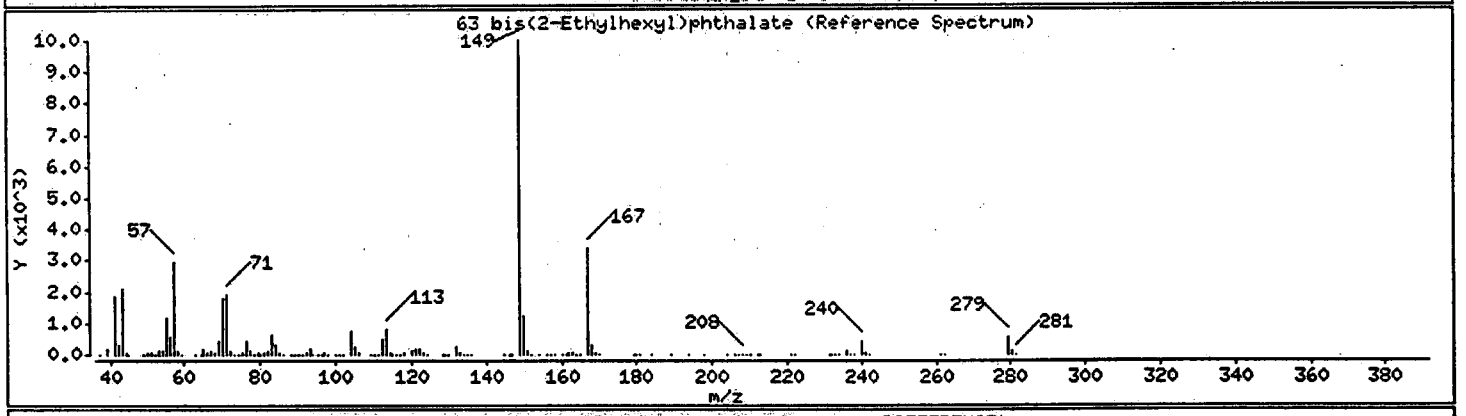
Column diameter: 0.53

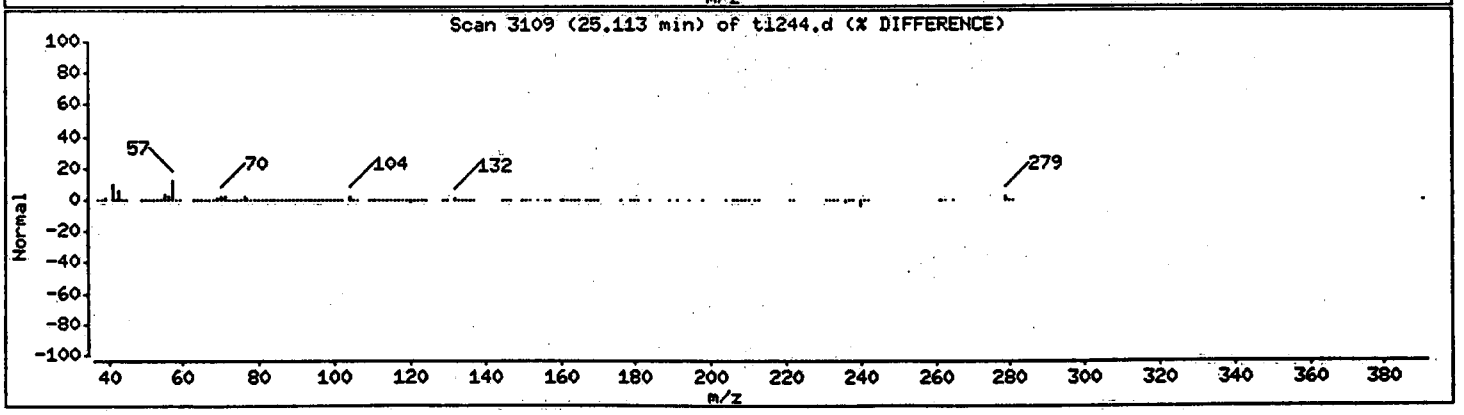
63 bis(2-Ethylhexyl)phthalate

Concentration: 92 ug/L









Client ID: MW_25R
Site: L.E. Carpenter

Lab Sample No: 197724
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1212.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1212.d
Report Date: 05-May-2000 11:36

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-04-00/04may00.b/t1212.d
Lab Smp Id: 197724 Client Smp ID: MW_25R
Inj Date : 05-MAY-2000 04:45
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197724;980;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-04-00/04may00.b/BNA625b.m
Meth Date : 05-May-2000 11:11 lily Quant Type: ISTD
Cal Date : 04-MAY-2000 13:55 Cal File: t1195.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

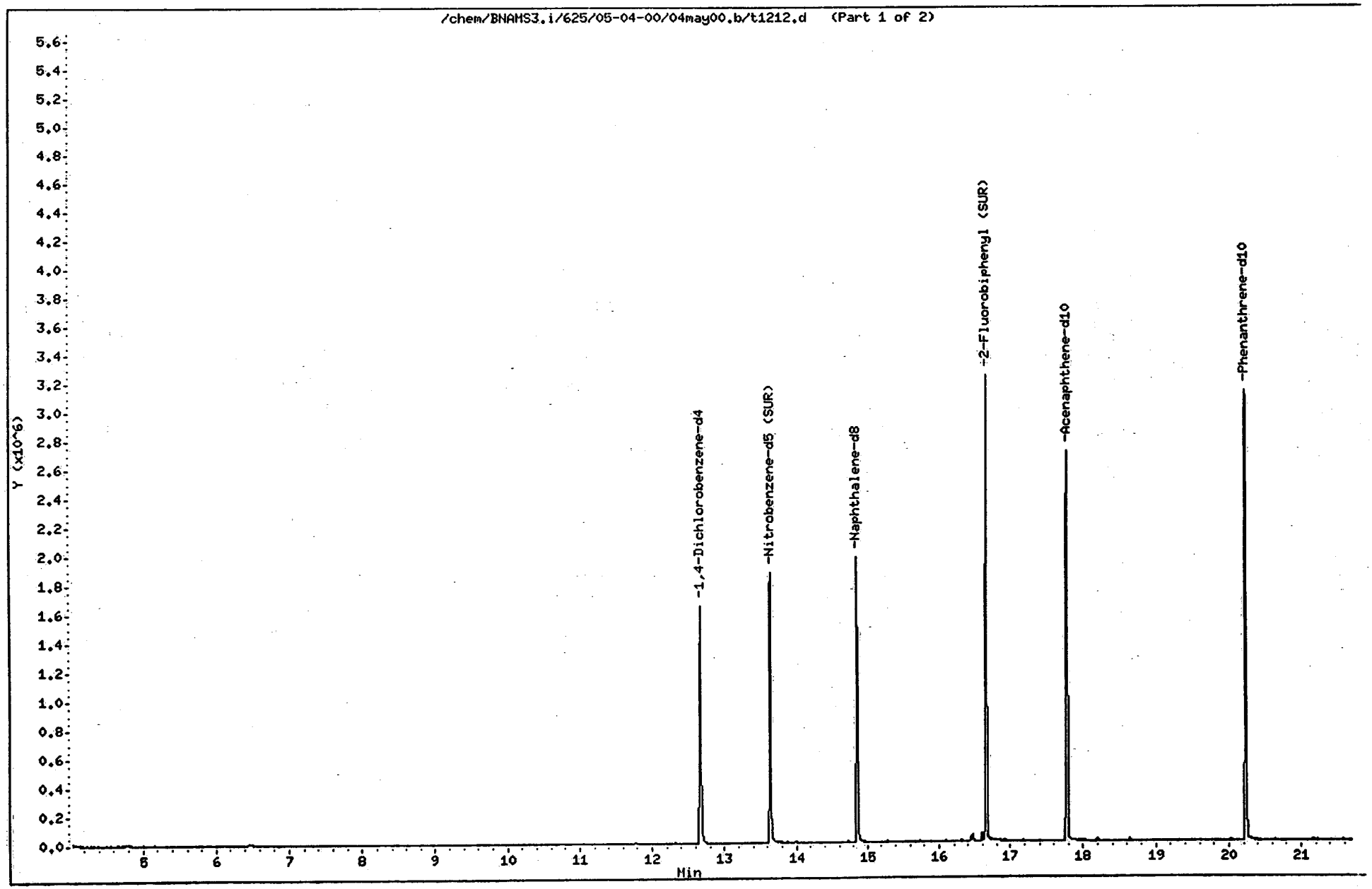
Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.665	12.658	(1.000)	184342	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.645	13.634	(0.918)	761303	48.7087	99
* 80 Naphthalene-d8	136	14.861	14.855	(1.000)	635617	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.656	16.651	(0.937)	873555	42.2236	86
* 82 Acenaphthene-d10	164	17.781	17.781	(1.000)	567662	40.0000	
* 83 Phenanthrene-d10	188	20.239	20.236	(1.000)	1470978	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.850	22.841	(0.929)	2132729	52.5448	110
* 81 Chrysene-d12	240	24.596	24.604	(1.000)	1680659	40.0000	
* 84 Perylene-d12	264	27.766	27.761	(1.000)	1267810	40.0000	

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1212.d
Date : 05-MAY-2000 04:45
Client ID: MW_25R
Sample Info: 197724;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i
Operator: BNAMS 1
Column diameter: 0.53

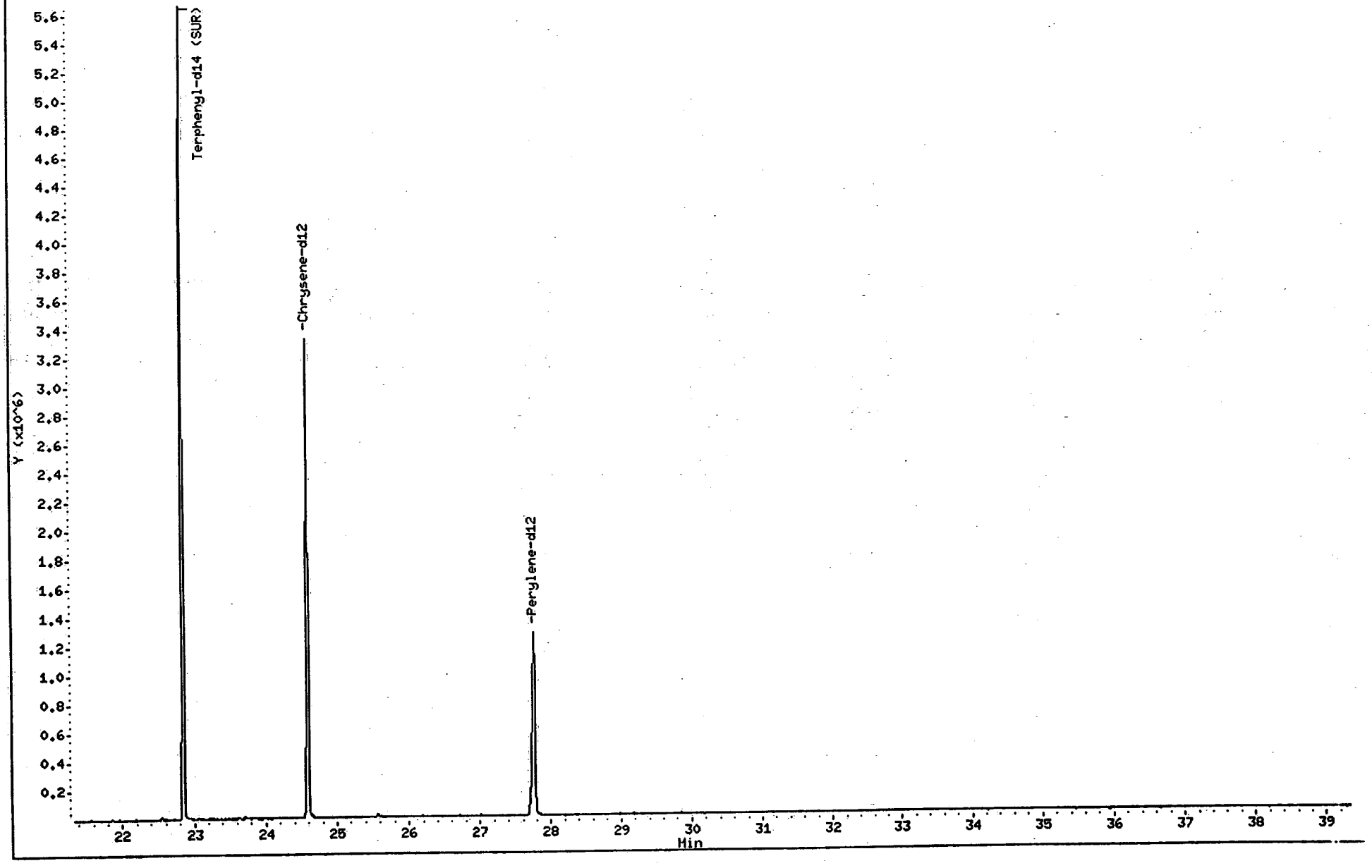


Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1212.d
Date : 05-MAY-2000 04:45
Client ID: MW_25R
Sample Info: 197724;980;2;1;;
Purge Volume: 980.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53

/chem/BNAMS3.i/625/05-04-00/04may00.b/t1212.d (Part 2 of 2)



Client ID: **MW_14I**
Site: L.E. Carpenter

Lab Sample No: **197725**
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1213.d

Matrix: WATER
Level: LOW
Sample Volume: 960 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.0

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1213.d
Report Date: 05-May-2000 11:36

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-04-00/04may00.b/t1213.d
Lab Smp Id: 197725 Client Smp ID: MW_14I
Inj Date : 05-MAY-2000 05:34
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197725;960;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-04-00/04may00.b/BNA625b.m
Meth Date : 05-May-2000 11:11 lily Quant Type: ISTD
Cal Date : 04-MAY-2000 13:55 Cal File: t1195.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	960.00000	Volume of sample extracted (mL)

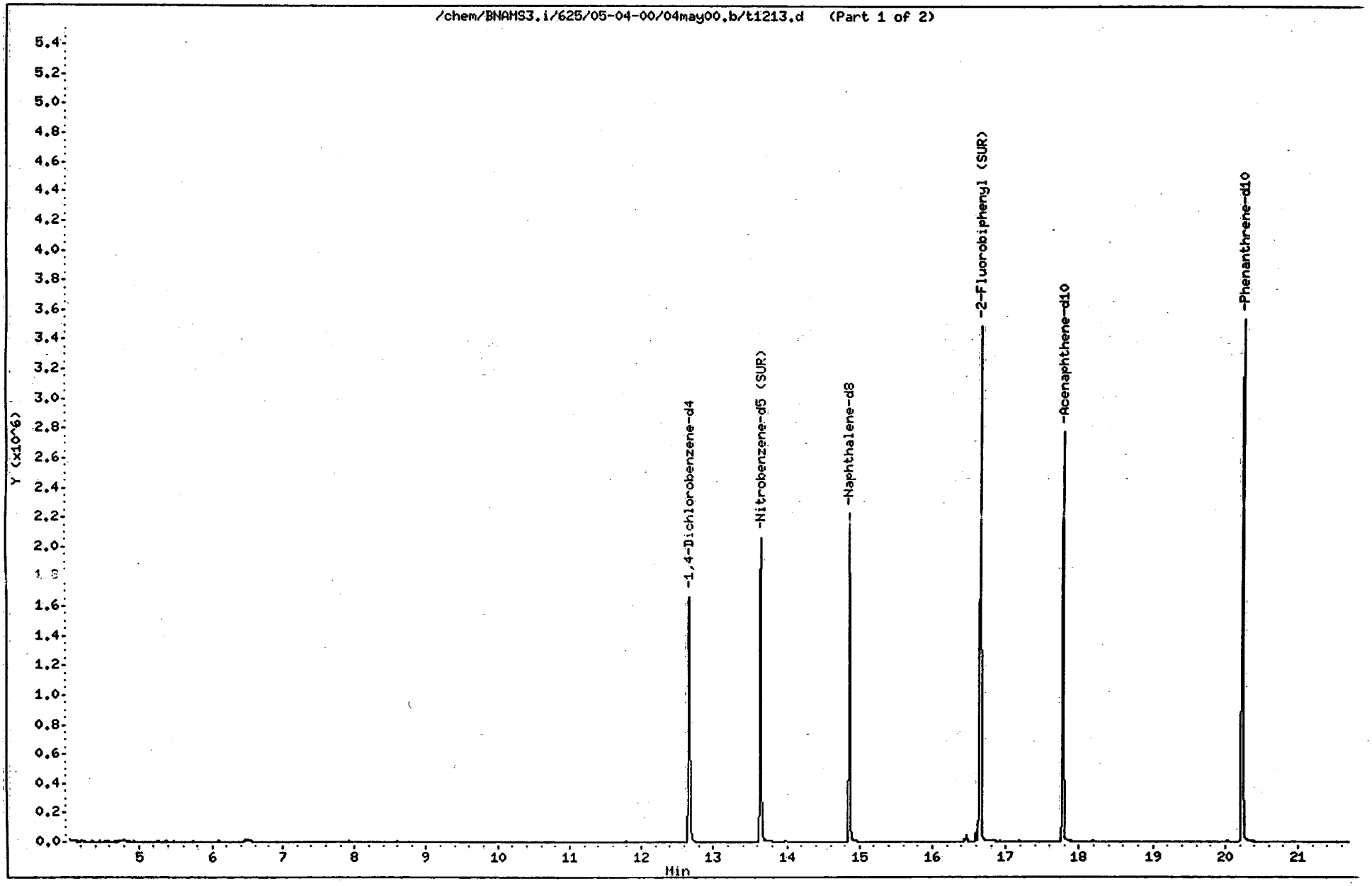
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.671	12.658	(1.000)	200145	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.644	13.634	(0.918)	807983	47.2932	98
* 80 Naphthalene-d8	136	14.860	14.855	(1.000)	694781	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.655	16.651	(0.937)	907221	42.0952	88
* 82 Acenaphthene-d10	164	17.779	17.781	(1.000)	591337	40.0000	
* 83 Phenanthrene-d10	188	20.237	20.236	(1.000)	1490219	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.853	22.841	(0.929)	2097023	51.5941	110
* 81 Chrysene-d12	240	24.597	24.604	(1.000)	1682972	40.0000	
* 84 Perylene-d12	264	27.759	27.761	(1.000)	1294685	40.0000	

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1213.d
Date : 05-MAY-2000 05:34
Client ID: MW_14I
Sample Info: 197725;960;2;1;;
Purge Volume: 960.0
Column phase: DB-5

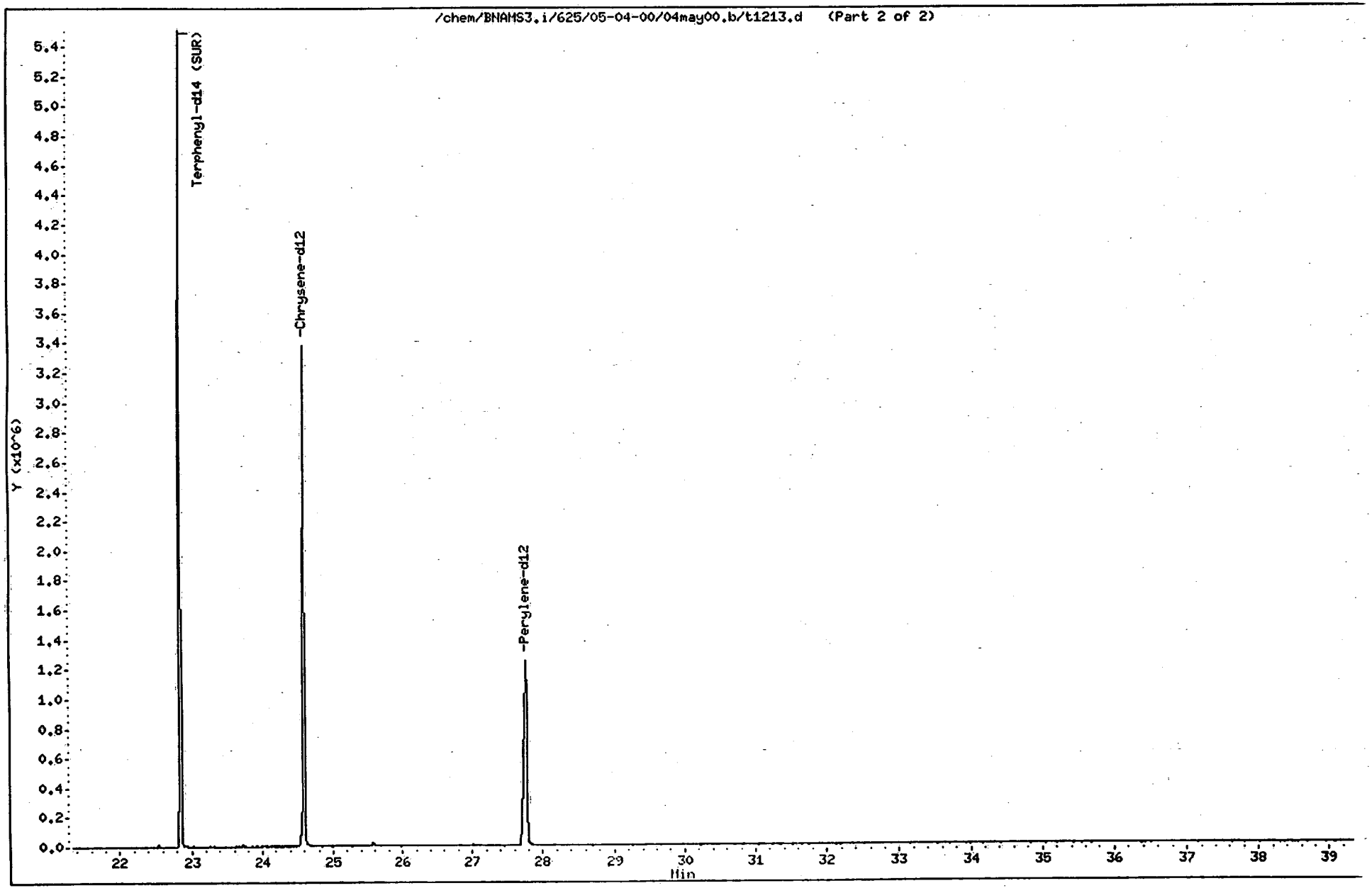
Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1213.d
Date : 05-MAY-2000 05:34
Client ID: MW_14I
Sample Info: 197725;960;2;1;;
Purge Volume: 960.0
Column phase: DB-5

Instrument: BNAMS3.i
Operator: BNAMS 1
Column diameter: 0.53



Client ID: MW_21
Site: L.E. Carpenter

Lab Sample No: 197726
Lab Job No: Z281

Date Sampled: 04/13/00
Date Received: 04/13/00
Date Extracted: 04/18/00
Date Analyzed: 05/05/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1214.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	2.1

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1214.d
Report Date: 05-May-2000 11:37

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/05-04-00/04may00.b/t1214.d
Lab Smp Id: 197726 Client Smp ID: MW_21
Inj Date : 05-MAY-2000 06:22
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : 197726;950;2;1;;
Misc Info : Z281;DEHP;5383;156
Comment :
Method : /chem/BNAMS3.i/625/05-04-00/04may00.b/BNA625b.m
Meth Date : 05-May-2000 11:11 lily Quant Type: ISTD
Cal Date : 04-MAY-2000 13:55 Cal File: t1195.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Bis2phb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

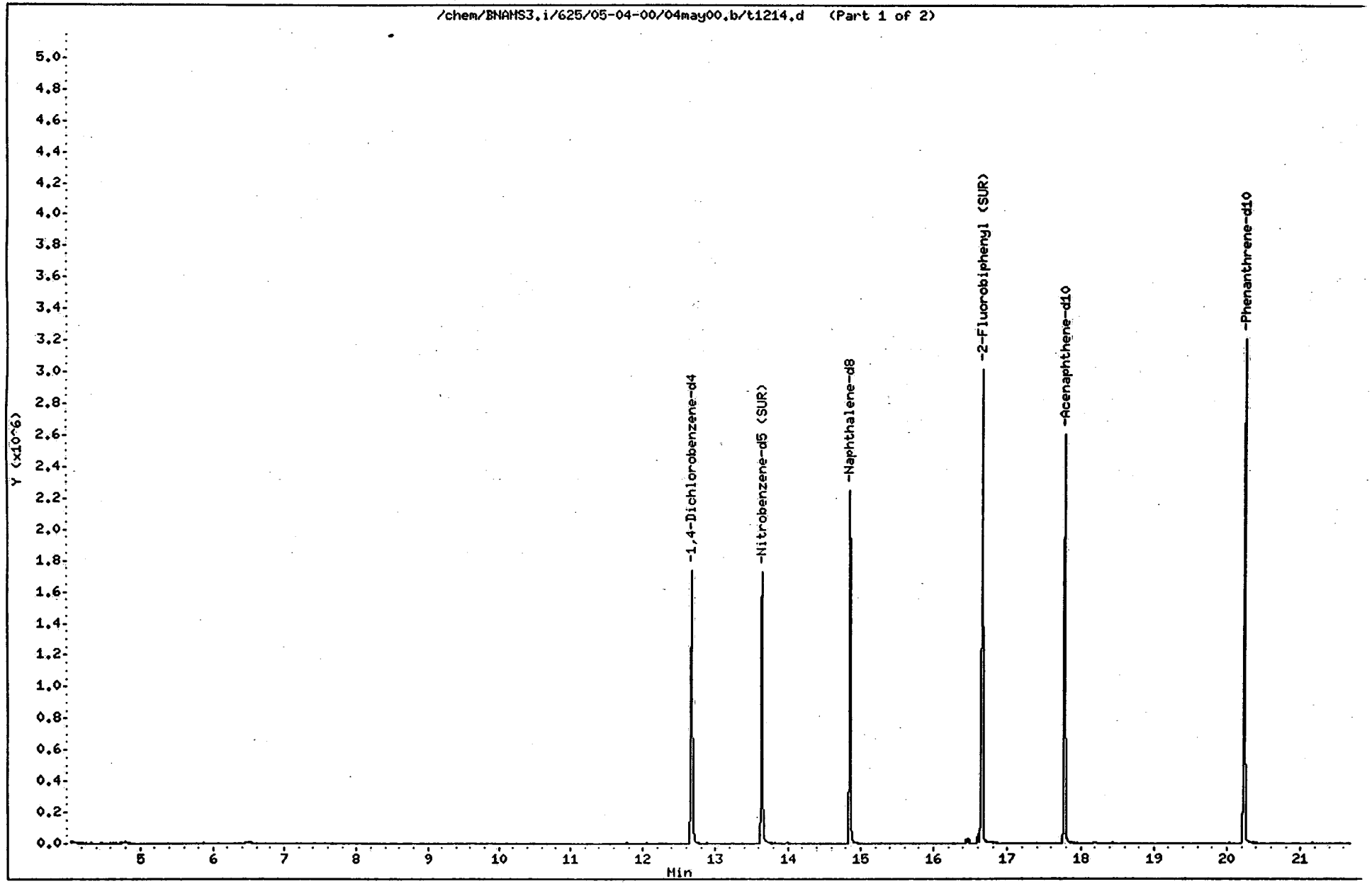
Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	950.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.670	12.658	(1.000)	213729	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.643	13.634	(0.918)	669924	38.8833	82
* 80 Naphthalene-d8	136	14.859	14.855	(1.000)	700658	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.654	16.651	(0.936)	786409	35.3974	74
* 82 Acenaphthene-d10	164	17.785	17.781	(1.000)	609582	40.0000	
* 83 Phenanthrene-d10	188	20.236	20.236	(1.000)	1446385	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.851	22.841	(0.929)	1871721	46.6043	98
* 81 Chrysene-d12	240	24.602	24.604	(1.000)	1662987	40.0000	
* 84 Perylene-d12	264	27.762	27.761	(1.000)	1323913	40.0000	

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1214.d
Date : 05-MAY-2000 06:22
Client ID: MW_21
Sample Info: 197726;950;2;1;;
Purge Volume: 950.0
Column phase: DB-5

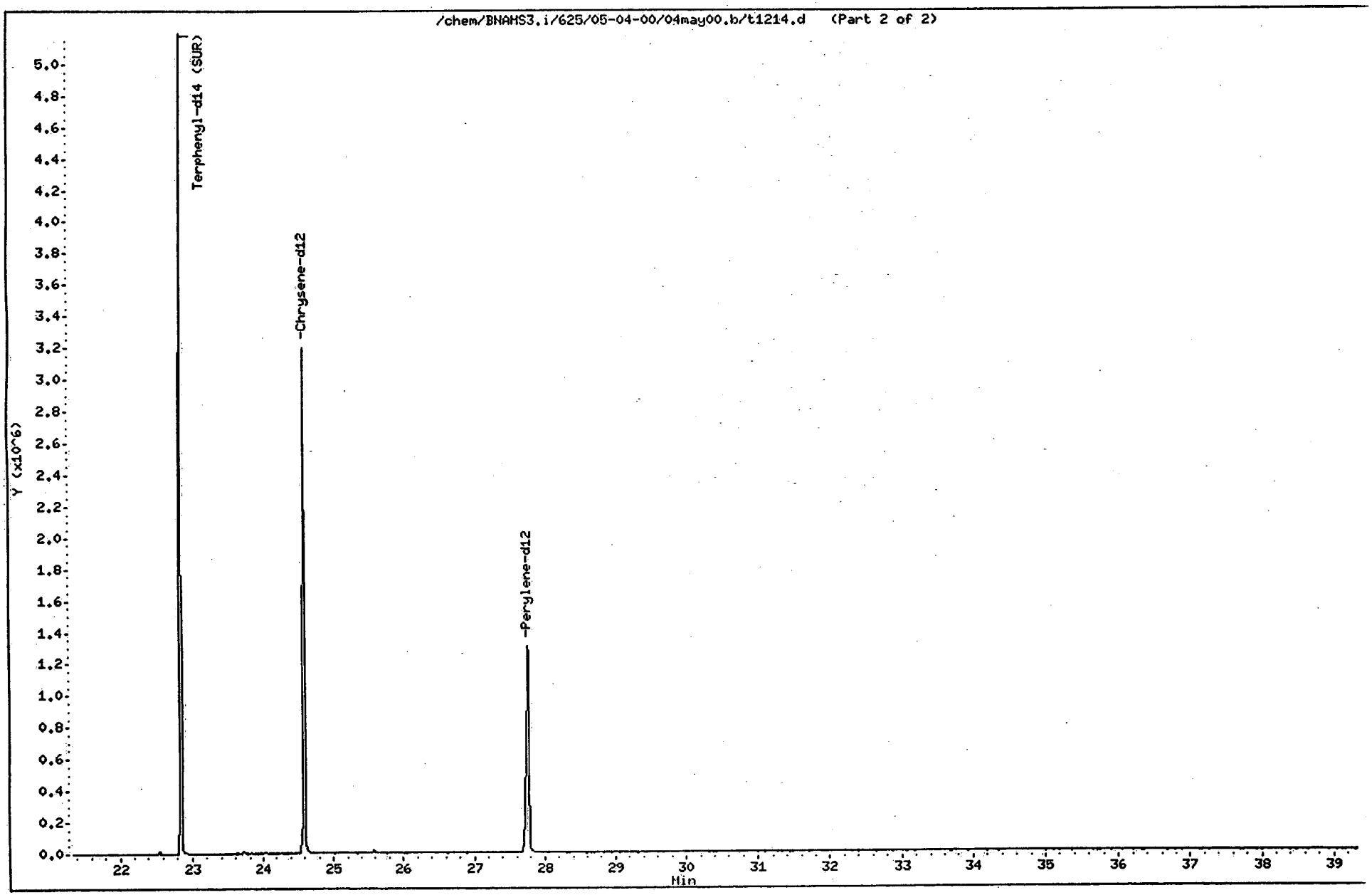
Instrument: BNAMS3.i
Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1214.d
Date : 05-MAY-2000 06:22
Client ID: MW_21
Sample Info: 197726;950;2;1;;
Purge Volume: 950.0
Column phase: DB-5

Instrument: BNAMS3.i

Operator: BNAMS 1
Column diameter: 0.53



SEMI-VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab File ID: T1068

Instrument ID: BNAMS3

DFTPP Injection Date: 04/28/00

DFTPP Injection Time: 1006

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.2
68	Less than 2.0% of mass 69	0.2 (0.3)1
69	Mass 69 relative abundance	68.5
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.4
365	Greater than 1.0% of mass 198	5.65
441	0.0 - 100.0% of mass 443	11.9 (90.3)2
442	40.0 - 110.0% of mass 198	69.8
443	17.0 - 23.0% of mass 442	13.2 (18.9)3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	TSTD050	TSTD050	T1069	04/28/00	1033
02	TSTD120	TSTD120	T1070	04/28/00	1121
03	TSTD010	TSTD010	T1071	04/28/00	1210
04	TSTD080	TSTD080	T1072	04/28/00	1259
05	TSTD020	TSTD020	T1073	04/28/00	1347
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					

Data File: /chem/BNAHS3.i/625/04-28-00/28apr00.b/t1068.d

Date : 28-APR-2000 10:06

Client ID:

Instrument: BNAHS3.i

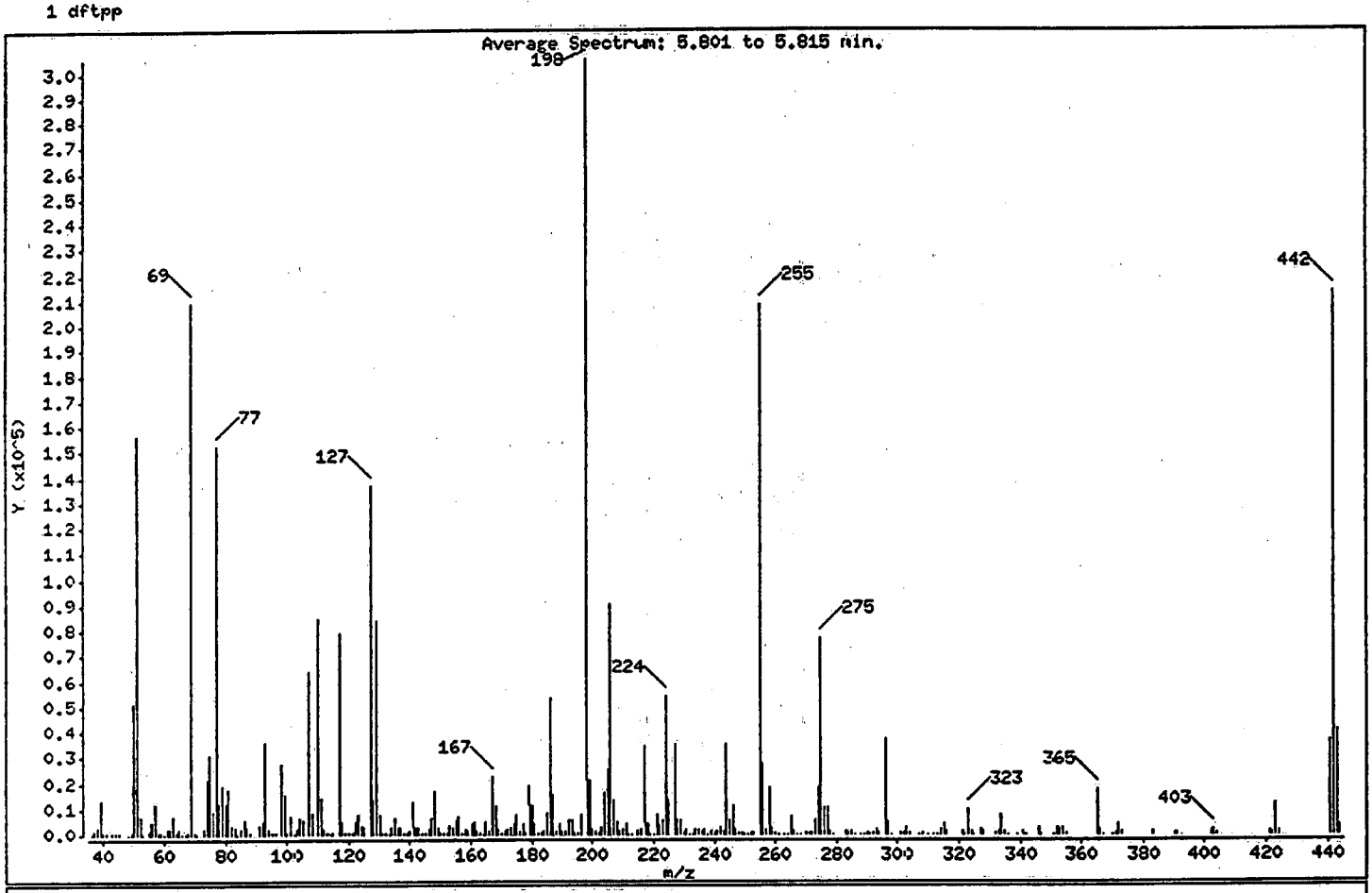
Sample Info: TDFT119

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	51.24
68	Less than 2.00% of mass 69	0.20 (0.30)
69	Mass 69 relative abundance	68.52
70	Less than 2.00% of mass 69	0.30 (0.43)
127	40.00 - 60.00% of mass 198	44.78
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.93
275	10.00 - 30.00% of mass 198	25.40
365	Greater than 1.00% of mass 198	5.65
441	0.01 - 100.00% of mass 443	11.94 (90.26)
442	40.00 - 110.00% of mass 198	69.83
443	17.00 - 23.00% of mass 442	13.23 (18.94)

Data File: /chem/BNAMS3.i/625/04-28-00/28apr00.b/t1068.d

Date : 28-APR-2000 10:06

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT119

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1068.d

Spectrum: Average Spectrum: 5.801 to 5.815 min.

Location of Maximum: 198.00

Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	120	121.00	565	196.00	7702	276.00	10358
37.00	1208	122.00	4954	198.00	305408	277.00	10669
38.00	2953	123.00	7559	199.00	21168	278.00	1686
39.00	13020	124.00	3749	200.00	2110	279.00	346
40.00	869	125.00	2774	201.00	1228	283.00	1338
41.00	410	127.00	136768	202.00	623	284.00	824
43.00	639	128.00	13005	203.00	3151	285.00	1616
44.00	495	129.00	84152	204.00	16054	286.00	153
45.00	447	130.00	7395	205.00	25448	288.00	102
48.00	123	131.00	992	206.00	90584	289.00	188
49.00	893	132.00	666	207.00	13280	290.00	363
50.00	51104	133.00	141	208.00	4798	291.00	335
51.00	156480	134.00	2704	209.00	1392	292.00	517
52.00	7161	135.00	6319	210.00	2008	293.00	2032
53.00	274	136.00	2531	211.00	4339	294.00	450
55.00	1660	137.00	2875	212.00	236	296.00	37456
56.00	4992	138.00	644	213.00	107	297.00	4757
57.00	12034	139.00	611	215.00	1736	298.00	343
58.00	621	140.00	1059	216.00	1998	301.00	439
59.00	486	141.00	12593	217.00	34488	302.00	548
60.00	106	142.00	2866	218.00	4035	303.00	2965
61.00	2425	143.00	2476	219.00	326	304.00	807
62.00	2240	144.00	745	220.00	244	307.00	152
63.00	6670	145.00	442	221.00	7662	308.00	624
64.00	1038	146.00	2303	222.00	3777	310.00	109
65.00	2202	147.00	6270	223.00	5659	312.00	107
66.00	128	148.00	16768	224.00	54368	313.00	256
67.00	299	149.00	2558	225.00	12997	314.00	1899
68.00	622	150.00	878	227.00	34872	315.00	4509
69.00	209216	151.00	926	228.00	5365	316.00	1610
70.00	906	152.00	489	229.00	5480	321.00	1165
71.00	107	153.00	3705	230.00	811	322.00	115
73.00	2399	154.00	2478	231.00	1825	323.00	9710
74.00	20872	155.00	5832	232.00	349	324.00	1245
75.00	30576	156.00	7124	233.00	245	325.00	122

Data File: /chem/BNAMS3.i/625/04-28-00/28apr00.b/t1068.d

Date : 28-APR-2000 10:06

Client ID: Instrument: BNAMS3.i

Sample Info: TDFT119

Operator: BNA2

Column phase: DB-5 Column diameter: 0.25

Data File: t1068.d

Spectrum: Average Spectrum: 5.801 to 5.815 min.

Location of Maximum: 198.00

Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	8958	157.00	738	234.00	1924	327.00	1855
77.00	152256	158.00	1817	235.00	1840	328.00	1321
78.00	11816	159.00	1347	236.00	1461	332.00	789
79.00	18792	160.00	4002	237.00	2009	333.00	1144
80.00	11740	161.00	4588	238.00	112	334.00	7417
81.00	17472	162.00	1234	239.00	1453	335.00	1085
82.00	3325	163.00	571	240.00	793	336.00	138
83.00	2686	164.00	271	241.00	1701	339.00	149
84.00	201	165.00	5026	242.00	2865	341.00	1596
85.00	2380	166.00	1357	243.00	1493	342.00	142
86.00	5311	167.00	22352	244.00	35168	346.00	2482
87.00	2680	168.00	10906	245.00	5323	347.00	128
88.00	785	169.00	1796	246.00	11351	351.00	121
91.00	3711	170.00	614	247.00	2021	352.00	2656
92.00	4757	171.00	1370	248.00	435	353.00	1998
93.00	36032	172.00	1859	249.00	822	354.00	2493
94.00	1885	173.00	2558	250.00	126	355.00	411
95.00	837	174.00	4332	251.00	211	365.00	17240
96.00	612	175.00	7826	252.00	521	366.00	1961
98.00	27376	176.00	1080	253.00	553	367.00	141
99.00	15733	177.00	4151	255.00	208512	370.00	102
100.00	958	178.00	987	256.00	27560	371.00	831
101.00	7356	179.00	18704	257.00	2238	372.00	4122
102.00	330	180.00	11307	258.00	18496	373.00	1342
103.00	2225	181.00	3937	259.00	2753	383.00	1134
104.00	6336	182.00	762	260.00	362	390.00	797
105.00	5735	183.00	501	261.00	111	391.00	425
107.00	64080	184.00	1406	263.00	275	402.00	1651
108.00	8120	185.00	8421	264.00	305	403.00	2018
110.00	85296	186.00	53608	265.00	6855	404.00	845
111.00	14283	187.00	15716	266.00	1378	421.00	1749
112.00	2137	188.00	1649	267.00	224	422.00	354
113.00	370	189.00	4497	268.00	279	423.00	11663
114.00	330	190.00	1082	270.00	389	424.00	1558
115.00	397	191.00	1623	271.00	686	441.00	36456

Data File: /chem/BNAMS3.i/625/04-28-00/28apr00.b/t1068.d

Date : 28-APR-2000 10:06

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT119

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1068.d

Spectrum: Average Spectrum: 5.801 to 5.815 min.

Location of Maximum: 198.00

Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	79432	192.00	5561	272.00	621	442.00	213248
118.00	5190	193.00	5298	273.00	5531	443.00	40392
119.00	356	194.00	1015	274.00	18384	444.00	3813
120.00	681	195.00	451	275.00	77576		

Data File: /chem/BNAMS3.i/625/04-28-00/28apr00.b/t1068.d

Date : 28-APR-2000 10:06

Client ID:

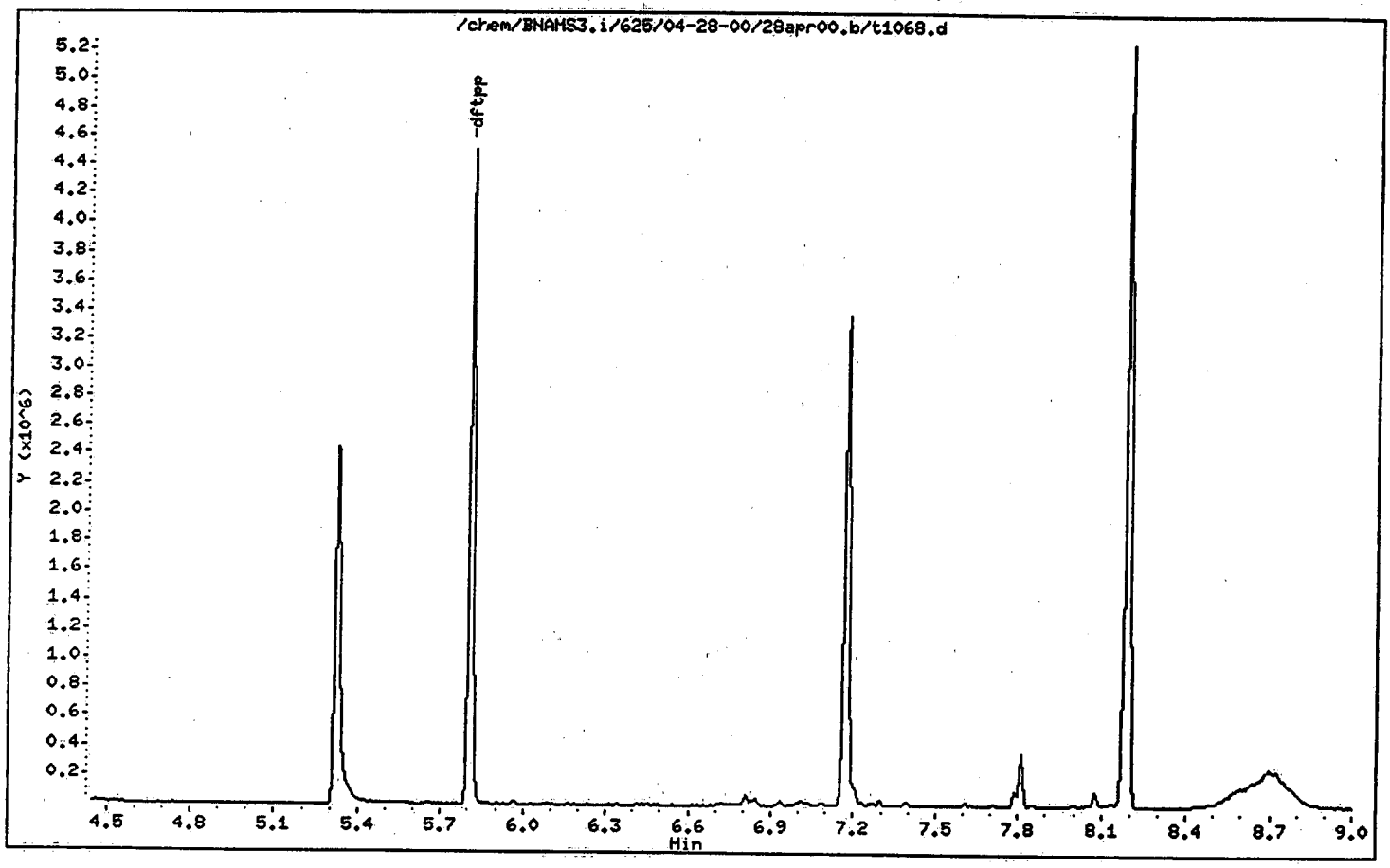
Instrument: BNAMS3.i

Sample Info: TDFT119

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25



SEMI-VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab File ID: T1156

DFTPP Injection Date: 05/03/00

Instrument ID: BNAMS3

DFTPP Injection Time: 0958

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	65.6
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	44.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	23.9
365	Greater than 1.0% of mass 198	5.08
441	0.0 - 100.0% of mass 443	9.1 (90.6)2
442	40.0 - 110.0% of mass 198	56.4
443	17.0 - 23.0% of mass 442	10.1 (17.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	TSTD124	TSTD124	T1158	05/03/00	1115
02	WB109	WB109	T1162	05/03/00	1430
03	FIELD_BLANK	197716	T1174	05/04/00	0013
04	MW_15S	197718	T1175	05/04/00	0102
05	MW_15I	197719	T1176	05/04/00	0150
06	MW_11D	197720	T1177	05/04/00	0239
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1156.d

Date : 03-MAY-2000 09:58

Client ID:

Instrument: BNAMS3.i

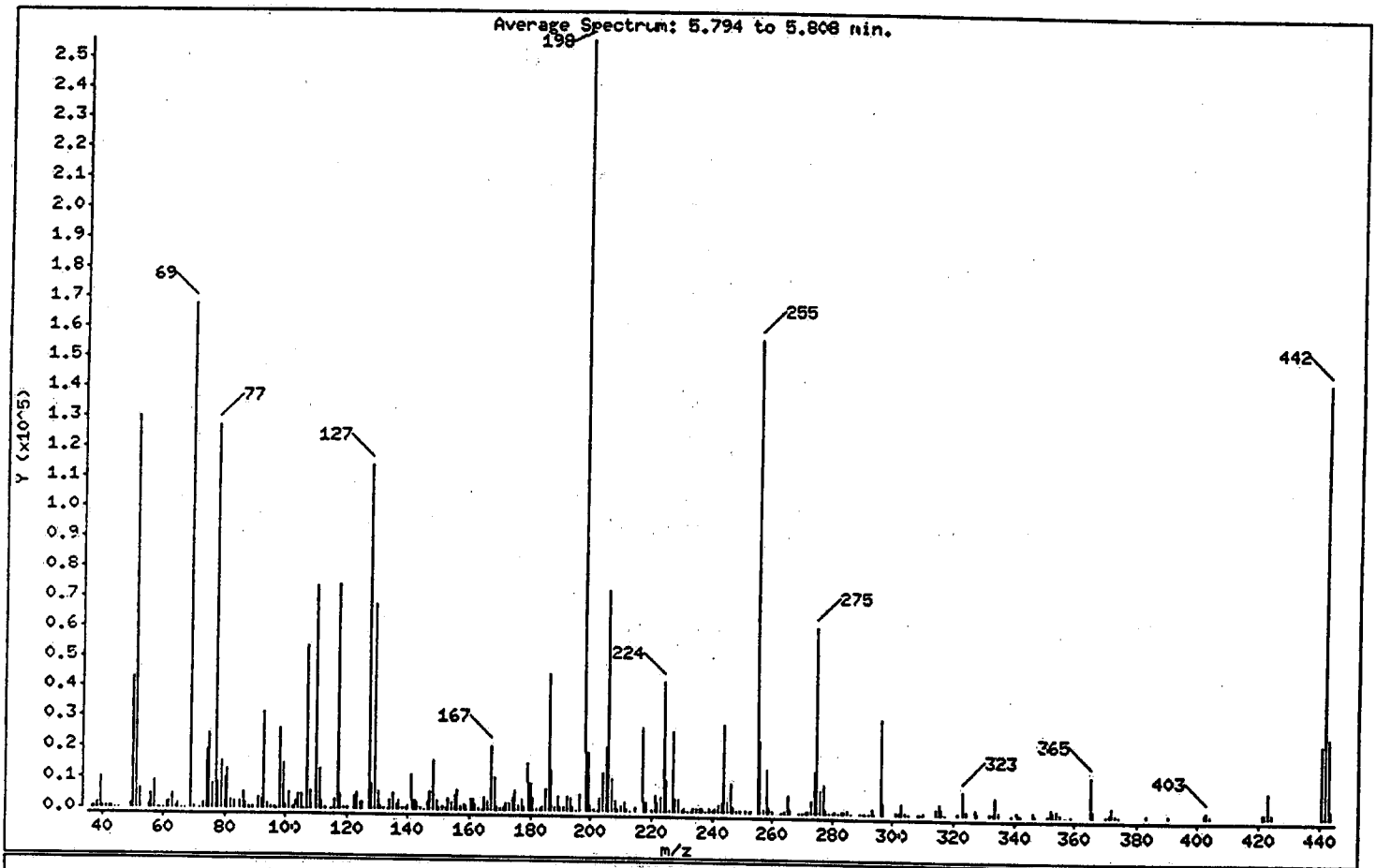
Sample Info: TDFT124

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	50.84
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	65.60
70	Less than 2.00% of mass 69	0.19 (0.29)
127	40.00 - 60.00% of mass 198	44.53
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.33
275	10.00 - 30.00% of mass 198	23.94
365	Greater than 1.00% of mass 198	5.08
441	0.01 - 100.00% of mass 443	9.13 (90.58)
442	40.00 - 110.00% of mass 198	56.40
443	17.00 - 23.00% of mass 442	10.08 (17.87)

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1156.d

Date : 03-MAY-2000 09:58

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT124

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1156.d
Spectrum: Average Spectrum: 5.794 to 5.808 min.
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	116	120.00	548	195.00	213	278.00	1172
37.00	754	122.00	4051	196.00	5349	279.00	180
38.00	1773	123.00	5195	198.00	255808	280.00	138
39.00	10254	124.00	2640	199.00	18744	281.00	360
40.00	653	125.00	2105	200.00	1554	282.00	173
41.00	662	127.00	113920	201.00	465	283.00	675
42.00	314	128.00	8449	202.00	113	284.00	691
43.00	301	129.00	67488	203.00	3887	285.00	1174
44.00	106	130.00	6031	204.00	12365	286.00	178
45.00	215	131.00	905	205.00	20648	289.00	119
49.00	888	132.00	735	206.00	72808	290.00	126
50.00	43064	133.00	211	207.00	10426	291.00	102
51.00	130056	134.00	2673	208.00	3445	292.00	250
52.00	6535	135.00	5228	209.00	746	293.00	1872
55.00	1428	136.00	2038	210.00	1507	294.00	265
56.00	4747	137.00	2654	211.00	3191	296.00	30352
57.00	9087	138.00	512	212.00	316	297.00	3734
58.00	258	139.00	389	213.00	288	301.00	435
59.00	164	140.00	1081	215.00	1299	302.00	522
60.00	188	141.00	11353	217.00	27048	303.00	3402
61.00	1618	142.00	2710	218.00	3199	304.00	595
62.00	2582	143.00	2067	220.00	300	305.00	125
63.00	4595	144.00	387	221.00	5246	308.00	142
64.00	443	145.00	263	222.00	2827	309.00	111
65.00	1531	146.00	2124	223.00	4575	310.00	350
66.00	114	147.00	6025	224.00	42080	314.00	1848
67.00	150	148.00	15702	225.00	9990	315.00	3409
69.00	167808	149.00	2988	226.00	595	316.00	1495
70.00	487	150.00	609	227.00	25968	317.00	206
72.00	118	151.00	1132	228.00	3935	321.00	631
73.00	1973	152.00	444	229.00	4304	323.00	7833
74.00	18864	153.00	3803	230.00	821	324.00	1351
75.00	24104	154.00	2098	231.00	1361	327.00	1540
76.00	8180	155.00	4735	232.00	169	328.00	586
77.00	127224	156.00	6193	233.00	175	332.00	568

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1156.d

Date : 03-MAY-2000 09:58

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT124

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1156.d

Spectrum: Average Spectrum: 5.794 to 5.808 min.

Location of Maximum: 198.00

Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	8051	157.00	1061	234.00	1369	333.00	512
79.00	15495	158.00	1888	235.00	1432	334.00	5651
80.00	9726	159.00	1296	236.00	1369	335.00	1071
81.00	12717	160.00	3268	237.00	1300	339.00	125
82.00	2761	161.00	3476	238.00	101	341.00	990
83.00	2221	162.00	1558	239.00	1109	342.00	107
85.00	2304	163.00	408	240.00	650	346.00	1469
86.00	5391	164.00	238	241.00	1205	347.00	136
87.00	1688	165.00	4396	242.00	2136	351.00	228
88.00	445	166.00	2745	243.00	2827	352.00	2277
89.00	451	167.00	20680	244.00	28296	353.00	937
91.00	3721	168.00	10504	245.00	3760	354.00	1808
92.00	3101	169.00	1146	246.00	9357	355.00	357
93.00	31176	170.00	621	247.00	1602	359.00	145
94.00	1704	171.00	909	248.00	473	365.00	13006
95.00	701	172.00	2062	249.00	810	366.00	1709
96.00	721	173.00	2335	251.00	317	370.00	114
97.00	281	174.00	4098	252.00	175	371.00	617
98.00	25872	175.00	6264	253.00	701	372.00	3110
99.00	14642	176.00	1510	255.00	156224	373.00	672
100.00	1362	177.00	3366	256.00	23080	374.00	107
101.00	5015	178.00	1059	257.00	1429	383.00	512
102.00	366	179.00	15442	258.00	14374	390.00	363
103.00	2468	180.00	8775	259.00	1887	402.00	1421
104.00	4595	181.00	3965	260.00	311	403.00	1511
105.00	4418	182.00	736	263.00	105	404.00	427
106.00	289	183.00	321	264.00	431	421.00	1401
107.00	53632	184.00	1225	265.00	6107	422.00	1088
108.00	6146	185.00	7049	266.00	1129	423.00	8194
110.00	73304	186.00	44704	269.00	174	424.00	1239
111.00	12816	187.00	13192	270.00	268	441.00	23344
112.00	2212	188.00	1350	271.00	304	442.00	144256
113.00	701	189.00	4828	272.00	533	443.00	25776
115.00	153	190.00	945	273.00	4245	444.00	2496
116.00	2696	191.00	1369	274.00	13789		

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1156.d

Date : 03-MAY-2000 09:58

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT124

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1156.d

Spectrum: Average Spectrum: 5.794 to 5.808 min.

Location of Maximum: 198.00

Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	74072	192.00	4565	275.00	61256		
118.00	4478	193.00	4082	276.00	7744		
119.00	570	194.00	1223	277.00	9285		

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1156.d

Date : 03-MAY-2000 09:58

Client ID:

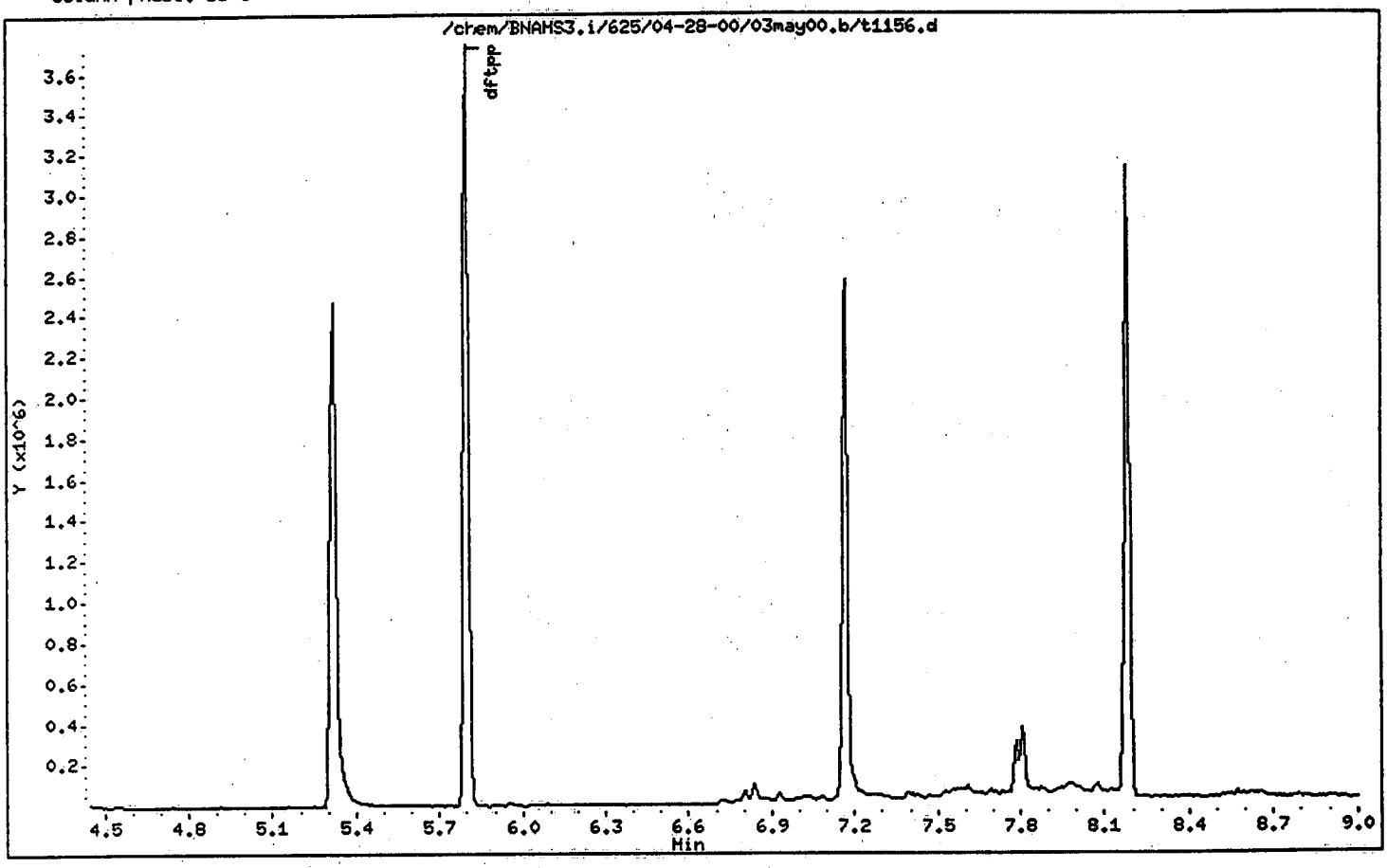
Instrument: BNAMS3.i

Sample Info: TDFT124

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25



SEMI-VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab File ID: T1188 DFTPP Injection Date: 05/04/00

Instrument ID: BNAMS3 DFTPP Injection Time: 0815

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.7
68	Less than 2.0% of mass 69	0.5 (0.7)1
69	Mass 69 relative abundance	71.3
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	44.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	23.7
365	Greater than 1.0% of mass 198	4.82
441	0.0 - 100.0% of mass 443	8.4 (87.5)2
442	40.0 - 110.0% of mass 198	49.9
443	17.0 - 23.0% of mass 442	9.6 (19.2)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	TSTD050	TSTD050	T1190	05/04/00	0928
02	TSTD120	TSTD120	T1191	05/04/00	1020
03	TSTD080	TSTD080	T1192	05/04/00	1111
04	TSTD010	TSTD010	T1194	05/04/00	1249
05	TSTD020	TSTD020	T1195	05/04/00	1355
06	MW_17S	197722	T1210	05/05/00	0307
07	MW_25R	197724	T1212	05/05/00	0445
08	MW_14I	197725	T1213	05/05/00	0534
09	MW_21	197726	T1214	05/05/00	0622
10					
11					
12					
13					
14					
15					
16					
17					
18					

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1188.d

Date : 04-MAY-2000 08:15

Client ID:

Instrument: BNAMS3.i

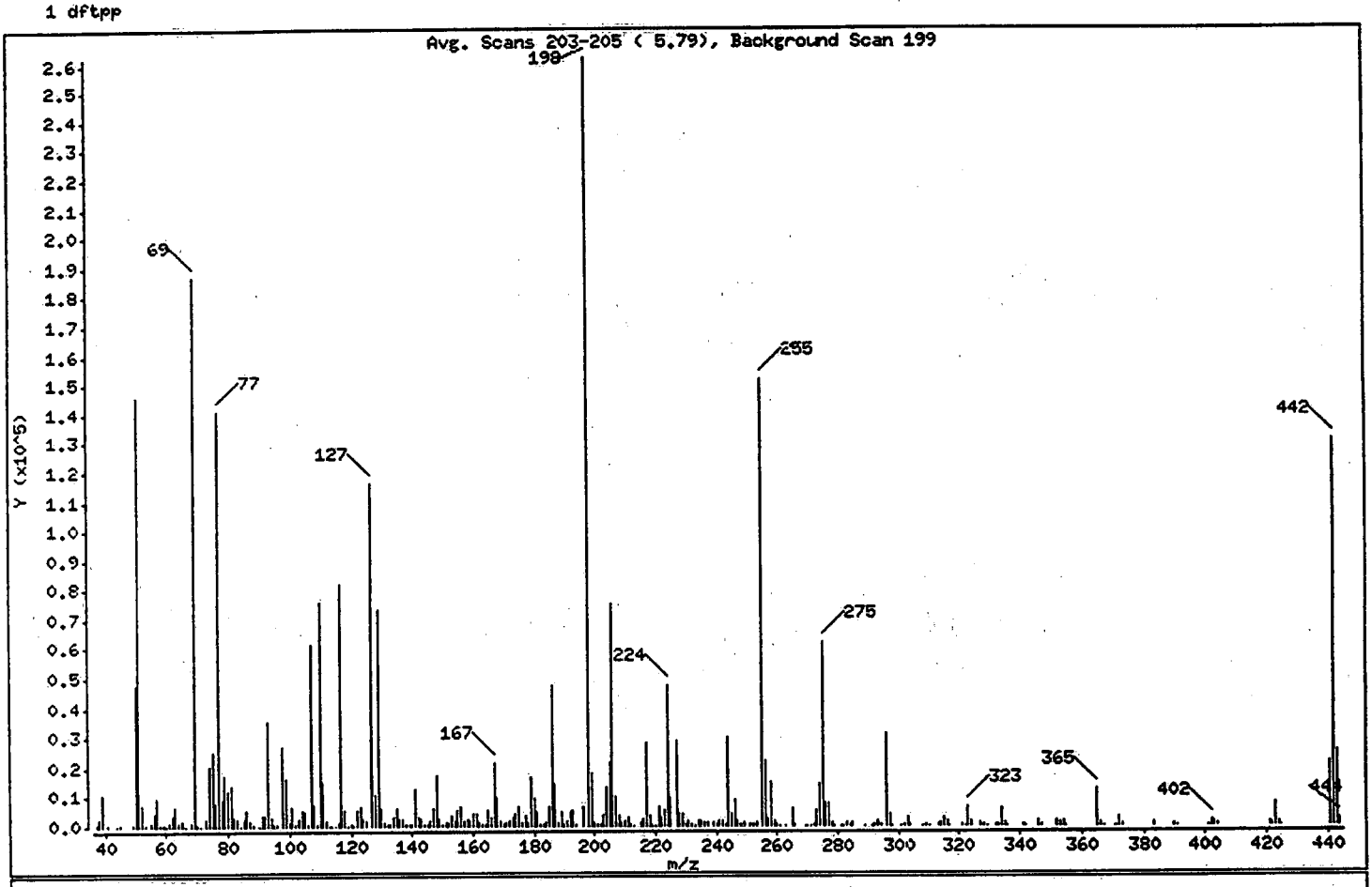
Sample Info: TDFT125

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	55.69
68	Less than 2.00% of mass 69	0.52 (0.73)
69	Mass 69 relative abundance	71.32
70	Less than 2.00% of mass 69	0.26 (0.36)
127	40.00 - 60.00% of mass 198	44.33
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	23.68
365	Greater than 1.00% of mass 198	4.82
441	0.01 - 100.00% of mass 443	8.37 (87.52)
442	40.00 - 110.00% of mass 198	49.85
443	17.00 - 23.00% of mass 442	9.56 (19.18)

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1188.d

Date : 04-MAY-2000 08:15

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT125

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1188.d

Spectrum: Avg. Scans 203-205 (5.79), Background Scan 199

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	844	120.00	755	193.00	5367	276.00	7848
38.00	2240	121.00	194	194.00	781	277.00	7820
39.00	11141	122.00	5178	196.00	6808	278.00	1223
41.00	451	123.00	6607	198.00	262208	279.00	198
44.00	117	124.00	2685	199.00	17992	281.00	264
45.00	320	125.00	1647	200.00	1437	282.00	188
49.00	495	127.00	116248	201.00	611	283.00	998
50.00	47328	128.00	10923	202.00	668	284.00	647
51.00	146048	129.00	73288	203.00	3574	285.00	1207
52.00	7105	130.00	6025	204.00	13104	289.00	118
53.00	309	131.00	1460	205.00	21776	291.00	301
55.00	1491	132.00	569	206.00	75152	292.00	320
56.00	4271	133.00	363	207.00	10028	293.00	1648
57.00	9442	134.00	2838	208.00	3816	294.00	355
58.00	384	135.00	5913	209.00	1197	296.00	31136
59.00	456	136.00	2299	210.00	1528	297.00	4416
60.00	120	137.00	2677	211.00	3067	298.00	277
61.00	1383	138.00	337	212.00	785	301.00	210
62.00	3502	139.00	693	213.00	182	302.00	357
63.00	6475	140.00	821	215.00	1043	303.00	3228
64.00	1068	141.00	12559	216.00	2452	304.00	668
65.00	2083	142.00	3183	217.00	28376	308.00	162
66.00	298	143.00	2398	218.00	3357	309.00	375
68.00	1361	144.00	634	219.00	215	310.00	269
69.00	187008	145.00	446	220.00	291	313.00	343
70.00	679	146.00	1720	221.00	6517	314.00	1214
71.00	147	147.00	6116	222.00	3198	315.00	2962
73.00	2140	148.00	17520	223.00	5200	316.00	1670
74.00	20432	149.00	2558	224.00	47400	317.00	102
75.00	25456	150.00	389	225.00	9932	321.00	805
76.00	7780	151.00	1152	227.00	28776	322.00	152
77.00	141056	152.00	1175	228.00	4445	323.00	6836
78.00	9150	153.00	3382	229.00	4327	324.00	1517
79.00	17312	154.00	1971	230.00	472	327.00	1369
80.00	11936	155.00	5322	231.00	1512	328.00	425

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1188.d

Date : 04-MAY-2000 08:15

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT125

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1188.d

Spectrum: Avg. Scans 203-205 (5.79), Background Scan 199

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	13928	156.00	6538	232.00	360	329.00	117
82.00	2781	157.00	1519	233.00	192	332.00	462
83.00	2356	158.00	2426	234.00	1540	333.00	749
84.00	269	159.00	1521	235.00	1541	334.00	5816
85.00	2576	160.00	3991	236.00	1431	335.00	1265
86.00	5173	161.00	4050	237.00	1236	336.00	111
87.00	1608	162.00	1033	239.00	1051	341.00	636
88.00	528	163.00	826	240.00	574	342.00	117
90.00	185	164.00	612	241.00	1573	346.00	1692
91.00	3665	165.00	5356	242.00	1986	347.00	359
92.00	3840	166.00	3205	243.00	460	352.00	1925
93.00	35344	167.00	21808	244.00	30088	353.00	1294
94.00	2762	168.00	9870	245.00	3971	354.00	2046
95.00	488	169.00	1557	246.00	8796	355.00	150
96.00	875	170.00	753	247.00	1612	365.00	12639
98.00	27232	171.00	932	248.00	653	366.00	1330
99.00	16382	172.00	1853	249.00	1189	367.00	120
100.00	1316	173.00	2963	251.00	330	371.00	199
101.00	6898	174.00	4475	252.00	584	372.00	3045
102.00	380	175.00	6902	253.00	1043	373.00	635
103.00	2655	176.00	1293	255.00	151808	383.00	990
104.00	5586	177.00	3324	256.00	22496	390.00	403
105.00	5021	178.00	1232	257.00	2304	391.00	274
106.00	548	179.00	16600	258.00	15319	401.00	114
107.00	61184	180.00	9833	259.00	2016	402.00	1729
108.00	7254	181.00	4652	260.00	398	403.00	1089
109.00	473	182.00	543	261.00	213	404.00	772
110.00	75912	183.00	412	263.00	110	421.00	1100
111.00	14930	184.00	1336	265.00	6227	422.00	731
112.00	1712	185.00	6393	266.00	594	423.00	7863
113.00	260	186.00	47544	269.00	111	424.00	1488
114.00	156	187.00	14486	270.00	136	425.00	121
115.00	178	188.00	1094	271.00	292	441.00	21944
116.00	1212	189.00	4539	272.00	555	442.00	130728
117.00	81832	190.00	811	273.00	5237	443.00	25072

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1188.d

Date : 04-MAY-2000 08:15

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT125

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1188.d

Spectrum: Avg. Scans 203-205 (5.79), Background Scan 199

Location of Maximum: 198.00

Number of points: 287

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	5659	191.00	1591	274.00	14706	444.00	2217
119.00	88	192.00	4797	275.00	62088		

Data File: /chem/BNAMS3.i/625/05-04-00/04may00.b/t1188.d

Date : 04-MAY-2000 08:15

Client ID:

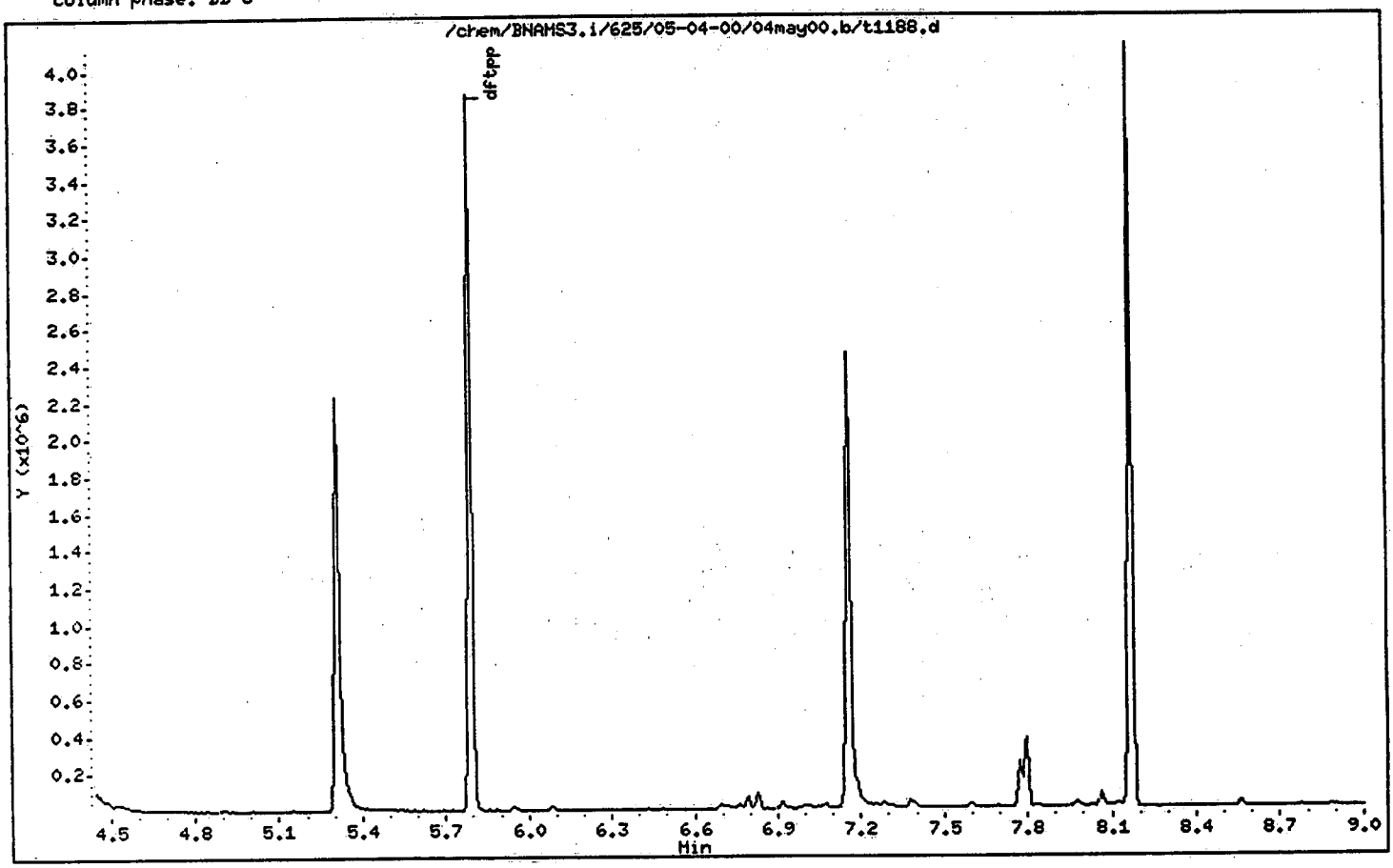
Instrument: BNAMS3.i

Sample Info: TDFT125

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25



SEMI-VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab File ID: T1232 DFTPP Injection Date: 05/08/00

Instrument ID: BNAMS3 DFTPP Injection Time: 1811

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.0
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	40.0 - 60.0% of mass 198	45.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	20.8
365	Greater than 1.0% of mass 198	3.21
441	0.0 - 100.0% of mass 443	10.0 (80.0)2
442	40.0 - 110.0% of mass 198	66.4
443	17.0 - 23.0% of mass 442	12.6 (18.9)3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	TSTD050	TSTD050	T1233	05/08/00	1832
02	TSTD120	TSTD120	T1234	05/08/00	1922
03	TSTD080	TSTD080	T1235	05/08/00	2011
04	TSTD020	TSTD020	T1236	05/08/00	2101
05	TSTD010	TSTD010	T1237	05/08/00	2151
06	MW_4	197721	T1243	05/09/00	0249
07	MW_22R	197723	T1244	05/09/00	0339
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1232.d

Date : 08-MAY-2000 18:11

Client ID:

Instrument: BNAMS3.i

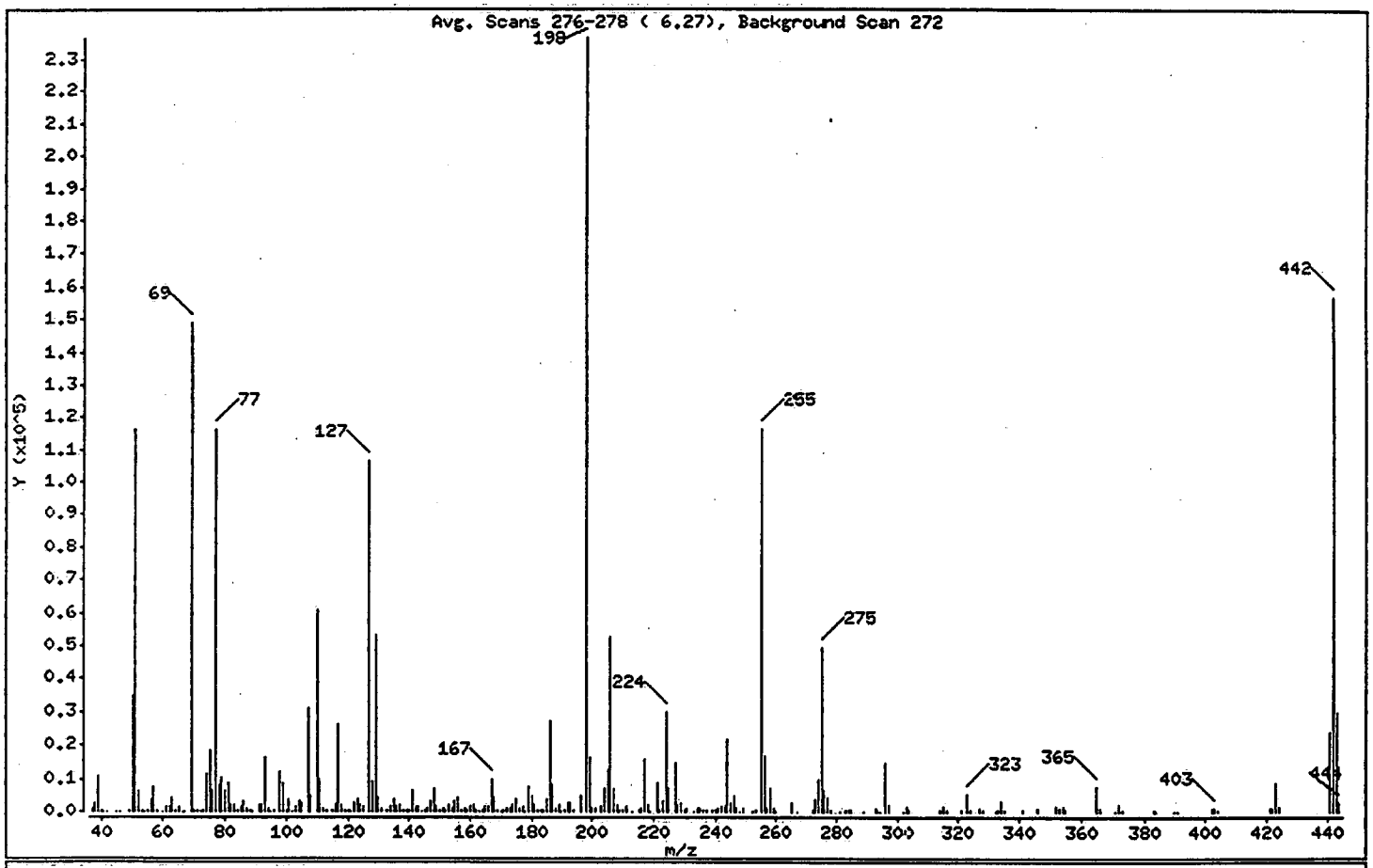
Sample Info: TDFT129

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	49.16
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	63.00
70	Less than 2.00% of mass 69	0.31 (0.49)
127	40.00 - 60.00% of mass 198	45.03
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 30.00% of mass 198	20.83
365	Greater than 1.00% of mass 198	3.21
441	0.01 - 100.00% of mass 443	10.05 (80.00)
442	40.00 - 110.00% of mass 198	66.44
443	17.00 - 23.00% of mass 442	12.56 (18.90)

Data File: /chem/BNAHS3.i/625/05-08-00/08may00.b/t1232.d

Date : 08-MAY-2000 18:11

Client ID:

Instrument: BNAHS3.i

Sample Info: TDFT129

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1232.d
Spectrum: Avg. Scans 276-278 (6.27), Background Scan 272
Location of Maximum: 198.00
Number of points: 258

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	880	112.00	1093	180.00	4812	257.00	1263
38.00	2776	113.00	522	181.00	2149	258.00	7231
39.00	10633	115.00	313	182.00	412	259.00	1178
40.00	324	116.00	2113	183.00	392	260.00	135
41.00	52	117.00	26112	184.00	627	265.00	2798
42.00	58	118.00	2052	185.00	3894	267.00	141
45.00	225	119.00	354	186.00	26936	272.00	331
46.00	100	120.00	414	187.00	7901	273.00	3580
49.00	508	121.00	257	188.00	864	274.00	9858
50.00	34616	122.00	2585	189.00	1928	275.00	49280
51.00	116272	123.00	3918	190.00	168	276.00	6794
52.00	6361	124.00	1960	191.00	488	277.00	4425
53.00	452	125.00	1638	192.00	2543	278.00	635
54.00	132	127.00	106512	193.00	2607	281.00	267
55.00	555	128.00	9331	194.00	551	283.00	482
56.00	3834	129.00	53448	196.00	4910	284.00	293
57.00	7590	130.00	4159	198.00	236544	285.00	695
58.00	318	131.00	904	199.00	16071	289.00	111
60.00	71	133.00	280	200.00	1251	293.00	1089
61.00	1485	134.00	1629	201.00	951	294.00	130
62.00	1683	135.00	4000	203.00	1805	296.00	14497
63.00	4560	136.00	1427	204.00	7077	297.00	1972
64.00	719	137.00	1929	205.00	12566	302.00	157
65.00	1447	138.00	539	206.00	52552	303.00	1748
66.00	123	139.00	517	207.00	7207	304.00	459
67.00	20	140.00	421	208.00	2161	314.00	719
69.00	148992	141.00	6542	209.00	604	315.00	1634
70.00	736	142.00	1745	210.00	710	316.00	812
71.00	560	143.00	1396	211.00	1889	321.00	527
72.00	106	144.00	201	213.00	102	323.00	5330
73.00	757	145.00	381	215.00	654	324.00	811
74.00	11539	146.00	1289	216.00	941	327.00	984
75.00	18496	147.00	3293	217.00	15887	328.00	350
76.00	6732	148.00	7224	218.00	2041	332.00	164
77.00	116624	149.00	1510	219.00	113	333.00	675

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1232.d

Date : 08-MAY-2000 18:11

Client ID:

Instrument: BNAMS3.i

Sample Info: TDFT129

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25

Data File: t1232.d

Spectrum: Avg. Scans 276-278 (6.27), Background Scan 272

Location of Maximum: 198.00

Number of points: 258

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	8308	150.00	337	221.00	8665	334.00	3180
79.00	10437	151.00	1083	222.00	712	335.00	636
80.00	6765	152.00	342	223.00	3280	341.00	584
81.00	8942	153.00	1957	224.00	29792	346.00	900
82.00	2352	154.00	1274	225.00	6801	352.00	1423
83.00	2406	155.00	3308	227.00	14729	353.00	1183
84.00	278	156.00	4549	228.00	1998	354.00	1467
85.00	1557	157.00	792	229.00	2709	355.00	513
86.00	3002	158.00	947	230.00	312	365.00	7590
87.00	1209	159.00	739	231.00	1034	366.00	833
88.00	294	160.00	1556	233.00	263	371.00	253
89.00	118	161.00	2419	234.00	853	372.00	2359
91.00	2341	162.00	633	235.00	1088	373.00	682
92.00	2310	163.00	142	236.00	672	383.00	595
93.00	16576	164.00	336	237.00	800	384.00	107
94.00	1055	165.00	1888	239.00	532	390.00	149
95.00	55	166.00	1399	240.00	415	391.00	107
96.00	795	167.00	9905	241.00	854	402.00	840
98.00	11855	168.00	4511	242.00	1475	403.00	1320
99.00	8531	169.00	705	243.00	1736	404.00	476
100.00	348	170.00	167	244.00	21488	421.00	1269
101.00	3996	171.00	457	245.00	2782	422.00	1073
102.00	131	172.00	1143	246.00	4756	423.00	8948
103.00	1599	173.00	1257	247.00	895	424.00	1639
104.00	3003	174.00	2015	248.00	112	441.00	23760
105.00	2486	175.00	3748	249.00	816	442.00	157120
107.00	31064	176.00	897	252.00	230	443.00	29696
108.00	4838	177.00	1821	253.00	679	444.00	2449
110.00	60752	178.00	190	255.00	116408		
111.00	9623	179.00	7827	256.00	16792		

Data File: /chem/BNAMS3.i/625/05-08-00/08may00.b/t1232.d

Date : 08-MAY-2000 18:11

Client ID:

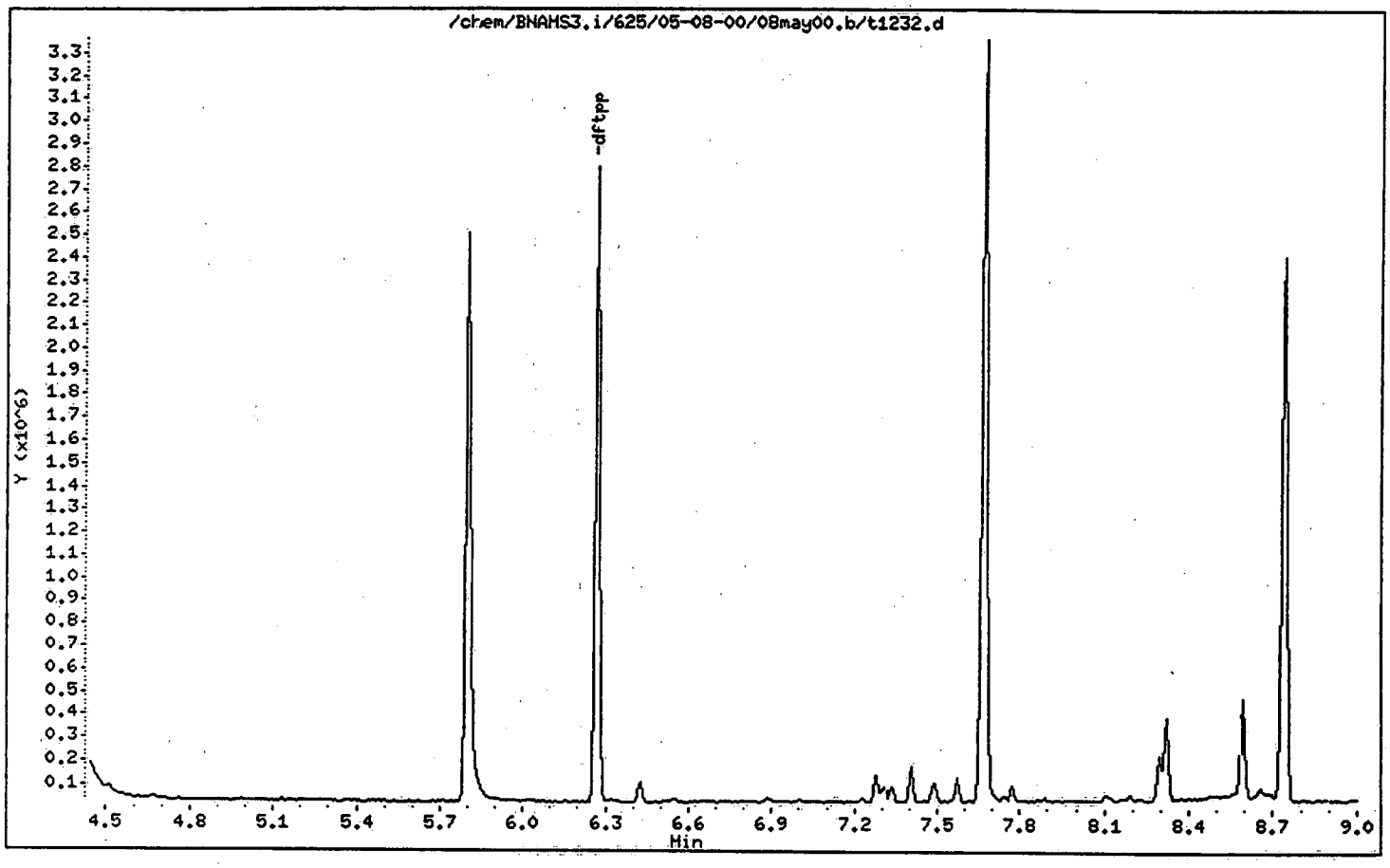
Instrument: BNAMS3.i

Sample Info: TDFT129

Operator: BNA2

Column phase: DB-5

Column diameter: 0.25



LAB SAMPLE NO.

WB109

SEMIVOLATILE METHOD BLANK SUMMARY

Matrix: WATER

Level: LOW

Instrument ID: BNAMS3

Date Analyzed: 05/03/00

Time Analyzed: 1430

Lab File ID: T1162

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	DATE ANALYZED
01	FIELD_BLANK	197716	T1174	05/04/00
02	MW_15S	197718	T1175	05/04/00
03	MW_15I	197719	T1176	05/04/00
04	MW_11D	197720	T1177	05/04/00
05	MW_17S	197722	T1210	05/05/00
06	MW_25R	197724	T1212	05/05/00
07	MW_14I	197725	T1213	05/05/00
08	MW_21	197726	T1214	05/05/00
09	MW_4	197721	T1243	05/09/00
10	MW_22R	197723	T1244	05/09/00
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **WB109**
Site:

Lab Sample No: **WB109**
Lab Job No: Z281

Date Sampled: _____
Date Received: _____
Date Extracted: 04/18/00
Date Analyzed: 05/03/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1162.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
N-Nitrosodimethylamine	ND	0.5
bis(2-Chloroethyl)ether	ND	1.1
1,3-Dichlorobenzene	ND	0.6
1,4-Dichlorobenzene	ND	0.6
1,2-Dichlorobenzene	ND	0.6
bis(2-chloroisopropyl)ether	ND	1.1
N-Nitroso-di-n-propylamine	ND	0.8
Hexachloroethane	ND	0.7
Nitrobenzene	ND	0.8
Isophorone	ND	0.9
bis(2-Chloroethoxy)methane	ND	0.9
1,2,4-Trichlorobenzene	ND	0.6
Naphthalene	ND	0.8
4-Chloroaniline	ND	0.8
Hexachlorobutadiene	ND	0.6
2-Methylnaphthalene	ND	0.6
Hexachlorocyclopentadiene	ND	0.9
2-Chloronaphthalene	ND	0.8
2-Nitroaniline	ND	0.7
Dimethylphthalate	ND	0.5
Acenaphthylene	ND	0.5
2,6-Dinitrotoluene	ND	0.7
3-Nitroaniline	ND	0.4
Acenaphthene	ND	0.6
Dibenzofuran	ND	0.4
2,4-Dinitrotoluene	ND	0.6
Diethylphthalate	ND	0.4
4-Chlorophenyl-phenylether	ND	0.5
Fluorene	ND	0.7
4-Nitroaniline	ND	0.6
N-Nitrosodiphenylamine	ND	0.6
4-Bromophenyl-phenylether	ND	1.2
Hexachlorobenzene	ND	0.6
Phenanthrene	ND	0.5

Client ID: **WB109**
Site:

Lab Sample No: **WB109**
Lab Job No: Z281

Date Sampled: _____
Date Received: _____
Date Extracted: 04/18/00
Date Analyzed: 05/03/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1162.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Anthracene	ND	0.3
Carbazole	ND	0.6
Di-n-butylphthalate	ND	0.5
Fluoranthene	ND	0.5
Pyrene	ND	0.6
Benzidine	ND	13
Butylbenzylphthalate	ND	0.7
3,3'-Dichlorobenzidine	ND	4.7
Benzo(a)anthracene	ND	0.4
Chrysene	ND	0.6
bis(2-Ethylhexyl)phthalate	ND	2.0
Di-n-octylphthalate	ND	0.3
Benzo(b)fluoranthene	ND	0.4
Benzo(k)fluoranthene	ND	0.6
Benzo(a)pyrene	ND	0.2
Indeno(1,2,3-cd)pyrene	ND	0.5
Dibenz(a,h)anthracene	ND	0.3
Benzo(g,h,i)perylene	ND	0.4
Pyridine	ND	0.6
Aniline	ND	1.0
Benzyl Alcohol	ND	0.8
1,2-Diphenylhydrazine	ND	0.5
Diphenyl	ND	0.7
Acetophenone	ND	1.0
1,4-Dioxane	ND	0.6
Benzaldehyde	ND	1.8
Caprolactum	ND	0.2
Atrazine	ND	1.0

Client ID: **WB109**
Site:

Lab Sample No: **WB109**
Lab Job No: Z281

Date Sampled: _____
Date Received: _____
Date Extracted: 04/18/00
Date Analyzed: 05/03/00
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t1162.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 625

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO SEMI-VOLATILE ORGANIC COMPOUNDS FOUND			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			

TOTAL ESTIMATED CONCENTRATION 0.0

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1162.d
Report Date: 04-May-2000 09:02

STL Envirotech

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS3.i/625/04-28-00/03may00.b/t1162.d
Lab Smp Id: WB109 Client Smp ID: BNA
Inj Date : 03-MAY-2000 14:30
Operator : BNAMS 1 Inst ID: BNAMS3.i
Smp Info : WB109;1000;2;1;;
Misc Info : ;BNA;;;
Comment :
Method : /chem/BNAMS3.i/625/04-28-00/03may00.b/BNA625b.m
Meth Date : 03-May-2000 12:06 eddie Quant Type: ISTD
Cal Date : 28-APR-2000 13:47 Cal File: t1073.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allBNb.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1000*Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	2.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)

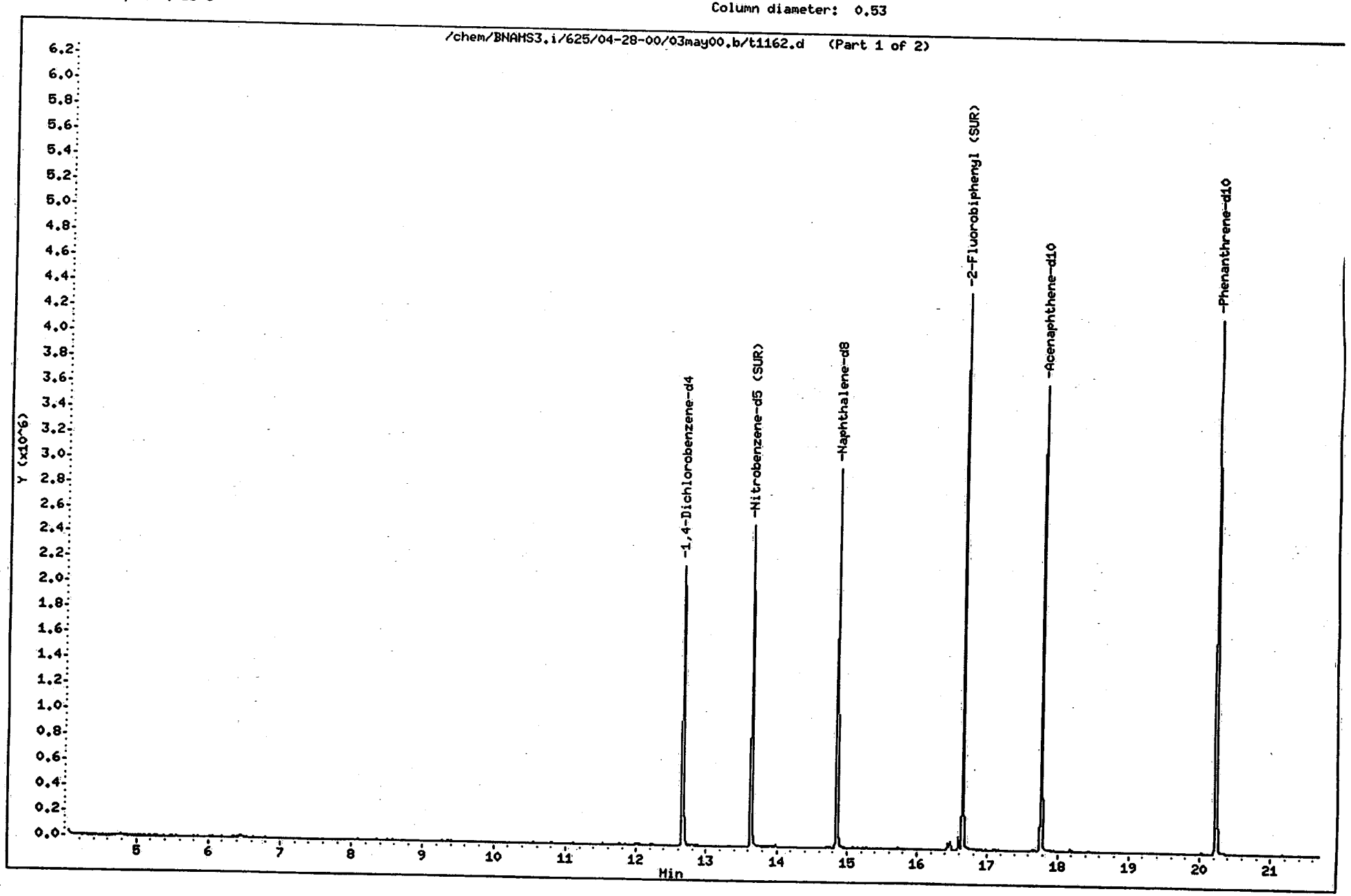
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	12.657	12.669	(1.000)	278233	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	13.637	13.647	(0.918)	1046881	38.6769	77
* 80 Naphthalene-d8	136	14.854	14.864	(1.000)	999590	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	16.650	16.658	(0.937)	1228135	39.4343	79
* 82 Acenaphthene-d10	164	17.775	17.785	(1.000)	830304	40.0000	
* 83 Phenanthrene-d10	188	20.233	20.242	(1.000)	2079768	40.0000	
$ 78 Terphenyl-d14 (SUR)	244	22.844	22.851	(0.929)	2739053	51.2818	100
* 81 Chrysene-d12	240	24.589	24.612	(1.000)	2224873	40.0000	
* 84 Perylene-d12	264	27.745	27.773	(1.000)	1733892	40.0000	

Data File: /chem/BNAMS3.i/625/04-28-00/03may00.b/t1162.d
Date : 03-MAY-2000 14:30
Client ID: BNA
Sample Info: WB109;1000;2;1;;
Purge Volume: 1000.0
Column phase: DB-5

Instrument: BNAMS3.i

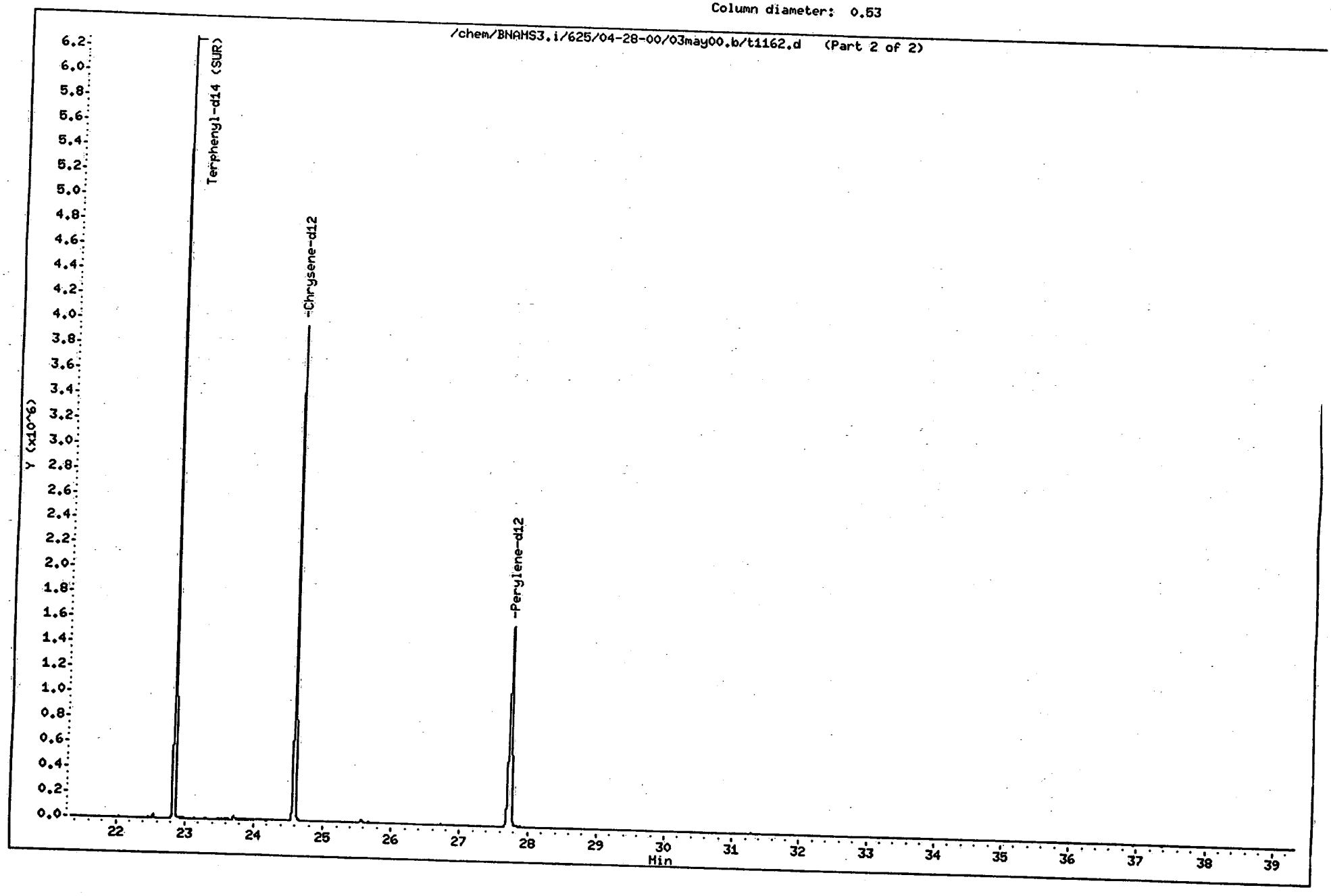
Operator: BNAMS 1
Column diameter: 0.53



Data File: /chem/BNAHS3.i/625/04-28-00/03may00.b/t1162.d
Date : 03-MAY-2000 14:30
Client ID: BNA
Sample Info: WB109;1000;2;1;;
Purge Volume: 1000.0
Column phase: DB-5

Instrument: BNAHS3.i

Operator: BNAHS 1
Column diameter: 0.53



SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

LAB FILE ID: RRF10: T1071 RRF20: T1073 RRF50: T1069
RRF80: T1072 RRF120: T1070

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Phenol	1.906	1.897	2.247	2.410	2.586
2-Chlorophenol	0.938	0.922	1.058	1.119	1.262
2-Methylphenol	1.187	1.210	1.461	1.558	1.731
4-Methylphenol	1.242	1.223	1.755	2.126	2.423
2-Nitrophenol	0.192	0.204	0.219	0.235	0.259
2,4-Dimethylphenol	0.278	0.309	0.358	0.387	0.432
2,4-Dichlorophenol	0.351	0.364	0.441	0.470	0.557
4-Chloro-3-methylphenol	0.568	0.580	0.639	0.578	0.615
2,4,6-Trichlorophenol	0.522	0.525	0.584	0.601	0.653
2,4,5-Trichlorophenol	0.501	0.506	0.594	0.603	0.682
2,4-Dinitrophenol	0.130	0.185	0.215	0.241	0.268
4-Nitrophenol	0.566	0.578	0.618	0.588	0.612
4,6-Dinitro-2-methylphenol	0.117	0.135	0.150	0.156	0.176
Pentachlorophenol	0.109	0.150	0.171	0.177	0.188
Benzoic Acid	0.132	0.160	0.139	0.150	0.141
N-Nitrosodimethylamine	0.823	0.814	0.910	0.956	0.958
bis(2-Chloroethyl)ether	1.530	1.430	1.558	1.568	1.690
1,3-Dichlorobenzene	1.323	1.298	1.483	1.583	1.780
1,4-Dichlorobenzene	1.231	1.203	1.459	1.615	1.863
1,2-Dichlorobenzene	1.230	1.169	1.383	1.711	2.242
bis(2-chloroisopropyl)ether	2.736	2.515	2.781	2.754	2.865
N-Nitroso-di-n-propylamine	2.060	1.932	2.142	2.090	2.047
Hexachloroethane	1.072	1.029	1.090	1.099	1.130
Nitrobenzene	1.405	1.405	1.478	1.433	1.472
Isophorone	1.566	1.578	1.649	1.580	1.544
bis(2-Chloroethoxy)methane	0.606	0.616	0.689	0.715	0.757
1,2,4-Trichlorobenzene	0.494	0.504	0.571	0.598	0.665
Naphthalene	0.832	0.890	1.092	1.315	1.584
4-Chloroaniline	0.312	0.347	0.424	0.449	0.485
Hexachlorobutadiene	0.629	0.613	0.633	0.619	0.607
2-Methylnaphthalene	0.645	0.691	0.866	0.983	1.204
Hexachlorocyclopentadiene	0.300	0.310	0.478	0.456	0.526
2-Chloronaphthalene	0.891	0.956	1.090	1.251	1.475
2-Nitroaniline	0.783	0.773	0.769	0.754	0.762
Dimethylphthalate	1.579	1.599	1.737	1.794	1.953
Acenaphthylene	1.291	1.322	1.588	1.758	2.054
2,6-Dinitrotoluene	0.293	0.304	0.340	0.361	0.403
3-Nitroaniline	0.201	0.212	0.245	0.254	0.287
Acenaphthene	0.799	0.889	1.076	1.255	1.477

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

LAB FILE ID: RRF10: T1071 RRF20: T1073 RRF50: T1069
RRF80: T1072 RRF120: T1070

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Dibenzofuran	1.409	1.483	1.763	2.139	2.560
2,4-Dinitrotoluene	0.415	0.449	0.523	0.616	0.752
Diethylphthalate	1.834	1.900	2.103	2.158	2.332
4-Chlorophenyl-phenylether	0.951	0.993	1.155	1.258	1.374
Fluorene	1.202	1.284	1.611	1.970	2.342
4-Nitroaniline	0.178	0.185	0.201	0.217	0.230
N-Nitrosodiphenylamine	0.318	0.330	0.377	0.415	0.484
4-Bromophenyl-phenylether	0.264	0.264	0.282	0.287	0.301
Hexachlorobenzene	0.278	0.289	0.308	0.319	0.335
Phenanthrene	0.726	0.778	0.946	1.069	1.192
Anthracene	0.757	0.792	0.940	1.035	1.198
Carbazole	0.628	0.632	0.696	0.739	0.822
Di-n-butylphthalate	1.173	1.199	1.335	1.483	1.547
Fluoranthene	1.222	1.306	1.414	1.488	1.567
Pyrene	1.012	1.010	1.091	1.070	1.051
Benzidine	0.261	0.225	0.239	0.143	0.086
Butylbenzylphthalate	0.475	0.509	0.522	0.538	0.540
3,3'-Dichlorobenzidine	0.401	0.440	0.418	0.361	0.296
Benzo(a)anthracene	1.058	1.057	1.143	1.167	1.143
Chrysene	0.887	0.940	0.990	1.008	0.986
bis(2-Ethylhexyl)phthalate	0.671	0.680	0.825	0.950	0.970
Di-n-octylphthalate	1.324	1.392	1.538	1.713	1.809
Benzo(b)fluoranthene	1.231	1.256	1.294	1.409	1.612
Benzo(k)fluoranthene	1.157	1.197	1.285	1.312	1.175
Benzo(a)pyrene	1.130	1.143	1.219	1.258	1.288
Indeno(1,2,3-cd)pyrene	1.031	1.047	1.190	1.216	1.327
Dibenz(a,h)anthracene	1.010	1.035	1.110	1.180	1.277
Benzo(g,h,i)perylene	1.095	1.104	1.156	1.163	1.175
Pyridine	1.282	1.307	1.195	1.320	1.273
Aniline	1.798	1.817	2.278	2.326	2.432
Benzyl Alcohol	0.895	0.913	1.066	1.217	1.394
1,2-Diphenylhydrazine	1.052	1.014	1.018	1.028	1.042
Diphenyl	1.081	1.135	1.401	1.686	2.040
Diphenyl Ether	0.730	0.740	0.865	1.009	1.164
Acetophenone	2.556	2.515	3.027	3.154	3.196
N,N-Dimethylaniline	1.737	1.693	2.319	2.547	2.846
1,4-Dioxane	0.485	0.461	0.492	0.492	0.537
2,3,7,8-TCDD (screen)			0.151		
Benzaldehyde	1.382	1.617	1.064	0.870	0.658

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

LAB FILE ID: RRF10: T1071 RRF20: T1073 RRF50: T1069
RRF80: T1072 RRF120: T1070

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Caprolactum	0.143	0.153	0.167	0.150	0.143
Atrazine	0.249	0.244	0.238	0.209	0.213
2-Fluorophenol (SUR)	0.995	1.089	1.227	1.273	1.385
Phenol-d5 (SUR)	1.604	1.648	1.988	2.126	2.334
2,4,6-Tribromophenol (SUR)	0.446	0.449	0.487	0.502	0.522
Nitrobenzene-d5 (SUR)	1.026	1.074	1.117	1.083	1.115
2-Fluorobiphenyl (SUR)	1.216	1.264	1.478	1.654	1.889
Terphenyl-d14 (SUR)	0.967	0.969	1.011	0.956	0.899

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Phenol	AVRG	2.20925381	13.8*
2-Chlorophenol	AVRG	1.05985155	13.2*
2-Methylphenol	AVRG	1.42922609	16.2*
4-Methylphenol	AVRG	1.75377055	30.3*
2-Nitrophenol	AVRG	0.22203101	11.9*
2,4-Dimethylphenol	AVRG	0.35271642	17.4*
2,4-Dichlorophenol	AVRG	0.43653061	19.3*
4-Chloro-3-methylphenol	AVRG	0.59586474	5.0*
2,4,6-Trichlorophenol	AVRG	0.57719794	9.5*
2,4,5-Trichlorophenol	AVRG	0.57735497	13.1*
2,4-Dinitrophenol	AVRG	0.20784513	25.5**
4-Nitrophenol	AVRG	0.59253652	3.8**
4,6-Dinitro-2-methylphenol	AVRG	0.14680091	15.0*
Pentachlorophenol	AVRG	0.15893965	19.6*
Benzoic Acid	AVRG	0.14454456	7.4*
N-Nitrosodimethylamine	AVRG	0.89220856	7.8**
bis(2-Chloroethyl)ether	AVRG	1.55488971	6.0*
1,3-Dichlorobenzene	AVRG	1.49372762	13.3*
1,4-Dichlorobenzene	AVRG	1.47407169	18.7*
1,2-Dichlorobenzene	AVRG	1.54697524	28.6*
bis(2-chloroisopropyl)ether	AVRG	2.73030696	4.8*
N-Nitroso-di-n-propylamine	AVRG	2.05425979	3.8**
Hexachloroethane	AVRG	1.08391404	3.4*
Nitrobenzene	AVRG	1.43859637	2.4*
Isophorone	AVRG	1.58354788	2.5*
bis(2-Chloroethoxy)methane	AVRG	0.67662996	9.6*
1,2,4-Trichlorobenzene	AVRG	0.56658052	12.4*
Naphthalene	AVRG	1.14258717	27.2*
4-Chloroaniline	AVRG	0.40338243	17.8*
Hexachlorobutadiene	AVRG	0.62012488	1.8*
2-Methylnaphthalene	AVRG	0.87793683	25.9*
Hexachlorocyclopentadiene	AVRG	0.41382712	24.8**
2-Chloronaphthalene	AVRG	1.13272477	20.8*
2-Nitroaniline	AVRG	0.76794437	1.4*
Dimethylphthalate	AVRG	1.73252924	8.8*
Acenaphthylene	AVRG	1.60277016	19.8*
2,6-Dinitrotoluene	AVRG	0.34034948	13.0*
3-Nitroaniline	AVRG	0.23980351	14.3*
Acenaphthene	AVRG	1.09925895	25.0*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Dibenzofuran	AVRG	1.87091390	25.7*
2,4-Dinitrotoluene	AVRG	0.55111799	24.7*
Diethylphthalate	AVRG	2.06531456	9.7*
4-Chlorophenyl-phenylether	AVRG	1.14634821	15.5*
Fluorene	AVRG	1.68166930	28.4*
4-Nitroaniline	AVRG	0.20218376	10.6*
N-Nitrosodiphenylamine	AVRG	0.38467489	17.7*
4-Bromophenyl-phenylether	AVRG	0.27948996	5.7*
Hexachlorobenzene	AVRG	0.30598079	7.4*
Phenanthrene	AVRG	0.94217517	20.7*
Anthracene	AVRG	0.94437332	19.2*
Carbazole	AVRG	0.70328412	11.5*
Di-n-butylphthalate	AVRG	1.34739659	12.3*
Fluoranthene	AVRG	1.39942058	9.9*
Pyrene	AVRG	1.04674823	3.4*
Benzidine	AVRG	0.19103209	38.5*
Butylbenzylphthalate	AVRG	0.51672992	5.2*
3,3'-Dichlorobenzidine	AVRG	0.38327393	14.8*
Benzo(a)anthracene	AVRG	1.11373991	4.7*
Chrysene	AVRG	0.96243711	5.1*
bis(2-Ethylhexyl)phthalate	AVRG	0.81934201	17.4*
Di-n-octylphthalate	AVRG	1.55509585	13.2*
Benzo(b)fluoranthene	AVRG	1.36020862	11.5*
Benzo(k)fluoranthene	AVRG	1.22515483	5.6*
Benzo(a)pyrene	AVRG	1.20765977	5.7*
Indeno(1,2,3-cd)pyrene	AVRG	1.16230063	10.7*
Dibenz(a,h)anthracene	AVRG	1.12251675	9.8*
Benzo(g,h,i)perylene	AVRG	1.13865656	3.2*
Pyridine	AVRG	1.27558872	3.8*
Aniline	AVRG	2.13050084	14.1*
Benzyl Alcohol	AVRG	1.09674140	19.2*
1,2-Diphenylhydrazine	AVRG	1.03075495	1.6*
Diphenyl	AVRG	1.46892993	27.2**
Diphenyl Ether	AVRG	0.90178355	20.5**
Acetophenone	AVRG	2.88959560	11.4**
N,N-Dimethylaniline	AVRG	2.22831339	22.6**
1,4-Dioxane	AVRG	0.49349699	5.6**
2,3,7,8-TCDD (screen)	AVRG	0.15125608	0.0*
Benzaldehyde	AVRG	1.11809937	34.5*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 04/28/00 04/28/00

Calibration Time(s): 1033 1347

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Caprolactum	AVRG	0.15124844	6.4*
Atrazine	AVRG	0.23071353	8.0*
2-Fluorophenol (SUR)	AVRG	1.19390633	12.9*
Phenol-d5 (SUR)	AVRG	1.93984536	16.1*
2,4,6-Tribromophenol (SUR)	AVRG	0.48132139	6.9*
Nitrobenzene-d5 (SUR)	AVRG	1.08313770	3.4*
2-Fluorobiphenyl (SUR)	AVRG	1.50035768	18.6*
Terphenyl-d14 (SUR)	AVRG	0.96026653	4.2*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 625

Instrument ID: BNAMS3 Calibration Date: 05/03/00 Time: 1115

Lab File ID: T1158 Init. Calib. Date(s): 04/28/00 04/28/00

Init. Calib. Times: 1033 1347

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	2.209	2.106		4.7	20.0
2-Chlorophenol	1.060	1.025		3.3	20.0
2-Methylphenol	1.429	1.430		-0.1	
4-Methylphenol	1.754	1.622		7.5	
2-Nitrophenol	0.222	0.213		4.0	20.0
2,4-Dimethylphenol	0.353	0.346		2.0	20.0
2,4-Dichlorophenol	0.437	0.423		3.2	20.0
4-Chloro-3-methylphenol	0.596	0.618		-3.7	20.0
2,4,6-Trichlorophenol	0.577	0.554		4.0	20.0
2,4,5-Trichlorophenol	0.577	0.553		4.2	
2,4-Dinitrophenol	0.208	0.215	0.05	-3.4	20.0
4-Nitrophenol	0.592	0.528	0.05	10.8	20.0
4,6-Dinitro-2-methylphenol	0.147	0.145		1.4	20.0
Pentachlorophenol	0.159	0.160		-0.6	20.0
Benzoic Acid	0.144	0.147		-2.1	
N-Nitrosodimethylamine	0.892	0.844	0.01	5.4	20.0
bis(2-Chloroethyl)ether	1.555	1.487		4.4	20.0
1,3-Dichlorobenzene	1.493	1.468		1.7	20.0
1,4-Dichlorobenzene	1.474	1.382		6.2	20.0
1,2-Dichlorobenzene	1.547	1.384		10.5	20.0
bis(2-chloroisopropyl)ether	2.730	2.479		9.2	20.0
N-Nitroso-di-n-propylamine	2.054	1.916	0.5	6.7	20.0
Hexachloroethane	1.084	1.063		1.9	20.0
Nitrobenzene	1.439	1.299		9.7	20.0
Isophorone	1.583	1.472		7.0	20.0
bis(2-Chloroethoxy)methane	0.677	0.649		4.1	20.0
1,2,4-Trichlorobenzene	0.566	0.539		4.8	20.0
Naphthalene	1.143	1.076		5.9	20.0
4-Chloroaniline	0.403	0.404		-0.2	
Hexachlorobutadiene	0.620	0.559		9.8	20.0
2-Methylnaphthalene	0.878	0.843		4.0	
Hexachlorocyclopentadiene	0.414	0.368	0.05	11.1	20.0
2-Chloronaphthalene	1.133	1.076		5.0	20.0
2-Nitroaniline	0.768	0.690		10.2	
Dimethylphthalate	1.732	1.708		1.4	20.0
Acenaphthylene	1.603	1.543		3.7	20.0
2,6-Dinitrotoluene	0.340	0.332		2.4	20.0

SEMIVOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 625

Instrument ID: BNAMS3 Calibration Date: 05/03/00 Time: 1115

Lab File ID: T1158 Init. Calib. Date(s): 04/28/00 04/28/00

Init. Calib. Times: 1033 1347

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
3-Nitroaniline	0.240	0.241		-0.4	
Acenaphthene	1.099	1.052		4.3	20.0
Dibenzofuran	1.871	1.785		4.6	
2,4-Dinitrotoluene	0.551	0.516		6.4	20.0
Diethylphthalate	2.065	2.041		1.2	20.0
4-Chlorophenyl-phenylether	1.146	1.058		7.7	20.0
Fluorene	1.682	1.594		5.2	20.0
4-Nitroaniline	0.202	0.206		-2.0	
N-Nitrosodiphenylamine	0.385	0.374		2.8	20.0
4-Bromophenyl-phenylether	0.280	0.240		14.3	20.0
Hexachlorobenzene	0.306	0.296		3.3	20.0
Phenanthrene	0.942	0.917		2.6	20.0
Anthracene	0.944	0.937		0.7	20.0
Carbazole	0.703	0.698		0.7	
Di-n-butylphthalate	1.347	1.352		-0.4	20.0
Fluoranthene	1.399	1.363		2.6	20.0
Pyrene	1.047	1.228		-17.3	20.0
Benzidine	0.191	0.185		3.1	
Butylbenzylphthalate	0.517	0.613		-18.6	20.0
3,3'-Dichlorobenzidine	0.383	0.404		-5.5	20.0
Benzo(a)anthracene	1.114	1.172		-5.2	20.0
Chrysene	0.962	1.040		-8.1	20.0
bis(2-Ethylhexyl)phthalate	0.819	0.936		-14.3	20.0
Di-n-octylphthalate	1.555	1.699		-9.3	20.0
Benzo(b)fluoranthene	1.360	1.279		6.0	20.0
Benzo(k)fluoranthene	1.225	1.242		-1.4	20.0
Benzo(a)pyrene	1.208	1.166		3.5	20.0
Indeno(1,2,3-cd)pyrene	1.162	1.164		-0.2	20.0
Dibenz(a,h)anthracene	1.122	1.124		-0.2	20.0
Benzo(g,h,i)perylene	1.139	1.176		-3.2	20.0
Pyridine	1.275	1.144		10.3	
Aniline	2.130	2.198		-3.2	
Benzyl Alcohol	1.097	1.054		3.9	
1,2-Diphenylhydrazine	1.031	0.975		5.4	
Diphenyl	1.469	1.393	0.001	5.2	20.0
Diphenyl Ether	0.902	0.873	0.001	3.2	20.0
Acetophenone	2.890	2.853	0.001	1.3	20.0

SEMIVOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 625

Instrument ID: BNAMS3 Calibration Date: 05/03/00 Time: 1115

Lab File ID: T1158 Init. Calib. Date(s): 04/28/00 04/28/00

Init. Calib. Times: 1033 1347

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N,N-Dimethylaniline	2.228	2.161	0.001	3.0	20.0
1,4-Dioxane	0.493	0.402	0.01	18.4	20.0
2,3,7,8-TCDD (screen)	0.151	0.180		-19.2	20.0
Benzaldehyde	1.118	0.733		34.4	20.0
Caprolactum	0.151	0.159		-5.3	20.0
Atrazine	0.231	0.232		-0.4	20.0
2-Fluorophenol (SUR)	1.194	1.186		0.7	
Phenol-d5 (SUR)	1.940	1.973		-1.7	
2,4,6-Tribromophenol (SUR)	0.481	0.442		8.1	20.0
Nitrobenzene-d5 (SUR)	1.083	0.982		9.3	
2-Fluorobiphenyl (SUR)	1.500	1.436		4.3	
Terphenyl-d14 (SUR)	0.960	1.022		-6.4	

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

LAB FILE ID: RRF10: T1194 RRF20: T1195 RRF50: T1190
RRF80: T1192 RRF120: T1191

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Phenol	1.741	1.890	2.077	2.325	2.464
2-Chlorophenol	0.917	0.932	1.039	1.159	1.238
2-Methylphenol	1.183	1.175	1.436	1.615	1.773
4-Methylphenol	1.200	1.216	1.716	2.194	2.414
2-Nitrophenol	0.181	0.203	0.217	0.233	0.242
2,4-Dimethylphenol	0.281	0.314	0.343	0.380	0.412
2,4-Dichlorophenol	0.339	0.363	0.424	0.484	0.515
4-Chloro-3-methylphenol	0.529	0.563	0.608	0.576	0.580
2,4,6-Trichlorophenol	0.456	0.470	0.552	0.604	0.599
2,4,5-Trichlorophenol	0.413	0.471	0.552	0.611	0.620
2,4-Dinitrophenol	0.093	0.152	0.211	0.228	0.238
4-Nitrophenol	0.425	0.526	0.561	0.562	0.526
4,6-Dinitro-2-methylphenol	0.104	0.129	0.135	0.146	0.158
Pentachlorophenol	0.105	0.133	0.159	0.173	0.177
Benzoic Acid	0.058	0.120	0.088	0.060	0.108
N-Nitrosodimethylamine	0.618	0.599	0.798	0.845	0.899
bis(2-Chloroethyl)ether	1.405	1.449	1.492	1.536	1.622
1,3-Dichlorobenzene	1.282	1.266	1.423	1.546	1.650
1,4-Dichlorobenzene	1.176	1.264	1.358	1.550	1.702
1,2-Dichlorobenzene	1.122	1.172	1.340	1.686	2.048
bis(2-chloroisopropyl)ether	2.288	2.448	2.405	2.548	2.620
N-Nitroso-di-n-propylamine	1.959	1.921	1.972	2.017	1.900
Hexachloroethane	0.991	1.008	1.040	1.055	1.066
Nitrobenzene	1.253	1.337	1.303	1.309	1.291
Isophorone	1.485	1.523	1.504	1.493	1.423
bis(2-Chloroethoxy)methane	0.610	0.600	0.642	0.706	0.720
1,2,4-Trichlorobenzene	0.480	0.528	0.540	0.567	0.591
Naphthalene	0.854	0.896	1.078	1.271	1.468
4-Chloroaniline	0.335	0.332	0.401	0.436	0.485
Hexachlorobutadiene	0.561	0.553	0.539	0.540	0.521
2-Methylnaphthalene	0.702	0.699	0.859	0.977	1.105
Hexachlorocyclopentadiene	0.137	0.237	0.314	0.322	0.356
2-Chloronaphthalene	0.900	0.935	1.100	1.247	1.379
2-Nitroaniline	0.683	0.688	0.691	0.720	0.685
Dimethylphthalate	1.505	1.591	1.745	1.821	1.847
Acenaphthylene	1.265	1.290	1.602	1.795	1.948
2,6-Dinitrotoluene	0.278	0.295	0.348	0.397	0.395
3-Nitroaniline	0.184	0.212	0.262	0.275	0.286
Acenaphthene	0.807	0.858	1.097	1.290	1.428

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

LAB FILE ID: RRF10: T1194 RRF20: T1195 RRF50: T1190
RRF80: T1192 RRF120: T1191

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Dibenzofuran	1.414	1.475	1.808	2.209	2.462
2,4-Dinitrotoluene	0.387	0.447	0.541	0.642	0.726
Diethylphthalate	1.772	1.893	2.085	2.235	2.258
4-Chlorophenyl-phenylether	0.855	0.914	1.098	1.207	1.216
Fluorene	1.195	1.293	1.643	2.000	2.179
4-Nitroaniline	0.192	0.180	0.227	0.213	0.231
N-Nitrosodiphenylamine	0.320	0.327	0.372	0.433	0.478
4-Bromophenyl-phenylether	0.224	0.230	0.233	0.256	0.259
Hexachlorobenzene	0.268	0.278	0.284	0.302	0.316
Phenanthrene	0.721	0.784	0.929	1.064	1.190
Anthracene	0.771	0.795	0.930	1.068	1.167
Carbazole	0.609	0.650	0.699	0.710	0.768
Di-n-butylphthalate	1.178	1.247	1.346	1.522	1.578
Fluoranthene	1.204	1.305	1.371	1.438	1.497
Pyrene	1.136	1.143	1.204	1.166	1.165
Benzidine	0.273	0.238	0.175	0.078	0.039
Butylbenzylphthalate	0.549	0.575	0.615	0.616	0.618
3,3'-Dichlorobenzidine	0.386	0.428	0.399	0.330	0.251
Benzo(a)anthracene	1.088	1.109	1.179	1.193	1.179
Chrysene	0.926	0.974	1.036	1.029	1.032
bis(2-Ethylhexyl)phthalate	0.767	0.803	0.950	1.096	1.116
Di-n-octylphthalate	1.527	1.514	1.755	1.934	2.086
Benzo(b)fluoranthene	1.152	1.209	1.332	1.406	1.619
Benzo(k)fluoranthene	1.155	1.176	1.257	1.314	1.174
Benzo(a)pyrene	1.064	1.092	1.192	1.213	1.284
Indeno(1,2,3-cd)pyrene	0.996	1.007	1.153	1.253	1.277
Dibenz(a,h)anthracene	0.965	1.001	1.123	1.212	1.361
Benzo(g,h,i)perylene	1.078	1.094	1.164	1.194	1.255
Pyridine	0.939	0.807	1.070	1.100	1.151
Aniline	1.703	1.988	2.101	2.182	2.353
Benzyl Alcohol	0.838	0.898	1.053	1.261	1.376
1,2-Diphenylhydrazine	1.032	0.987	0.961	1.005	1.007
Diphenyl	1.090	1.130	1.427	1.709	1.950
Diphenyl Ether	0.697	0.711	0.880	1.000	1.108
Acetophenone	2.450	2.508	2.918	3.130	3.204
N,N-Dimethylaniline	1.723	1.772	2.172	2.508	2.709
1,4-Dioxane	0.356	0.375	0.448	0.451	0.452
2,3,7,8-TCDD (screen)			0.161		
Benzaldehyde	1.678	0.958	1.155	0.944	0.352

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

LAB FILE ID: RRF10: T1194 RRF20: T1195 RRF50: T1190
RRF80: T1192 RRF120: T1191

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Caprolactum	0.150	0.156	0.174	0.141	0.152
Atrazine	0.252	0.245	0.214	0.170	0.185
2-Fluorophenol (SUR)	0.912	1.001	1.156	1.269	1.363
Phenol-d5 (SUR)	1.447	1.618	1.849	2.141	2.387
2,4,6-Tribromophenol (SUR)	0.376	0.383	0.441	0.444	0.446
Nitrobenzene-d5 (SUR)	0.963	0.995	0.988	0.992	0.980
2-Fluorobiphenyl (SUR)	1.193	1.229	1.448	1.647	1.772
Terphenyl-d14 (SUR)	0.984	0.985	0.998	0.955	0.908

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Phenol	AVRG	2.09940062	14.2*
2-Chlorophenol	AVRG	1.05713088	13.3*
2-Methylphenol	AVRG	1.43639210	18.3*
4-Methylphenol	AVRG	1.74790282	31.7*
2-Nitrophenol	AVRG	0.21516355	11.2*
2,4-Dimethylphenol	AVRG	0.34578975	14.9*
2,4-Dichlorophenol	AVRG	0.42500416	17.8*
4-Chloro-3-methylphenol	AVRG	0.57136183	5.0*
2,4,6-Trichlorophenol	AVRG	0.53624511	13.1*
2,4,5-Trichlorophenol	AVRG	0.53313063	16.8*
2,4-Dinitrophenol	AVRG	0.18435945	33.1**
4-Nitrophenol	AVRG	0.52014277	10.8**
4,6-Dinitro-2-methylphenol	AVRG	0.13447338	15.1*
Pentachlorophenol	AVRG	0.14943444	20.2*
Benzoic Acid	AVRG	0.08706036	32.1*
N-Nitrosodimethylamine	AVRG	0.75181248	18.1**
bis(2-Chloroethyl)ether	AVRG	1.50093112	5.5*
1,3-Dichlorobenzene	AVRG	1.43367266	11.6*
1,4-Dichlorobenzene	AVRG	1.40991386	15.2*
1,2-Dichlorobenzene	AVRG	1.47370543	26.4*
bis(2-chloroisopropyl)ether	AVRG	2.46176396	5.2*
N-Nitroso-di-n-propylamine	AVRG	1.95404371	2.3**
Hexachloroethane	AVRG	1.03201268	3.1*
Nitrobenzene	AVRG	1.29879339	2.4*
Isophorone	AVRG	1.48543141	2.6*
bis(2-Chloroethoxy)methane	AVRG	0.65568279	8.4*
1,2,4-Trichlorobenzene	AVRG	0.54126492	7.8*
Naphthalene	AVRG	1.11348183	23.2*
4-Chloroaniline	AVRG	0.39820138	16.5*
Hexachlorobutadiene	AVRG	0.54283328	2.8*
2-Methylnaphthalene	AVRG	0.86844443	20.3*
Hexachlorocyclopentadiene	AVRG	0.27350010	32.1**
2-Chloronaphthalene	AVRG	1.11242861	18.3*
2-Nitroaniline	AVRG	0.69363124	2.2*
Dimethylphthalate	AVRG	1.70191220	8.7*
Acenaphthylene	AVRG	1.58002434	19.1*
2,6-Dinitrotoluene	AVRG	0.34262771	16.1*
3-Nitroaniline	AVRG	0.24382493	17.9*
Acenaphthene	AVRG	1.09598887	24.5*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Dibenzofuran	AVRG	1.87365248	24.4*
2,4-Dinitrotoluene	AVRG	0.54856826	25.2*
Diethylphthalate	AVRG	2.04880216	10.4*
4-Chlorophenyl-phenylether	AVRG	1.05803027	15.7*
Fluorene	AVRG	1.66182887	25.8*
4-Nitroaniline	AVRG	0.20872693	10.5*
N-Nitrosodiphenylamine	AVRG	0.38610993	17.7*
4-Bromophenyl-phenylether	AVRG	0.24066605	6.6*
Hexachlorobenzene	AVRG	0.28956099	6.5*
Phenanthrene	AVRG	0.93763536	20.7*
Anthracene	AVRG	0.94637243	18.1*
Carbazole	AVRG	0.68718452	8.8*
Di-n-butylphthalate	AVRG	1.37410541	12.5*
Fluoranthene	AVRG	1.36306638	8.4*
Pyrene	AVRG	1.16287611	2.3*
Benzidine	AVRG	0.16072354	62.7*
Butylbenzylphthalate	AVRG	0.59453224	5.2*
3,3'-Dichlorobenzidine	AVRG	0.35873087	19.5*
Benzo(a)anthracene	AVRG	1.14974625	4.1*
Chrysene	AVRG	0.99956543	4.8*
bis(2-Ethylhexyl)phthalate	AVRG	0.94630262	17.0*
Di-n-octylphthalate	AVRG	1.76324759	14.2*
Benzo(b)fluoranthene	AVRG	1.34355126	13.6*
Benzo(k)fluoranthene	AVRG	1.21519289	5.6*
Benzo(a)pyrene	AVRG	1.16906375	7.7*
Indeno(1,2,3-cd)pyrene	AVRG	1.13718415	11.6*
Dibenz(a,h)anthracene	AVRG	1.13242852	14.2*
Benzo(g,h,i)perylene	AVRG	1.15715513	6.3*
Pyridine	AVRG	1.01374879	13.8*
Aniline	AVRG	2.06530766	11.7*
Benzyl Alcohol	AVRG	1.08546609	21.2*
1,2-Diphenylhydrazine	AVRG	0.99836731	2.7*
Diphenyl	AVRG	1.46119873	25.3**
Diphenyl Ether	AVRG	0.87928042	20.4**
Acetophenone	AVRG	2.84195656	12.2**
N,N-Dimethylaniline	AVRG	2.17701419	20.0**
1,4-Dioxane	AVRG	0.41620065	11.3**
2,3,7,8-TCDD (screen)	AVRG	0.16094996	0.0*
Benzaldehyde	AVRG	1.01737777	46.8*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/04/00 05/04/00

Calibration Time(s): 0928 1355

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Caprolactum	AVRG	0.15454884	8.0*
Atrazine	AVRG	0.21323776	16.9*
2-Fluorophenol (SUR)	AVRG	1.14026048	16.3*
Phenol-d5 (SUR)	AVRG	1.88845908	20.2*
2,4,6-Tribromophenol (SUR)	AVRG	0.41814618	8.4*
Nitrobenzene-d5 (SUR)	AVRG	0.98359307	1.3*
2-Fluorobiphenyl (SUR)	AVRG	1.45782332	17.4*
Terphenyl-d14 (SUR)	AVRG	0.96602035	3.7*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

LAB FILE ID: RRF10: T1237 RRF20: T1236 RRF50: T1233
RRF80: T1235 RRF120: T1234

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Phenol	2.040	1.971	1.875	1.895	2.007
2-Chlorophenol	1.456	1.470	1.394	1.433	1.402
2-Methylphenol	1.502	1.460	1.408	1.430	1.399
4-Methylphenol	1.597	1.593	1.523	1.472	1.396
2-Nitrophenol	0.227	0.233	0.220	0.219	0.207
2,4-Dimethylphenol	0.416	0.398	0.376	0.377	0.362
2,4-Dichlorophenol	0.341	0.340	0.335	0.343	0.328
4-Chloro-3-methylphenol	0.508	0.481	0.451	0.413	0.402
2,4,6-Trichlorophenol	0.468	0.490	0.459	0.448	0.443
2,4,5-Trichlorophenol	0.487	0.494	0.492	0.476	0.471
2,4-Dinitrophenol	0.132	0.192	0.204	0.225	0.231
4-Nitrophenol	0.478	0.461	0.460	0.441	0.447
4,6-Dinitro-2-methylphenol	0.125	0.148	0.140	0.149	0.145
Pentachlorophenol	0.167	0.172	0.169	0.170	0.168
Benzoic Acid	0.226	0.268	0.376	0.206	0.143
N-Nitrosodimethylamine	1.304	1.430	1.441	1.391	1.341
bis(2-Chloroethyl)ether	1.723	1.722	1.590	1.550	1.524
1,3-Dichlorobenzene	1.484	1.467	1.424	1.467	1.420
1,4-Dichlorobenzene	1.404	1.392	1.382	1.358	1.402
1,2-Dichlorobenzene	1.390	1.337	1.305	1.315	1.312
bis(2-chloroisopropyl)ether	3.590	3.421	3.137	2.920	2.706
N-Nitroso-di-n-propylamine	1.864	1.628	1.495	1.475	1.441
Hexachloroethane	0.816	0.790	0.769	0.722	0.690
Nitrobenzene	0.959	0.863	0.769	0.737	0.698
Isophorone	1.287	1.225	1.136	1.114	1.062
bis(2-Chloroethoxy)methane	0.587	0.559	0.518	0.514	0.509
1,2,4-Trichlorobenzene	0.403	0.408	0.389	0.384	0.375
Naphthalene	1.136	1.113	1.082	1.088	1.072
4-Chloroaniline	0.478	0.476	0.454	0.457	0.445
Hexachlorobutadiene	0.307	0.286	0.271	0.258	0.246
2-Methylnaphthalene	0.772	0.741	0.724	0.743	0.739
Hexachlorocyclopentadiene	0.264	0.311	0.334	0.303	0.302
2-Chloronaphthalene	1.077	1.070	1.021	1.014	1.023
2-Nitroaniline	0.750	0.732	0.573	0.556	0.512
Dimethylphthalate	1.660	1.607	1.530	1.481	1.450
Acenaphthylene	1.629	1.652	1.588	1.575	1.556
2,6-Dinitrotoluene	0.348	0.361	0.351	0.348	0.346
3-Nitroaniline	0.408	0.409	0.396	0.404	0.400
Acenaphthene	0.563	0.559	0.542	0.540	0.540

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

LAB FILE ID: RRF10: T1237 RRF20: T1236 RRF50: T1233
RRF80: T1235 RRF120: T1234

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Dibenzofuran	1.654	1.663	1.598	1.547	1.516
2,4-Dinitrotoluene	0.491	0.518	0.504	0.494	0.494
Diethylphthalate	1.714	1.703	1.610	1.537	1.499
4-Chlorophenyl-phenylether	0.868	0.849	0.770	0.718	0.644
Fluorene	1.329	1.322	1.308	1.290	1.294
4-Nitroaniline	0.368	0.328	0.314	0.297	0.300
N-Nitrosodiphenylamine	0.455	0.443	0.406	0.404	0.387
4-Bromophenyl-phenylether	0.234	0.227	0.210	0.202	0.186
Hexachlorobenzene	0.277	0.260	0.239	0.230	0.216
Phenanthrene	0.926	0.908	0.863	0.844	0.794
Anthracene	0.991	0.957	0.899	0.850	0.773
Carbazole	0.818	0.774	0.692	0.639	0.611
Di-n-butylphthalate	1.397	1.316	1.190	1.149	1.060
Fluoranthene	1.403	1.303	1.127	1.044	0.934
Pyrene	1.491	1.409	1.266	1.161	1.099
Benzidine	0.316	0.373	0.356	0.214	0.146
Butylbenzylphthalate	0.760	0.706	0.660	0.626	0.621
3,3'-Dichlorobenzidine	0.468	0.448	0.373	0.312	0.258
Benzo(a)anthracene	1.269	1.212	1.143	1.078	1.032
Chrysene	1.152	1.116	1.046	0.981	0.936
bis(2-Ethylhexyl)phthalate	0.909	0.860	0.835	0.801	0.764
Di-n-octylphthalate	1.640	1.536	1.400	1.337	1.295
Benzo(b)fluoranthene	1.234	1.213	1.164	1.197	1.260
Benzo(k)fluoranthene	1.210	1.170	1.084	0.984	0.716
Benzo(a)pyrene	1.173	1.150	1.075	1.046	1.019
Indeno(1,2,3-cd)pyrene	1.170	1.172	1.147	1.134	1.191
Dibenz(a,h)anthracene	1.166	1.112	1.096	1.084	0.853
Benzo(g,h,i)perylene	1.206	1.209	1.173	1.142	1.136
Pyridine	2.002	2.023	2.047	1.859	2.072
Aniline	2.050	2.097	1.960	1.934	1.912
Benzyl Alcohol	1.096	1.074	1.050	1.055	1.057
1,2-Diphenylhydrazine	1.096	1.016	0.863	0.790	0.701
Diphenyl	1.367	1.389	1.334	1.330	1.331
Diphenyl Ether	0.788	0.807	0.778	0.777	0.759
Acetophenone	2.350	2.144	2.057	2.026	1.943
N,N-Dimethylaniline	2.262	2.135	2.029	1.944	1.930
1,4-Dioxane	0.716	0.722	0.723	0.758	0.759
2,3,7,8-TCDD (screen)			0.224		
Benzaldehyde	1.688	1.613	1.411	0.815	0.630

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

LAB FILE ID: RRF10: T1237 RRF20: T1236 RRF50: T1233
RRF80: T1235 RRF120: T1234

COMPOUND	RRF10	RRF20	RRF50	RRF80	RRF120
Caprolactum	0.147	0.085	0.121	0.147	0.154
Atrazine	0.254	0.228	0.192	0.168	0.152
2-Fluorophenol (SUR)	1.449	1.415	1.394	1.394	1.408
Phenol-d5 (SUR)	2.062	2.031	1.908	1.963	1.934
2,4,6-Tribromophenol (SUR)	0.299	0.326	0.320	0.303	0.290
Nitrobenzene-d5 (SUR)	0.719	0.669	0.640	0.614	0.586
2-Fluorobiphenyl (SUR)	1.304	1.291	1.205	1.183	1.151
Terphenyl-d14 (SUR)	1.118	1.066	0.947	0.862	0.807

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Phenol	AVRG	1.95750351	3.6*
2-Chlorophenol	AVRG	1.43112095	2.3*
2-Methylphenol	AVRG	1.43996149	2.9*
4-Methylphenol	AVRG	1.51631265	5.6*
2-Nitrophenol	AVRG	0.22108539	4.4*
2,4-Dimethylphenol	AVRG	0.38579664	5.5*
2,4-Dichlorophenol	AVRG	0.33745869	1.8*
4-Chloro-3-methylphenol	AVRG	0.45079320	9.9*
2,4,6-Trichlorophenol	AVRG	0.46151120	4.0*
2,4,5-Trichlorophenol	AVRG	0.48399187	2.1*
2,4-Dinitrophenol	AVRG	0.19704358	19.9**
4-Nitrophenol	AVRG	0.45769561	3.1**
4,6-Dinitro-2-methylphenol	AVRG	0.14149691	6.8*
Pentachlorophenol	AVRG	0.16912690	1.0*
Benzoic Acid	AVRG	0.24389817	35.6*
N-Nitrosodimethylamine	AVRG	1.38136755	4.2**
bis(2-Chloroethyl)ether	AVRG	1.62158217	5.9*
1,3-Dichlorobenzene	AVRG	1.45239668	2.0*
1,4-Dichlorobenzene	AVRG	1.38766361	1.3*
1,2-Dichlorobenzene	AVRG	1.33198680	2.6*
bis(2-chloroisopropyl)ether	AVRG	3.15500641	11.4*
N-Nitroso-di-n-propylamine	AVRG	1.58052714	11.0**
Hexachloroethane	AVRG	0.75763805	6.7*
Nitrobenzene	AVRG	0.80517598	13.1*
Isophorone	AVRG	1.16482168	7.7*
bis(2-Chloroethoxy)methane	AVRG	0.53748345	6.4*
1,2,4-Trichlorobenzene	AVRG	0.39180060	3.5*
Naphthalene	AVRG	1.09841811	2.3*
4-Chloroaniline	AVRG	0.46192853	3.1*
Hexachlorobutadiene	AVRG	0.27355436	8.7*
2-Methylnaphthalene	AVRG	0.74372283	2.4*
Hexachlorocyclopentadiene	AVRG	0.30282462	8.3**
2-Chloronaphthalene	AVRG	1.04105102	2.9*
2-Nitroaniline	AVRG	0.62446758	17.4*
Dimethylphthalate	AVRG	1.54570718	5.6*
Acenaphthylene	AVRG	1.60007459	2.5*
2,6-Dinitrotoluene	AVRG	0.35074068	1.8*
3-Nitroaniline	AVRG	0.40349959	1.3*
Acenaphthene	AVRG	0.54895897	2.0*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Dibenzofuran	AVRG	1.59558692	4.1*
2,4-Dinitrotoluene	AVRG	0.50029312	2.2*
Diethylphthalate	AVRG	1.61271264	6.0*
4-Chlorophenyl-phenylether	AVRG	0.76993304	12.0*
Fluorene	AVRG	1.30863132	1.3*
4-Nitroaniline	AVRG	0.32127441	8.9*
N-Nitrosodiphenylamine	AVRG	0.41911319	6.9*
4-Bromophenyl-phenylether	AVRG	0.21175059	9.1*
Hexachlorobenzene	AVRG	0.24439021	9.8*
Phenanthrene	AVRG	0.86713276	6.0*
Anthracene	AVRG	0.89411092	9.6*
Carbazole	AVRG	0.70706390	12.4*
Di-n-butylphthalate	AVRG	1.22262021	11.0*
Fluoranthene	AVRG	1.16228628	16.4*
Pyrene	AVRG	1.28523604	12.8*
Benzidine	AVRG	0.28104181	34.7*
Butylbenzylphthalate	AVRG	0.67466090	8.7*
3,3'-Dichlorobenzidine	AVRG	0.37204097	23.8*
Benzo(a)anthracene	AVRG	1.14669987	8.4*
Chrysene	AVRG	1.04611167	8.6*
bis(2-Ethylhexyl)phthalate	AVRG	0.83400464	6.6*
Di-n-octylphthalate	AVRG	1.44172610	10.0*
Benzo(b)fluoranthene	AVRG	1.21344353	3.0*
Benzo(k)fluoranthene	AVRG	1.03282199	19.1*
Benzo(a)pyrene	AVRG	1.09258293	6.1*
Indeno(1,2,3-cd)pyrene	AVRG	1.16276176	1.9*
Dibenz(a,h)anthracene	AVRG	1.06250091	11.4*
Benzo(g,h,i)perylene	AVRG	1.17316315	2.9*
Pyridine	AVRG	2.00060056	4.2*
Aniline	AVRG	1.99059702	4.0*
Benzyl Alcohol	AVRG	1.06639547	1.8*
1,2-Diphenylhydrazine	AVRG	0.89318062	18.1*
Diphenyl	AVRG	1.35039313	2.0**
Diphenyl Ether	AVRG	0.78185147	2.3**
Acetophenone	AVRG	2.10417762	7.4**
N,N-Dimethylaniline	AVRG	2.05998413	6.8**
1,4-Dioxane	AVRG	0.73581714	2.9**
2,3,7,8-TCDD (screen)	AVRG	0.22395505	0.0*
Benzaldehyde	AVRG	1.23145247	39.0*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 625

Instrument ID: BNAMS3

Calibration Date(s): 05/08/00 05/08/00

Calibration Time(s): 1832 2151

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Caprolactum	AVRG	0.13067649	21.9*
Atrazine	AVRG	0.19858477	21.2*
2-Fluorophenol (SUR)	AVRG	1.41180309	1.6*
Phenol-d5 (SUR)	AVRG	1.97952249	3.3*
2,4,6-Tribromophenol (SUR)	AVRG	0.30746599	4.8*
Nitrobenzene-d5 (SUR)	AVRG	0.64584124	8.0*
2-Fluorobiphenyl (SUR)	AVRG	1.22715282	5.5*
Terphenyl-d14 (SUR)	AVRG	0.96017977	13.7*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

SEMI-VOLATILE SURROGATE RECOVERY
METHOD 625

Matrix: WATER Level: LOW Lab Job No: Z281

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	WB109	77	79	102		0
02	197716	82	76	104		0
03	197718	82	77	100		0
04	197719	80	73	95		0
05	197720	86	80	99		0
06	197722	92	82	118		0
07	197724	97	84	105		0
08	197725	94	84	103		0
09	197726	78	71	93		0
10	197721	93	93	120		0
11	197723	86	84	100		0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= Nitrobenzene-d5	(59-117)
S2	= 2-Fluorobiphenyl	(44-120)
S3	= Terphenyl-d14	(56-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

SEMI-VOLATILE SPIKE RECOVERY SUMMARY
METHOD 625

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 198709

MS Sample from Lab Job No: Z402

QA Batch: 5383

Compound	MS % REC.	BS % REC.	LIMITS
bis(2-Chloroethyl)ether	97	94	12-158
1,3-Dichlorobenzene	76	73	0-172
1,4-Dichlorobenzene	74	74	20-124
1,2-Dichlorobenzene	78	74	32-129
bis(2-chloroisopropyl)ether	100	100	36-166
N-Nitroso-di-n-propylamine	100	98	0-230
Hexachloroethane	76	73	40-113
Nitrobenzene	92	89	35-180
Isophorone	76	74	21-196
bis(2-Chloroethoxy)methane	100	97	33-184
1,2,4-Trichlorobenzene	78	78	44-142
Naphthalene	85	84	21-133
Hexachlorobutadiene	72	72	24-116
2-Chloronaphthalene	84	85	60-118
Dimethylphthalate	67	61	0-112
Acenaphthylene	88	89	33-145
2,6-Dinitrotoluene	92	96	50-158
Acenaphthene	89	89	47-145
2,4-Dinitrotoluene	96	95	39-139
Diethylphthalate	85	79	0-114
4-Chlorophenyl-phenylether	96	93	25-158
Fluorene	92	91	59-121
4-Bromophenyl-phenylether	98	92	53-127
Hexachlorobenzene	95	84	0-152
Phenanthrene	99	92	54-120
Anthracene	98	90	27-133
Di-n-butylphthalate	96	90	1-118
Fluoranthene	96	89	26-137
Pyrene	100	91	52-115
Butylbenzylphthalate	89	86	0-152

* Values outside of QC limits

SEMI-VOLATILE SPIKE RECOVERY SUMMARY
METHOD 625

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 198709

MS Sample from Lab Job No: Z402

QA Batch: 5383

Compound	MS % REC.	BS % REC.	LIMITS
3,3'-Dichlorobenzidine	98	100	0-262
Benzo(a)anthracene	97	86	33-143
Chrysene	99	89	17-168
bis(2-Ethylhexyl)phthalate	99	88	8-158
Di-n-octylphthalate	97	86	4-146
Benzo(b)fluoranthene	91	82	24-159
Benzo(k)fluoranthene	100	89	11-162
Benzo(a)pyrene	94	84	17-163
Indeno(1,2,3-cd)pyrene	97	85	0-171
Dibenz(a,h)anthracene	96	84	0-227
Benzo(g,h,i)perylene	99	85	0-219

* Values outside of QC limits

Spike Recovery: 0 out of 82 outside limits

COMMENTS:

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1158

Date Analyzed: 05/03/00

Instrument ID: BNAMS3

Time Analyzed: 1115

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(CRY) AREA #	RT #
	12 HOUR STD	244364	12.67	804801	14.86	1884518	24.61
	UPPER LIMIT	488728	13.17	1609602	15.36	3769036	25.11
	LOWER LIMIT	122182	12.17	402400	14.36	942259	24.11
	LABORATORY SAMPLE NO.						
01	WB109	278233	12.66	999590	14.85	2224873	24.59
02	197716	275308	12.66	936218	14.85	2196244	24.59
03	197718	273337	12.66	939295	14.86	2175818	24.59
04	197719	247599	12.66	885026	14.85	2134051	24.59
05	197720	264375	12.66	884825	14.85	2180032	24.59
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (CRY) = Chrysene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1158 Date Analyzed: 05/03/00

Instrument ID: BNAMS3 Time Analyzed: 1115

		IS4 (ANT) AREA #	RT #	IS5 (PHN) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	691012	17.78	1812859	20.24	1531498	27.77
	UPPER LIMIT	1382024	18.28	3625718	20.74	3062996	28.27
	LOWER LIMIT	345506	17.28	906430	19.74	765749	27.27
	LABORATORY SAMPLE NO.						
01	WB109	830304	17.77	2079768	20.23	1733892	27.74
02	197716	809109	17.77	2026880	20.23	1723340	27.75
03	197718	821595	17.78	1986799	20.23	1763459	27.75
04	197719	759143	17.78	1925927	20.23	1714546	27.75
05	197720	782465	17.77	1982130	20.23	1750456	27.75
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (ANT) = Acenaphthene-d10
IS5 (PHN) = Phenanthrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1190

Date Analyzed: 05/04/00

Instrument ID: BNAMS3

Time Analyzed: 0928

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(CRY) AREA #	RT #
	12 HOUR STD	242082	12.66	797859	14.86	1992172	24.61
	UPPER LIMIT	484164	13.16	1595718	15.36	3984344	25.11
	LOWER LIMIT	121041	12.16	398930	14.36	996086	24.11
	LABORATORY SAMPLE NO.						
01	197722	209199	12.67	728542	14.86	1525575	24.60
02	197724	184342	12.67	635617	14.86	1680659	24.60
03	197725	200145	12.67	694781	14.86	1682972	24.60
04	197726	213729	12.67	700658	14.86	1662987	24.60
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (CRY) = Chrysene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1190

Date Analyzed: 05/04/00

Instrument ID: BNAMS3

Time Analyzed: 0928

		IS4 (ANT) AREA #	RT #	IS5 (PHN) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	693160	17.78	1892631	20.24	1578816	27.77
	UPPER LIMIT	1386320	18.28	3785262	20.74	3157632	28.27
	LOWER LIMIT	346580	17.28	946316	19.74	789408	27.27
	LABORATORY SAMPLE NO.						
01	197722	644303	17.78	1567832	20.24	1054708	27.76
02	197724	567662	17.78	1470978	20.24	1267810	27.77
03	197725	591337	17.78	1490219	20.24	1294685	27.76
04	197726	609582	17.78	1446385	20.24	1323913	27.76
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (ANT) = Acenaphthene-d10
IS5 (PHN) = Phenanthrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1233

Date Analyzed: 05/08/00

Instrument ID: BNAMS3

Time Analyzed: 1832

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(CRY) AREA #	RT #
	12 HOUR STD	428869	13.16	1599079	15.35	2231162	25.21
	UPPER LIMIT	857738	13.66	3198158	15.85	4462324	25.71
	LOWER LIMIT	214434	12.66	799540	14.85	1115581	24.71
	LABORATORY SAMPLE NO.						
01	197721	391761	13.15	1501025	15.34	1629388	25.19
02	197723	374488	13.15	1489240	15.34	1745667	25.19
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (CRY) = Chrysene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): T1233

Date Analyzed: 05/08/00

Instrument ID: BNAMS3

Time Analyzed: 1832

		IS4(ANT) AREA #	RT #	IS5(PHN) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	1097634	18.28	2544506	20.76	2421620	28.89
	UPPER LIMIT	2195268	18.78	5089012	21.26	4843240	29.39
	LOWER LIMIT	548817	17.78	1272253	20.26	1210810	28.39
	LABORATORY SAMPLE NO.						
01	197721	988403	18.28	2009856	20.75	1733495	28.86
02	197723	1021951	18.27	2076686	20.75	1815163	28.87
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (ANT) = Acenaphthene-d10
IS5 (PHN) = Phenanthrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Client ID: **Trip_Blank**
Site: L.E. Carpenter

Lab Sample No: **197715**
Lab Job No: Z281

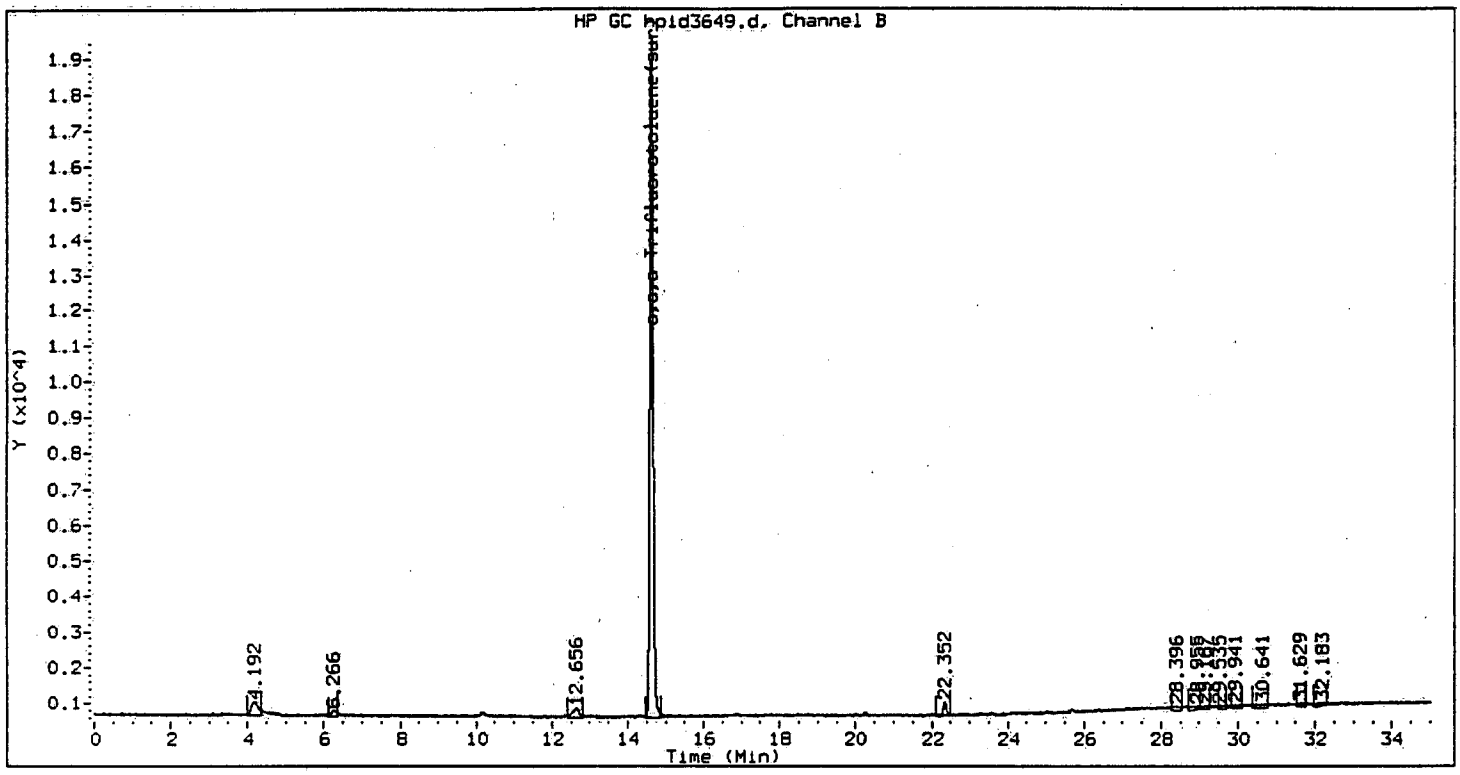
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/17/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3649.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3649.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197715
Lab ID : 197715
Inj Date : 17-APR-2000 23:06
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.638	14.637	0.001	563860	29.943	29.943

Client ID: **Field_Blank**
Site: L.E. Carpenter

Lab Sample No: **197716**
Lab Job No: Z281

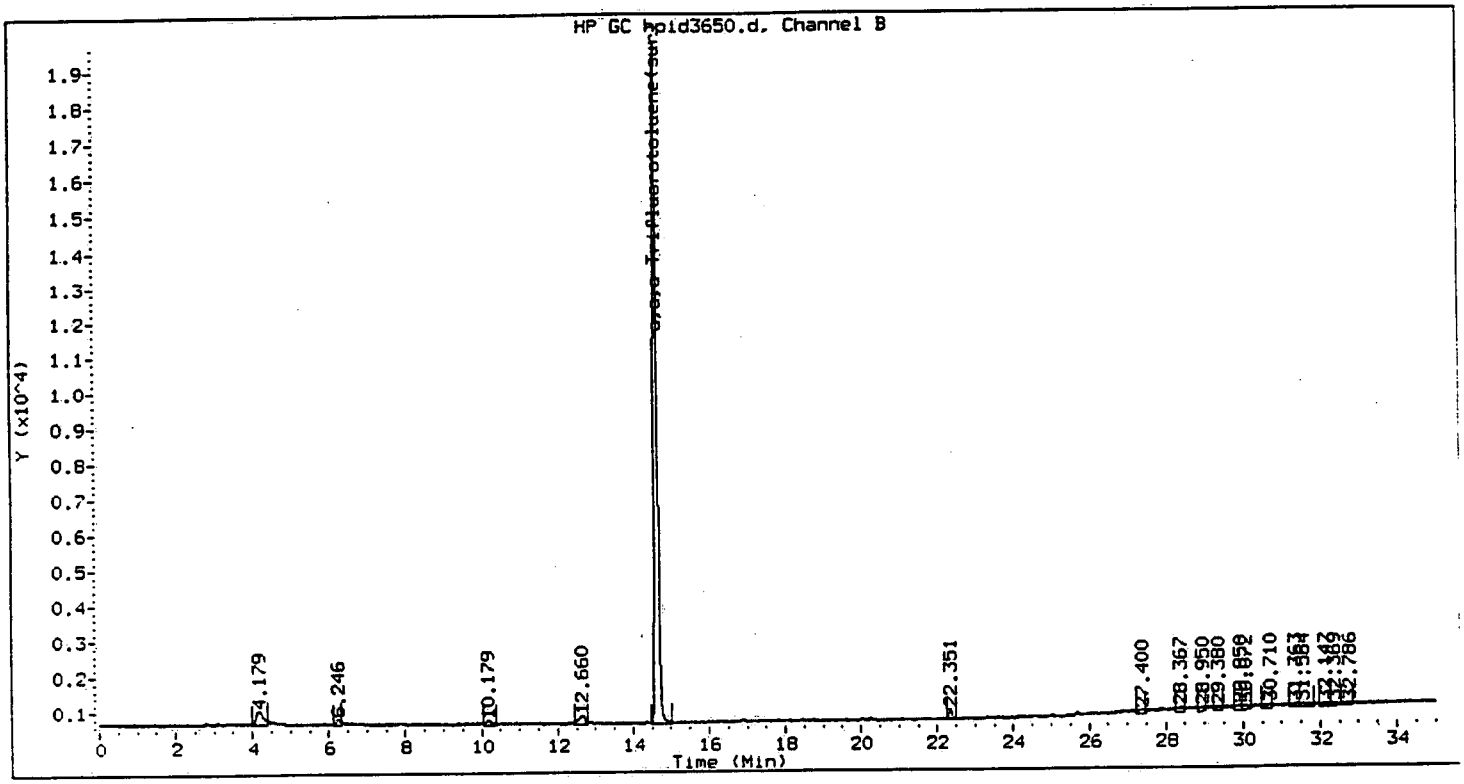
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/17/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3650.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3650.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197716
Lab ID : 197716
Inj Date : 17-APR-2000 23:47
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.639	14.637	0.002	569156	30.224	30.224

Client ID: **MW_11DD**
Site: L.E. Carpenter

Lab Sample No: **197717**
Lab Job No: Z281

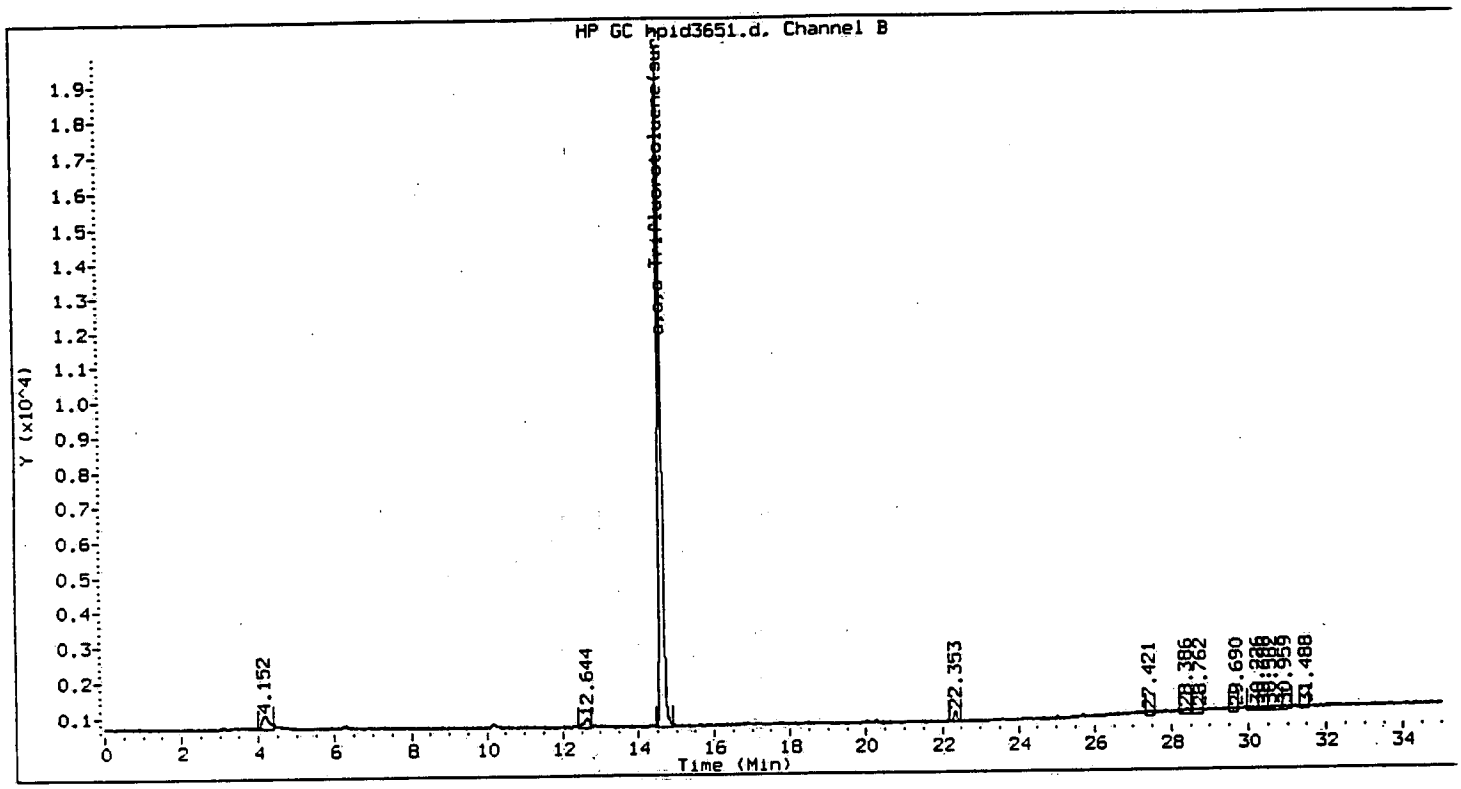
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3651.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3651.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197717
Lab ID : 197717
Inj Date : 18-APR-2000 00:28
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.639	14.637	0.002	571513	30.350	30.350

Client ID: **MW_15S**
Site: L.E. Carpenter

Lab Sample No: **197718**
Lab Job No: Z281

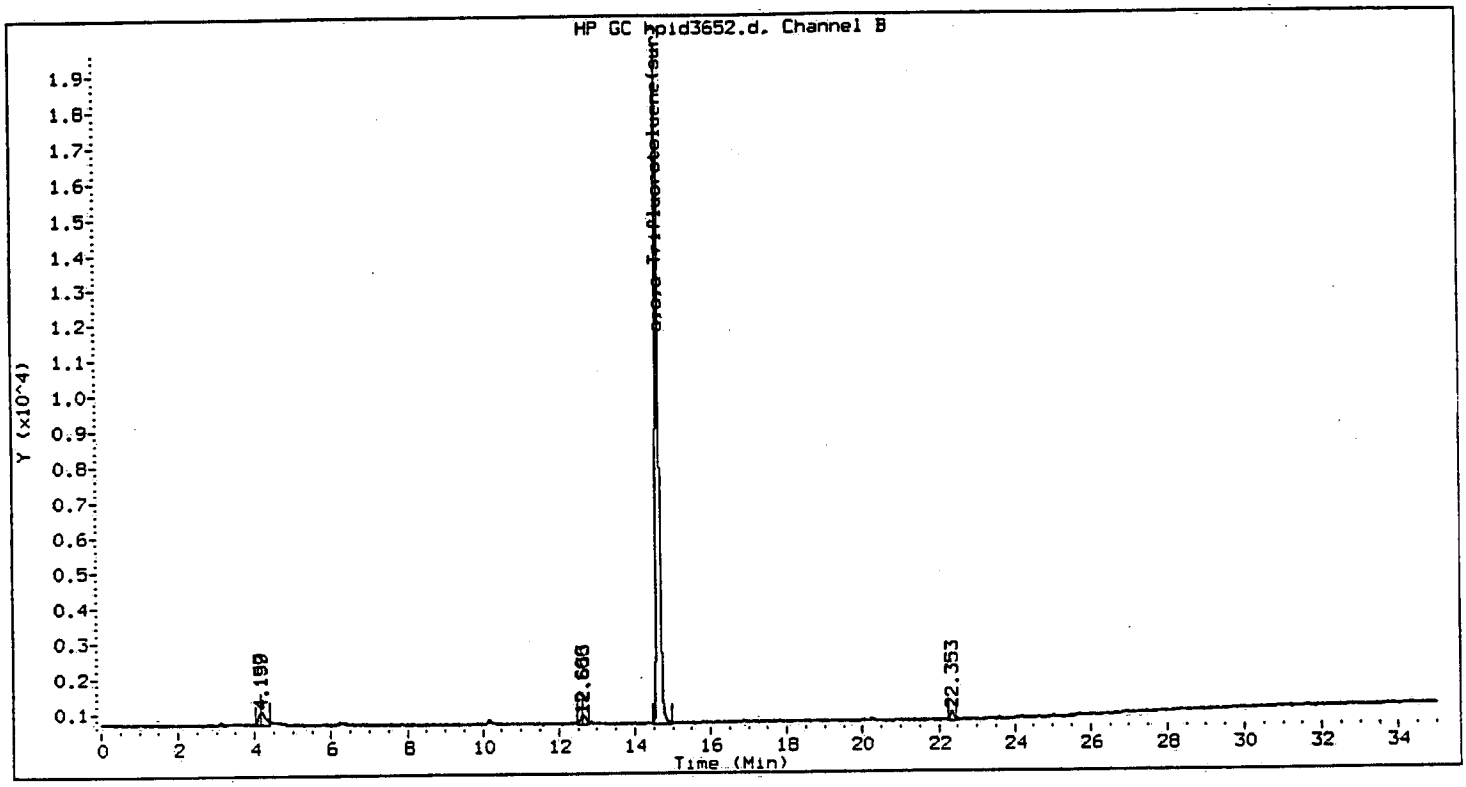
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3652.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3652.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197718
Lab ID : 197718
Inj Date : 18-APR-2000 01:08
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.640	14.637	0.003	570302	30.285	30.285

Client ID: **MW_15I**
Site: L.E. Carpenter

Lab Sample No: **197719**
Lab Job No: Z281

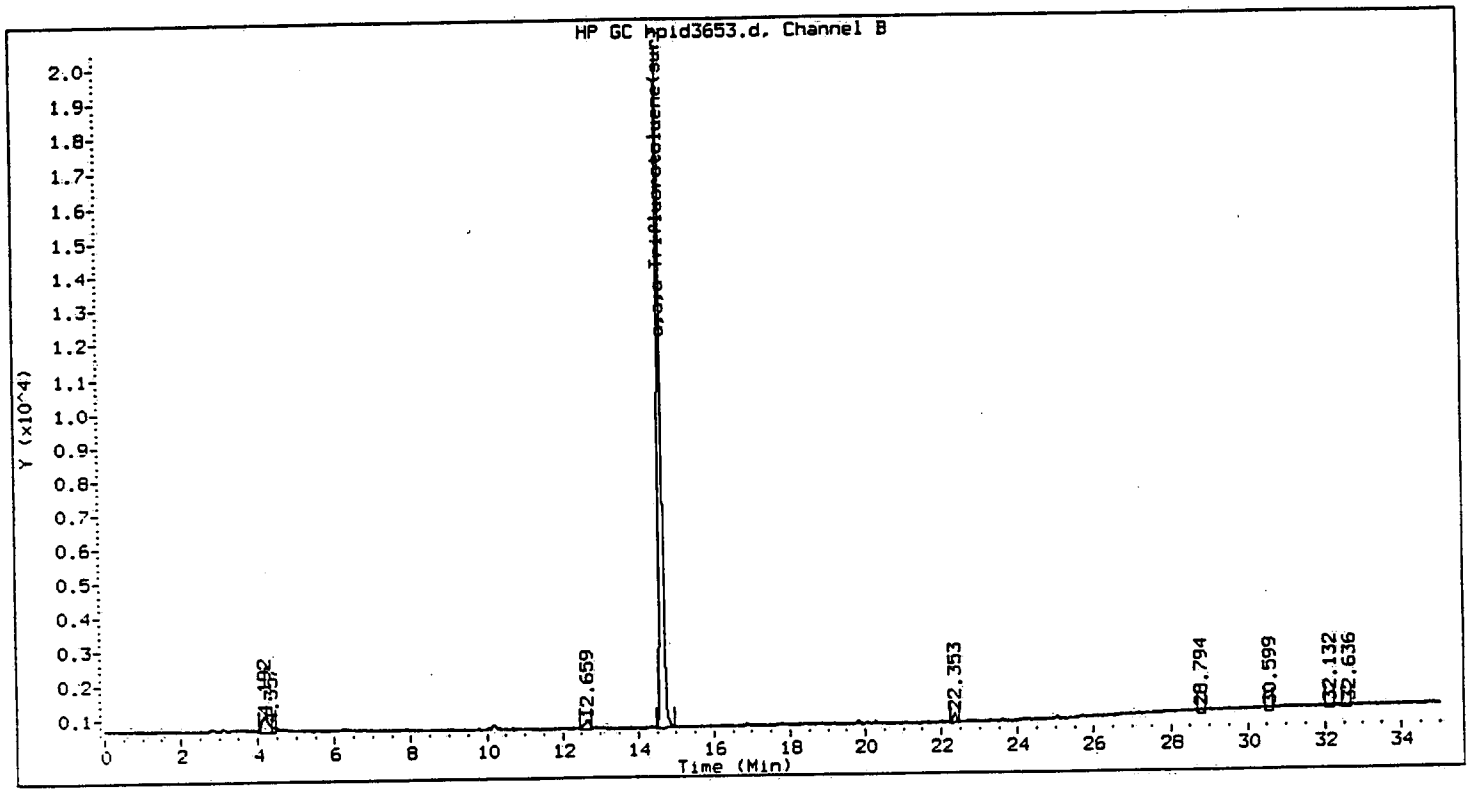
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3653.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3653.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197719
Lab ID : 197719
Inj Date : 18-APR-2000 01:49
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.644	14.637	0.007	584188	31.023	31.023

Client ID: **MW_11D**
Site: L.E. Carpenter

Lab Sample No: **197720**
Lab Job No: Z281

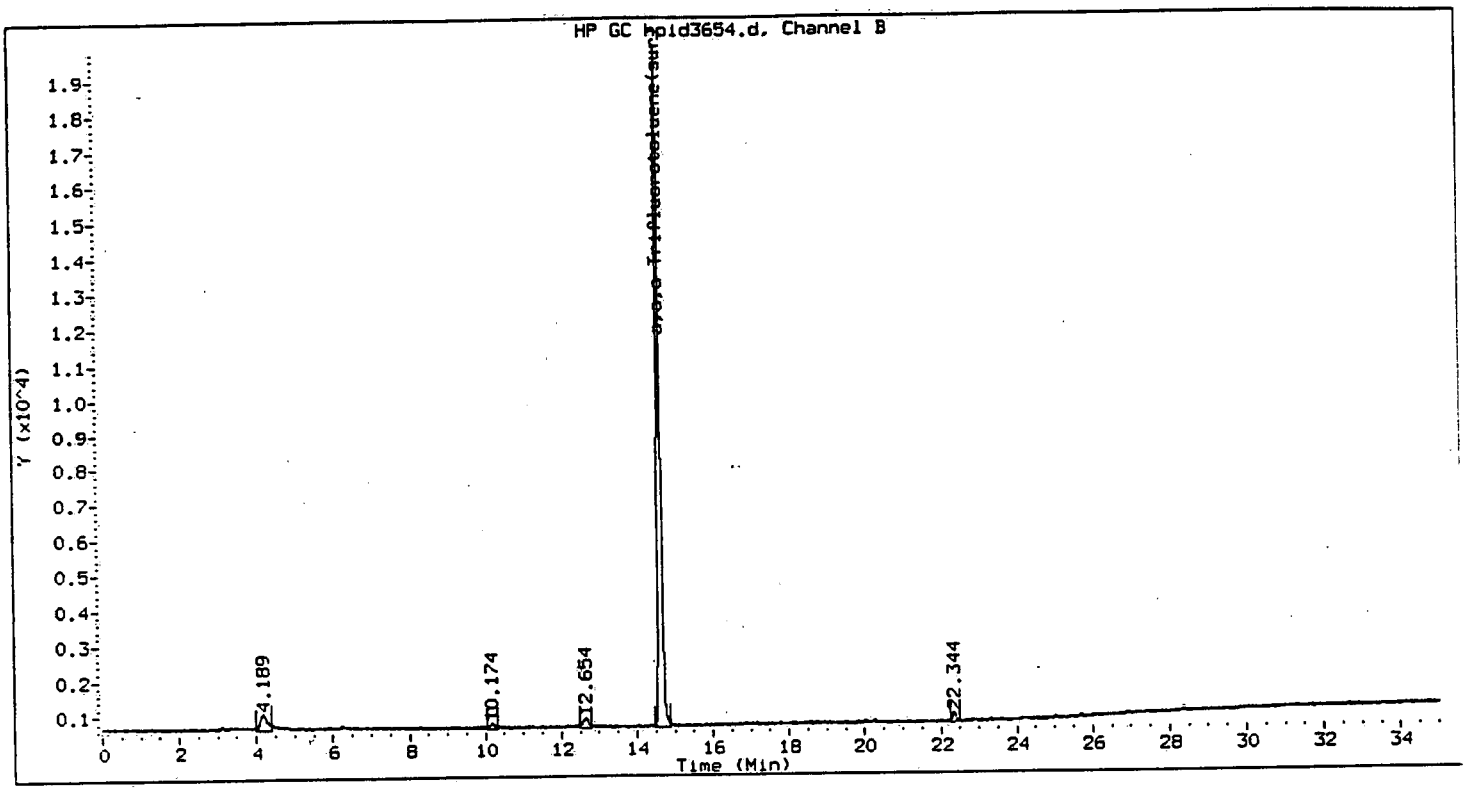
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3654.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3654.d
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197720
Lab ID : 197720
Inj Date : 18-APR-2000 02:30
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.641	14.637	0.004	571629	30.356	30.356

Client ID: **MW_4**
Site: L.E. Carpenter

Lab Sample No: **197721**
Lab Job No: Z281

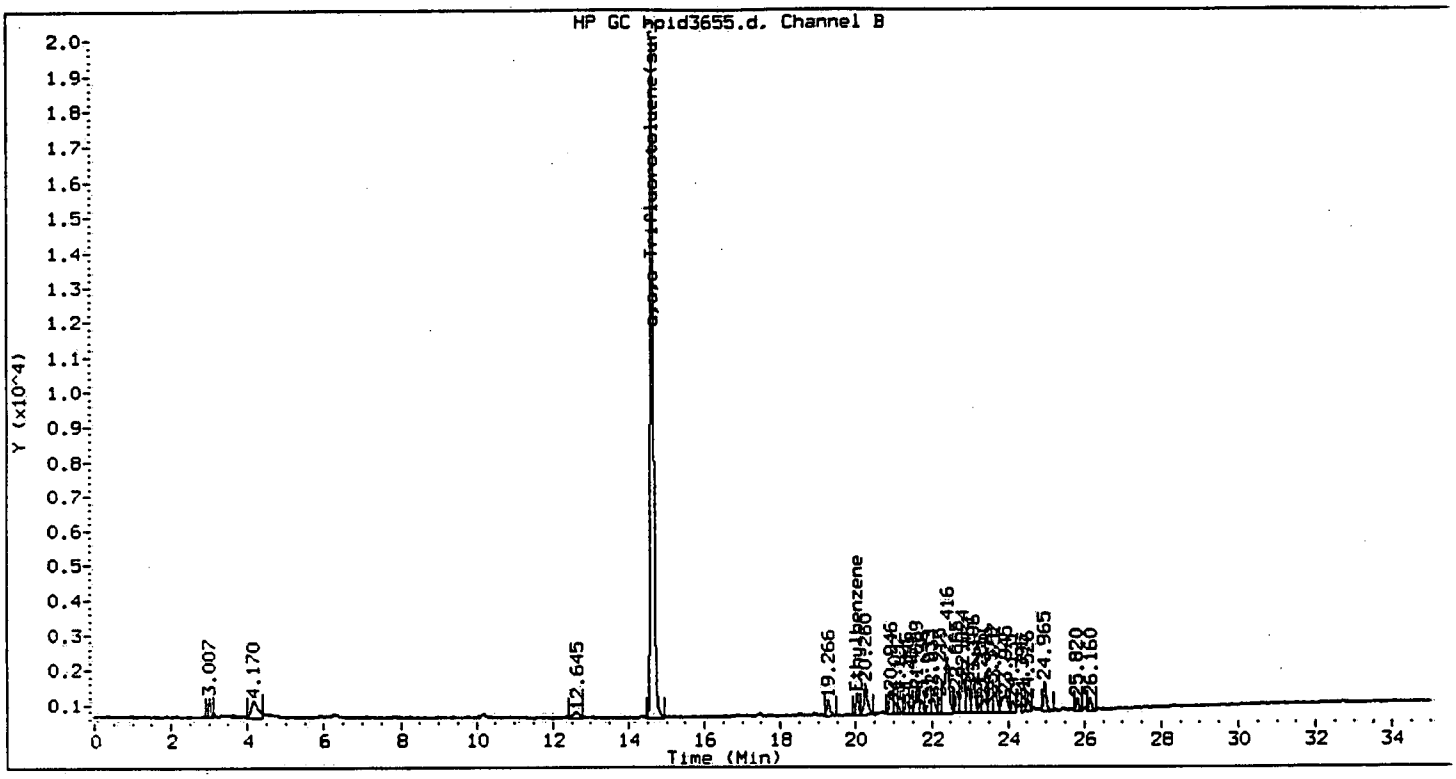
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3655.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	0.31	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3655.d Page 1
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197721
Lab ID : 197721
Inj Date : 18-APR-2000 03:11
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Ethylbenzene	20.038	20.025	0.013	14934	0.309	0.309
a,a,a-Trifluorotoluene(sur)	14.641	14.637	0.004	575602	30.567	30.567

Client ID: **MW_17S**
Site: L.E. Carpenter

Lab Sample No: **197722**
Lab Job No: Z281

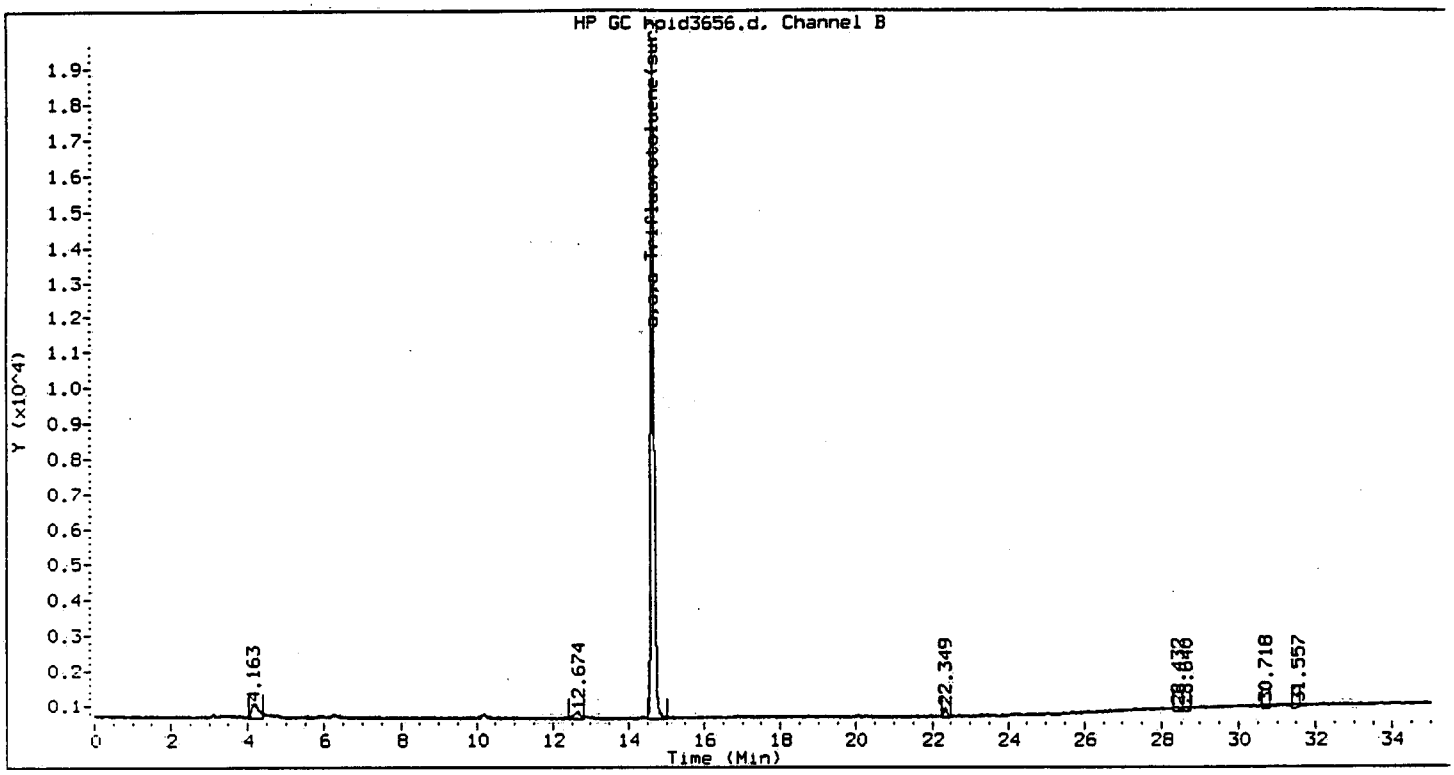
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3656.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3656.d Page 1
Report Date 04/18/2000 09:27



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : 197722
Lab ID : 197722 Inst ID : VOAGC2.i
Inj Date : 18-APR-2000 03:52 Dil Factor : 1
Operator : SP Sample Matrix : WATER
Cpnd Sublist: btex Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.641	14.637	0.004	571034	30.324	30.324

Client ID: **MW_22R**
Site: L.E. Carpenter

Lab Sample No: **197723**
Lab Job No: Z281

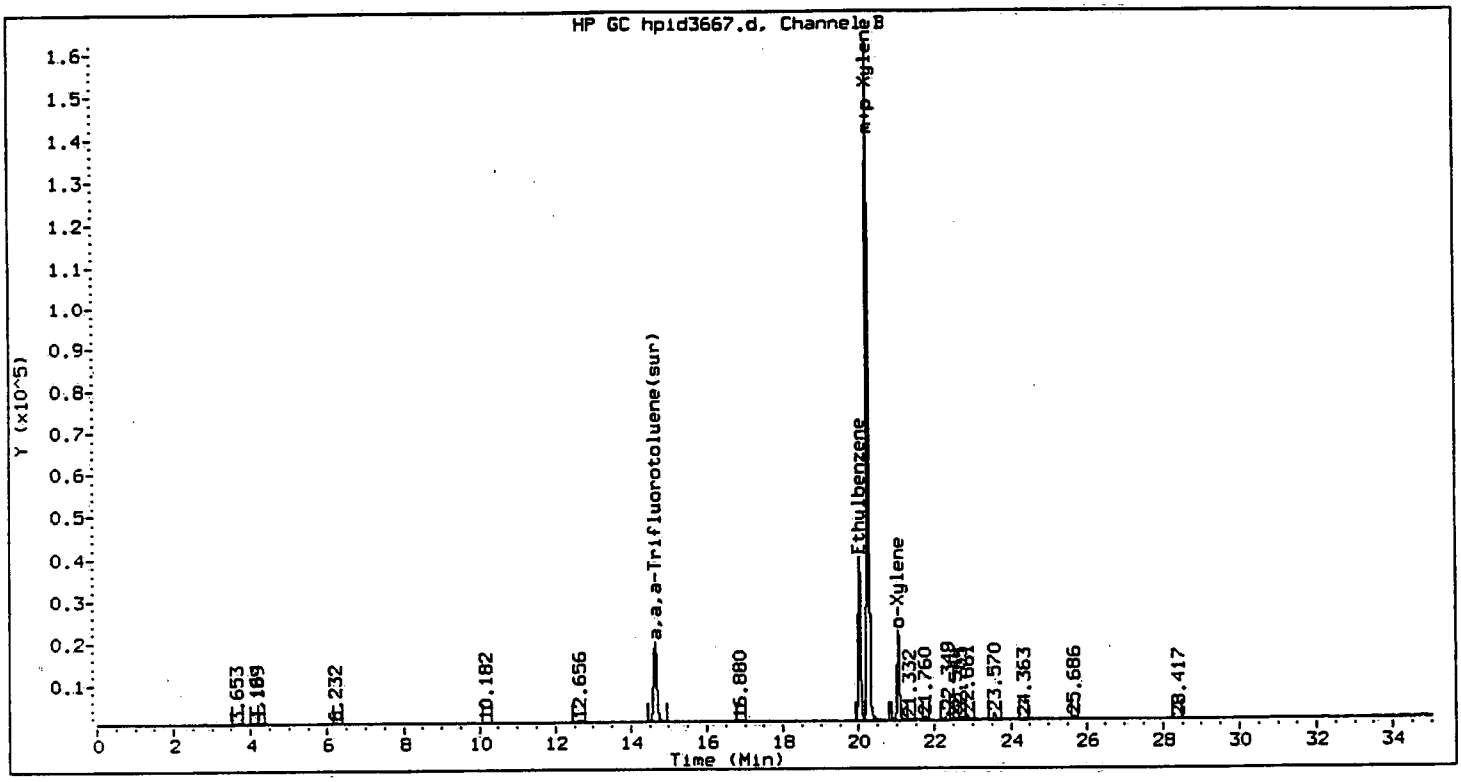
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3667.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 50.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	12
Toluene	ND	14
Ethylbenzene	820	14
Xylene (Total)	3600	12

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3667.d
Report Date 04/19/2000 09:02



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : 197723;;50
Lab ID : 197723
Inj Date : 18-APR-2000 12:45
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
m+p-Xylene	20.259	20.259	0.001	3343350	61.381	3069.073
o-Xylene	21.047	21.047	0.000	432919	9.020	450.977
Ethylbenzene	20.030	20.027	0.003	795173	16.470	823.510
Xylene (Total)	25.019	25.019	0.000	3776269	72.188	3609.401
a,a,a-Trifluorotoluene(sur)	14.642	14.631	0.011	562724	29.883	29.883

Client ID: **MW_25R**
Site: L.E. Carpenter

Lab Sample No: **197724**
Lab Job No: Z281

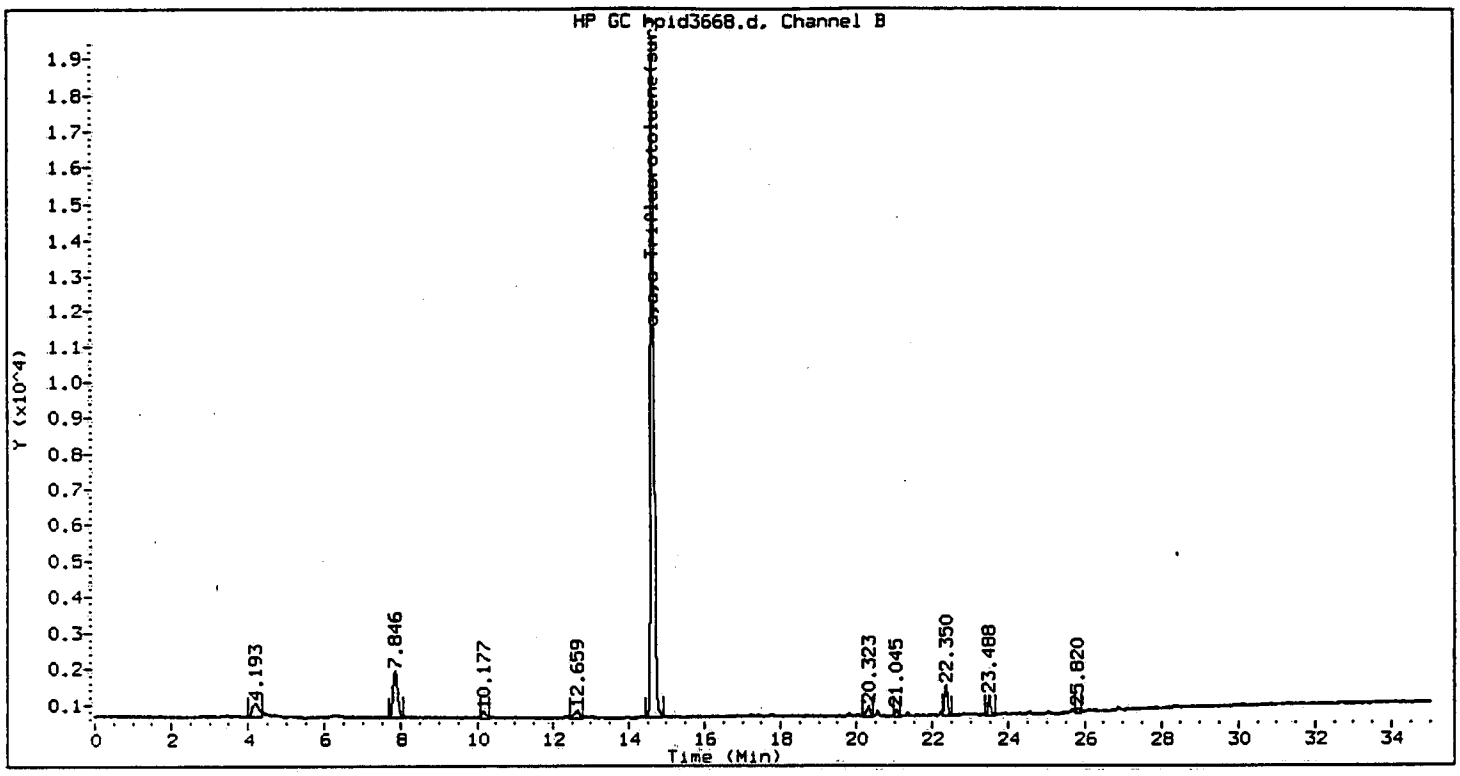
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3668.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3668.d
Report Date 04/19/2000 09:02



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : 197724
Lab ID : 197724
Inj Date : 18-APR-2000 13:26
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.639	14.631	0.008	556842	29.571	29.571

Client ID: MW_14I
Site: L.E. Carpenter

Lab Sample No: 197725
Lab Job No: Z281

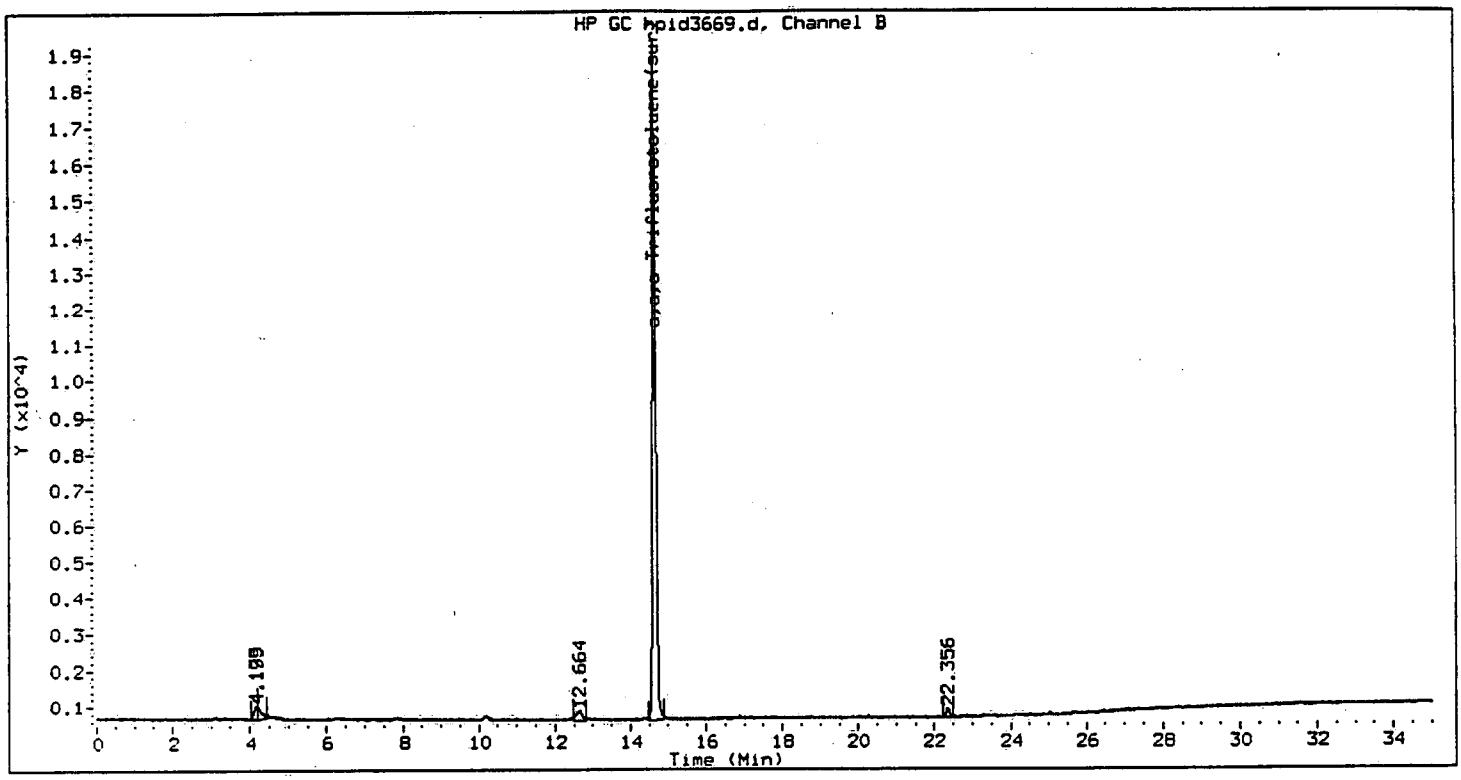
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3669.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3669.d Page 1
Report Date 04/19/2000 09:02



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : 197725
Lab ID : 197725
Inj Date : 18-APR-2000 14:07
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.641	14.631	0.010	552270	29.328	29.328

Client ID: **MW_21**
Site: L.E. Carpenter

Lab Sample No: **197726**
Lab Job No: Z281

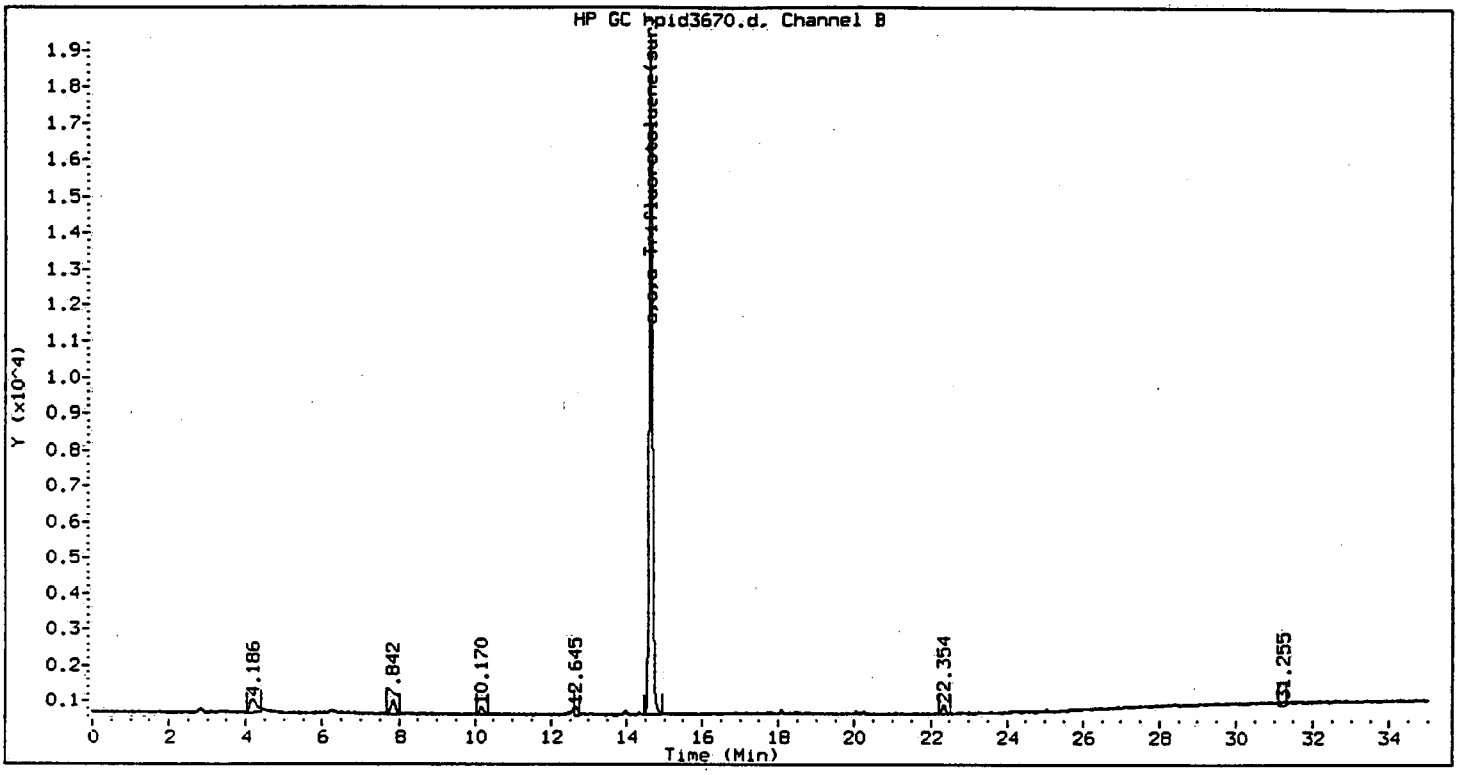
Date Sampled: 04/13/00
Date Received: 04/13/00
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3670.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.25
Toluene	ND	0.27
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3670.d Page 1
Report Date 04/19/2000 09:02



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : 197726
Lab ID : 197726
Inj Date : 18-APR-2000 14:48
Operator : SP
Cpnd Sublist: btex

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.643	14.631	0.012	555876	29.519	29.519

LAB SAMPLE NO.

HG108

VOLATILE METHOD BLANK SUMMARY

Date Analyzed: 04/17/00

Instrument ID: VOAGC2

Time Analyzed: 0958

Lab File ID: HPID3631

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	TRIP_BLANK	197715	HPID3649	2306
02	FIELD_BLANK	197716	HPID3650	2347
03	MW_11DD	197717	HPID3651	0028
04	MW_15S	197718	HPID3652	0108
05	MW_15I	197719	HPID3653	0149
06	MW_11D	197720	HPID3654	0230
07	MW_4	197721	HPID3655	0311
08	MW_17S	197722	HPID3656	0352
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **HG108**
Site:

Lab Sample No: **HG108**
Lab Job No: Z281

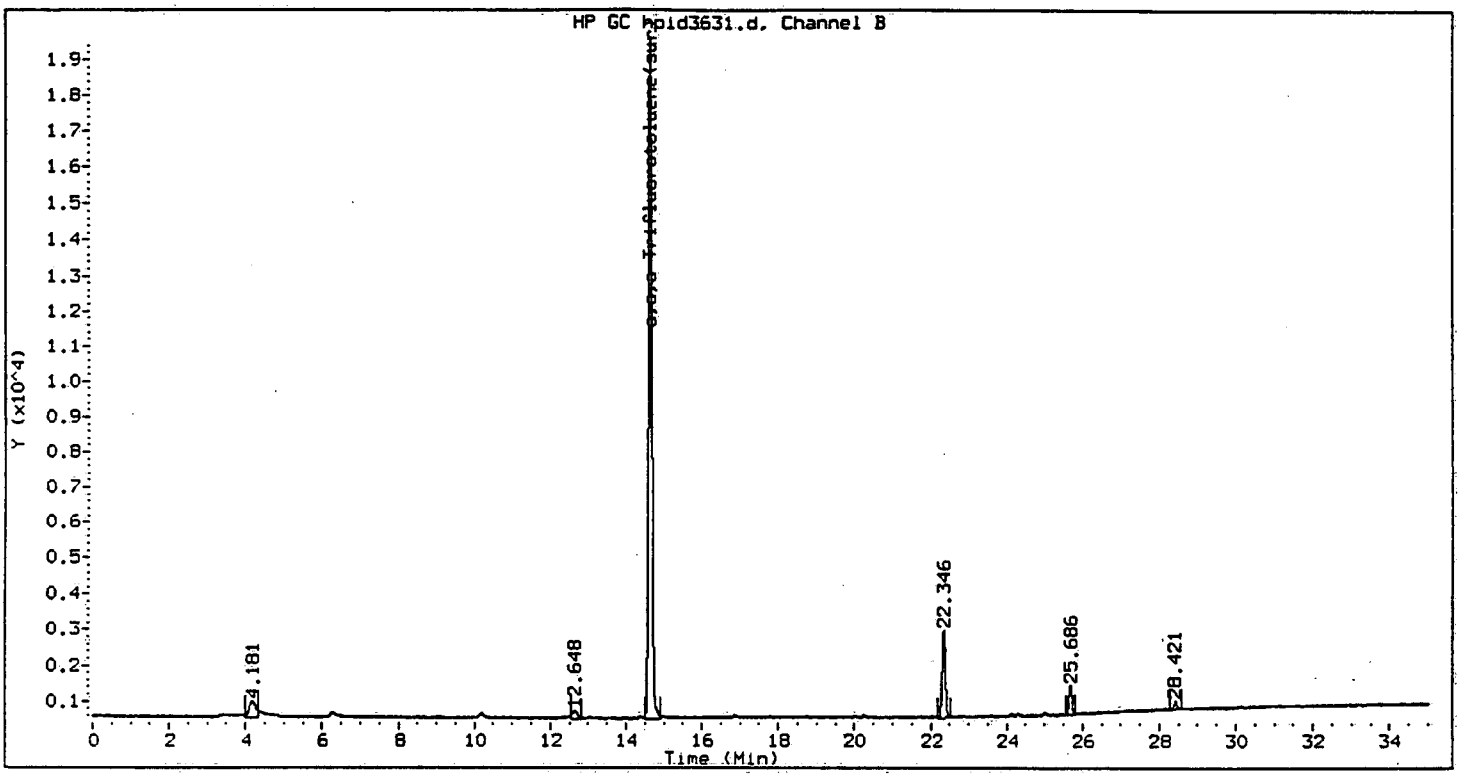
Date Sampled: _____
Date Received: _____
Date Analyzed: 04/17/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3631.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
TBA	ND	20
MTBE	ND	0.24
DIPE	ND	0.28
Benzene	ND	0.25
Toluene	ND	0.27
Chlorobenzene	ND	0.25
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25
1,3-Dichlorobenzene	ND	0.25
1,4-Dichlorobenzene	ND	0.26
1,2-Dichlorobenzene	ND	0.25
Naphthalene	ND	0.16

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3631.d Page 1
Report Date 04/18/2000 09:26



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : HG108
Lab ID : HG108
Inj Date : 17-APR-2000 09:58
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.640	14.637	0.003	566330	30.074	30.074

LAB SAMPLE NO.

HG109

VOLATILE METHOD BLANK SUMMARY

Date Analyzed: 04/18/00

Instrument ID: VOAGC2

Time Analyzed: 1105

Lab File ID: HPID3665

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	MW_22R	197723	HPID3667	1245
02	MW_25R	197724	HPID3668	1326
03	MW_14I	197725	HPID3669	1407
04	MW_21	197726	HPID3670	1448
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **HG109**
Site:

Lab Sample No: **HG109**
Lab Job No: Z281

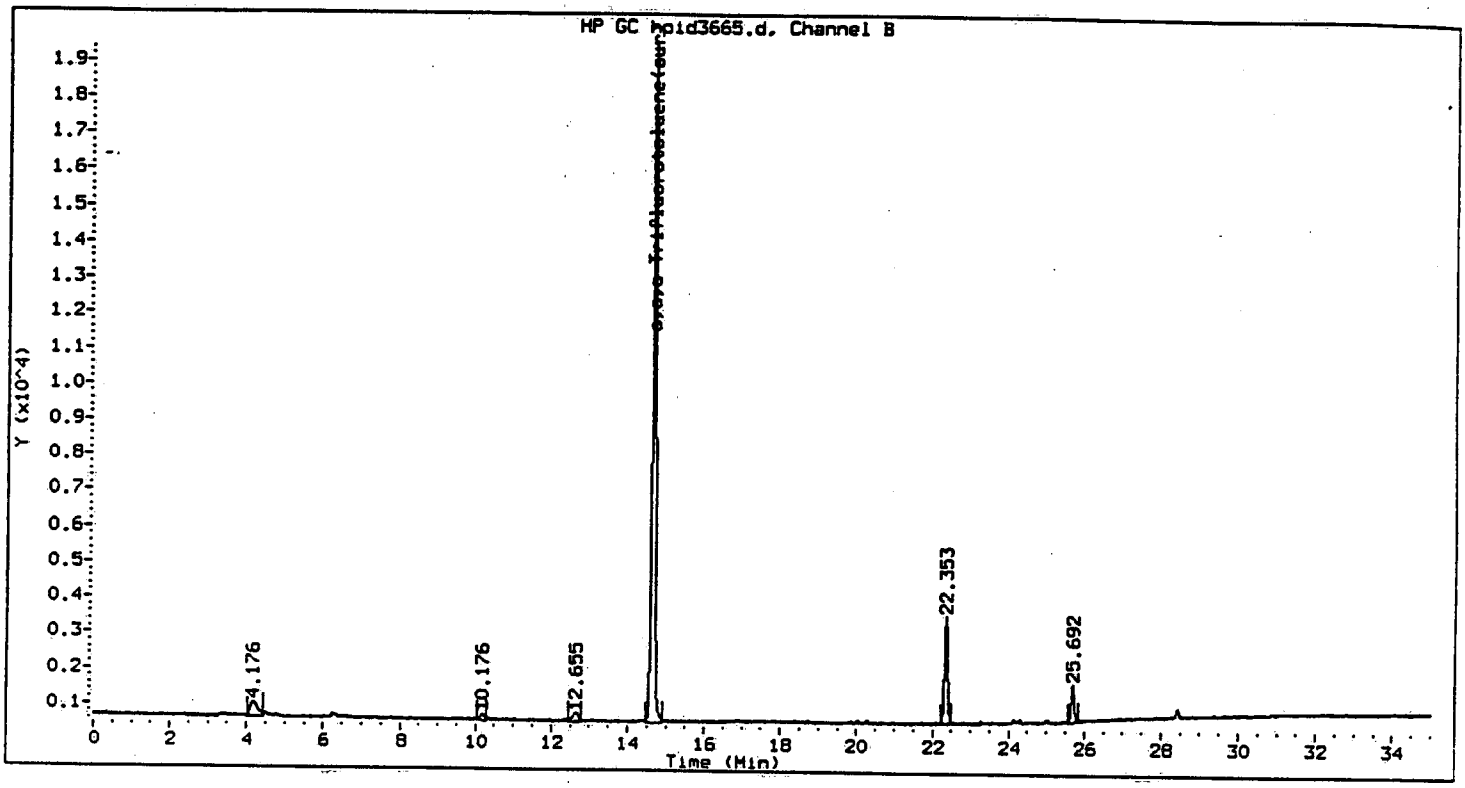
Date Sampled: _____
Date Received: _____
Date Analyzed: 04/18/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: hpid3665.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
TBA	ND	20
MTBE	ND	0.24
DIPE	ND	0.28
Benzene	ND	0.25
Toluene	ND	0.27
Chlorobenzene	ND	0.25
Ethylbenzene	ND	0.27
Xylene (Total)	ND	0.25
1,3-Dichlorobenzene	ND	0.25
1,4-Dichlorobenzene	ND	0.26
1,2-Dichlorobenzene	ND	0.25
Naphthalene	ND	0.16

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3665.d
Report Date 04/19/2000 09:01



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : HG109
Lab ID : HG109
Inj Date : 18-APR-2000 11:05
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
a,a,a-Trifluorotoluene(sur)	14.644	14.631	0.013	559835	29.729	29.729

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VOAGC2

Calibration Date(s): 04/12/00 04/12/00

Calibration Time(s): 1833 2118

LAB FILE ID: RRF2: HPID3556 RRF5: HPID3557 RRF10: HPID3558
RRF20: HPID3559 RRF40: HPID3560

COMPOUND	RRF2	RRF5	RRF10	RRF20	RRF40
TBA **	155	158	144	133	
MTBE	25492	25255	24549	23674	23199
DIPE	27580	28473	27810	27133	27259
Benzene	54623	55550	54137	52785	53663
Toluene	57011	55048	52646	50938	51346
Chlorobenzene	59386	59842	58708	57824	58137
Ethylbenzene	49614	49460	48103	46856	47366
Xylene (Total)	53073	53534	52369	50918	51665
1,3-Dichlorobenzene	47668	48383	48066	47420	48371
1,4-Dichlorobenzene	48330	49020	48323	47431	48247
1,2-Dichlorobenzene	39458	39771	39753	38823	39489
Naphthalene	35690	33312	34983	33267	33211
a,a,a-Trifluorotoluene(sur)	18819	18652	18763	18915	19006

** TBA Calibration Levels are RF200, RF400, RF1000, and RF2000

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VOAGC2

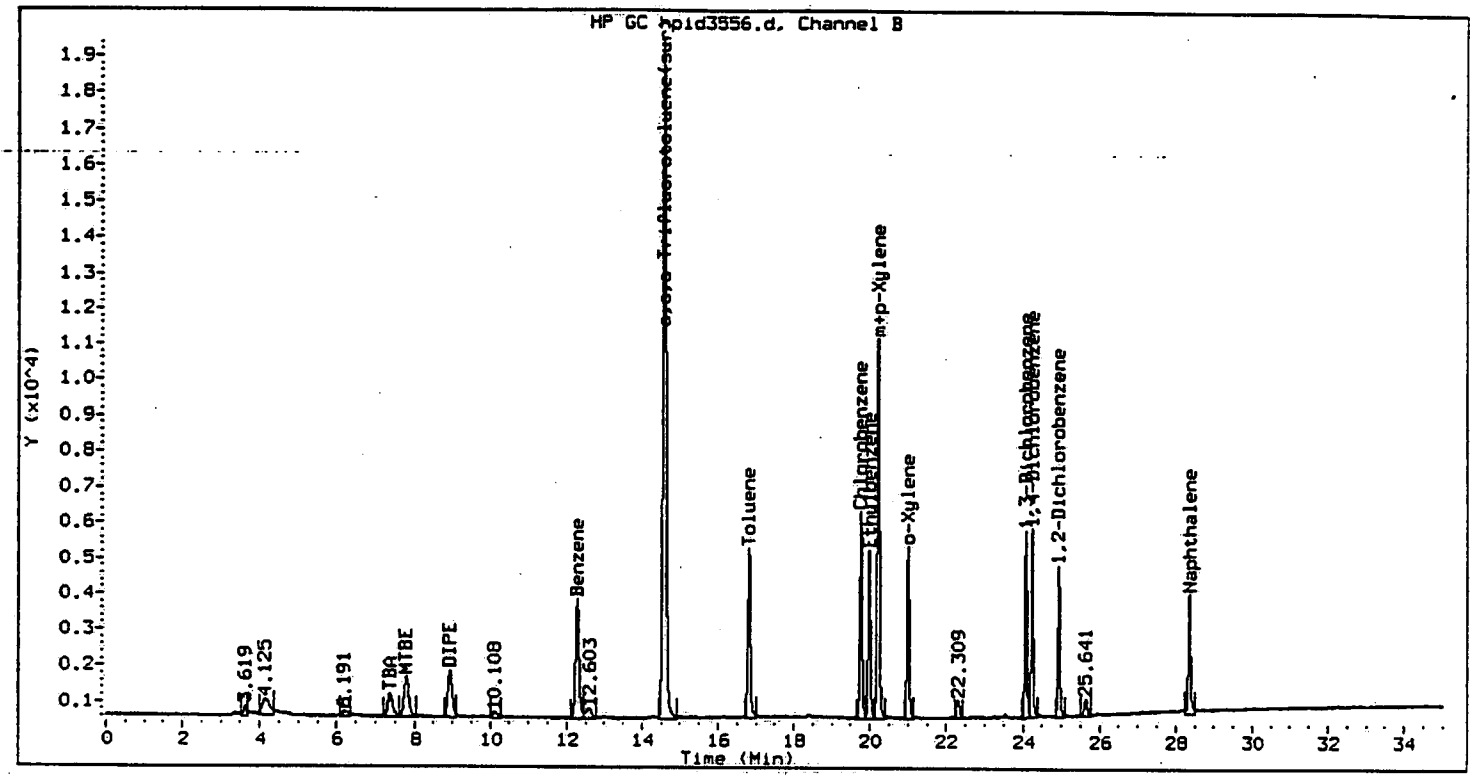
Calibration Date(s): 04/12/00 04/12/00

Calibration Time(s): 1833 2118

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
TBA **	AVRG	147	7.6*
MTBE	AVRG	24434	4.0*
DIPE	AVRG	27651	1.9*
Benzene	AVRG	54152	1.9*
Toluene	AVRG	53398	4.8*
Chlorobenzene	AVRG	58779	1.4*
Ethylbenzene	AVRG	48280	2.6*
Xylene (Total)	AVRG	52312	2.0*
1,3-Dichlorobenzene	AVRG	47982	0.9*
1,4-Dichlorobenzene	AVRG	48270	1.2*
1,2-Dichlorobenzene	AVRG	39459	1.0*
Naphthalene	AVRG	34093	3.4*
a,a,a-Trifluorotoluene(sur)	AVRG	18831	0.7*

** TBA Calibration Levels are RF200, RF400, RF1000, and RF2000
* Compounds with required maximum %RSD values.

Data File: /chem/VOAGC2.i/602/04-12-00/12APR00.b/hpid3556.d Page 1
Report Date 04/13/2000 07:56



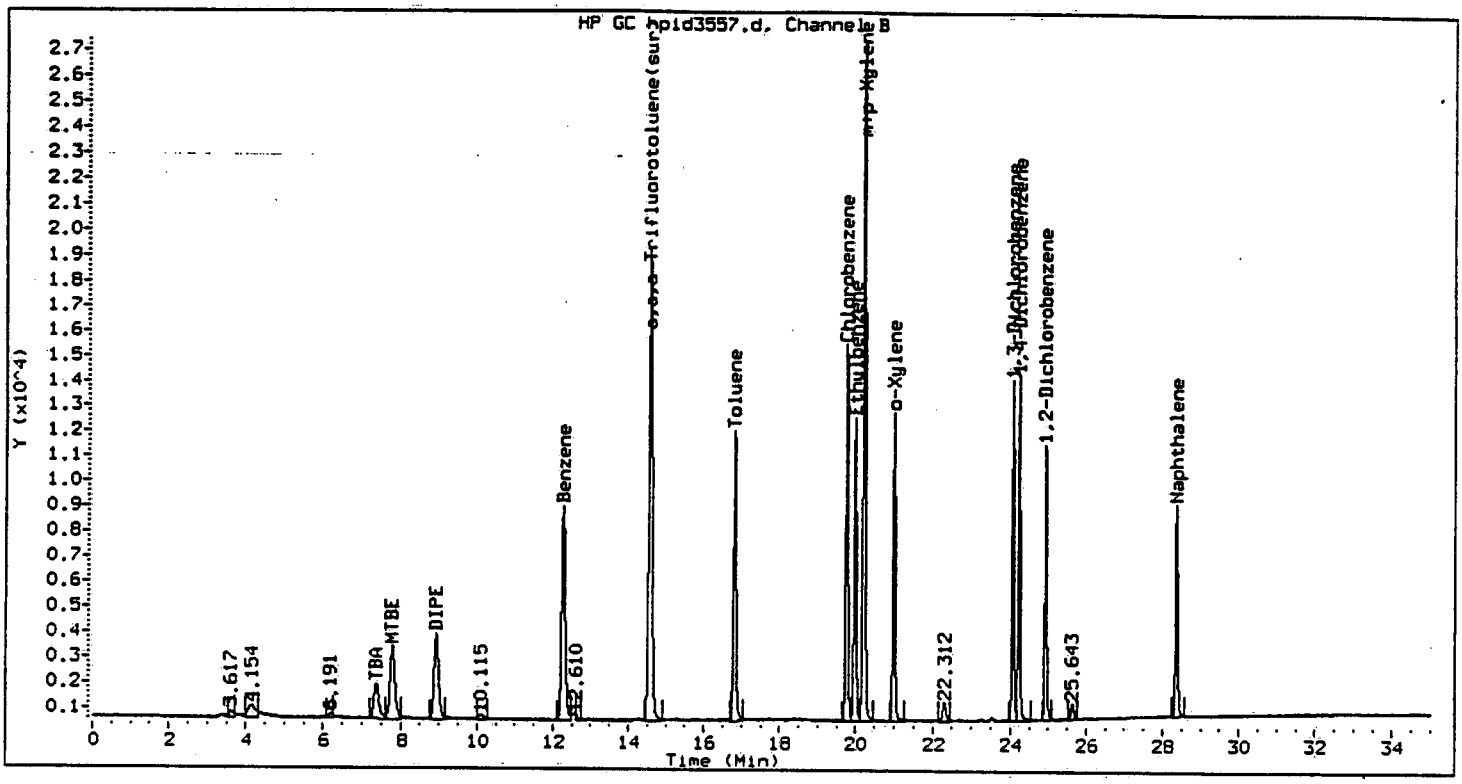
Method : /chem/VOAGC2.i/602/04-12-00/12APR00.b/602_00.m
Sample Info : HSTD002
Lab ID : HSTD002
Inj Date : 12-APR-2000 18:33
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	20.999	21.004	0.004	96540	2.000	2.000
m+p-Xylene	20.212	20.218	0.006	221896	4.000	4.000
TBA	7.379	7.384	0.005	30989	200.000	200.000
MTBE	7.798	7.802	0.004	50983	2.000	2.000
DIPE	8.938	8.939	0.001	55159	2.000	2.000
Benzene	12.279	12.284	0.005	109246	2.000	2.000
Toluene	16.820	16.826	0.006	114022	2.000	2.000
Chlorobenzene	19.760	19.767	0.007	118772	2.000	2.000
Ethylbenzene	19.980	19.985	0.005	99227	2.000	2.000

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
Xylene (Total)	25.019	25.019	0.000	318436	6.000	6.000
1,3-Dichlorobenzene	24.081	24.085	0.004	95337	2.000	2.000
1,4-Dichlorobenzene	24.240	24.244	0.004	96660	2.000	2.000
1,2-Dichlorobenzene	24.935	24.940	0.005	78917	2.000	2.000
Naphthalene	28.366	28.373	0.007	71381	2.000	2.000
a,a,a-Trifluorotoluene(sur)	14.586	14.592	0.007	564569	30.000	30.000

Data File: /chem/VOAGC2.i/602/04-12-00/12APR00.b/hpid3557.d
Report Date 04/13/2000 07:56



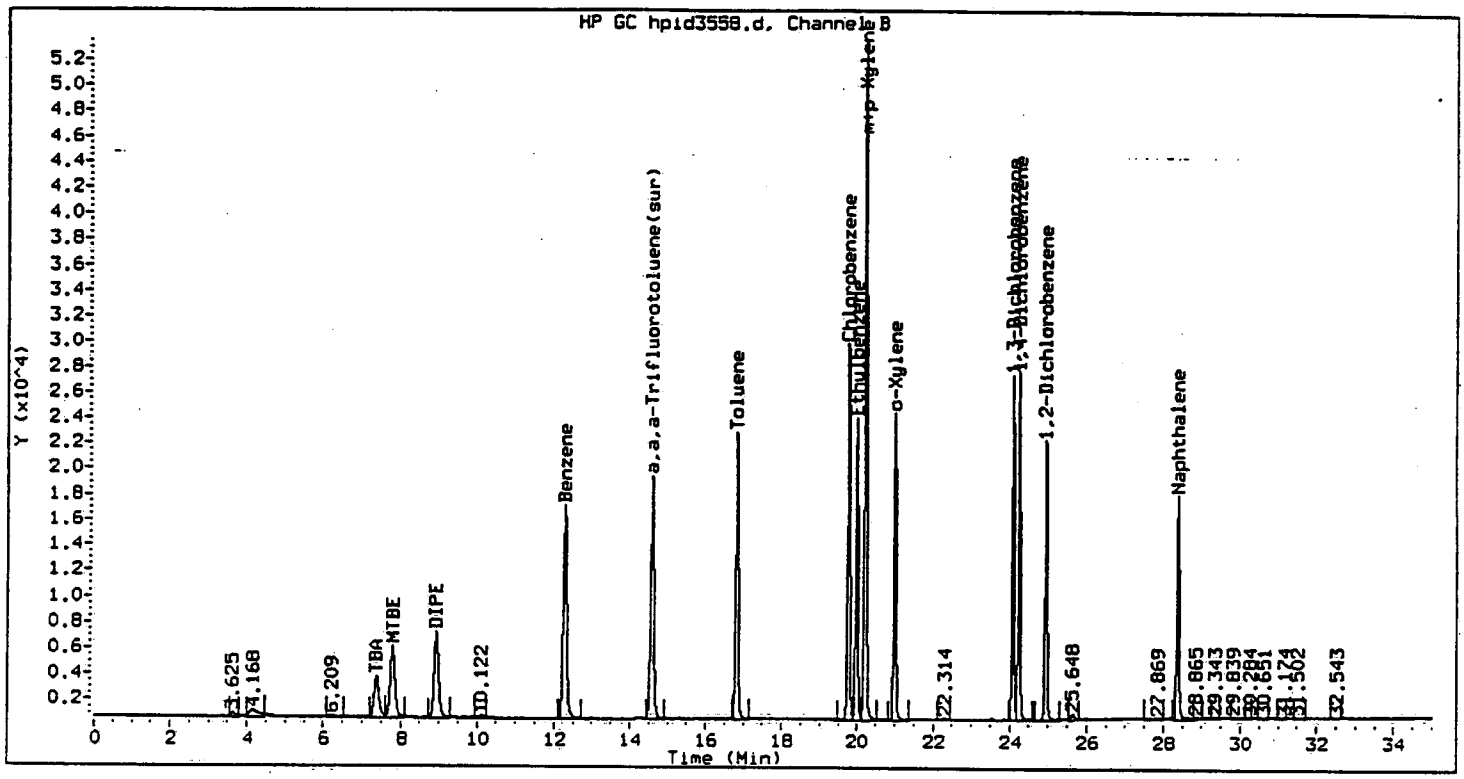
Method : /chem/VOAGC2.i/602/04-12-00/12APR00.b/602_00.m
Sample Info : HSTD005
Lab ID : HSTD005
Inj Date : 12-APR-2000 19:14
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	20.997	21.004	0.007	245870	5.046	5.046
m+p-Xylene	20.211	20.218	0.007	557138	10.022	10.022
TBA	7.368	7.384	0.016	63172	403.816	403.816
MTBE	7.790	7.802	0.012	126273	4.977	4.977
DIPE	8.932	8.939	0.007	142366	5.080	5.080
Benzene	12.272	12.284	0.011	277750	5.042	5.042
Toluene	16.819	16.826	0.008	275242	4.912	4.912
Chlorobenzene	19.760	19.767	0.007	299209	5.019	5.019
Ethylbenzene	19.978	19.985	0.008	247299	4.992	4.992

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
Xylene (Total)	25.019	25.019	0.000	803008	15.065	15.065
1,3-Dichlorobenzene	24.079	24.085	0.006	241917	5.037	5.037
1,4-Dichlorobenzene	24.239	24.244	0.005	245101	5.035	5.035
1,2-Dichlorobenzene	24.935	24.940	0.005	198856	5.020	5.020
Naphthalene	28.366	28.373	0.007	166559	4.828	4.828
a,a,a-Trifluorotoluene(sur)	14.583	14.592	0.009	559567	29.867	29.867

Data File: /chem/VOAGC2.i/602/04-12-00/12APR00.b/hpid3558.d
Report Date 04/13/2000 07:56



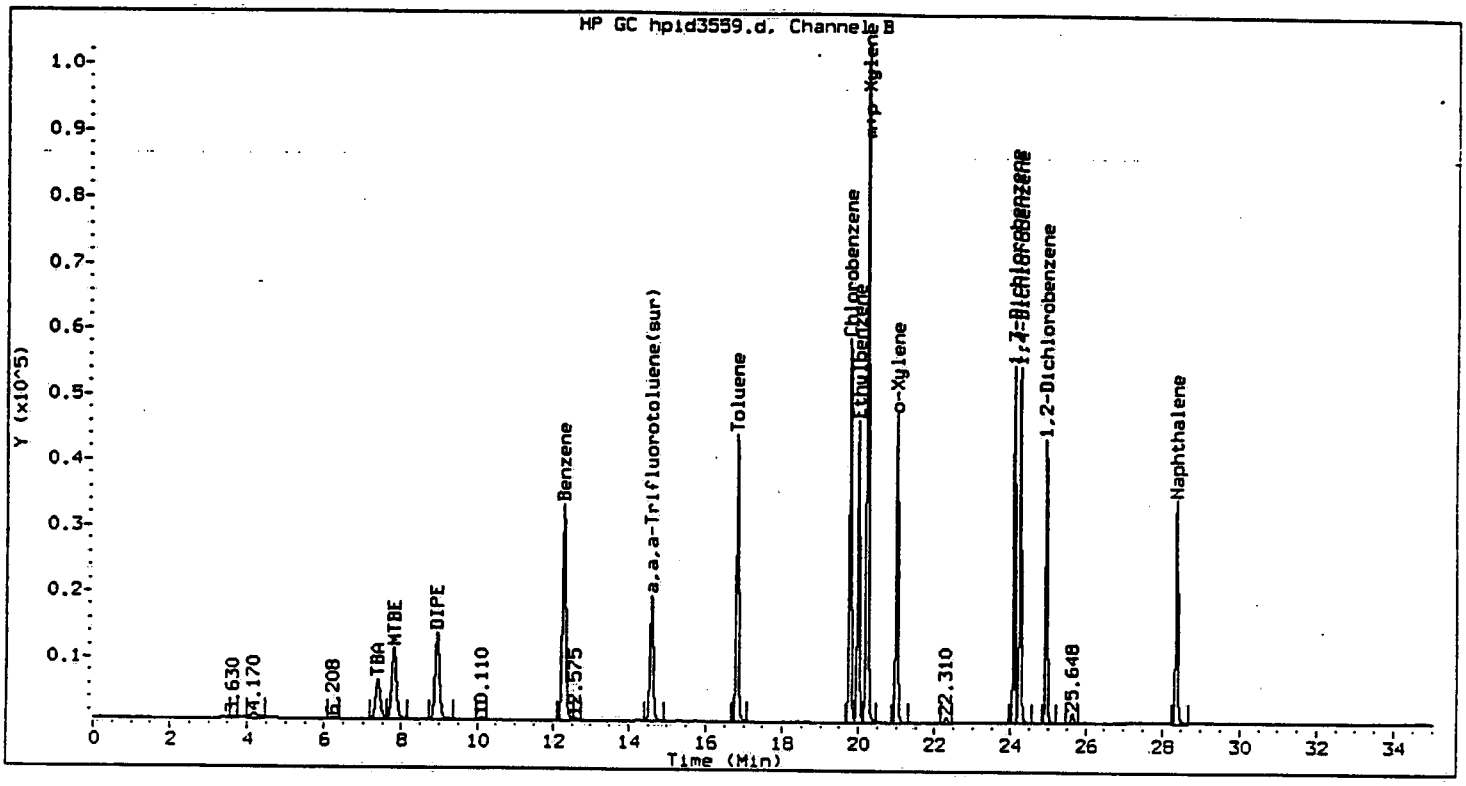
Method : /chem/VOAGC2.i/602/04-12-00/12APR00.b/602_00.m
Sample Info : HSTD010
Lab ID : HSTD010
Inj Date : 12-APR-2000 19:56
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	21.002	21.004	0.002	481189	9.917	9.917
m+p-Xylene	20.216	20.218	0.002	1089869	19.734	19.734
TBA	7.375	7.384	0.008	143659	944.020	944.020
MTBE	7.799	7.802	0.002	245494	9.781	9.781
DIPE	8.938	8.939	0.002	278100	9.948	9.948
Benzene	12.281	12.284	0.003	541373	9.884	9.884
Toluene	16.823	16.826	0.003	526462	9.589	9.589
Chlorobenzene	19.765	19.767	0.002	587081	9.898	9.898
Ethylbenzene	19.983	19.985	0.002	481028	9.805	9.805

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Xylene (Total)	25.019	25.019	0.000	1571058	29.647	29.647
1,3-Dichlorobenzene	24.082	24.085	0.003	480655	10.005	10.005
1,4-Dichlorobenzene	24.242	24.244	0.002	483233	9.952	9.952
1,2-Dichlorobenzene	24.938	24.940	0.002	397534	10.023	10.023
Naphthalene	28.369	28.373	0.004	349834	10.093	10.093
a,a,a-Trifluorotoluene(sur)	14.589	14.592	0.003	562878	30.029	30.029

Data File: /chem/VOAGC2.i/602/04-12-00/12APR00.b/hpid3559.d
Report Date 04/13/2000 07:56



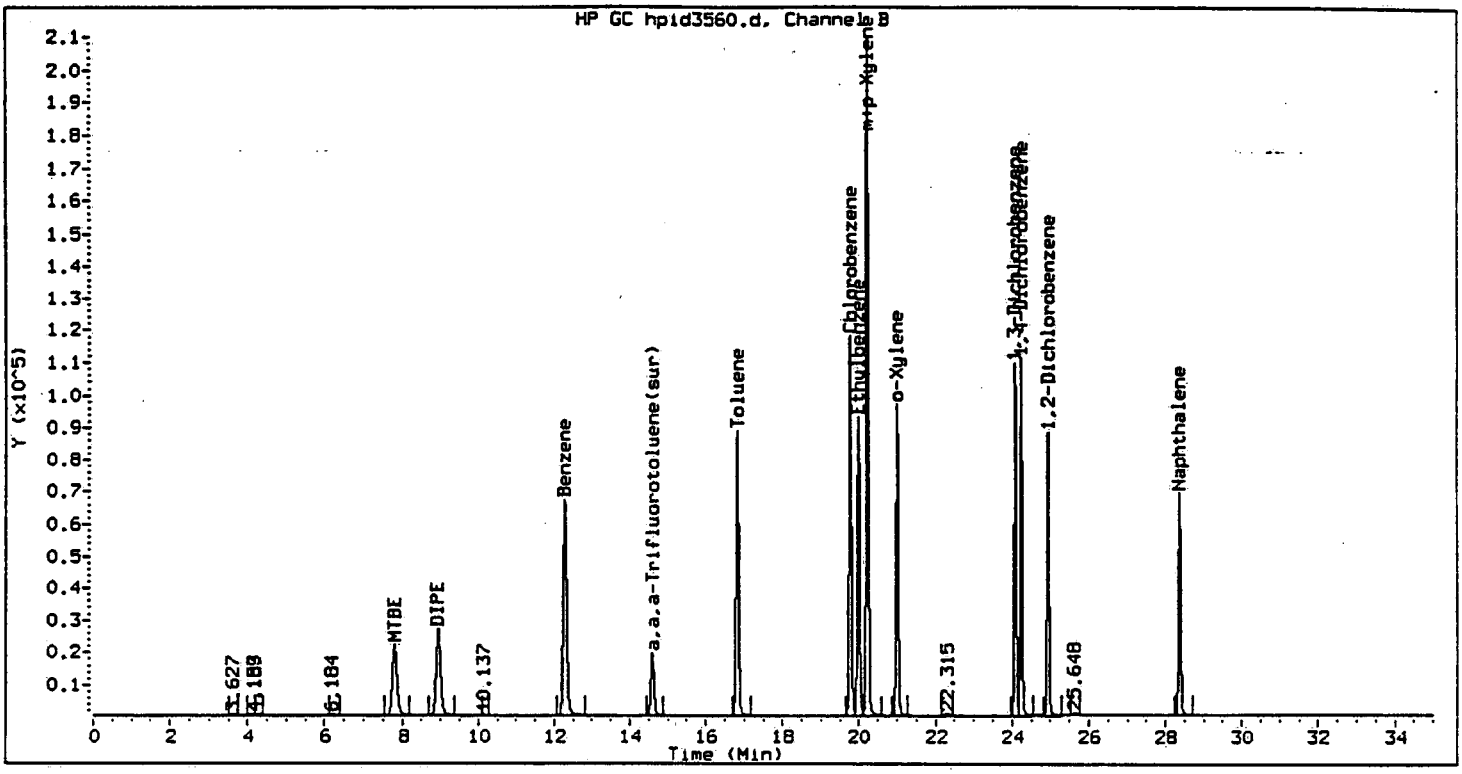
Method : /chem/VOAGC2.i/602/04-12-00/12APR00.b/602_00.m
Sample Info : HSTD020
Lab ID : HSTD020
Inj Date : 12-APR-2000 20:37
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	21.004	21.004	0.000	936070	19.464	19.464
m+p-Xylene	20.218	20.218	0.000	2119012	38.764	38.764
TBA	7.384	7.384	0.000	266797	1809.000	1809.000
MTBE	7.802	7.802	0.000	473487	19.137	19.137
DIPE	8.939	8.939	0.000	542655	19.556	19.556
Benzene	12.284	12.284	0.000	1055697	19.451	19.451
Toluene	16.826	16.826	0.000	1018766	18.897	18.897
Chlorobenzene	19.767	19.767	0.000	1156482	19.621	19.621
Ethylbenzene	19.985	19.985	0.000	937114	19.319	19.319

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Xylene (Total)	25.019	25.019	0.000	3055082	58.222	58.222
1,3-Dichlorobenzene	24.085	24.085	0.000	948397	19.806	19.806
1,4-Dichlorobenzene	24.244	24.244	0.000	948615	19.650	19.650
1,2-Dichlorobenzene	24.940	24.940	0.000	776468	19.682	19.682
Naphthalene	28.373	28.373	0.000	665332	19.390	19.390
a,a,a-Trifluorotoluene(sur)	14.592	14.592	0.000	567456	30.204	30.204

Data File: /chem/VOAGC2.i/602/04-12-00/12APR00.b/hpid3560.d Page 1
Report Date 04/13/2000 07:56



Method : /chem/VOAGC2.i/602/04-12-00/12APR00.b/602_00.m
Sample Info : HSTD040
Lab ID : HSTD040
Inj Date : 12-APR-2000 21:18
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
o-Xylene	21.004	21.004	0.000	1904932	39.688	39.688
m+p-Xylene	20.219	20.218	0.001	4294834	78.850	78.850
MTBE	7.802	7.802	0.001	927947	37.978	37.978
DIPE	8.945	8.939	0.005	1090371	39.433	39.433
Benzene	12.285	12.284	0.001	2146527	39.639	39.639
Toluene	16.828	16.826	0.002	2053850	38.463	38.463
Chlorobenzene	19.767	19.767	0.001	2325491	39.563	39.563
Ethylbenzene	19.986	19.985	0.001	1894630	39.243	39.243
Xylene (Total)	25.019	25.019	0.000	6199766	118.516	118.516

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1,3-Dichlorobenzene	24.083	24.085	0.002	1934831	40.324	40.324
1,4-Dichlorobenzene	24.243	24.244	0.001	1929896	39.981	39.981
1,2-Dichlorobenzene	24.939	24.940	0.001	1579562	40.030	40.030
Naphthalene	28.370	28.373	0.003	1328438	38.966	38.966
a,a,a-Trifluorotoluene(sur)	14.595	14.592	0.003	570176	30.279	30.279

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VOAGC2 Calibration Date: 04/17/00 Time: 0819

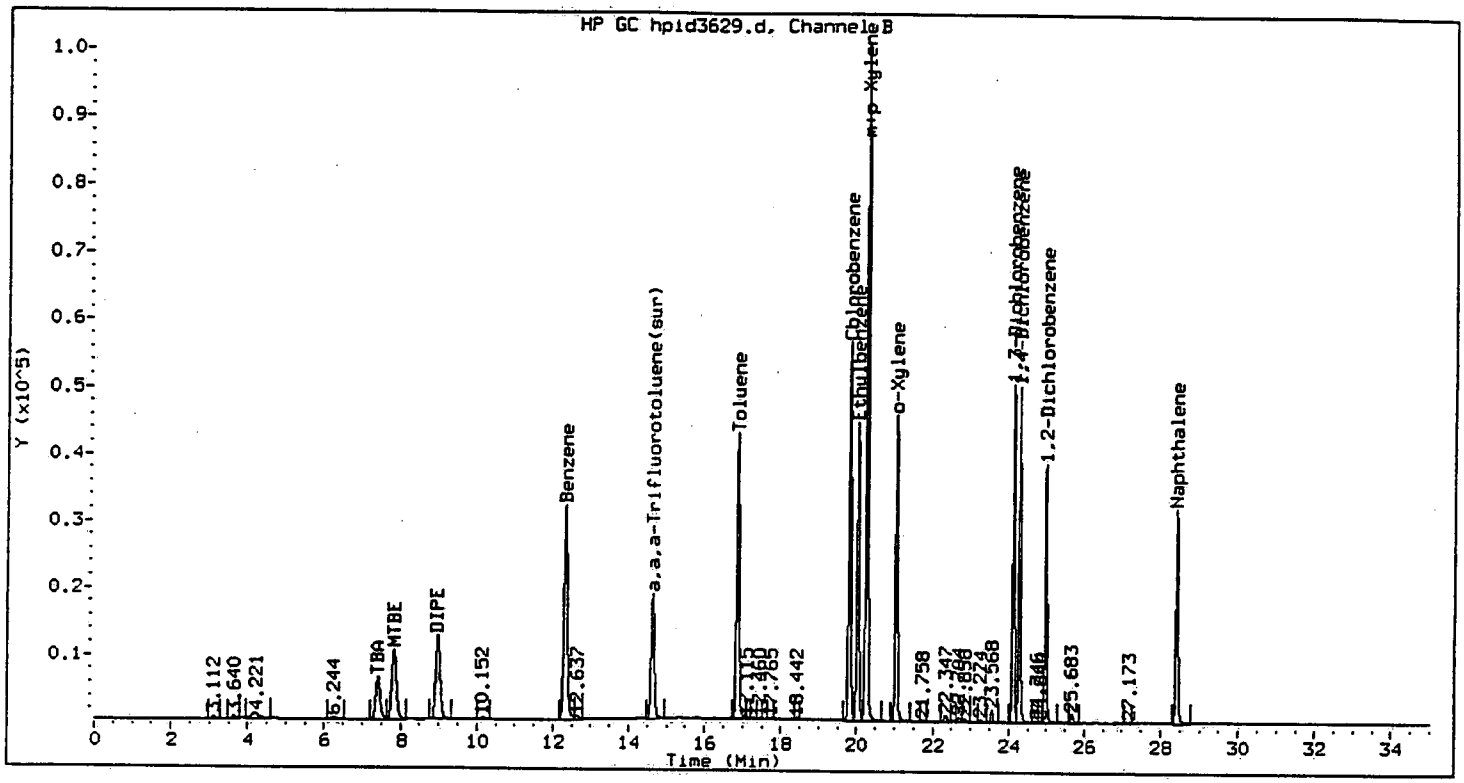
Lab File ID: HPID3629 Init. Calib. Date(s): 04/12/00 04/12/00

Heated Purge: (Y/N) N Init. Calib. Times: 1833 2118

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
TBA **	147.48	133.07		9.8	50.0
MTBE	24433.71	22271.95		8.8	50.0
DIPE	27650.95	25679.70		7.1	50.0
Benzene	54151.67	50593.70		6.6	23.0
Toluene	53398.03	49721.90		6.9	22.5
Chlorobenzene	58779.46	55895.65		4.9	19.5
Ethylbenzene	48279.51	45470.15		5.8	37.0
Xylene (Total)	52311.58	49543.42		5.3	50.0
1,3-Dichlorobenzene	47981.61	45007.55		6.2	27.5
1,4-Dichlorobenzene	48270.33	43883.10		9.1	30.5
1,2-Dichlorobenzene	39459.11	34751.50		11.9	32.0
Naphthalene	34092.65	30984.45		9.1	50.0
a,a,a-Trifluorotoluene(sur)	18830.97	18220.03		3.2	20.0

** TBA Continuing Calibration Level is RF2000.

Data File: /chem/VOAGC2.i/602/04-12-00/17APR00.b/hpid3629.d Page 1
Report Date 04/18/2000 09:26



Method : /chem/VOAGC2.i/602/04-12-00/17APR00.b/602_00.m
Sample Info : HSTD020
Lab ID : HSTD020
Inj Date : 17-APR-2000 08:19
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CCALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	21.044	21.044	0.000	907996	18.917	18.917
m+p-Xylene	20.258	20.258	0.000	2064609	37.905	37.905
TBA	7.412	7.412	0.000	266144	1804.573	1804.573
MTBE	7.836	7.836	0.000	445439	18.231	18.231
DIPE	8.977	8.977	0.000	513594	18.574	18.574
Benzene	12.330	12.330	0.000	1011874	18.686	18.686
Toluene	16.868	16.868	0.000	994438	18.623	18.623
Chlorobenzene	19.807	19.807	0.000	1117913	19.019	19.019
Ethylbenzene	20.025	20.025	0.000	909403	18.836	18.836

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Xylene (Total)	25.019	25.019	0.000	2972605	56.825	56.825
1,3-Dichlorobenzene	24.123	24.123	0.000	900151	18.760	18.760
1,4-Dichlorobenzene	24.283	24.283	0.000	877662	18.182	18.182
1,2-Dichlorobenzene	24.979	24.979	0.000	695030	17.614	17.614
Naphthalene	28.416	28.416	0.000	619689	18.177	18.177
a,a,a-Trifluorotoluene(sur)	14.637	14.637	0.000	546601	29.027	29.027

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VOAGC2 Calibration Date: 04/18/00 Time: 0922

Lab File ID: HPID3663 Init. Calib. Date(s): 04/12/00 04/12/00

Heated Purge: (Y/N) N Init. Calib. Times: 1833 2118

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
TBA **	147.48	149.49		-1.2	50.0
MTBE	24433.71	21816.25		10.7	50.0
DIPE	27650.95	25158.45		9.0	50.0
Benzene	54151.67	49041.05		9.4	23.0
Toluene	53398.03	47731.30		10.6	22.5
Chlorobenzene	58779.46	54487.90		7.3	19.5
Ethylbenzene	48279.51	44158.90		8.5	37.0
Xylene (Total)	52311.58	47753.82		8.7	50.0
1,3-Dichlorobenzene	47981.61	43835.15		8.6	27.5
1,4-Dichlorobenzene	48270.33	43003.10		10.9	30.5
1,2-Dichlorobenzene	39459.11	34199.60		13.3	32.0
Naphthalene	34092.65	30740.95		9.8	50.0
a,a,a-Trifluorotoluene(sur)	18830.97	18951.37		0.1	20.0

** TBA Continuing Calibration Level is RF2000.

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3663.d
Report Date: 19-Apr-2000 09:01

STL Envirotech

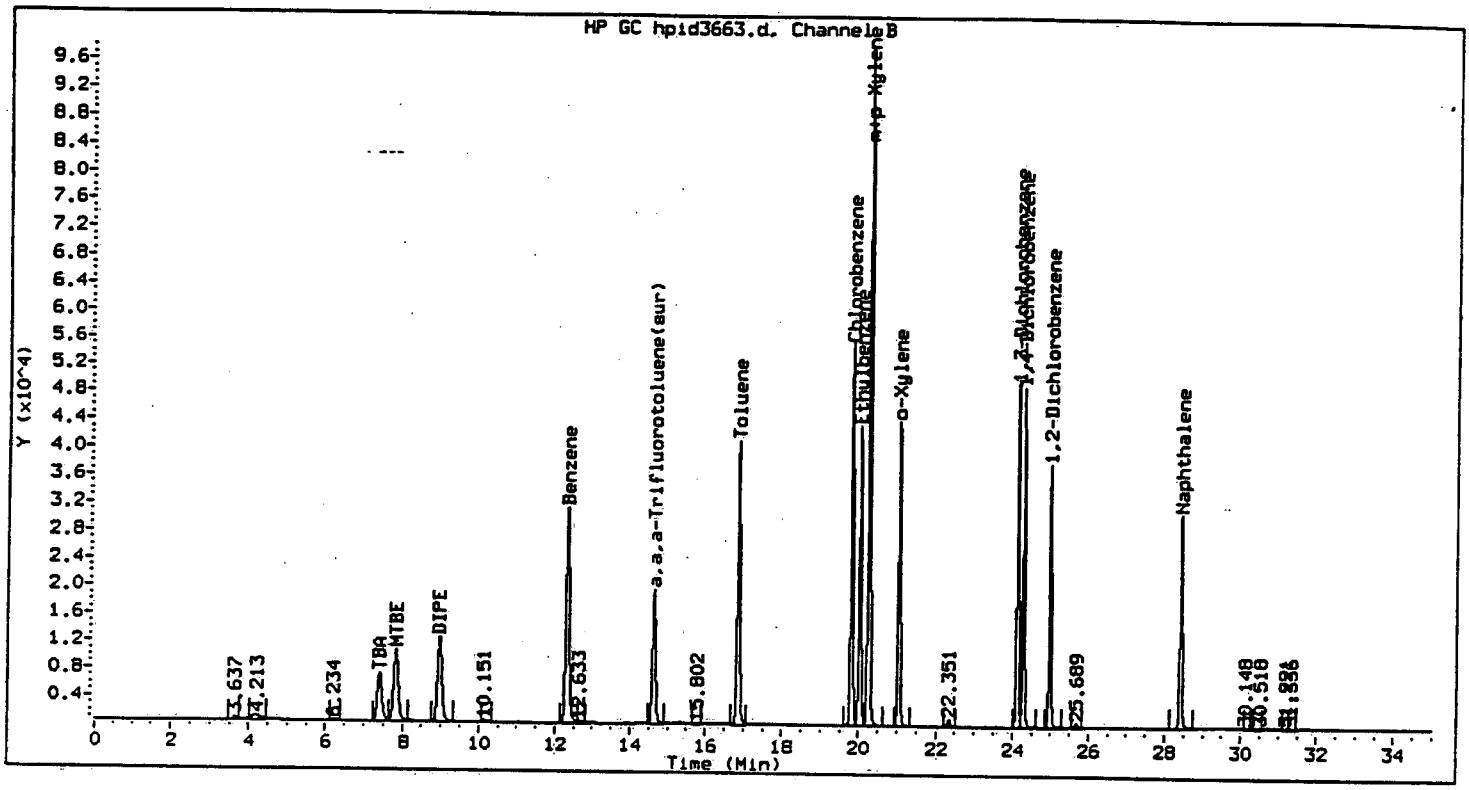
Data file : /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3663.d
Lab Smp Id: HSTD020
Inj Date : 18-APR-2000 09:22
Operator : SP Inst ID: VOAGC2.i
Smp Info : HSTD020
Misc Info : ;SP
Comment :
Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Meth Date : 18-Apr-2000 10:05 V Quant Type: ESTD
Cal Date : 12-APR-2000 21:18 Cal File: hpid3560.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.40
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Initial Volume

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 TBA	7.405	7.405	0.000	298985	2000.00	2000(A)
	2 MTBE	7.830	7.830	0.000	436325	20.0000	18
	3 DIPE	8.976	8.976	0.000	503169	20.0000	18
	4 Benzene	12.325	12.325	0.000	980821	20.0000	18
$	5 a,a,a-Trifluorotoluene(sur)	14.631	14.631	0.000	568541	30.0000	30
	6 Toluene	16.868	16.868	0.000	954626	20.0000	18
	7 Chlorobenzene	19.808	19.808	0.000	1089758	20.0000	18
	8 Ethylbenzene	20.027	20.027	0.000	883178	20.0000	18
M	9 Xylene (Total)				2865229	60.0000	55
	10 m+p-Xylene	20.259	20.259	0.000	1993736	40.0000	37
	11 o-Xylene	21.047	21.047	0.000	871493	20.0000	18
	12 1,3-Dichlorobenzene	24.128	24.128	0.000	876703	20.0000	18
	13 1,4-Dichlorobenzene	24.287	24.287	0.000	860062	20.0000	18
	14 1,2-Dichlorobenzene	24.984	24.984	0.000	683992	20.0000	17
	15 Naphthalene	28.423	28.423	0.000	614819	20.0000	18

Data File: /chem/VOAGC2.i/602/04-12-00/18APR00.b/hpid3663.d
Report Date 04/19/2000 09:01



Method : /chem/VOAGC2.i/602/04-12-00/18APR00.b/602_00.m
Sample Info : HSTD020
Lab ID : HSTD020
Inj Date : 18-APR-2000 09:22
Operator : SP
Cpnd Sublist: all

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CCALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
o-Xylene	21.047	21.047	0.000	871493	18.157	18.157
m+p-Xylene	20.259	20.259	0.000	1993736	36.604	36.604
TBA	7.405	7.405	0.000	298985	2027.249	2027.249
MTBE	7.830	7.830	0.000	436325	17.858	17.858
DIPE	8.976	8.976	0.000	503169	18.197	18.197
Benzene	12.325	12.325	0.000	980821	18.112	18.112
Toluene	16.868	16.868	0.000	954626	17.878	17.878
Chlorobenzene	19.808	19.808	0.000	1089758	18.540	18.540
Ethylbenzene	20.027	20.027	0.000	883178	18.293	18.293

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: WATER Level: LOW Lab Job No: Z281

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	HG108	100			0
02	197715	100			0
03	197716	101			0
04	197717	101			0
05	197718	101			0
06	197719	103			0
07	197720	101			0
08	197721	100			0
09	197722	101			0
10	HG109	100			0
11	197723	100			0
12	197724	98			0
13	197725	98			0
14	197726	98			0
15	HG110	87			0
16	197723MS	84			0
17	197723MSD	85			0
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

		QC LIMITS
SMC1	= a,a,a-Trifluorotoluene	(72-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 602

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 197707

MS Sample from Lab Job No: Z279

QA Batch: 7007

Compound	MS % REC.	BS % REC.	LIMITS
Benzene	100	100	39-150
Toluene	95	95	46-148
Chlorobenzene	100	100	55-135
Ethylbenzene	114	95	32-160
1,3-Dichlorobenzene	100	95	50-141
1,4-Dichlorobenzene	95	95	42-143
1,2-Dichlorobenzene	95	90	37-154

* Values outside of QC limits

Spike Recovery: 0 out of 14 outside limits

COMMENTS:

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 602

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 197723

MS Sample from Lab Job No: Z281

QA Batch: 7009

Compound	MS % REC.	BS % REC.	LIMITS
Benzene	93	90	39-150
Toluene	92	90	46-148
Chlorobenzene	95	95	55-135
Ethylbenzene	78	90	32-160
1,3-Dichlorobenzene	92	95	50-141
1,4-Dichlorobenzene	89	90	42-143
1,2-Dichlorobenzene	86	90	37-154

* Values outside of QC limits

Spike Recovery: 0 out of 14 outside limits

COMMENTS: