RCRA GROUNDWATER SAMPLING

QUARTERLY SAMPLING REPORT NO. 4

Prepared for:

Approved RCRA Closure Plan at

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SEPTEMBER 1989

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of California.

9-29-89

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I. INTRODUCTION

The Bermite Division of Whittaker Corporation discontinued operations effective April 3, 1987. The Bermite facility (see Figure 1), at the time of closure, had 14 Resource Conservation and Recovery Act, (RCRA) units with interim status permits for operation of these units. Under RCRA, a formal closure plan is required to certify closure of the RCRA units. The closure plan had to be approved by the California Department of Health Services, (DHS) and the United States Environmental Protection Agency, (EPA). A Closure Plan was submitted for approval in August 1986 prior to and in anticipation of the facility shutdown. After receiving initial comments from DHS and EPA, a Revised RCRA Closure Plan was submitted for approval in April 1987. In anticipation of approval and to expedite the closure process, closure activities were initiated at the beginning of June 1987.

Modifications to the Revised RCRA Closure Plan were received in early September 1987 from DHS and EPA. Whittaker proposed changes to the modifications and met with DHS and EPA to discuss the modifications and changes. A closure plan was approved on September 30, 1987 although with a 30-day period in which further changes to the approved plan could be made. Meetings were held in early October and early November with DHS and EPA to discuss the plan and the changes. Final changes were agreed to by DHS, EPA and Whittaker. The final Approved Closure Plan Modifications were received from DHS and EPA on December 28, 1987.

As a requirement of the Approved RCRA Closure Plan, two of the RCRA units (317 Area and 342 Area) require a groundwater monitoring system capable of detecting and assessing the impact of the two RCRA units on the uppermost aquifer at the Bermite Facility.

A preliminary Groundwater Monitoring Plan for the 317/342 Area, originally submitted in the Revised RCRA Closure Plan in April 1987, was revised and submitted to the DHS and EPA for review and approval on October 8, 1987. This plan, titled "Revised Groundwater Monitoring Plan for the 317/342 Area," October 8, 1987, detailed the location and construction of three RCRA wells to be used for characterization of the uppermost aquifer at the Bermite facility. A number of informal discussions and meetings were held with the DHS concerning specific aspects of the construction of the RCRA wells. Subsequently, two of the three wells were completed. The location of the third well was determined by the DHS and this well was completed in the same manner as the first two RCRA wells. A documentation report, "Construction and Development of Wells for Groundwater Monitoring of the 342 and 317 Areas," February 1988, describing the installation of the wells and information gained from them concerning preliminary groundwater quality and aquifer characteristics, was submitted to DHS and EPA for review and approval in February 1988.

After review of the results of the installation of the three wells, a fourth RCRA well was proposed to the DHS and EPA in a report titled, "RCRA Groundwater Monitoring System-Proposed Final Configuration," May 1988. This fourth well was constructed similarly to the first three wells. A documentation report titled, "Construction and Development of RCRA Groundwater Monitoring Well 4 at the 342 and 317 Areas," August 1988, describing the construction of the fourth well, groundwater gradient information compiled from all four wells, and further preliminary groundwater quality data, was submitted to DHS and EPA for review and approval in August 1988.

While the groundwater monitoring system was being proposed, installed and documented in a number of reports, presented to the DHS and EPA, a sampling and analysis plan for collecting and analyzing representative groundwater samples from the

RCRA wells was concurrently prepared and sent to DHS and EPA in December 1987. This plan, titled "Proposed Interim Status Groundwater Monitoring Sampling and Analysis Program," December 1987, was reviewed and modified by DHS and EPA, in March 1988. The "Groundwater Sampling and Analysis Plan," was revised and submitted to DHS and EPA in August 1988.

This first formal sampling and analysis episode of the four RCRA wells was proposed to the DHS and EPA for the first week of October 1988 and occurred on October 3, 1988. All results were tabulated, including those analyses of groundwater samples taken from the four RCRA wells prior to October 1988 and presented in "RCRA Groundwater Sampling, Quarterly Sampling Report No. 1", December 1988. The results of the first sampling event verified earlier sampling and analysis results and showed that the groundwater was free of contamination.

The second quarterly sampling event occurred in January 1989. The results of the second quarterly sampling event were consistent with the first sampling event and were presented in "RCRA Groundwater Sampling Quarterly Sampling Report No. 2," March 1989.

The third groundwater sampling event took place April 1989. Unlike the first two sampling events, the results of the third sampling event indicated low levels of volatile organic compounds at well MW-4. The other three wells were found to be free of contamination. These findings were presented in "RCRA Groundwater Sampling Quarterly Sampling Report No. 3," July 1989. As a result of the detection, two additional monitoring wells have been installed at the 317 Area (MW-5 and MW-6).

The fourth groundwater sampling event occurred in July 1989. The two new monitoring wells did not, at the time of sampling, have the necessary sampling pumps

installed and so were not included in this sampling event. The results of the sampling and analysis are presented herein, together with recommendations for future quarterly sampling events.

A tabulation of all reports referenced above is presented in the reference section of this report.

II. SAMPLING PREPARATION

A. Depth to Water Measurements

The depth to water in each RCRA Well (including MW-5 and MW-6) was measured prior to and after well evacuation and sampling. These measurements were made in the morning of July 26 and on the afternoon of July 27, 1989, respectively. The location of each well relative to the 342 and 317 Areas is indicated on Figure 2. Problems with the water level meter during the initial measurements caused the initial measured water levels to be inconsistent with levels from prior sample events. The measurements taken after completion of well sampling were more consistent with depth to water measurements taken during previous sampling events. The depth to water was measured with a Solinist electronic water level meter. This meter has a probe which, when in contact with the groundwater, activates an audible and visual alarm. The tape of the probe is marked in feet and tenths of feet. The point on the tape which lined up with the top of the well casing was measured to the next lowest mark on the tape to measure the depth to water in each well. These depths were measured to an accuracy of one hundredth of a foot. Multiple measurements were taken in each well to ensure repeatability.

The water level meter probe was checked for the presence of floating or immiscible layers after the measurements in each well. No floating layers were observed.

The history of the depth to water measurements and the resulting potentiometric elevation of the groundwater in each well (including MW-5 and MW-6) are included in Table I. These elevations are shown graphically on Figure 3. Depth to water measurements taken subsequent to sampling and prior to completion of this report are included on Figure 3. These water elevations have been used in the determination of

the direction of groundwater flow beneath the 342 and 317 Areas. A map of the potentiometric contours of the groundwater and the resultant flow direction on July 27, 1989 is given on Figure 4. It can be seen that well MW-4 is located hydraulically downgradient of the 317 area. This is consistent with earlier calculations of the groundwater flow direction (See "Documentation Report, Construction and Development of Wells for Groundwater Monitoring of the 342 and 317 Areas," February 1988; "RCRA Groundwater Sampling, Quarterly Sampling Report No. 1"; "RCRA Groundwater Sampling, Quarterly Sampling Report No. 2"; and "RCRA Groundwater Sampling, Quarterly Sampling Report No. 3"). The potentiometric contours from August 10 and August 18, 1989 are shown on Figures 5 and 6, respectively. These contours are consistent with those observed during the fourth sampling event (7/27/89).

B. Well Evacuation

After initial depth to water measurements were obtained, the pumps of the four wells were started in order to evacuate the wells of potentially stagnant water. The evacuation flowrate, duration of pumping of each well and the number of well volumes removed from each well are shown in Table II. The volume of each well is based on the length of water column in the four-inch well casing and the volume of groundwater contained in the 20 feet of well screen and gravel pack. It can be seen that more than the minimum three well volumes were removed from each well prior to collection of the groundwater samples. For this sampling event, a new pump, similar to the pump in well MW-4 was installed in well MW-1.

The evacuated water from wells MW-1, MW-2 and MW-3 which has been shown to be free of contaminants was discharged to the ground surface, hydraulically downgradient from each well in accordance with the "Groundwater Sampling and Analysis Plan",

August 1988. The evacuated water from well MW-4 was pumped, treated by granular activated carbon and discharged into a 20,000-gallon Baker tank located near to the well.

C. Well Stabilization

After initiation of well evacuation, well stabilization measurements were periodically taken to insure that representative groundwater samples would be collected.

Groundwater pH, temperature and specific conductance readings were taken prior to the sampling of each well and subsequent to the completion of sampling at each well.

These stabilization parameters are shown in Table 3. It can be seen that the wells were stable at the time that samples were collected.

III. SAMPLE COLLECTION - ANALYSIS

A. Required Groundwater Analysis

1. Indicator Parameters

As directed by the RCRA Closure Plan, the groundwater contamination indicator parameters of pH, specific conductance, total organic carbon (TOC), and total organic halogens (TOX) were analyzed in quadruplet from each well. This requirement is normally in force for a period of one year prior to the startup of a RCRA unit, and its usual purpose is to indicate more specific analyses that should be performed, such as for the hazardous constituents discussed below and analyzed in this sampling event. Each of the parameters were analyzed in accordance with EPA approved methodologies. The sample volume and container requirements and method analytical designations are included in Table IV. Copies of the analysis method protocols are included in Appendix B of Quarterly Report No. 1.

2. Quality Parameters

As directed by the Approved RCRA Closure Plan, monitoring to determine the quality of the groundwater at the Bermite site relative to EPA primary and secondary drinking water standards and as given in 40 CFR 265.92 (b) (1) - (3) is required. The quality parameters sampled, volume and container requirements, and the EPA-approved analysis method designations are shown in Table IV. Copies of the analysis method protocols are included in Appendix B of Quarterly Report No. 1.

3. Hazardous Constituent Parameters

As directed by the Approved RCRA Closure Plan, analysis for hazardous constituents as defined by 40 CFR 261, Appendix IX that were possibly used or created at the RCRA units was required. A list of these compounds was included in the "Groundwater Sampling and Analysis Plan", August 1988. The list includes both metal and organic compounds. The specific compounds that were analyzed can be seen in both Tables IV and V. Sample volume and container requirements and the EPA approved analysis method designations are included in Table IV. Copies of the analysis method protocols are included in Appendix B of Quarterly Report No. 1.

B. Approved Analysis Methods

As indicated above, the analysis of the indicator, quality and hazardous constituent parameters was performed by EPA or other approved methodologies. Copies of the protocols are included in Appendix B of Quarterly Report No. 1.

All sample analyses were performed by EPA methods except formaldehyde, total phosphate and fluoride, which have no EPA specified methodologies and therefore were analyzed by other approved methods. These other methods are indicated in Table IV.

All of the analysis methods were specified in the "Groundwater Sampling and Analysis Plan", August 1988.

C. Sample Containers

All sample containers were supplied by I-CHEM, Inc. Hayward, CA. Containers were pre-cleaned and sealed at the I-CHEM facilities and are statistically certified as clean and free of volatile organic and metal compounds. The Certificates of Analysis of all containers used in this sampling event are included as Appendix B.

D. Sample Labeling

All sample containers were labeled at the time of sample collection in accordance with the "Groundwater Sampling and Analysis Plan", August 1988. A unique sample identification system was used to ensure that samples were clearly and properly labeled. The key to the labeling scheme for each analysis and each container is included in Table VI.

E. Sample Collection

1. Sampling Volumetric Flowrate

After removal of sufficient water from each well to ensure representative groundwater, the groundwater samples were collected. The pumping of wells MW-2 and MW-3 cannot be varied. However, to ensure a maximum flowrate into the sample containers no greater than 100 milliliters/minute and to minimize aeration and agitation of the collected samples, a teflon sampling valve and stem was installed into the invert of the well discharge pipe. The sampling flowrate was adjusted to a rate of approximately 100 milliliters/minute and water from this valve and stem was directed into the sample containers. The pumping rate of wells MW-1 and MW-4 is adjustable and was set to a flowrate of approximately 100 milliliters/minute for the collection of the samples. In

addition, a teflon valve and stem was also installed at the discharge of these two wells. This low pumping rate was pumped for 10 hours, a time sufficient to ensure that the water located at the pump when the flowrate was changed was discharged from the well prior to sampling.

2. Order of Sample Collection

The order in which samples were collected from each well is given in Table VII. This same order of sample collection was used for each of the four RCRA monitoring wells.

3. Field Sample Preservation

The groundwater samples which were collected for metal analyses (total and dissolved) were pH adjusted in the field to a pH <2. This was accomplished with the addition of a 50% nitric acid solution to the sample containers. The samples collected for phenol analysis were pH adjusted in the field to pH <2 by the addition of sulfuric acid to the collected samples. The pH of each sample (metals and Phenol) was monitored with an electronic pH meter. Acid was added to the sample container with a small pipette until the desired pH was achieved.

The samples collected for dissolved metal analyses were filtered through a 0.45 micron filter prior to pH adjustment.

All samples, upon collection, labeling and sealing were placed into coolers containing ice. The samples collected from wells MW-2 and MW-3 on the first day of sampling were kept in the coolers in a locked office until delivery to the laboratory the next day. The remaining samples from MW-1 and MW-4 were collected during the second day and all samples were then delivered to the laboratory on that day.

4. Field and Trip Sample Blanks

Trip blanks were made up at the laboratory prior to the sampling event and field blanks were made up in the field during the sampling event. A field and trip blank for each type of sample bottle for organic analysis was made up in accordance with the "Groundwater Sampling and Analysis Plan", August 1988.

The trip blanks were made up at the laboratory, transferred to the site in coolers, kept in a refrigerator overnight, transferred to each sampling site and kept in the coolers with the collected samples until delivery to the laboratory.

The field blanks were made up in the field with water delivered to the field along with the trip blanks. These blanks were then placed into the coolers with the collected samples until delivery to the laboratory. A field blank for volatile organic compounds (Method EPA 624) was made up on both days of sampling. The remaining field blanks were made up after samples were collected at well MW-4.

IV. FIELD QA/QC

A. Decontamination of Field Test Equipment

The equipment used in the field during sample collection that came into contact with the wells or the collected samples was decontaminated to ensure that cross-contamination of samples was minimized. The mercury thermometer, pH probe, nitric acid and sulfuric acid eyedroppers, water filter apparatus, specific conductance probe and water level meter probe were all cleaned and rinsed with deionized water before and after each use on each sample at each well.

Clean sampling gloves were worn by all sample personnel who handled the samples prior to sealing the sample containers with the chain-of-custody seals.

B. Field Log

A log was kept of all field activities and observations during this sampling and analysis event. This log was kept in accordance with the "Groundwater Sampling and Analysis Plan", August 1988. A copy of this log is included as Appendix C.

C. Sample Container Labeling and Seals

As indicated above, all containers were labeled in the field as each sample was collected. A unique sample identification number was given to each separate sample. The sample containers were sealed with chain-of-custody seals (evidence tape) after labeling. The sample containers were then placed into coolers with ice. The coolers were also sealed with chain-of-custody seals for delivery to the laboratory.

D. Chain-of-Custody and Sample Analysis Request Forms

Chain-of-custody documentation was completed for all samples. These forms were filled out at the time of sample collection and were kept with the samples until delivery to the laboratory. Copies of the signed chain-of-custody forms are included as Appendix D. Sample analyses request forms indicating to the laboratory the desired analysis to be run on each sample (including trip and field blanks) were also completed at the time of sample collection. These forms were kept with the samples until delivery to the laboratory. Copies of these forms are included as Appendix E.

E. Delivery of Samples to Laboratory

Upon completion of the collection of all samples and the completion of all chain-of-custody and sample analysis request forms, the samples were delivered to FGL Environmental laboratories in Santa Paula, CA. The lab is approximately a 45-minute drive from the Bermite facility. Maximum-minimum thermometers were placed in the coolers with the samples for verification of the temperature of the samples. Upon delivery to the laboratory, temperatures, recorded by the maximum-minimum thermometers were logged on the sample analysis request forms. The temperature recorded in each of the five coolers used was less than 4° C.

F. Security

Security measures were taken to ensure that no person had the opportunity to tamper with the wells before, during and after sampling of the groundwater or with the collected groundwater samples. The wells have locking caps which prevents access to the wells. The Bermite facility has a locked gate which is manned 24 hours per day. In addition, Bermite personnel personally delivered the samples to FGL. The samples

from wells MW-2 and MW-3 were kept overnight in the coolers with ice in a locked room in the office at the Bermite facility.

V. LABORATORY QA/QC

All groundwater samples collected were analyzed by FGL Environmental, Santa Paula, California. FGL Environmental is certified by the California Department of Health Service to perform the analyses required of the groundwater samples. FGL utilized Brown and Caldwell Laboratories for some of the analysis. Brown and Caldwell is also certified by the California Department of Health Services.

A detailed description of the FGL Environmental QA/QC program can be found in Appendix F. In addition, copies of the original laboratory analytical reports and chromatograms of all trip, field and method blanks, duplicate and spiked samples that were performed as a part of the QA/QC program are included as Appendix G. The QA/QC laboratory reports have been reviewed by the analyzing laboratories.

VI. SAMPLE ANALYTICAL RESULTS

A. Indicator Parameters

The indicator parameters included pH, specific conductance, total organic carbon (TOC) and total organic halogen (TOX) measurements. Four replicates from each well were analyzed. The results of these analysis are presented in Table VIII.

As can be seen from Table VIII, pH values for all four monitoring wells were within the range of 6.7 - 7.5 pH units. The laboratory pH results correspond with the field pH readings (see Table III). The field and laboratory values of specific conductance in MW-2 were higher than in the other three wells which was also observed in sampling events 1, 2, and 3. The field and laboratory values of specific conductance for all wells are similar to the values obtained during sampling events 1, 2, and 3.

The TOC values for the monitoring wells ranged from less than the detection limit (3 mg/l) to a high of 9 mg/l in MW-2. As with earlier sampling events, these low values may be an indication of naturally occurring organic compounds in the vicinity of wells.

TOX values were not detectable for monitoring wells MW-1 and MW-3. Low values of TOX were again detected in well MW-2. This may be attributed to naturally occurring organic halides in the vicinity of monitoring well MW-2 or may be due to sampling or analysis errors.

The values of TOX in well MW-4 are higher than the other three wells. These concentrations correlate with the concentrations of chlorinated organics detected in well MW-4 during this sampling event.

Copies of original laboratory analytical reports for the indicator parameters can be found in Appendix H.

B. Groundwater Quality Parameters

1. Total and Dissolved Metals

The groundwater samples were analyzed for RCRA metals, both dissolved and total. Tables IX and X list dissolved and total metal values respectively for all four monitoring wells.

Metals were not detected at or above the detection limits, with the exception of barium in monitoring well MW-2, cadmium, chromium and lead in MW-3 and chromium in MW-4. The concentration of total and dissolved barium in MW-2 are both 600 ug/l. This concentration of 600 ug/l is the same as that determined in the previous sampling events.

Cadmium was detected in the dissolved sample from MW-3 at a concentration of 1 ug/l (part per billion) which is the detection limit achieved in the analysis. The total metals sample from MW-3 had detectable concentrations of chromium and lead of 11 ug/l and 23 ug/l, respectively.

The concentration of total chromium in MW-4 was 14 ug/l, while no dissolved chromium was detected in this well. These results are similar to the results of sampling events Nos. 2 and 3.

As was discussed in "Quarterly Sampling Report No. 3", July 1989, the source of chromium is not known. The construction and operation of the pump in well MW-4

were suspect and upon inspection of the pump prior to sampling event No. 4 it was found that a stainless steel rod guide was indeed wearing down. This part was replaced, however, prior to sample Event No. 4.

Copies of original laboratory analytical reports can be found in Appendix H.

2. Chlorinated Pesticides and Herbicides

Chlorinated pesticides and herbicides for which the samples were analyzed included endrin, lindane, methoxychlor, toxaphene, 2,4-D and 2,4,5-TP. None of these compounds was present in any of the four monitoring wells. Table XI lists US EPA MCL values for these compounds together with the detection limits.

Copies of original laboratory analytical reports can be found in Appendix H.

3. Radioactivity

Total radium (radium 226 and 228) was not detected in the wells at 1 picoCurie/l, while its MCL value is 5 picoCurie/l. All four monitoring wells had gross alpha and gross beta values that were between 0 and 6 picoCurie/l. The MCL values for gross alpha and gross beta are 15 picoCurie/l. Table XI lists these radioactivity parameters together with their MCL values.

Copies of original laboratory analytical reports can be found in Appendix H.

4. Bacteria

All groundwater samples were analyzed for the presence of bacteria. No coliform bacteria were found in any of the four monitoring wells. These results are presented in Table XI and copies of the original laboratory analytical reports can be found in Appendix H.

5. Nutrients

The nutrients for which the samples were analyzed included nitrate, sulfate, sodium, iron, manganese, total phosphate and fluoride. None of the compounds present in groundwater had values exceeding MCL levels and the concentrations are consistent with those determined during the previous sampling events. Table XI lists sample values together with the drinking water MCL values for these components. Copies of the original laboratory analytical reports are presented in Appendix H.

6. Phenols

Table XII lists all the phenol compounds for which groundwater samples were analyzed. None of the compounds were detected at the instrument detection limit. Except for pentachlorophenol, no compound has a set Maximum Contaminant Level. The MCL value for pentachlorophenol is 220 ug/l, while the detection limit was 50 ug/l.

Copies of the original laboratory analytical reports can be found in Appendix H.

C. Hazardous Constituents

1. Formaldehyde

Groundwater samples were analyzed for formaldehyde. Table XIII presents the results of the formaldehyde analyses. Formaldehyde was not detected in any of the four monitoring wells.

Copies of the original laboratory analytical reports can be found in Appendix H.

2. Total and Dissolved Metals

In addition to the eight RCRA metals discussed above, three additional metals were analyzed (antimony, copper and thallium). Groundwater analyses, both for total and dissolved concentrations, did not show these metals present at or above the detection limit. Table XIII lists these parameters together with their MCL values, where applicable.

Copies of the original laboratory reports can be found in Appendix H.

3. Volatile and Semi-Volatile Organics

Volatile and semi-volatile organic compounds were analyzed by EPA methods 624 and 625, respectively. The analyses with the exception of well MW-4 do not show any identified or tentatively identified compounds. Table XIV and XV present all parameters together with the detection limits for the particular compounds.

The 624 analysis for MW-4 again detected the presence of one volatile organic compound, trichloroethylene (TCE) at a concentration of 1.39 mg/l. No other volatile organics were detectable in MW-4.

Copies of the original laboratory analytical reports and chromatograms are included in Appendix H.

VII. SUMMARY

A. Indicator Parameters

The indicator parameters for wells MW-1, MW-2 and MW-3 do not show evidence of groundwater contamination. The pH and specific conductance values for these monitoring wells are within the range for clean drinking water. The absence of specific organic compounds in these wells correlates with these results. The concentration of TOX in MW-4 is consistent with the VOC results presented below.

B. Groundwater Quality Parameters

The groundwater quality parameters showed groundwater to be free of contamination by the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver), pesticides and herbicides, coliform bacteria and phenols. The analyses were all within the EPA primary and secondary drinking water standards.

The nutrients analyzed all were within applicable drinking water standards. The concentrations detected were similar to the concentrations detected during the first three quarterly sampling events.

C. Hazardous Constituent Parameters

The results of this sampling event do not indicate groundwater contamination by any of the hazardous constituents, except for the volatile organic compound TCE detected in well MW-4. The semi-volatile organic compound analyses do not show any of these compounds to be present. There was no detectable formaldehyde in the four monitoring wells.

VIII. RECOMMENDATIONS FOR FUTURE SAMPLING EVENTS

The objective of the groundwater sampling was to verify that the groundwater is free of contamination. The results of the fourth quarterly sample event indicate that the groundwater at well MW-4 has been impacted by the past activities at the 317 Area. The other three wells do not show any hazardous constituents.

Prior to the fourth quarterly sampling event, two additional RCRA monitoring wells (MW-5 and MW-6) were installed but not yet completed. A groundwater pumpout well has been installed. Approval for discharge of the pumped and treated (with granular activated carbon) water has been obtained and remediation of the groundwater has commenced.

The next quarterly sampling event will take place in October 1989 and will include the two new wells MW-5 and MW-6. The pumps recently installed in these wells are similar to the pumps in well MW-1 and MW-4.

It has been proposed to the DHS and EPA that the wells be sampled in accordance with 40 CFR Part 265 such that the following sampling and analysis schedule be adhered to:

Parameter	Analysis Frequency
Iron	Annually
Manganese	Annually
Phenols	Annually
Sodium	Annually
Sulfate	Annually
Pesticides	Annually
Radium/Gross Alpha-Beta	Annually
Coliform Bacteria	Annually
Nitrate	Annually

Parameter	Analysis Frequency
Total Phosphate	Annually
Fluoride	Annually
RCRA Metals	Annually
pH	Semi-Annually
Specific Conductance	Semi-Annually
TOC	Semi-Annually
TOX	Semi-Annually
Known Hazardous Constituents (i.e. volatile organics)	Quarterly

Assuming that DHS and EPA concur with the above proposal, the sampling and analysis of the six monitoring wells in October 1989 will be for the volatile organic compounds only.

IX. REFERENCES

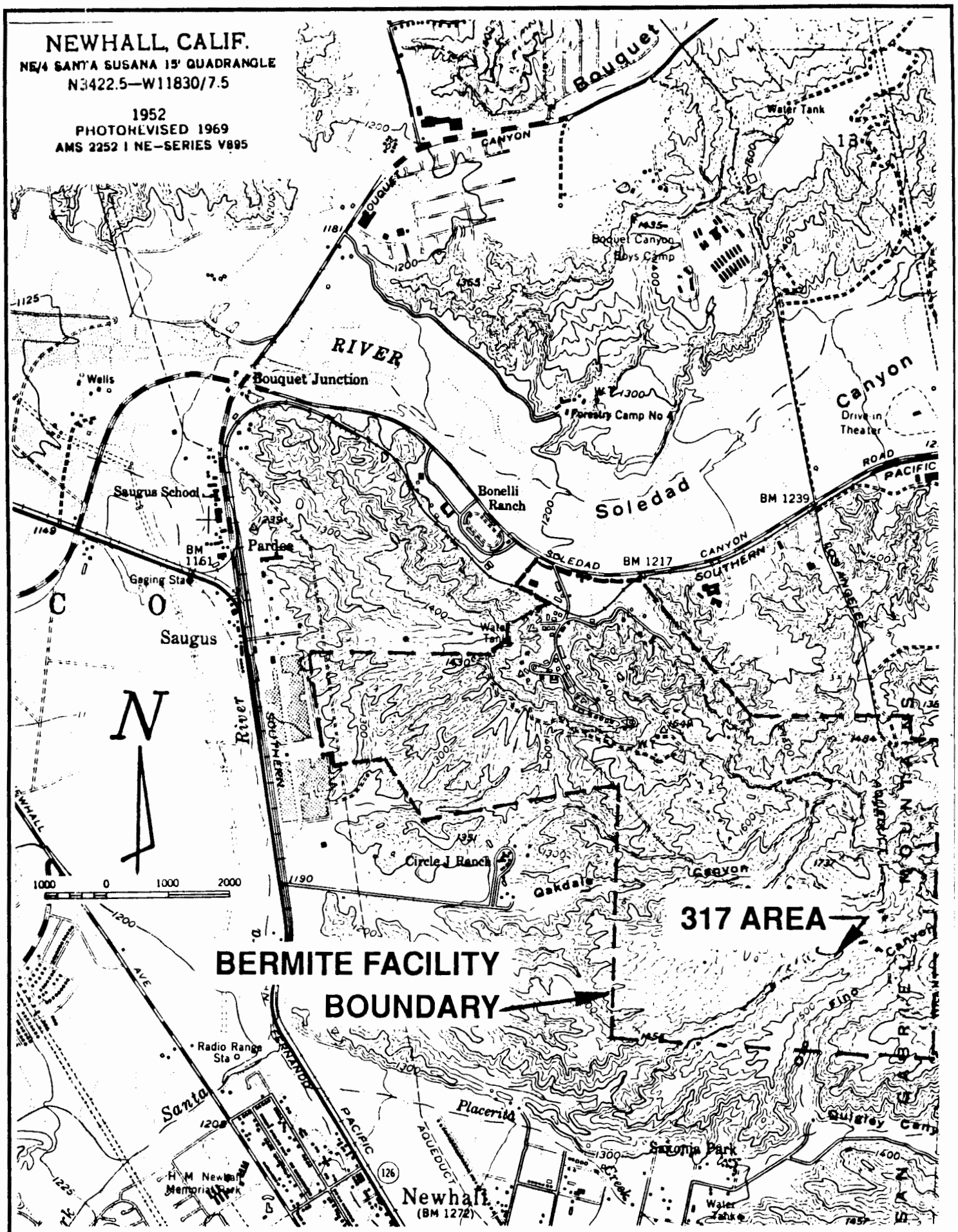
The following documents have been submitted to the California Department of Health Services (DHS) and the Region IX Environmental Protection Agency (EPA) in fulfillment of the RCRA Closure Plan regarding groundwater monitoring at the 342 and 317 areas:

- Revised RCRA Closure Plan, April, 1987
- Revised Groundwater Monitoring Plan for the 317/342 Area, October 8, 1987
- Proposed Interim Status Groundwater Monitoring Sampling and Analysis Program, December, 1987
- Documentation Report - Construction and Development of Wells for Groundwater Monitoring of the 342 and 317 Areas, February, 1988
- RCRA Groundwater Monitoring System - Proposed Final Configuration, May, 1988
- Documentation Report - Construction and Development of RCRA Groundwater Monitoring Well 4, August, 1988
- "Groundwater Sampling and Analysis Plan", August, 1988
- RCRA Groundwater Sampling, Quarterly Sampling Report No. 1, December 1988
- RCRA Groundwater Sampling, Quarterly Sampling Report No. 2, March 1989.
- RCRA Groundwater Sampling, Quarterly Sampling Report No. 3, July 1989.
- Specific Plan for a Groundwater Quality Assessment Program, June 1989.
- Interim Response Action Plan, 317 Area Soil and Groundwater Remediation, June 1989.

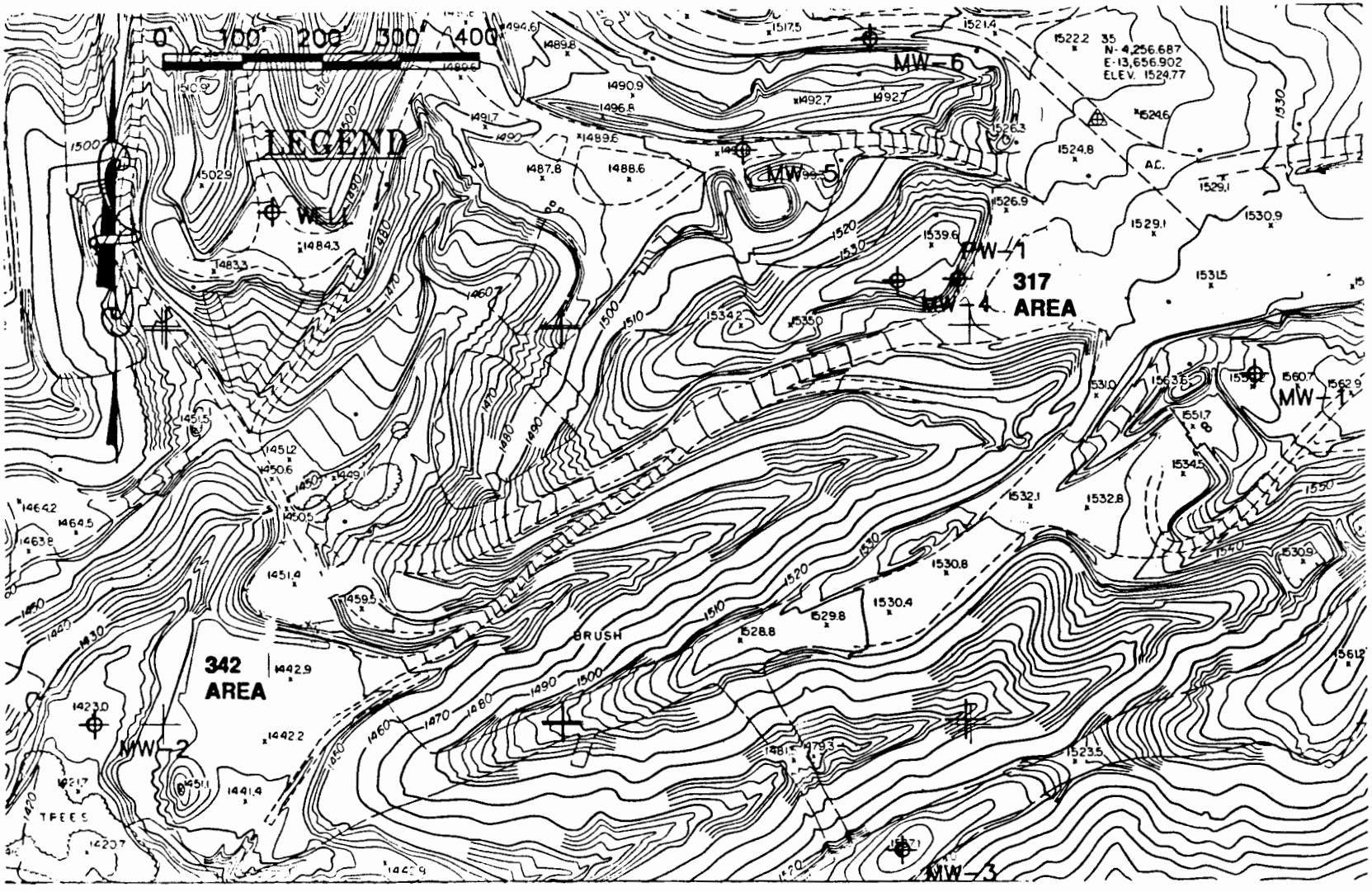
In addition the following document submitted to the DHS and EPA in fulfillment of the RCRA Closure Plan, regarding soil sampling of the near surface soils at the 342 and 317 areas, has been referenced herein:

- Verification Sampling Results at Selected RCRA Units, March, 1988

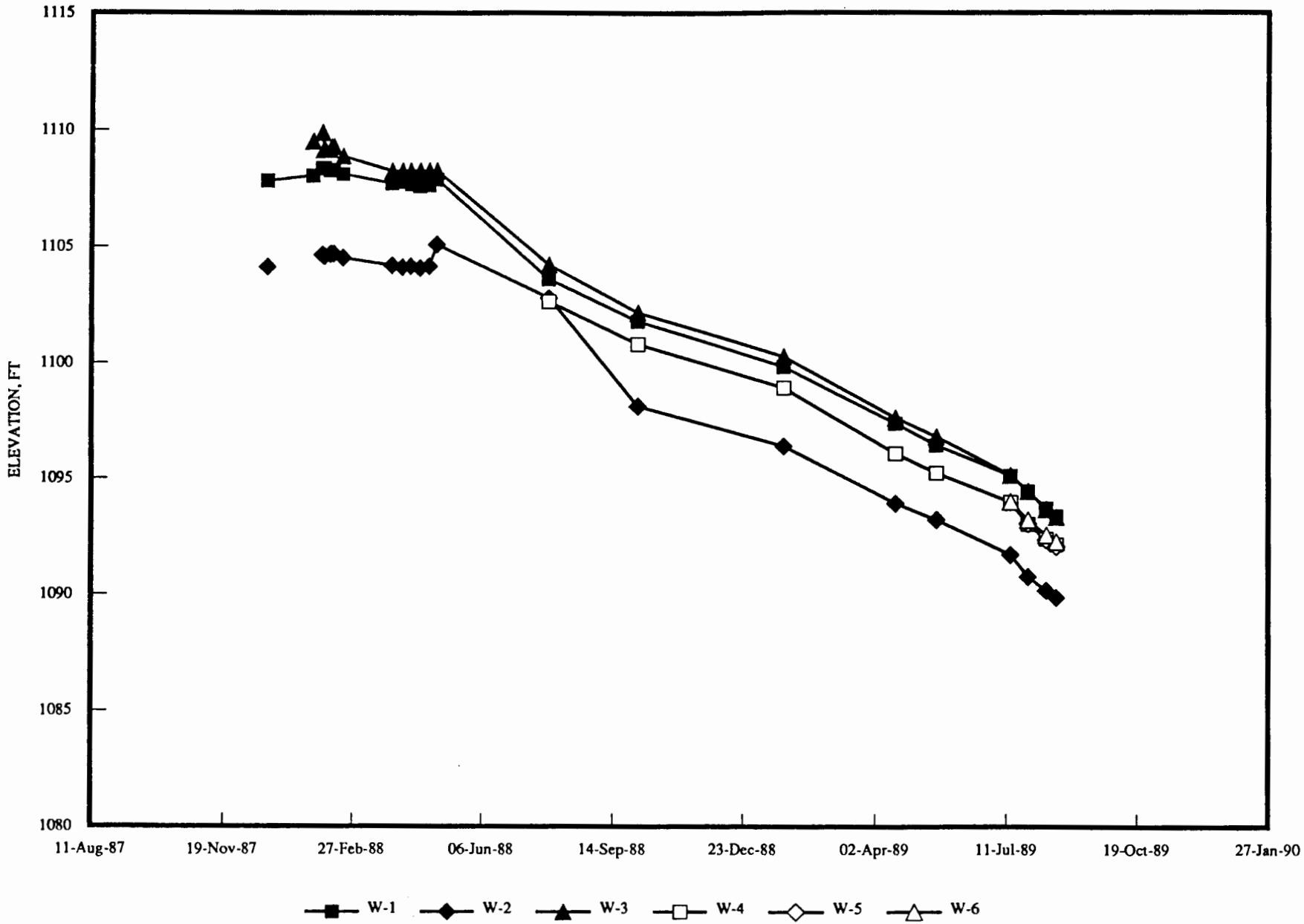
FIGURES



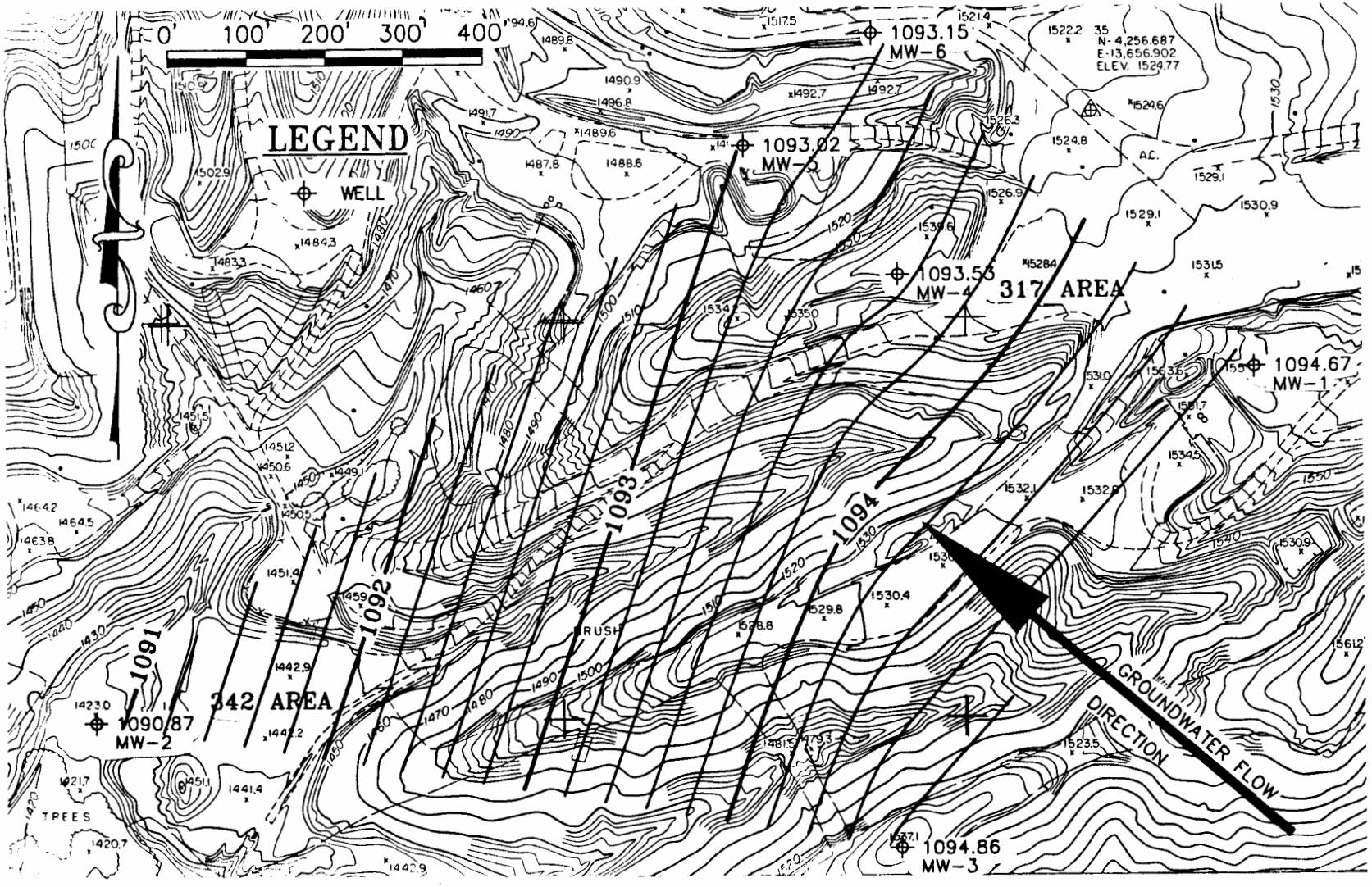
BERMITE DIVISION, WHITTAKER CORPORATION	Consulting Engineers	SEP 1989
Site Location Map	Wenck Associates, Inc. — Twelve Oaks Center, 15500 Wayzata Blvd., Wayzata, MN 55391	Fig. 1



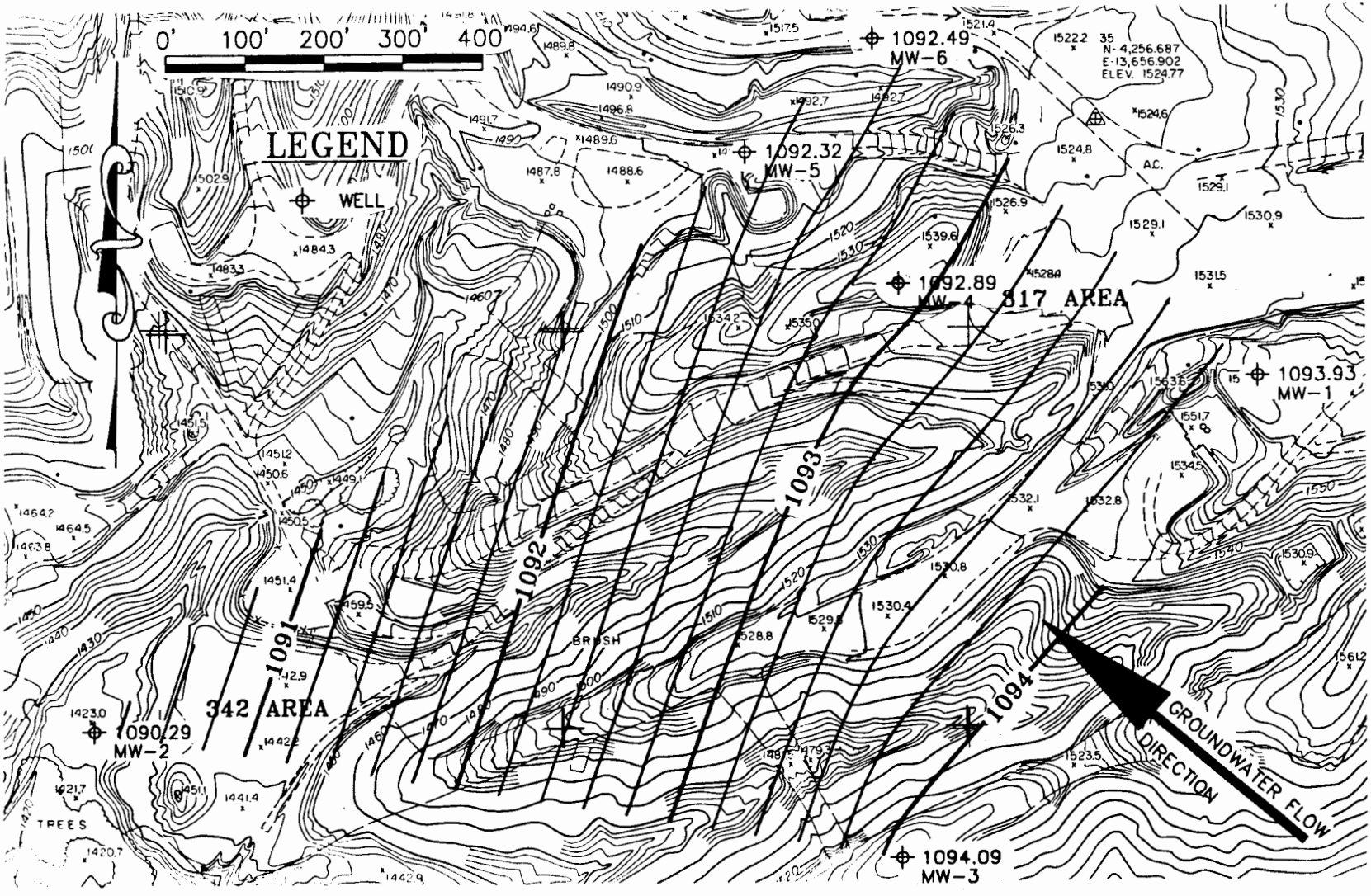
BERMITE DIVISION, WHITTAKER CORPORATION	Wenck Associates, Inc. Consulting Engineers Twelve Oaks Center 15500 Wayzata Blvd. Wayzata, MN 55391	SEP 1989
RCRA Well Location Map		Fig. 2



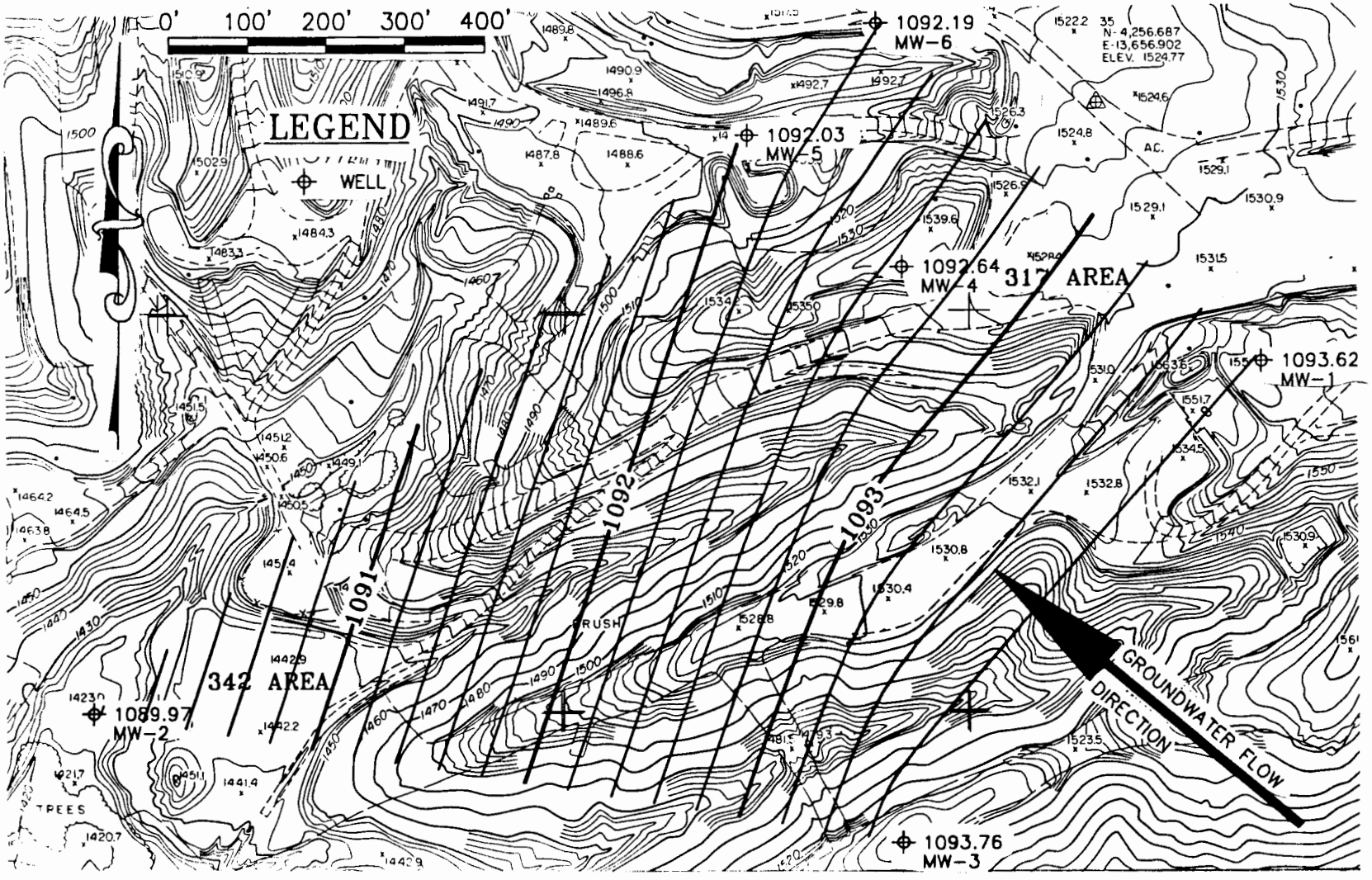
BERMITE DIVISION, WHITTAKER CORPORATION	Consulting Engineers	SEP 1989
RCRA Groundwater Monitoring Wells Potentiometric Surface Elevation History	Wenck Associates, Inc. Twelve Oaks Center 15500 Wayzata Blvd. Wayzata, MN 55391	Fig. 3



BERMITE DIVISION, WHITTAKER CORPORATION	Wenck Associates, Inc. Consulting Engineers, Twelve Oaks Center, 15500 Wayzata Blvd., Wayzata, MN 55391	SEP 1989
Groundwater Flow Direction at Site, 7/27/89		Fig. 4



BERMITE DIVISION, WHITTAKER CORPORATION	Wenck Associates, Inc. — Consulting Engineers — Twelve Oaks Center, 15500 Wayzata Blvd., Wayzata, MN 55391	SEP 1989
Groundwater Flow Direction at Site, 8/10/89		Fig. 5



BERMITE DIVISION, WHITTAKER CORPORATION	Wenck Associates, Inc. Consulting Engineers	SEP 1989
Groundwater Flow Direction at Site, 8/18/89	Twelve Oaks Center 15500 Wayzata Blvd. Wayzata, MN 55391	Fig. 6

TABLES

TABLE I

DEPTH TO WATER MEASUREMENTS

Well	Date	Top of Casing Elevation (NGVD)	Depth to Water (feet)	Potentiometric Surface Elevation (NGVG)
MW-1	12/23/87	1560.86	453.05	1107.81
	1/27/88	1560.86	452.83	1108.03
	2/3/88	1560.86	452.54	1108.32
	2/4/88	1560.86	452.50	1108.36
	2/5/88	1560.86	452.50	1108.36
	2/9/88	1560.86	452.62	1108.24
	2/10/88	1560.86	452.58	1108.28
	2/12/88	1560.86	452.58	1108.28
	2/19/88	1560.86	452.75	1108.11
	3/28/88	1560.86	453.17	1107.69
	4/5/88	1560.86	453.10	1107.76
	4/12/88	1560.86	453.20	1107.66
	4/19/88	1560.86	453.30	1107.56
	4/26/88	1560.86	453.25	1107.61
	5/2/88	1560.86	453.00	1107.86
	7/27/88	1561.07*	457.49	1103.58
	10/3/88	1561.07	459.32	1101.75
	1/23/89	1561.07	461.25	1099.82
	4/17/89	1561.07	463.70	1097.37
	7/27/89	1561.32**	466.65	1094.67
	8/10/89	1561.32	467.39	1093.93
	8/18/89	1561.32	467.70	1093.62

* New well cap installed July 1988.

** Well resurveyed.

TABLE I (continued)

DEPTH TO WATER MEASUREMENTS

Well	Date	Top of Casing Elevation (NGVD)	Depth to Water (feet)	Potentiometric Surface Elevation (NGVG)
MW-2	12/23/87	1424.05	319.44	1104.11
	1/27/88	1424.05	--	--
	2/3/88	1424.05	319.43	1104.62
	2/4/88	1424.05	319.46	1104.59
	2/5/88	1424.05	319.49	1104.56
	2/9/88	1424.05	319.41	1104.64
	2/10/88	1424.05	319.38	1104.67
	2/12/88	1424.05	319.38	1104.67
	2/19/88	1424.05	319.55	1104.50
	3/28/88	1424.05	319.88	1104.17
	4/5/88	1424.05	319.96	1104.09
	4/12/88	1424.05	319.92	1104.13
	4/19/88	1424.05	320.00	1104.05
	4/26/88	1424.05	319.92	1104.13
	5/2/88	1424.05	319.00	1105.05
	7/27/88	1424.04*	321.27	1102.77
	10/3/88	1424.04	325.92	1098.12
	1/23/89	1424.04	327.66	1096.38
	4/17/89	1424.04	330.15	1093.89
	7/27/89	1424.17**	333.30	1090.87
	8/10/89	1424.17	333.88	1090.29
	8/18/89	1424.17	334.20	1089.97

*Top of casing resurveyed July 1988.

** Well resurveyed.

TABLE I (continued)

DEPTH TO WATER MEASUREMENTS

Well	Date	Top of Casing Elevation (NGVD)	Depth to Water (feet)	Potentiometric Surface Elevation (NGVG)
MW-3	12/23/87	1538.06	--	--
	1/27/88	1538.06	428.55	1109.51
	2/3/88	1538.06	428.18	1109.88
	2/4/88	1538.06	428.92	1109.14
	2/5/88	1538.06	428.89	1109.17
	2/9/88	1538.06	428.93	1109.13
	2/10/88	1538.06	428.79	1109.27
	2/12/88	1538.06	428.79	1109.27
	2/19/88	1538.06	429.20	1108.86
	3/28/88	1538.06	429.83	1108.23
	4/5/88	1538.06	429.83	1108.23
	4/12/88	1538.06	429.83	1108.23
	4/19/88	1538.06	429.83	1108.23
	4/26/88	1538.06	429.83	1108.23
	5/2/88	1538.06	429.83	1108.23
	7/27/88	1538.07*	433.88	1104.19
	10/3/88	1538.07	435.96	1102.11
	1/23/89	1538.07	437.82	1100.25
	4/17/89	1538.07	440.45	1097.62
	7/27/89	1538.51**	443.66	1094.85
	8/10/89	1538.51	444.42	1094.09
	8/18/89	1538.51	444.75	1093.76

*Top of casing resurveyed July 1988.

** Well resurveyed.

TABLE I (continued)

DEPTH TO WATER MEASUREMENTS

Well	Date	Top of Casing Elevation (NGVD)	Depth to Water (feet)	Potentiometric Surface Elevation (NGVG)
MW-4	7/27/88	1537.92	435.31	1102.61
	10/3/88	1537.92	437.15	1100.77
	1/23/89	1537.92	439.00	1098.92
	4/17/89	1537.92	441.87	1096.05
	7/27/89	1538.43**	444.53	1093.53
	8/10/89	1538.43	445.54	1092.89
	8/18/89	1538.43	445.64	1092.64
MW-5	7/27/89	1493.37	400.35	1093.02
	8/10/89	1493.37	401.05	1092.32
	8/18/89	1493.37	401.34	1092.03
MW-6	7/27/89	1521.09	427.94	1093.15
	8/10/89	1521.09	428.60	1092.49
	8/18/89	1521.09	428.90	1092.19

** Well resurveyed.

TABLE II

WELL EVACUATION AND SAMPLING FLOWRATES

Well	Time and Date Pump Started	Evacuation Flowrate (ml/min)	Duration of Pumping (min)	Time and Date of Sample Collection	Sampling Flowrate (ml/min)	Well Volumes Removed Prior to Sampling
MW-1	0931 (7/26/89)	4,730	600	0830 (7/27/89)	100	3.9*
MW-2	0945 (7/26/89)	56,775	294	1535 (7/26/89)	100	27
MW-3	0938 (7/26/89)	9,463	364	1645 (7/26/89)	100	15
MW-4	00923(7/26/89)	5,680	600	1005 (7/27/89)	100	3.9**

* includes 12-hour period of sampling flowrate and 10.0 hours of evacuation flowrate
**includes 14-hour period of sampling flowrate and 10.0 hours of evacuation flowrate

TABLE III

WELL STABILIZATION TESTS

Well	T(°C)	pH	Specific Conductance Units (umhos)	Time
MW-1	23.5	7.05	555	1205 (7/26/89)
	23.5	7.10	527	1410 (7/26/89)
	23.5	7.30	550	1910 (7/26/89)
	23.0	7.12	535	0740 (7/27/89)
	23.0	7.10	532	0830 (7/27/89)
MW-2	23.0	6.65	3940	1150 (7/26/89)
	22.5	6.60	3960	1345 (7/26/89)
	23.5	6.61	4020	1435 (7/26/89)
	23.5	6.60	4020	1535 (7/26/89)
MW-3	24.5	7.14	645	1210 (7/26/89)
	23.5	7.15	637	1405 (7/26/89)
	24.0	7.15	635	1545 (7/26/89)
	24.0	7.15	650	1635 (7/26/89)
MW-4	23.5	7.55	610	1200 (7/26/89)
	23.5	7.51	582	1350 (7/26/89)
	23.5	7.48	560	1920 (7/26/89)
	23.0	7.45	565	0730 (7/27/89)
	23.0	7.45	592	0915 (7/27/89)
	23.0	7.45	565	1005 (7/27/89)

TABLE IV

SCHEDULE OF PARAMETER ANALYSIS, ANALYSIS METHODS, AND SAMPLE CONTAINER REQUIREMENTS (per well)

Indicator Parameters

Four replicates for each parameter collected and analyzed per well.

Parameter	Analysis Method	Amount of Sample Collected	Type of Container
pH	EPA 9040	4 x 500 ml	Plastic
Specific Conductance	EPA 9050		
Total Organic Carbon	EPA 9060	4 x 250 ml	Amber glass, TFE-lined cap
Total Organic Halogen	EPA 9020	4 x 250 ml	Amber glass, TFE-lined cap

Groundwater Quality Parameters

Analyze one sample per well.

Parameter	Analysis Method	Amount of Sample Required	Type of Container
Endrin			
Lindane	EPA 8080		
Methoxychlor			
Toxaphene		3 x 1000 ml	Amber glass, TFE-lined cap
2,4-D	EPA 8150		
2,4,5,-TP			

TABLE IV (continued)

Parameter	Analysis Method	Amount of Sample Required	Type of Container
Radium	EPA 9315	1 x 1000 ml	Plastic
Gross Alpha	EPA 9310		
Gross Beta			
Coliform Bacteria	EPA 9131	1 x 500 ml	Whirlpak
Phenols	EPA 8040	2 x 1000 ml	Amber glass, TFE-lined cap
Nitrate	EPA 9200		
Sulfate	EPA 9035		
Sodium	EPA 7770	1 x 1000 ml	Plastic
Iron	EPA 7380		
Manganese	EPA 7460		
Total Phosphate	Std. Method 424F	1 x 500 ml	Plastic
Dissolved and Total Metals			
Arsenic	EPA 7060		
Barium	EPA 7080		
Cadmium	EPA 7130		
Chromium	EPA 7190	2 x 1000 ml	Plastic
Lead	EPA 7420		
Mercury	EPA 7470		
Selenium	EPA 7740		
Silver	EPA 7760	2 x 250 ml	Amber glass, TFE-lined cap
Fluoride	Std. Method 413B	500 ml	Plastic

TABLE IV (continued)

Hazardous Constituents

Analyze one sample per well.

Parameter	Analysis Method	Amount of Sample Required	Type of Container
Volatile organics	EPA 8240	3 x 40 ml	Amber glass TFE-lined cap
Semi-volatile organics	EPA 8270	3 x 1000 ml	Amber glass, TFE-lined cap
Formaldehyde	NIOSH 3500	2 x 250 ml	Amber glass, TFE-lined cap
Antimony	EPA 7040		
Copper	EPA 7210	See above for metals	
Thallium	EPA 7840		

NOTE: See Table V for specific volatile and semi-volatile compounds required for analysis. All compounds identified will be reported.

TABLE V

LIST OF VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS

Compound	Method of Analysis
Benzene	EPA 8240
Butyl Acetate	EPA 8240
Carbon Disulfide	EPA 8240
Chloroform	EPA 8240
Dichloromethane	EPA 8240
Methyl Methacrylate	EPA 8240
Tetrachloroethene	EPA 8240
Trichloroethene	EPA 8240
Methylene Chloride	EPA 8240
1,1,1-Trichloroethane	EPA 8240
Methyl Ethyl Ketone	EPA 8240
Acetone	EPA 8240
Toluene	EPA 8240
Total Xylenes	EPA 8240
Ethyl Benzene	EPA 8240
Styrene	EPA 8240
Decane	EPA 8240
Undecane	EPA 8240
Nitrobenzene	EPA 8270
N-Nitrosodiphenylamine	EPA 8270
Hexachloroethane	EPA 8270
Naphthalene	EPA 8270

TABLE VI

KEY TO ANALYSIS DESIGNATION LABELS ON SAMPLE CONTAINERS

Analysis Designation	Parameter(s) to be Analyzed
A	pH Specific Conductance (temperature corrected)
B	Total Organic Carbon (TOC)
C	Total Organic Halogen (TOX)
D	Endrin, Lindane Methoxychlor, Toxaphene 2,4-D and 2,4,5 - TP
E	Radium, Gross Alpha, Gross Beta
F	Coliform Bacteria
G	Phenols
H	Nitrate, Sulfate, Sodium, Iron Manganese
I	Total Phosphate
J	Total Metals Ar, Ba, Cd, Cr, Pb, Hg, Se, Cu, Sb, Tl
K	Dissolved Metals Ar, Ba, Cd, Cr, Pb, Hg, Se, Cu, Sb, Tl
L	Silver (Total)
M	Silver (Dissolved)
N	Fluoride
O	Volatile organics
P	Semi-volatile organics
Q	Formaldehyde

TABLE VI (continued)

Each sample container will be labeled with a unique sample number. The form of each label is as follows:

Well I.D./Analysis Designation/Sample Event No./Replicate No.

Where:

Well I.D. = MW-1, MW-2, MW-3 or MW-4

Analysis Designation = A through Q according to Table attached

Sample Event No. = 1 through 4

Replicate No. = 1 through 4

NOTE: "No Replicate No." indicates replicate samples are not required

TABLE VII

ORDER OF SAMPLING

1. Volatile Organics
2. Semi-Volatile Organics
3. Total Organic Halogen (TOX)
4. Total Organic Carbon (TOC)
5. Phenols
6. Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-D, 2,4,5-TP
7. pH, Specific Conductance
8. Radium, Gross Alpha, Gross Beta
9. Coliform Bacteria
10. Total Metals
11. Silver (Total)
12. Dissolved Metals
13. Silver (Dissolved)
14. Nitrate, Sulfate, Sodium, Iron, Manganese
15. Fluoride
16. Total Phosphate
17. Formaldehyde

TABLE VIII

INDICATOR PARAMETERS

WELL	DATE	SAMPLE EVENT	REPLICATE	pH	CONDUCTANCE (umhos)	TOC (mg/l)	TOX (ug/l)
MW-1	27-Jul-89	4	1	7.4	502	<3	<100
			2	7.5	502	<3	<100
			3	7.5	502	5	<100
			4	7.5	495	<3	<100
MW-2	27-Jul-89	4	1	6.8	4246	<3	125(1)
			2	6.9	4298	9	120(1)
			3	6.7	4298	<3	100(1)
			4	6.9	4298	<3	100(1)
MW-3	27-Jul-89	4	1	7.5	661	<3	<100
			2	7.5	661	<3	<100
			3	7.5	661	<3	<100
			4	7.5	661	<3	<100
MW-4	27-Jul-89	4	1	7.8	595	<3	990
			2	7.7	595	8	730
			3	7.8	595	4	910
			4	7.8	599	<3	800

NOTE:
< = LESS THAN THE DETECTION LIMIT
(1) = SAMPLE RECEIVED WITH HEADSPACE IN SAMPLE CONTAINER. POSSIBLE LOSS OF ORGANICS. RESULT MAY NOT BE RELIABLE.

TABLE IX

GROUNDWATER QUALITY PARAMETERS
DISSOLVED METALS

WELL	DATE	SAMPLE EVENT	ARSENIC (ug/l)	BARIUM (ug/l)	CADMIUM (ug/l)	CHROMIUM (ug/l)	LEAD (ug/l)	MERCURY (ug/l)	SELENIUM (ug/l)	SILVER (ug/l)
MCL			50	1000	10	50	*50	2	10	50
MW-1	27-Jul-89	4	<10	<100	<1	<10	<10	<1	<5	<10
MW-2	27-Jul-89	4	<10	600	<1	<10	<10	<1	<5	<10
MW-3	27-Jul-89	4	<10	<100	1	<10	<10	<1	<5	<10
MW-4	27-Jul-89	4	<10	<100	<1	<10	<10	<1	<5	<10

OTE:
CL = MAXIMUM CONTAMINANT LEVEL
< = LESS THAN THE DETECTION LIMIT
* = MCL UNDER REVIEW

TABLE X

GROUNDWATER QUALITY PARAMETERS
TOTAL METALS

	WELL	DATE	SAMPLE EVENT	ARSENIC (ug/l)	BARIUM (ug/l)	CADMIUM (ug/l)	CHROMIUM (ug/l)	LEAD (ug/l)	MERCURY (ug/l)	SELENIUM (ug/l)	SILVER (ug/l)
MCL				50	1000	10	50	*50	2	10	50
	MW-1	27-Jul-89	4	<10	<100	<1	<10	<10	<1	<5	<10
	MW-2	27-Jul-89	4	<10	600	<1	<10	<10	<1	<5	<10
	MW-3	27-Jul-89	4	<10	<100	<1	11	23	<1	<5	<10
	MW-4	27-Jul-89	4	<10	<100	<1	14	<10	<1	<5	<10

OTE:
CL = MAXIMUM CONTAMINANT LEVEL
< = LESS THAN THE DETECTION LIMIT
* = MCL UNDER REVIEW

TABLE XI

GROUNDWATER QUALITY PARAMETERS

WELL	DATE	SAMPLE EVENT	ENDRIN (ug/l)	LINDANE (ug/l)	METHOXY-CHLOR (ug/l)	TOXAPHENE (ug/l)	2,4-D (ug/l)	2,4,5-TP (ug/l)	TOTAL RADIUM (pCi/L)	GROSS ALPHA (pCi/L)	GROSS BETA (pCi/L)
CL			0.2	4	100	5	100	10	5	15	15
MW-1	27-Jul-89	4	<0.02	<0.4	<10	<0.5	<10	<1	<1	0	3
MW-2	27-Jul-89	4	<0.02	<0.4	<10	<0.5	<10	<1	<1	0	6
MW-3	27-Jul-89	4	<0.02	<0.4	<10	<0.5	<10	<1	<1	0	2
MW-4	27-Jul-89	4	<0.02	<0.4	<10	<0.5	<10	<1	<1	2	0

OTE:
CL=MAXIMUM CONTAMINANT LEVEL
.A.=NOT APPLICABLE
<=LESS THAN THE DETECTION LIMIT

TABLE XI (CONT'D.)

GROUNDWATER QUALITY PARAMETERS

WELL	DATE	SAMPLE EVENT	COLIFORM BACTERIA (MPN/100mL)	NO3- (mg/L)	SO4- (mg/L)	Na+ (mg/L)	Fe (ug/L)	MANGANESE (ug/L)	TOTAL PHOSPHATE (mg/L)	FLUORIDE (mg/L)
CL			2.2	10	250	N.A.	300	50	N.A.	4
MW-1	27-Jul-89	4	<2.2	9	13	42	<100	<30	<0.1	0.2
MW-2	27-Jul-89	4	<2.2	2	9	82	<100	<30	<0.1	<0.1
MW-3	27-Jul-89	4	<2.2	2	65	46	200	<30	<0.1	0.2
MW-4	27-Jul-89	4	<2.2	3	33	64	100	<30	<0.1	0.2

OTE:
CL=MAXIMUM CONTAMINANT LEVEL
.A.=NOT APPLICABLE
<=LESS THAN THE DETECTION LIMIT

TABLE XII

GROUNDWATER QUALITY PARAMETERS
PHENOLS

WELL	DATE	SAMPLE EVENT	2,4-DI-CHLORO-PHENOL (ug/l)	2,4-DI-METHYL-PHENOL (ug/l)	2,4-DI-NITRO-PHENOL (ug/l)	2-CHLORO-PHENOL (ug/l)	4-CHLORO-3-METHYL-PHENOL (ug/l)	2-METHYL-PHENOL (ug/l)	4-METHYL-PHENOL (ug/l)
ROPOSED MCLG			N.S.L.	N.S.L.	N.S.L.	N.S.L.	N.S.L.	N.S.L.	N.S.L.
MW-1	27-Jul-89	4	<20	<20	<20	<20	<20	<10	<10
MW-2	27-Jul-89	4	<20	<20	<20	<20	<20	<10	<10
MW-3	27-Jul-89	4	<20	<20	<20	<20	<20	<10	<10
MW-4	27-Jul-89	4	<20	<20	<20	<20	<20	<10	<10

NOTE:
CLG = MAXIMUM CONTAMINANT LEVEL GOAL
.S.L.=NO SET LEVEL
< = LESS THAN THE DETECTION LIMIT

TABLE XII (CONT'D.)

GROUNDWATER QUALITY PARAMETERS
PHENOLS

WELL	DATE	SAMPLE EVENT	2-METHYL-4,6-DINITRO-PHENOL (ug/l)	2-NITRO-PHENOL (ug/l)	4-NITRO-PHENOL (ug/l)	PENTA-CHLORO-PHENOL (ug/l)	PHENOL (ug/l)	2,4,5-TRI-CHLORO-PHENOL (ug/l)	2,4,6-TRI-CHLORO-PHENOL (ug/l)
ROPOSED MCLG			N.S.L.	N.S.L.	N.S.L.	220	N.S.L.	N.S.L.	N.S.L.
MW-1	27-Jul-89	4	<50	<20	<50	<50	<20	<10	<20
MW-2	27-Jul-89	4	<50	<20	<50	<50	<20	<10	<20
MW-3	27-Jul-89	4	<50	<20	<50	<50	<20	<10	<20
MW-4	27-Jul-89	4	<50	<20	<50	<50	<20	<10	<20

NOTE:
CLG = MAXIMUM CONTAMINANT LEVEL GOAL
.S.L.=NO SET LEVEL
< = LESS THAN THE DETECTION LIMIT

TABLE XIII

HAZARDOUS CONSTITUENTS

	WELL	DATE	SAMPLE EVENT	FORMALDEHYDE (ug/l)	DISSOLVED ANTIMONY (ug/l)	DISSOLVED COPPER (ug/l)	DISSOLVED THALLIUM (ug/l)	TOTAL ANTIMONY (ug/l)	TOTAL COPPER (ug/l)	TOTAL THALLIUM (ug/l)
ROPOSED MCLG				N.S.L.	N.S.L.	1300	N.S.L.	N.S.L.	1300	N.S.L.
	MW-1	27-Jul-89	4	<20	<100	<50	<100	<100	<50	<100
	MW-2	27-Jul-89	4	<20	<100	<50	<100	<100	<50	<100
	MW-3	27-Jul-89	4	<20	<100	<50	<100	<100	<50	<100
	MW-4	27-Jul-89	4	<20	<100	<50	<100	<100	<50	<100

OTE:
CLG = MAXIMUM CONTAMINANT LEVEL GOAL
.S.L.=NO SET LEVEL
< = LESS THAN THE DETECTION LIMIT

TABLE XIV

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	ACETONE (ug/l)	BENZENE (ug/l)	BROMO-DICHLORO-METHANE (ug/l)	BROMOFORM (ug/l)	BROMO-METHANE (ug/l)	CARBON TETRA-CHLORIDE (ug/l)	CHLORO-BENZENE (ug/l)
SNARL			700	70	100	100	N.S.L.	20	N.S.L.
MW-1	27-Jul-89	4	<50	<5	<5	<5	<5	<5	<5
MW-2	27-Jul-89	4	<50	<5	<5	<5	<5	<5	<5
MW-3	27-Jul-89	4	<50	<5	<5	<5	<5	<5	<5
MW-4	27-Jul-89	4	<625	<62.5	<62.5	<62.5	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XIV (CONT'D.)

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	CHLORO-ETHANE (ug/l)	CHLOROFORM (ug/l)	CHLORO-METHANE (ug/l)	DIBROMO-CHLORO-METHANE (ug/l)	1,2-DICHLORO-BENZENE (ug/l)	1,3-DICHLORO-BENZENE (ug/l)
SNARL			N.S.L.	100	N.S.L.	100	130	130
MW-1	27-Jul-89	4	<5	<5	<5	<5	<5	<5
MW-2	27-Jul-89	4	<5	<5	<5	<5	<5	<5
MW-3	27-Jul-89	4	<5	<5	<5	<5	<5	<5
MW-4	27-Jul-89	4	<62.5	<62.5	<62.5	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XIV (CONT'D.)

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	1,4-DICHLORO-BENZENE (ug/l)	1,1-DICHLORO-ETHANE (ug/l)	1,2-DICHLORO-ETHANE (ug/l)	1,1-DICHLORO-ETHENE (ug/l)
SNARL			130	N.S.L.	5	70
MW-1	27-Jul-89	4	<5	<5	<5	<5
MW-2	27-Jul-89	4	<5	<5	<5	<5
MW-3	27-Jul-89	4	<5	<5	<5	<5
MW-4	27-Jul-89	4	<62.5	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XIV (CONT'D.)

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	trans-1,2-DICHLORO-ETHENE (ug/l)	1,2-DICHLORO-PROPANE (ug/l)	cis-1,3-DICHLORO-PROPENE (ug/l)	trans-1,3-DICHLORO-PROPENE (ug/l)	ETHYL BENZENE (ug/l)
SNARL			270	10	N.S.L.	N.S.L.	N.S.L.
MW-1	27-Jul-89	4	<5	<5	<5	<5	<5
MW-2	27-Jul-89	4	<5	<5	<5	<5	<5
MW-3	27-Jul-89	4	<5	<5	<5	<5	<5
MW-4	27-Jul-89	4	<62.5	<62.5	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XIV (CONT'D.)

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	METHYL ETHYL KETONE (ug/l)	METHYLENE CHLORIDE (ug/l)	1,1,2,2-TETRACHLORO-ETHANE (ug/l)	TETRACHLORO-ETHENE (ug/l)	TOLUENE (ug/l)	1,1,1-TRICHLORO-ETHANE (ug/l)
SNARL			750	150	N.S.L.	20	340	200
MW-1	27-Jul-89	4	<50	<5	<5	<5	<5	<5
MW-2	27-Jul-89	4	<50	<5	<5	<5	<5	<5
MW-3	27-Jul-89	4	<50	<5	<5	<5	<5	<5
MW-4	27-Jul-89	4	<625	<62.5	<62.5	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XIV (CONT'D.)

HAZARDOUS CONSTITUENTS
VOLATILE ORGANICS

WELL	DATE	SAMPLE EVENT	1,1,2-TRICHLORO-ETHANE (ug/l)	TRICHLORO-ETHENE (ug/l)	TRICHLORO-FLUORO-METHANE (ug/l)	VINYL CHLORIDE (ug/l)	XYLENES (ug/l)
SNARL			N.S.L.	75	N.S.L.	2	420
MW-1	27-Jul-89	4	<5	<5	<5	<5	<5
MW-2	27-Jul-89	4	<5	<5	<5	<5	<5
MW-3	27-Jul-89	4	<5	<5	<5	<5	<5
MW-4	27-Jul-89	4	<62.5	1390	<62.5	<62.5	<62.5

NOTE:
SNARL = SUGGESTED NO-ADVERSE-RESPONSE LEVEL
N.S.L.= NO SET LEVEL
<= LESS THAN THE DETECTION LIMIT

TABLE XV

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

ELL	DATE	SAMPLE EVENT	1,2,4-TRICHLORO-BENZENE (ug/l)	2,4-DINITRO-TOLUENE (ug/l)	2,6-DINITRO-TOLUENE (ug/l)	2-CHLORO-NAPHTHALENE (ug/l)	3,3'-DICHLORO-BENZIDINE (ug/L)	4-BROMO-PHENYL-PHENYL-ETHER (ug/L)	4-CHLORO-PHENYL-PHENYL-ETHER (ug/L)	ACE-NAPHTHENE (ug/L)
W-1	27-Jul-89	4	<10	<10	<10	<10	<40	<10	<10	<10
W-2	27-Jul-89	4	<10	<10	<10	<10	<40	<10	<10	<10
W-3	27-Jul-89	4	<10	<10	<10	<10	<40	<10	<10	<10
W-4	27-Jul-89	4	<10	<10	<10	<10	<40	<10	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

TABLE XV (CONT'D.)

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

ELL	DATE	SAMPLE EVENT	ACE-NAPHTHYLENE (ug/L)	ANTRACENE (ug/L)	BIS (2-ETHYL-HEXYL) PHTHALATE (ug/L)	BENZIDINE (ug/L)	BIS (2-CHLORO-ETHYL) ETHER (ug/L)	BIS (2-CHLORO-ISOPROPYL) ETHER (ug/L)	BIS (2-CHLORO-ETHOXY) METHANE (ug/L)
W-1	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10
W-2	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10
W-3	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10
W-4	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

TABLE XV (CONT'D.)

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

ELL	DATE	SAMPLE EVENT	BENZO(a) ANTHRACENE (ug/L)	BENZO(a) PYRENE (ug/L)	BENZO(b) FLUORO-ANTHENE (ug/L)	BENZO (g,h,i) PERYLENE (ug/L)	BENZO(k) FLUORO-ANTHENE (ug/L)	BUTYL-BENZYL-PHTHALATE (ug/L)	CHRYSENE (ug/L)	DI-N-OCTYL-PHTHALATE (ug/L)
W-1	27-Jul-89	4	<20	<20	<20	<20	<20	<20	<10	<10
W-2	27-Jul-89	4	<20	<20	<20	<20	<20	<20	<10	<10
W-3	27-Jul-89	4	<20	<20	<20	<20	<20	<20	<10	<10
W-4	27-Jul-89	4	<20	<20	<20	<20	<20	<20	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

TABLE XV (CONT'D.)

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

:LL	DATE	SAMPLE EVENT	DIBENZO-(a,h) ANTHRACENE (ug/L)	DIBUTYL-PHTHALATE (ug/L)	DIETHYL-PHTHALATE (ug/L)	DIMETHYL-PHTHALATE (ug/L)	FLUORENE (ug/L)	FLUORO-ANTHENE (ug/L)	HEXA-CHLORO-BENZENE (ug/L)	HEXA-CHLORO-BUTADIENE (ug/L)
----	---------	-------	---------	---------	---------	---------	--------	--------	--------	---------
7-1	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10	<10
7-2	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10	<10
7-3	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10	<10
7-4	27-Jul-89	4	<10	<10	<10	<10	<10	<10	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

TABLE XV (CONT'D.)

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

ELL	DATE	SAMPLE EVENT	HEXA-CHLORO-CYCLO-PENTADIENE (ug/L)	HEXA-CHLORO-ETHANE (ug/L)	INDENO-(1,2,3-c,d) PYRENE (ug/L)	ISOPHORONE (ug/L)	N-NITROSO-DI-N-PROPYL-AMINE (ug/L)	N-NITROSO-DIMETHYL-AMINE (ug/L)	N-NITROSO-DIPHENYL-AMINE (ug/L)
W-1	27-Jul-89	4	<40	<10	<20	<20	<10	<10	<10
W-2	27-Jul-89	4	<40	<10	<20	<20	<10	<10	<10
W-3	27-Jul-89	4	<40	<10	<20	<20	<10	<10	<10
W-4	27-Jul-89	4	<40	<10	<20	<20	<10	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

TABLE XV (CONT'D.)

HAZARDOUS CONSTITUENTS
SEMI-VOLATILE ORGANICS

:LL	DATE	SAMPLE EVENT	NAPHTHALENE (ug/L)	NITRO-BENZENE (ug/L)	PHENANTHRENE (ug/L)	PYRENE (ug/L)
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]-1	27-Jul-89	4	<10	<10	<10	<10
]-2	27-Jul-89	4	<10	<10	<10	<10
]-3	27-Jul-89	4	<10	<10	<10	<10
]-4	27-Jul-89	4	<10	<10	<10	<10

OTE:
= LESS THAN THE DETECTION LIMIT

APPENDIX A

Photographs of Sample Event No. 4

APPENDIX B

Sample Container Certificates of Analysis

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 8285203 February 3, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, Cold-Vapor Atomic Absorption and ICP-Atomic Emission spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
Tl	< 5	V	< 10
Sn	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L:

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 8285203.

Marvin Rudd, President

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 8285173 February 2, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, Cold-Vapor Atomic Absorption and ICP-Atomic Emission spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
Tl	< 5	V	< 10
Sn	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L:

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 8285173.

Marvin Rudd, President

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CERTIFICATE OF ANALYSIS

Analysis of Lot 8285193 February 3, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, Cold-Vapor Atomic Absorption and ICP-Atomic Emission spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
Tl	< 5	V	< 10
Sn	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L:

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 8285193.

Marvin Rudd, President

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I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 9136063 June 6, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, ICP-Atomic Emission Spectroscopy and ICP-Mass Spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)
Hg	< 0.2
As	< 5
Se	< 2
Sb	< 5
Ag	< 5
Ba	< 50
Be	< 1
Co	< 20
Pb	< 4
Tl	< 5
Sn	< 20
Zn	< 10
Cu	< 10
Ni	< 20
Al	< 80
Mn	< 10
Cr	< 10
B	< 100
Fe	< 50
Cd	< 1
V	< 10

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 9136063.

Anita Rudd
President

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 9144143 June 13, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, ICP-Atomic Emission Spectroscopy and ICP-Mass Spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)
Hg	< 0.2
As	< 5
Se	< 2
Sb	< 5
Ag	< 5
Ba	< 50
Be	< 1
Co	< 20
Pb	< 4
Tl	< 5
Sn	< 20
Zn	< 10
Cu	< 10
Ni	< 20
Al	< 80
Mn	< 10
Cr	< 10
B	< 100
Fe	< 50
Cd	< 1
V	< 10

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 9144143.

Anita Rudd
President

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 9128153 May 23, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, ICP-Atomic Emission Spectroscopy and ICP-Mass Spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
Tl	< 5	V	< 10
Sn	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L:

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

Contact our laboratory if additional information is required.

Please keep this certificate for your records and to facilitate any necessary correspondence regarding lot # 9128153

Anita Rudd, President

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 9128153 May 23, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, ICP-Atomic Emission Spectroscopy and ICP-Mass Spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
Tl	< 5	V	< 10
Sn	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L.

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

Contact our laboratory if additional information is required.

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Anita Rudd, President

CHEM *Chemists in the Container Business™*

I-CHEM RESEARCH

CERTIFICATE OF ANALYSIS

Analysis of Lot 9128153 May 23, 1989

This lot has been analyzed by Furnace Atomic Absorption, Flame Atomic Absorption, ICP-Atomic Emission Spectroscopy and ICP-Mass Spectroscopy. The following analytical results were obtained:

Element	Concentration (ug/L)	Element	Concentration (ug/L)
Hg	< 0.2	Zn	< 10
As	< 5	Cu	< 10
Se	< 2	Ni	< 20
Sb	< 5	Al	< 80
Ag	< 5	Mn	< 10
Ba	< 50	Cr	< 10
Be	< 1	B	< 100
Co	< 20	Fe	< 50
Pb	< 4	Cd	< 1
T	< 5	V	< 10
Sr	< 20		

The lot was also analyzed for extractables by GC/MS.The following compounds were analyzed for and either not found or found in concentrations less than 5 ug/L:

N-Nitroso-dimethylamine
Phenol
Aniline
Bis(2-chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
Benzyl alcohol
Bis(2-chloro-isopropyl) ether
4-Methylphenol
N-Nitroso-di-propylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-chloro-3-methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
Acenaphthalene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethyl Phthalate
4-Chlorophenyl phenyl ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Di-n-butyl Phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl Phthalate
3,3'-Dichlorobenzidine
Benz(a)anthracene
Bis(2-ethylhexyl) Phthalate
Chrysene
Di-n-octyl Phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(a,h)perylene
N-Nitrosodiphenylamine

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Anita Rudd, President

APPENDIX C

Field Log

RCRA Groundwater Sampling Event No. 4
7-26-89 Chris Thompson/Bill Johnson
John Pelogunh/Tim Brizker Sunny 25°C

RECEIVED BY
WENCK
AUG 1989

0650 - Start up hill to measure water levels in all wells and turn on pumps - tabulation of depth to water on pg. 24

0715 measuring water level in MW-2, Hard to obtain reading accurately, tape hard to get down and hard to duplicate rdg

0800 measuring water level in MW-3, tape was easy to get down - measurement taken 3 times - all same

0815 measuring water level in MW-1 - tape was easy to get down - measurement verified 3 times - TOC of MW-1 is 1561.07

0830 Measuring water level in MW-4 - Hard to get tape down - hard to get reading

0905 measuring water level in MW-6, easy to get tape down and get reading

0915 measuring water level in MW-5, tape fairly easy to get down and get measurement.

0920 Start to turn on pumps as indicated on pg. 24

7/8" 11 1/8" - EACH RECORDING

EE

= WATER LEVELS BEING TAKEN USING A WATER LEVEL INDICATOR FROM SLOPE INDICATOR CO. "SOLINST" MODEL 5.453 SERIAL # 12467

Depths to Water in Wells

well	TOC.	Depth to Water	Elevation	Time Pump	Flowrates (measured)
MW-1	1561.07	466 7"	1100.48	0931	1.25 gpm
MW-2	1424.04	333 7/8"	1,090.17	0945	1.5 "
MW-3	1538.07	443 7/8"	1,094.48	0938	2.5 "
MW-4	1537.92	444 6 3/8	1,093.39	0923	1.5 "
MW-5	1493.38	401.21	1092.17	—	—
MW-6	1521.14	427.60	1093.54	—	—

Well Stabilization Readings

well	time	date	temp	pH	cond.
MW-2	1150	7-26	23.0	6.65	3920
MW-4	1200	7-26	23.5	7.55	610
MW-1	1205	7-26	23.5	7.05	555
MW-3	1210	7-26	24.5	7.14	645
MW-2	1345	7-26	22.5	6.60	3960
MW-4	1350	7-26	23.5	7.51	582
MW-3	1405	7-26	23.5	7.15	637
MW-1	1410	7-26	23.5	7.10	527
MW-2	1435	7-26	23.5	6.61	4020
MW-2	1535	7-26	23.5	6.60	4020
MW-3	1545	7-26	24.0	7.15	635
MW-3	1635	7-26	24.0	7.15	650

1100 Preparing supplies for sampling - calibrate pH/temp probe and cond. probe - problem w/pH-temp probe - work on probes while assembling sample containers

1150 probe calibrated - Start well stabilization readings at MW-2

1340 recalibrate probe again before stabilization readings - start at well MW-2, check calibration of pH probe between each well

1435 recalibrate probe - set up to sample at well MW-2, take stabilization reading - well stable so proceed w/sampling.

1535 Finish collection of samples at MW-2 - pH adjust metals & phenol samples label all containers while sampling - keep log of samples on scratch paper - take well sample for stabilization readings, turn off pump

1545 Propose to sample MW-3 - calibrate pH meter - take stabilization reading well is stable - proceed with sample collection

1645 Finish collection of samples at

MW-3, pH adjust metals + phenols, label all sampling containers while sampling, keep log of samples on scratch paper - take well sample for stabilization readings, take field Blank #1 for volatiles

1700 Top of coolers w/more ice - put Max-min thermometers in coolers - place chain of custody seals on coolers and place in locked room at office

Complete chain-of-custody forms for wells MW-2 and MW-3

1900 Finish chain of custody documentation, including partial filling out of docum. for wells 1 & 4 and field & trip blanks

Head up to wells 1 & 4 to take stabilization readings - calibrate pH meter prior to each well

1930 Turn pumping rate down on wells 1 & 4 to ~100 ml/min

1940 End of day, lock office, leave site

[redacted]

Well Stabilization Readings (con't)

well	time	date	temp	pH	cond.	
MW-1	1910	7-26	23.5	7.30	550	06
MW-4	1920	7-26	23.5	7.48	560	
MW-4	0730	7-27	23.0	7.45	565	
MW-1	0740	7-27	23.0	7.12	535	
MW-1	0830	7-27	23.0	7.10	532	
MW-4	0915	7-27	23.0	7.46	592	07
MW-4	1005	7-27	23.0	7.45	565	08

09

7-27-89 Sunny warm -25°C

0645 Arrive on site - check coolers, all ok - prepare for sampling wells 1 & 4, calibrate pH meter - take stabilization readings at wells 4 & 1 wells

0715 Begin sampling at well MW-1

0830 Finish sampling at MW-1, pH adjusted metals and phenol samples stabilization readings taken, all containers labeled & sealed - all samples into coolers w/ ice

0915 Set up to sample at well MW-4 calibrate pH meter, take stabilization reading - well stable - commence sample collection, take all samples for MW-4, label and seal, place in coolers - Place all Trip & Field blank containers and water out on truck, make up field blanks Take last well stabilization readings well still stable - Take all coolers down to office - complete chain of custody forms - turn off

25

READINGS: STARTED 6:45

Depth to water Measurements

well	TOC	Depth to Water	Elev
MW-3	1538.07	443.655	1094.42
MW-1	1561.07	466.652	1094.42
MW-2	1424.04	333.300	1090.74
MW-5	1493.38	400.35	1093.03
MW-6	1521.14	427.94	1093.20
MW-4	1537.92	444.90 - 444.95	1093.02

113

114

18

20

well MW-4 at 1005

1130 Finishing up chain of custody all samples in coolers w/ice, thermometers and seals - coolers sealed w/chain of custody seals

1145 sign over custody of samples to Tim Brizker - Tim drives samples to Lab.

1845 - Take Depth to water measurements in wells once again - 1st set of measurements do not look correct. Use new 'Solinist' water level meter - Much easier to use - only well hard to get reading was last one measured MW-4. Elevations look good.

2015 End of 4th Quarterly Sampling

APPENDIX D

Chain-of-Custody Forms

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-0144

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS	REMARKS
MW2/O/4	7/26	2:45		✓	Monitoring well 2	3	Analysis Type O
MW2/P/4	"	2:50		✓	"	3	" P
MW2/C/4/1-4	"	2:55		✓	"	4	" C
MW2/B/4/1-4	"	3:00		✓	"	4	" B
MW2/G/4	"	3:05		✓	"	2	" G
MW2/D/4	"	3:10		✓	"	3	" D
MW2/A/4/1-4	"	3:15		✓	"	4	" A
MW2/E/4	"	3:15		✓	"	1	" E
MW2/F/4	"	3:20		✓	"	1	" F
MW2/J/4	"	3:20		✓	"	1	" J
MW2/L/4	"	3:20		✓	"	1	" L
MW2/K/4	"	3:20		✓	"	1	" K

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCallister

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

N: 2/10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-01.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE ~~EXAMPLE~~ NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
MW2/M/4	7/26	3:20		✓	monitoring well 2	1							Analysis Type M
MW2/H/4	"	3:25		✓	"	1							" H
MW2/I/4	"	3:25		✓	"	1							" I
MW2/Q/4	"	3:30		✓	"	2							" Q
MW2/N/4	"	3:25		✓	"	1							" N

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89		Julie McCalister [signature]
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

No. 3/10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-01.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
MW3/O/4	7/26	3:50		✓	Monitoring well 3	3							Analysis Type O
MW3/P/4	"	3:55		✓	"	3							" P
MW3/C/4/1-4	"	4:00		✓	"	4							" C
MW3/B/4/1-4	"	4:05		✓	"	4							" B
MW3/G/4	"	4:10		✓	"	2							" G
MW3/D/4	"	4:10		✓	"	3							" D
MW3/A/4/1-4	"	4:15		✓	"	4							" A
MW3/E/4	"	4:15		✓	"	1							" E
MW3/F/4	"	4:15		✓	"	1							" F
MW3/J/4	"	4:20		✓	"	1							" J
MW3/L/4	"	4:20		✓	"	1							" L
MW3/K/4	"	4:20		✓	"	1							" K

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCallister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

No. 1/10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-014

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
MW3/M/4	7/26	4:20		✓	Monitoring well 3	1							Analysis Type M
MW3/H/4	"	4:20		✓	"	1							" H
MW3/N/4	"	4:25		✓	"	1							" N
MW3/I/4	"	4:25		✓	"	1							" I
MW3/Q/4	"	4:30		✓	"	2							" Q

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCallister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

N: 5/6

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 8501.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS	REMARKS
Field Blank #1	7/26	4:30		✓	taken at MW-3	3-40ML	Analysis Type *DIDN'T GET O
Field Blank #2	7/27			✓	taken at MW-4	3-40ML	" O
Field Blank #3	"			✓	"	1-1000 ML ~~1-250ml~~	" D
FIELD BLANK #4	"			✓	"	1-1000 ML	" G
FIELD BLANK #5	"			✓	"	1-1000 ML	" P
FIELD BLANK #6	"			✓	"	250 1-~~1000~~ ML	" Q
Field Blank #7	"			✓	"	1-250ml	" C
Field Blank #8	"			✓	"	1-250ml	" B

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89		[signature]	[signature]	7/27/89	1300	Julie McCalister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

No. 4 10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 8501.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS	REMARKS
MW1/O/4	7/27	0750		✓	Monitoring well 1	3	Analysis Type O
MW1/P/4	"	0750		✓	"	3	" P
MW1/C/4	"	0755		✓	"	4	" C
MW1/B/4	"	0800		✓	"	4	" B
MW1/G/4	"	0805		✓	"	2	" G
MW1/D/4	"	0810		✓	"	3	" D
MW1/A/4	"	0810		✓	"	4	" A
MW1/E/4	"	0815		✓	"	1	" E
MW1/F/4	"	0815		✓	"	1	" F
MW1/J/4	"	0820		✓	"	1	" J
MW1/L/4	"	0820		✓	"	1	" L
MW1/K/4	"	0820		✓	"	1	" K

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McAlister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 8501.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE ~~STATION~~ NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS						REMARKS
MW1/M/4	7/27	0820		✓	Monitoring well 1	1						Analysis Type M
MW1/H/4	"	0825		✓	"	1						" H
MW1/N/4	"	0825		✓	"	1						" N
MW1/I/4	"	0825		✓	"	1						" I
MW1/Q/4	"	0825		✓	"	2						" Q

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCalister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

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N: 8/10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-01.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE ~~STATION~~ NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
MW4/O/4	7/27	0920		✓	Monitoring well 4	3							Analysis Type O
MW4/P/4	"	0925		✓	"	3							" P
MW4/C 14/1-4	"	0925		✓	"	4							" C
MW4/B 14/1-4	"	0930		✓	"	4							" B
MW4/G/4	"	0930		✓	"	2							" G
MW4/D/4	"	0935		✓	"	3							" D
MW4/A 14/1-4	"	0935		✓	"	4							" A
MW4/E/4	"	0935		✓	"	1							" E
MW4/F/4	"	0935		✓	"	1							" F
MW4/J/4	"	0940		✓	"	1							" J
MW4/L/4	"	0940		✓	"	1							" L
MW4/K/4	"	0940		✓	"	1							" K

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCalister
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

No. 1110

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-01.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
MW4/M/4	7/27	0940		✓	Monitoring Well 4	1							Analysis Type M
MW4/H/4	"	0940		✓	"	1							" H
MW4/N/4	"	0945		✓	"	1							" N
MW4/I/4	"	0945		✓	"	1							" I
MW4/Q/4	"	0945		✓	"	2							" Q

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCaloth
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

No. 10/10

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR: Chris Thompson

PROJ. NO.: 85-01.4

PROJECT NAME: Bermite

SAMPLERS (Signature): [signature]

SAMPLE ~~STATION~~ NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
Travel Blank						2 - 40ml							Analysis Type A
TRAVEL BLANK						1-250mL							" " B
"						1-250mL							C
"						1-1000 mL							" " D
"						1-1000 mL							" " G
"						1-1000 mL							" " P
"						1-~~1000~~ 250 mL							" " Q

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	7/27/89	11:45	[signature]	[signature]	7/27/89	1300	Julie McCallion
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

APPENDIX E

Analysis Request Forms

RECEIVED BY
WENCK ASSOCIATES INC.
AUG 2 1989

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-01.4 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCallister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	volatile organics 624	semi-volatile organics 625	TOX	TOC	phenols	pesticides
MW2/O/4	19707	X					
MW2/P/4	19709		X				
MW2/C/4/1-4	19712			X			
MW2/B/4/1-4	19717				X		
MW2/G/4	19714					X	
MW2/D/4	19706						X
MW3/O/4	19707	X					
MW3/P/4	19709		X				
MW3/C/4/1-4	19712			X			
MW3/B/4/1-4	19717				X		
MW3/G/4	19714					X	
MW3/D/4	19706						X

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-01.4 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCaliff

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	pH, conduct.	radium, gross alpha, Beta	Coliform Bacteria	Total Metals	Total Silver	Dissolved Metals
MW2/A/4/1-4	19710	X					
MW2/E/4	19713		X				
MW2/F/4	19701			X			
MW2/J/4	19704				X		
MW2/L/4	19702					X	
MW2/K/4	19705						X
MW3/A/4/1-4	19710	X					
MW3/E/4	19713		X				
MW3/F/4	19701			X			
MW3/J/4	19704				X		
MW3/L/4	19702					X	
MW3/K/4	19705						X

3/8

SAMPLE ANALYSIS REQUEST

m ling Information

oject No. 85-014 Project Name: Bermite

m ler Name: Chris Thompson Tele. No. (612) 475-0858

ame of Person Receiving Samples: Julie McCalister

a e Samples Received: 7/27/89

nternal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	Dissolved Silver	Nitrate, Sulfate Sodium Iron Manganese	Flouride	total phosphate	Formaldehyde	
MW2/M/4	19703	X					
MW2/H/4	19715		X				
MW2/N/4	19716			X			
MW2/I/4	19711				X		
MW2/Q/4	19708					X	
MW3/M/4	19703	X					
MW3/H/4	19715		X				
MW3/N/4	19716			X			
MW3/I/4	19711				X		
MW3/Q/4	19708					X	

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-014 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCalister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	Volatile organics 624	Semi-volatile organics 625	TOX	TOC	Phenols	pesticides
MW1/O/4	19707	x					
MW1/P/4	19709		x				
MW1/C/4/1-4	19712			x			
MW1/B/4/1-4	19717				x		
MW1/G/4	19714					x	
MW1/D/4	19706						x
MW4/O/4	19707	x					
MW4/P/4	19709		x				
MW4/C/4/1-4	19712			x			
MW4/B/4/1-4	19717				x		
MW4/G/4	19714					x	
MW4/D/4	19706						x

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-014 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCallister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	pH/conduc.	radium gross alpha beta	coliform bacteria	total metals	total silver	dissolved metals
MW1/A/4/1-4	19710	x					
MW1/E/4	19713		x				
MW1/F/4	19701			x			
MW1/J/4	19704				x		
MW1/L/4	19702					x	
MW1/K/4	19705						x
MW4/A/4/1-4	19710	x					
MW4/E/4	19713		x				
MW4/F/4	19701			x			
MW4/J/4	19704				x		
MW4/L/4	19702					x	
MW4/K/4	19705						x

6/8

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-01.4 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCalister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	dissolved silver	Nitrate, sulfate sodium, iron manganese	fluoride	total phosphate	Formaldehyde	
MW1/M/4	19703	x					
MW1/H/4	19715		x				
MW1/N/4	19716			x			
MW1/I/4	19711				x		
MW1/Q/4	19708					x	
MW4/M/4	19703	x					
MW4/H/4	19715		x				
MW4/N/4	19716			x			
MW4/I/4	19711				x		
MW4/Q/4	19708					x	

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-014 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Julie McCalister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 5°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	volatile organics 624	pesticides	phenols	semi-volatile organics 625	formaldehyde	TOX	TOC
Field Blank #1	19707	X						
Field Blank #2	19707	X						
Field Blank #3	19706		X					
Field Blank #4	19714			X				
Field Blank #5	19709				X			
Field Blank #6	19708					X		
Field Blank #7	19712						X	
Field Blank #8	19717							X

SAMPLE ANALYSIS REQUEST

Sampling Information

Project No. 85-014 Project Name: Bermite

Sampler Name: Chris Thompson Tele. No. (612) 475-0858

Name of Person Receiving Samples: Anni McCalister

Date Samples Received: 7/27/89

Internal Temperature of Sample Container: 0°

Notes on Samples:

Analysis Required

Sample I.D.	Laboratory I.D.	volatile organics	TOC	TOX	pesticides	phenols	semi-volatiles	Formaldehyde
Travel Blank	19707	x						
"	19717		x					
"	19712			x				
"	19706				x			
"	19714					x		
"	19709						x	
"	19708							x

APPENDIX F

Laboratory QA/QC Program

Sampling

1. Samples should be representative of the source.
2. For chemical tests, the source should be run for a minimum of 15 minutes before sampling. Plastic containers may be used, except those for which glass containers should be used (See EPA Manual for preservation and holding time).
3. Fresh drawn samples are preferred.
4. For microbiological tests:
   a. We prefer to collect samples in sterile bottles provided by this laboratory.
   b. Allow the water to run for at least three (3) minutes and turn off. Burn the faucet with propane burner and turn on the water again for about one (1) minute to flush out loose crust. Carefully fill our bottle to about ½ inch from the top. Return the sample to the laboratory without delay. Samples that are not processed immediately should be stored in the refrigerator. Samples should be processed within six (6) hours from time of sampling. Under no circumstance can processing be more than thirty (30) hours after sampling. (See Standard Methods, 16th Edition, Page 859.)
5. Make available in the sample receiving area written instructions for sample preservation.

Chain of Custody

1. When sample arrives, enter in the log book, lab tag and/or work sheet the following information:
   a. Date the sample was received.
   b. Sampler's name.
   c. Description of sample.
   d. Type of analysis desired.
2. Attach the lab tag onto the container. The sample is then turned over to the analyst. The analyst will have custody of the sample until analyses are completed.
3. Chain of custody samples will be either in the immediate possession of the receiving analyst or in the appropriate locked sample storage.

Laboratory Operations

1. Deionized water
   a. Set the automatic shut-off water at a resistance of 500,000 ohms.
   b. The DI water should be checked monthly for pH and standard plate count.
   c. DI water should be tested annually for inhibitory residue suitability and heavy metals (to include lead, cadmium, chromium, copper, nickel and zinc).
2. Instruments
   a. Follow operations procedures outlined in manufacturer's handbook that comes with the instruments.

b. Have qualified specialists certify the analytical balances once a year.
c. pH meter should be standardized on the day of use with two (2) buffer solutions (pH4, 7 and/or 10).
d. Conductivity meter should be standardized once a month with 0.01 NKCL solution.
e. Turbidity meter should be standardized with standards before use. A 4.0 NTU standard made from EPA procedures should be checked once a month against commercial standard.
f. Do not use reference electrode that contains AG:AgCl for pH adjustment when silver is the analyte.
g. When using HGA, metal standards should be tested in duplicate The difference should not exceed UCL. If exceeded, repeat the analysis and investigate the cause. Corrective actions should be taken before proceeding with quantitative analysis.
h. The lab director should be notified immediately if any sign of malfunction occurs on any instrument so that he can decide if a qualified serviceman should be consulted.

3. Method of Analysis
Use methods from EPA Manual (600-4-79-020 & SW846) or standard methods. If method other than these are used, indicate in the report the reference.

Quality Control

1. Drinking water analyses:
   a. Each analyst should be trained until the analyst is competent to run the test.
   b. Metal analyses should be made with one or two standards along with the unknown, depending on the instructions in the procedure. If the standard deviates beyond the UCL, rerun the standard and the sample.
   c. Once a year, ranges, UCL, UWL of each metal test should be calculated and recorded.
   d. For trace analyses, all glasswares should be cleaned with nitric acid and rinsed with DI water.
   e. Consult EPA QC Handbook, pages 9-2, 9-3, 9-4 for skills time rating of various tests.
   f. For general mineral analysis, check the anion and cation balances. If the difference is morethan 0.3 mg/l or 5% which ever is greater, recheck the analysis.
   g. Anytime a new batch of titrant is made, standard should be analyzed in triplicate to insure that the new titrant is suitable.
   h. For auto analyses, at least three (3) standard solutions should be included for every 37 or less samples.
   i. Make chemical standards for BOD5 and COD tests and check it monthly.
   j. Participate in EPA and/or State sponsored referee sample programs.
   k. Save EPA samples to be used for quality control purposes.
   l. When metal analysis of drinking water exceeds MCL levels, repeat the analysis and/or check with alternative method when available
   m. Lab Director will review all the data on inorganic chemical analyses before reporting.
2. Microbiological analyses:
   a. Media stored in our refrigerator should be incubated at the appropriate temperature for 24 hours before being used and tubes showing any change should be discarded.
   b. Check pH of all media after each sterilization.

c. Date all chemicals.
d. Inspect all media in the tubes before use, to make sure that there are no bubbles present. Notify clients by phone when three or more positive tubes are found. Indicate in report the name of person contacted and the date of notification.
e. Do not use mouth pipet for waste water samples. Use pipet bulb.
f. All thermometers should be standardized against a certified thermometer and record such information in the log book.
g. Temperature of incubator should be checked and recorded daily.

3. Hazardous Waste Analyses
   a. A log book should be maintained for preparation of all standards, information such as suppliers, lot numbers, wt/vol. of standards used, date prepared and name of analyst should be recorded.
   b. A log book sall be maintained documenting repairs and maintenance of equipment.
   c. For all organic analyses, three point calibration curves should be run and documented. On each working day, standards should be run and so long as the standards are within 20% of the predicted response, samples can be run. Otherwise the three point calibration will be rerun. Sample data must be bracketed by standards
   d. For organic analyses by GC, all positive results should be confirmed either by a second dissimilar column or by GC/MS.
   e. These standards will be used for calibration. AA flame analysis calibration data for standards should be recorded in a laboratory notebook or work sheet.
   f. Check standards should be run every 15 samples for AA analysis.
   g. Organic analysis, blanks, duplicates and spike will be analyzed once for each batch of samples, or type of matrix or 20 samples, whichever is more frequent. The location of chromotogram for blanks, duplicates and spikes will be noted on sample worksheets for each batch. For inorganic metal analysis, the spikes and duplicates will be recorded in notebook or worksheet.
   h. Results of analysis on blanks will be recorded on the worksheet of the batch.
   i. Records of analysis of external referance samples such as those from EPA, MBS or other sources should be maintained for inspection and review.
   j. Current acceptance limits on metal analysis is ±10% on duplicates and spikes. It will be ±30% on duplicates and spikes for organic analyses (Methods 8150, 8120, 8040, 8080). Standard deviation on duplicates and spikes will be developed after 20 analyses. And the acceptance limits will become ±3 standard deviations.
   k. All analytical and quality control results should be reviewed and approved by a supervisor. Approval of the work will be indicated by supervisor's signature.
   l. When quality control data is out of control, the analyst should:
      1) recheck calculation
      2) recalibrate the three standards
      3) if that fails, reanalyze the sample, starting from beginning.
      4) if that fails, indicate in the report the suspicion of matrix interference.
   m. All analytical procedures for sample analysis should be referenced in the final report.
   n. For GC/MS analyses, the overall precision and accuracy of recovery is monitored by the addition of surrogate standards to every sample.
   o. For corrosivity test, a minimum of four coupons should be maintained.

APPENDIX G

Laboratory QA/QC Analytical Reports and Chromotograms

TEST MODE

BERMITE
8-1-89

S.NO. :	1001	
EQW :	35.45	
END.P :	299.0	mV
SENS :	1.0	mV
GAIN-1 :	1.66	
GAIN-2 :	3.73	
GAIN-3 :	5.85	
SMPL :	30.00	
DLY-1 :	2.0	min
DLY-2 :	0.3	min
TEMP-1 :	850	°C
TEMP-2 :	950	°C
TEMP-3 :	25	°C
FACTOR :	1.000	
BL :	0.196	µg
CURRENT:	1.0	mA

S.NO. :	1001	
EQW :	35.45	
END.P :	300.2	mV
SENS :	1.0	mV
GAIN-1 :	1.53	
GAIN-2 :	3.75	
GAIN-3 :	3.75	
SMPL :	30.00	
DLY-1 :	2.0	min
DLY-2 :	0.3	min
TEMP-1 :	850	°C
TEMP-2 :	950	°C
TEMP-3 :	25	°C
FACTOR :	1.000	
BL :	0.196	µg
CURRENT:	1.0	mA

TSX-CAL MODE
INPUT THEOR. VALUE

TSX-CAL NO.1
THEOR. 11.100 µgCl
COUNTS 11.083 µgCl
FACTOR 0.998

TOX-BLANK MODE

TOX-BLNK NO.1
COUNTS 0.169 µgCl

TOX-BLNK NO.2
COUNTS 0.068 µgCl

AVERAGE 0.119 µgCl

TOX-AOX-2 MODE
INPUT SMPL

TOX-AOX NO.1 19712-1
SAMPLE 30.00 ml
COUNTS 0.367 µgCl
0.124 µgCl
BLANK 0.119 µgCl
CONCN. 8.5 ppb

TOX-AOX NO.2 19712-2
SAMPLE 30.00 ml
COUNTS 0.327 µgCl
0.068 µgCl
BLANK 0.119 µgCl
CONCN. 6.9 ppb

TOX-AOX NO.3 19712-3
SAMPLE 30.00 ml
COUNTS 0.366 µgCl
0.149 µgCl
BLANK 0.119 µgCl
CONCN. 9.2 ppb

TOX-AOX NO.4 19712-4
SAMPLE 30.00 ml
COUNTS 0.084 µgCl
0.157 µgCl
BLANK 0.119 µgCl
CONCN. 1.3 ppb

TOX-AOX NO.5 19712-5
SAMPLE 30.00 ml
COUNTS 3.643 µgCl
0.380 µgCl
BLANK 0.119 µgCl
CONCN. 126.2 ppb

TOX-AOX NO.6 19712-6
SAMPLE 30.00 ml
COUNTS 3.378 µgCl
0.423 µgCl
BLANK 0.119 µgCl
CONCN. 118.8 ppb

TOX-AOX NO.7 19712-7
SAMPLE 30.00 ml
COUNTS 2.701 µgCl
0.418 µgCl
BLANK 0.119 µgCl
CONCN. 96.0 ppb

TOX-AOX NO.8 19712-8
SAMPLE 30.00 ml
COUNTS 2.841 µgCl
0.448 µgCl
BLANK 0.119 µgCl
CONCN. 101.7 ppb

TOX-AOX NO.9 19712-9
SAMPLE 30.00 ml
COUNTS 0.199 µgCl
0.070 µgCl
BLANK 0.119 µgCl
CONCN. 2.7 ppb

TOX-AOX NO.10 19712-10
SAMPLE 30.00 ml
COUNTS 0.118 µgCl
0.089 µgCl
BLANK 0.119 µgCl
CONCN. 0.0 ppb

TEST MODE

S.NO.	:	9	
EQW	:	35.45	
END.P	:	299.3	mV
SENS	:	1.0	mV
GAIN-1	:	1.38	
GAIN-2	:	3.35	
GAIN-3	:	6.30	
SMPL	:	30.00	
DLY-1	:	2.0	min
DLY-2	:	0.3	min
TEMP-1	:	850	°C
TEMP-2	:	950	°C
TEMP-3	:	25	°C
FACTOR	:	1.000	
BL	:	0.119	µg
CURRENT	:	1.0	mA

S.NO.	:	9	
EQW	:	35.45	
END.P	:	299.3	mV
SENS	:	1.0	mV
GAIN-1	:	1.39	
GAIN-2	:	3.41	
GAIN-3	:	6.61	
SMPL	:	30.00	
DLY-1	:	2.0	min
DLY-2	:	0.3	min
TEMP-1	:	850	°C
TEMP-2	:	950	°C
TEMP-3	:	25	°C
FACTOR	:	1.000	
BL	:	0.119	µg
CURRENT	:	1.0	mA

TOX-AOX-2 MODE
INPUT SMPL

TOX-AOX NO.11 19712-11

SAMPLE	30.00	ml
COUNTS	0.138	µgCl
	0.114	µgCl
BLANK	0.119	µgCl
CONCN.	0.6	ppb

TOX-AOX NO.12 19712-12

SAMPLE	30.00	ml
COUNTS	0.070	µgCl
	0.056	µgCl
BLANK	0.119	µgCl
CONCN.	0.0	ppb

TOX-AOX NO.13 19712-13

SAMPLE	30.00	ml
COUNTS	30.154	µgCl
	0.161	µgCl
BLANK	0.119	µgCl
CONCN.	1.003	ppm

TOX-AOX NO.13 10X 19712-13

SAMPLE	30.00	ml
COUNTS	3.089	µgCl
	0.097	µgCl
BLANK	0.119	µgCl
CONCN.	99.0	ppb

TOX-AOX NO.14 10X 19712-14

SAMPLE	30.00	ml
COUNTS	2.301	µgCl
	0.035	µgCl
BLANK	0.119	µgCl
CONCN.	72.7	ppb

CHECK GENERATOR

TEST MODE

S.NO.	:	15	
EQW	:	35.45	
END.P	:	299.9	mV
SENS	:	1.0	mV
GAIN-1	:	1.58	
GAIN-2	:	3.98	
GAIN-3	:	3.98	
SMPL	:	30.00	
DLY-1	:	2.0	min
DLY-2	:	0.3	min
TEMP-1	:	850	°C
TEMP-2	:	950	°C
TEMP-3	:	25	°C
FACTOR	:	1.000	
BL	:	0.119	µg
CURRENT	:	1.0	mA

S.NO.	:	15	
EQW	:	35.45	
END.P	:	298.0	mV
SENS	:	1.0	mV
GAIN-1	:	1.61	
GAIN-2	:	3.60	
GAIN-3	:	3.60	
SMPL	:	30.00	
DLY-1	:	2.0	min
DLY-2	:	0.3	min
TEMP-1	:	850	°C
TEMP-2	:	950	°C
TEMP-3	:	25	°C
FACTOR	:	1.000	
BL	:	0.119	µg
CURRENT	:	1.0	mA

TOX-AOX-2 MODE
INPUT SMPL

TOX-AOX NO.15 10X 19712-15

SAMPLE	30.00	ml
COUNTS	2.767	µgCl
	0.206	µgCl
BLANK	0.119	µgCl
CONCN.	91.2	ppb

TOX-AOX NO.16 10X 19712-16

SAMPLE	30.00	ml
COUNTS	2.519	µgCl
	0.104	µgCl
BLANK	0.119	µgCl
CONCN.	80.0	ppb

TOX-AOX NO.17 FIELD BLANK

SAMPLE	30.00	ml
COUNTS	0.381	µgCl
	0.112	µgCl
BLANK	0.119	µgCl
CONCN.	8.7	ppb

TOX-AOX NO.18 TRIP BLANK

SAMPLE	30.00	ml
COUNTS	0.253	µgCl
	0.106	µgCl
BLANK	0.119	µgCl
CONCN.	4.5	ppb

TOX-AOX NO.19 BLANK SPIKE

SAMPLE	30.00	ml
COUNTS	3.328	µgCl
	0.014	µgCl
BLANK	0.119	µgCl
CONCN.	107.0	ppb

TOX-AOX NO.19 BLANK SPIKE

SAMPLE	30.00	ml
COUNTS	2.930	µgCl
	0.041	µgCl
BLANK	0.119	µgCl
CONCN.	93.7	ppb

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, BLANK WATER SAMPLES	DATE SAMPLED
07-498-17	Field Blank #8	
07-498-18	Trip Blank	

PARAMETER	07-498-17	07-498-18
Total Organic Carbon (TOC), mg/L	<3	<3

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-19	MW1/B/4/1 BC/QC DUP	27 JUL 89
07-498-20	MW4/B/4/1 BC/QC DUP	27 JUL 89

PARAMETER	07-498-19	07-498-20
Total Organic Carbon (TOC), mg/L	<3	<3

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-21	MW1/B/4/1 BC/QC SPK	27 JUL 89
07-498-22	MW4/B/4/1 BC/QC SPK	27 JUL 89

PARAMETER	07-498-21	07-498-22
Total Organic Carbon (TOC), Percent	119	110

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, REAGENT WATER SAMPLES	DATE SAMPLED
07-498-23	Laboratory Control Standard	

PARAMETER	07-498-23
Total Organic Carbon (TOC), Percent	84

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, BLANK WATER SAMPLES	DATE SAMPLED
07-498-24	Laboratory Blank	

PARAMETER	07-498-24
Total Organic Carbon (TOC), mg/L	<3

Jeffrey A. Erion, Laboratory Manager

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Spike MW1/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Percent Recovery
2,4-D*	18
2,4,5-TP Silvex*	5.0
Surrogate Spike	
2,4,5-T	39

* = Variation on the old spike concentration.

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-2

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW2/D/4 - Duplicate
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW1/D/4 Duplicate
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-4

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Spike MW4/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Percent Recovery
Endrin	103
Lindane	192
Methoxychlor	141
Surrogate Spike	
DBC	91

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-6

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Travel Blank
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-5

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW4 Field Blank #3
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, BLANK WATER SAMPLES	DATE SAMPLED
07-497-5	Field Blank #4	
07-497-6	Trip Blank	

PARAMETER	07-497-5	07-497-6
EPA Method 604 - Phenols		
Date Extracted	08/02/89	08/02/89
Date Analyzed	08/15/89	08/15/89
Dilution Factor, Times 1	1	1
2,4,6-Trichlorophenol, ug/L	<20	<20
2,4-Dichlorophenol, ug/L	<20	<20
2,4-Dimethylphenol, ug/L	<20	<20
2,4-Dinitrophenol, ug/L	<20	<20
2-Nitrophenol, ug/L	<20	<20
2-Chlorophenol, ug/L	<20	<20
2-Methyl-4,6-dinitrophenol, ug/L	<50	<50
4-Chloro-3-methylphenol, ug/L	<20	<20
4-Nitrophenol, ug/L	<50	<50
Pentachlorophenol, ug/L	<50	<50
Phenol, ug/L	<20	<20

BROWN AND CALDWELL LABORATORIES

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ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-497-7	MW1/G/4 BC/QC SPK	27 JUL 89

PARAMETER	07-497-7
EPA Method 604 - Phenols	
Date Extracted	08/02/89
Date Analyzed	08/15'89
Dilution Factor, Times 1	1
2,4,6-Trichlorophenol, Percent	80
2,4-Dichlorophenol, Percent	71
2,4-Dimethylphenol, Percent	70
2,4-Dinitrophenol, Percent	62
2-Nitrophenol, Percent	66
2-Chlorophenol, Percent	63
2-Methyl-4,6-dinitrophenol, Percent	86
4-Chloro-3-methylphenol, Percent	80
4-Nitrophenol, Percent	110
Pentachlorophenol, Percent	86
Phenol, Percent	61

BROWN AND CALDWELL LABORATORIES

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(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-497-8	MW1/G/4 BC/QC DUP-SPK	27 JUL 89

PARAMETER	07-497-8
Order Cancelled, Date	Cancelled

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, REAGENT WATER SAMPLES	DATE SAMPLED
07-497-9	Laboratory Control Standard	

PARAMETER	07-497-9
EPA Method 604 - Phenols	
Date Extracted	08/02/89
Date Analyzed	08/15/89
Dilution Factor, Times 1	1
2,4,6-Trichlorophenol, Percent	91
2,4-Dichlorophenol, Percent	82
2,4-Dimethylphenol, Percent	81
2,4-Dinitrophenol, Percent	97
2-Nitrophenol, Percent	96
2-Chlorophenol, Percent	77
2-Methyl-4,6-dinitrophenol, Percent	120
4-Chloro-3-methylphenol, Percent	89
4-Nitrophenol, Percent	106
Pentachlorophenol, Percent	110
Phenol, Percent	75

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

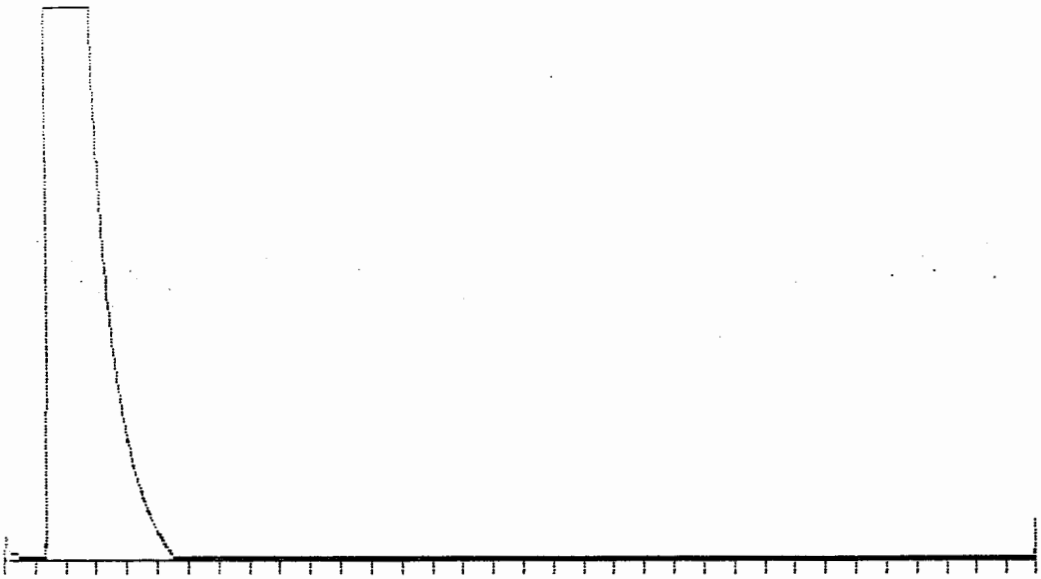
REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, BLANK WATER SAMPLES	DATE SAMPLED
07-497-10	Laboratory Blank	

PARAMETER	07-497-10
EPA Method 604 - Phenols	
Date Extracted	08/02/89
Date Analyzed	08/15/89
Dilution Factor, Times 1	1
2,4,6-Trichlorophenol, ug/L	<20
2,4-Dichlorophenol, ug/L	<20
2,4-Dimethylphenol, ug/L	<20
2,4-Dinitrophenol, ug/L	<20
2-Nitrophenol, ug/L	<20
2-Chlorophenol, ug/L	<20
2-Methyl-4,6-dinitrophenol, ug/L	<50
4-Chloro-3-methylphenol, ug/L	<20
4-Nitrophenol, ug/L	<50
Pentachlorophenol, ug/L	<50
Phenol, ug/L	<20

The duplicate-spike for MW1/G/4 was not recovered in the final step of the EPA 604 extraction procedure (G89-07-497-8). --T.G.

Linda Brack OK JAE
Jeffrey A. Erion, Laboratory Manager



Interface 1] 0-34 Min Scale: 100 Mv
LANK Processed: 08-15-1989 18:08:11, segment 6, cycle 6
RAW DATA SAVED IN FILE L:GH15-6.PTS

AREA PERCENT REPORT

```
******************** 08-15-1989 18:08:37 Version 4.1 *********************
  Sample Name: BLANK                                Data File: L:GH15-6      *
  Date: 08-15-1989 18:08:12 Method: PHENOLS                                  *
* Interface: 1   Cycle#:  6    Operator G.D Channel#: 0    Vial#: N.A.      *
  Starting Peak Width:  12   Threshold: 1  Area Threshold: 1000             *
 ***************************************************************************
* Instrument Type: Varian 3400          Column Type: DB-5 Capillary        *
*              Solvent Description:                                         *
  Conditions: 40 for 4min. 10/min. to 250 hold for 5min                     *
*            Detector 0: FID                  Detector 1:                   *
* Misc. Information:                                                        *
 ***************************************************************************
 tarting Delay:   0.00                        Run Time:   34.00
```

Pk o.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	23.300	2458	4.9842	1	360	15.058	6.8
2	27.140	5065	10.2723	2	796	31.034	6.4
3	29.180	5695	11.5503	2	447	34.894	12.8
4	30.340	8234	16.6999	1	1321	50.452	6.2
5	31.200	11535	23.3928	2	429	70.672	26.9
6	33.280	16321	33.1005	2	1708	100.000	9.6

Total Area: 49308 Area Reject: 100 One sample per 1.200 sec.

** ** ** ** ** EXTERNAL STANDARD TABLE ** ** ** ** **

********** 08-15-1989 18:08:40 Version 4.1 **********

* Sample Name: BLANK Data File: L:GH15-6 *

Date: 08-15-1989 18:08:12 Method: PHENOLS 08-15-1989 16:54:24 # 188 *

Interface: 1 Cycle#: 6 Operator G.D Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

Instrument Type: Varian 3400 Column Type: DB-5 Capillary *

* Solvent Description: *

* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *

Detector 0: FID Detector 1: *

Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00

Area reject: 100 One sample per 1.200 sec.

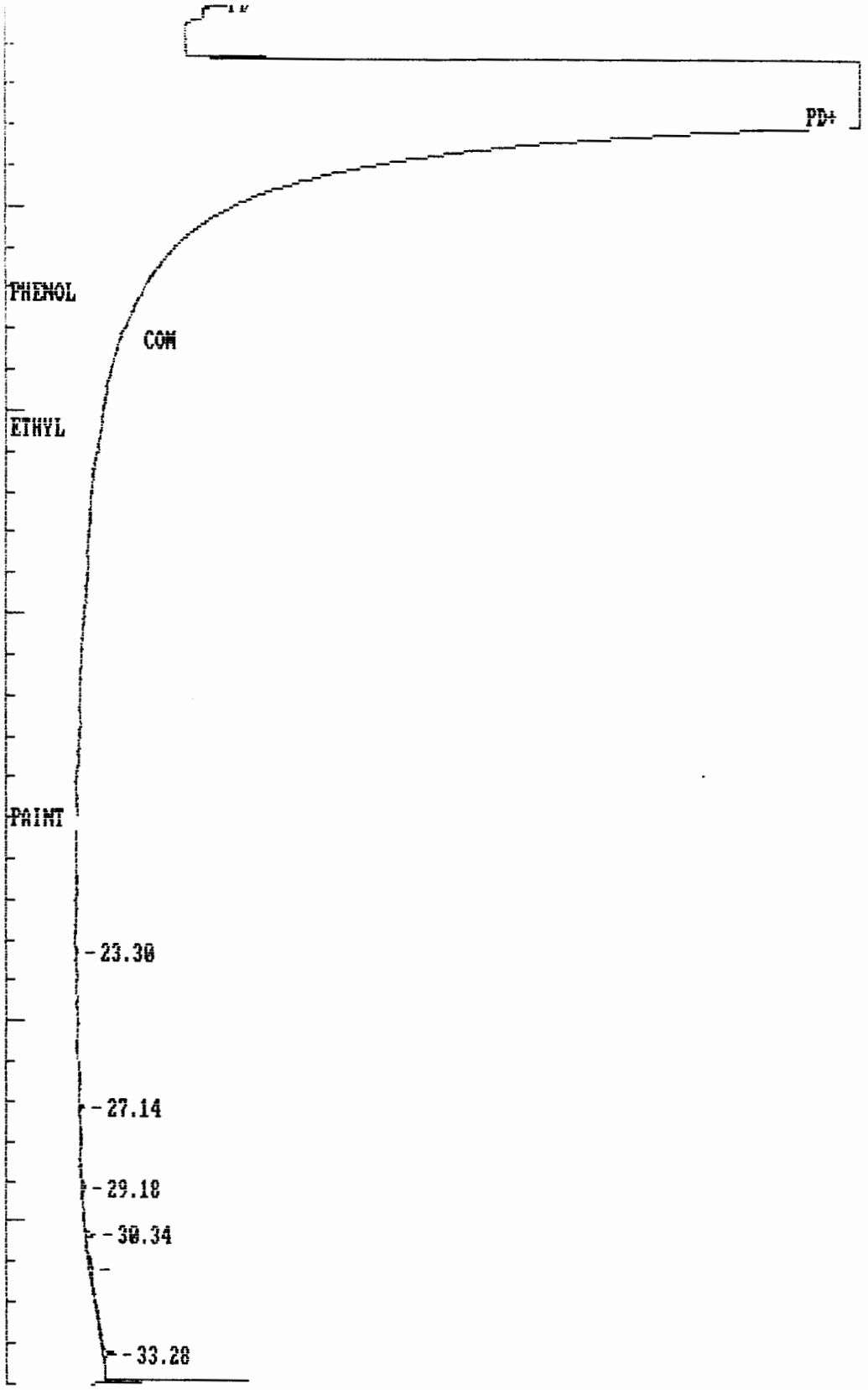
Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA

TOTAL AMOUNT = 0.0000

Data File = L:GH15-6.PTS Printed on 08-15-1989 at 18:08:46
tart time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
ull Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:18:31 Version 4.1 **********

* Sample Name: lcs Data File: L:LH15-15 *
* Date: 08-15-1989 23:41:02 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
* Interface: 1 Cycle#: 15 Operator G.D Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

* Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
* Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
* Detector 0: FID Detector 1: *
* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00
Area reject: 100 One sample per 1.200 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.300		38.6689	1.7854%	386689	10979	35.2	1			1.0000E-04
2	4.660		2.9896	0.1380%	29896	4769	6.3	1			1.0000E-04
3	5.280		0.7692	0.0355%	7692	1713	4.5	1			1.0000E-04
4	6.660		1.1301	0.0522%	11301	1031	11.0	2			1.0000E-04
5	6.940	Phenol	359.4455	16.5957%	3594455	658283	5.5	2	150/200 = 75%		1.0000E-04
6	7.580	2-chlorophenol	269.2886	12.4331%	2692886	455130	5.9	2	154/200 = 77%		1.0000E-04
7	8.740		1.0499	0.0485%	10499	1762	6.0	1			1.0000E-04
8	9.500		0.9999	0.0462%	9999	738	13.5	2			1.0000E-04
9	9.780		2.2097	0.1020%	22097	2122	10.4	2			1.0000E-04
10	10.920		0.6829	0.0315%	6829	1342	5.1	1			1.0000E-04
11	12.300	2-nitrophenol	176.1219	8.1316%	1761219	331763	5.3	2	192.6/200 = 96%		1.0000E-04
12	12.500	2,4-Dimethylphenol	414.8729	19.1548%	4148730	661905	6.3	3	161/200 = 81%	.3189	1.0000E-04
13	13.040		5.7003	0.2632%	57003	5032	11.3	4	165/200 = 82%		1.0000E-04
14	13.580	2,4-dichlorphenol	214.8136	9.9180%	2148137	368636	5.8	3			1.0000E-04
15	14.220		3.8235	0.1765%	38235	2110	18.1	4			1.0000E-04
16	14.780		1.8467	0.0853%	18467	1686	11.0	2			1.0000E-04
17	16.540		3.6715	0.1695%	36715	3509	10.5	2			1.0000E-04
18	17.460	4-chloro-3-methylphenol	267.1447	12.3341%	2671447	557096	4.8	1	179/200 = 89%		1.0000E-04
19	19.660	2,4,6-Trichlorphenol	162.0996	7.4842%	1620996	338991	4.8	2	182/200 = 91%		1.0000E-04
20	22.260	[illegible]	0.6462	0.0298%	6462	732	8.8	2			1.0000E-04
21	23.160		0.8758	0.0404%	8758	797	11.0	2			1.0000E-04
22	23.620	2,4-Dinitrophenol	23.0240	1.0630%	230240	38415	6.0	2	194/200 = 97%		1.0000E-04
23	23.980	2,4-Dinitrophenol	71.7175	3.3112%	717175	132589	5.4	2	206/200 = 103%	.5029	1.0000E-04
24	25.000		2.6612	0.1229%	26612	2424	11.0	2			1.0000E-04
25	25.700		1.1258	0.0520%	11258	2197	5.1	2			1.0000E-04
26	26.080		0.7730	0.0357%	7730	1611	4.8	2			1.0000E-04
27	26.220	2-methyl-4,6-dinitrophenol	56.9155	2.6278%	569155	107058	5.3	3	240/200 = 120%	-.8320	1.0000E-04
28	26.980		2.3924	0.1105%	23924	1793	13.3	4			1.0000E-04
29	28.660		2.6008	0.1201%	26008	1284	20.3	2			1.0000E-04
30	29.460	PENTACHLOROPHENOL	52.0800	2.4045%	520800	105028	5.0	2	220/200	-.7412	1.0000E-04
31	30.180		1.7080	0.0789%	17080	2588	6.6	2			1.0000E-04
32	30.360		2.5489	0.1177%	25489	2539	10.0	2			1.0000E-04
33	30.640		1.0715	0.0495%	10715	2301	4.7	2			1.0000E-04
34	31.240		2.8556	0.1318%	28556	2824	10.1	2			1.0000E-04
35	31.760		0.3592	0.0166%	3592	870	4.1	2			1.0000E-04
36	32.280		2.2842	0.1055%	22842	4108	5.6	2			1.0000E-04
37	32.640		3.5695	0.1648%	35695	4870	7.3	2			1.0000E-04

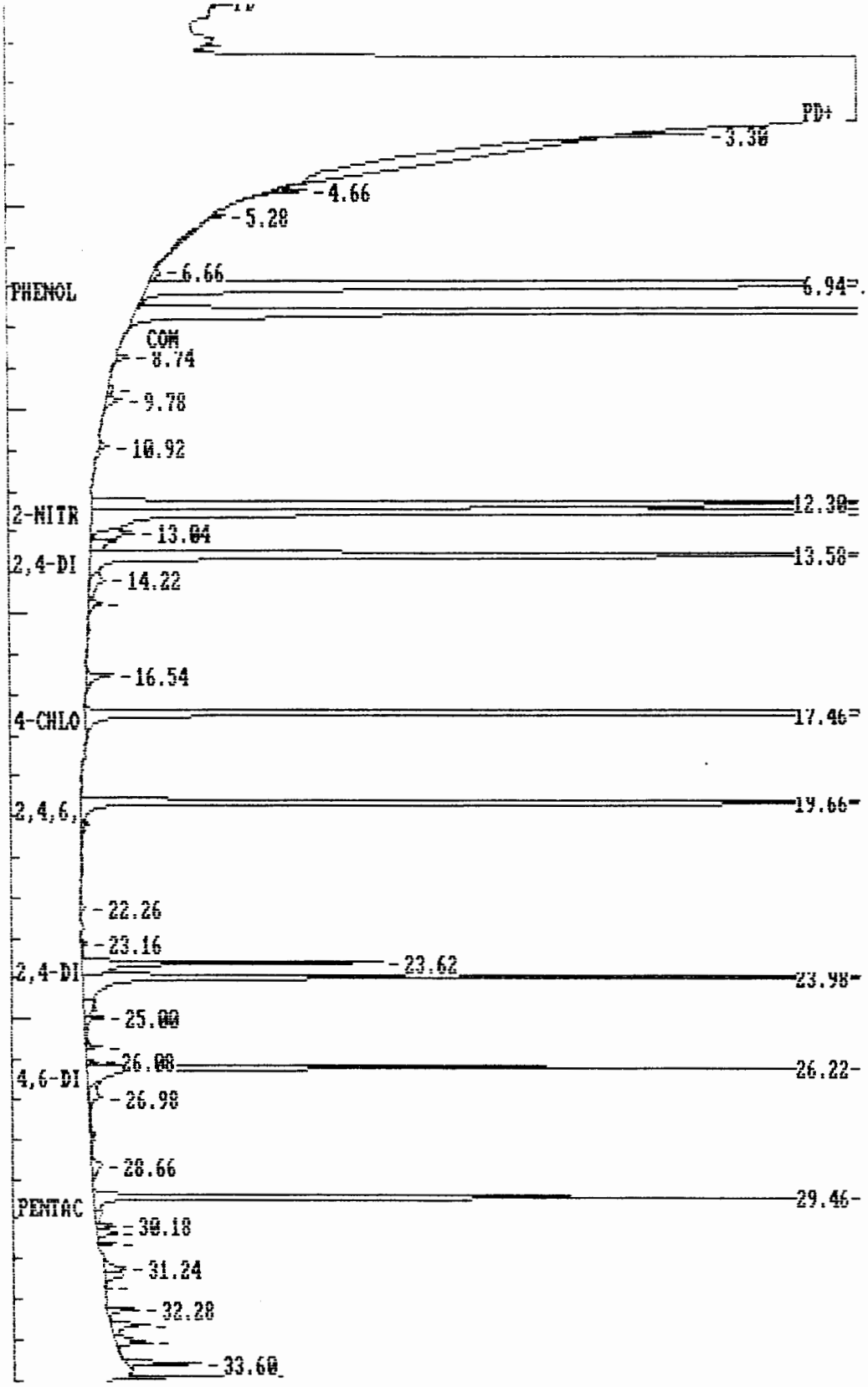
38	33.100		4.4451	0.2052%	44451	4562	9.7 2	1.0000E-04
39	33.600		4.9166	0.2270%	49166	9394	5.2 1	1.0000E-04

TOTAL AMOUNT = 2165.8999

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
PHENOL	7.10	PHENOL
2-CHLOROPHENOL	7.74	2-CHLOROPHENOL
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL
2,4-DICHLOROPHENOL	13.80	2,4-DICHLOROPHENOL
4-CHLORO3METHYLPHE	17.64	4-CHLORO3METHYLPHE
2,4,6,TRICHLOROPHE	19.86	2,4,6,TRICHLOROPHE
4-NITROPHENOL	24.20	4-NITROPHENOL

Data File = L:LH15-15.PTS Printed on 08-16-1989 at 09:18:48
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

```
******************** 08-16-1989 09:12:52 Version 4.1 ********************
* Sample Name: 89-07-497-1 r1 1000 ml/5ml          Data File: L:AH15-8      *
* Date: 08-15-1989 19:00:33 Method: G:PHENOLS  08-16-1989 09:11:42  #  190*
* Interface: 1   Cycle#:  8    Operator G.D Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  12   Threshold: 1  Area Threshold: 1000            *
*************************************************************************
* Instrument Type: Varian 3400          Column Type: DB-5 Capillary       *
*                Solvent Description:                                     *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min                   *
*              Detector 0: FID                  Detector 1:               *
* Misc. Information:                                                      *
*************************************************************************
Starting Delay:    0.00                      Ending retention time:    34.00
Area reject:       100                       One sample per    1.200 sec.
Amount injected:          1.00               Dilution factor:        1.00
Sample Weight:            1.000000
```

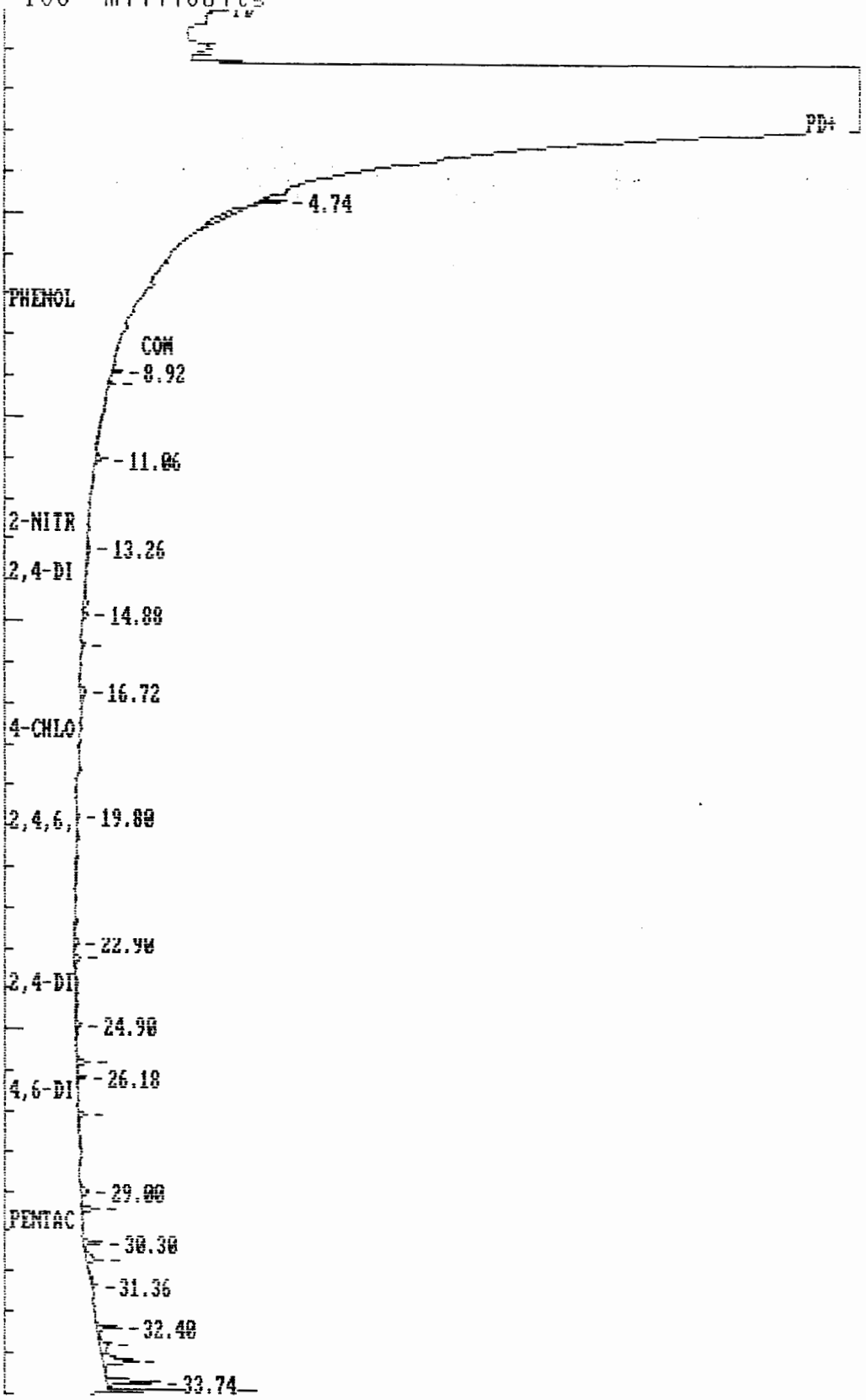
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.740		0.3176	0.3301%	3176	3660	0.9	1			1.0000E-04
2	8.920		0.8518	0.8851%	8518	1477	5.8	1			1.0000E-04
3	9.220		0.6531	0.6787%	6531	1125	5.8	2			1.0000E-04
4	11.060		1.0176	1.0575%	10176	1516	6.7	2			1.0000E-04
5	13.260		0.9523	0.9896%	9523	444	21.4	2			1.0000E-04
6	14.880		0.5829	0.6057%	5829	743	7.8	2			1.0000E-04
7	15.600		0.2680	0.2785%	2680	467	5.7	1			1.0000E-04
8	16.720		1.2808	1.3310%	12808	753	17.0	1			1.0000E-04
9	19.800	2,4,6,TRICHLOROPHE <20	66.9466	69.5692%	2981	341	8.7	2	<20 ppb	-.3021	2.2455E-02
10	22.900		0.8362	0.8690%	8362	586	14.3	2			1.0000E-04
11	23.260		0.8549	0.8884%	8549	814	10.5	2			1.0000E-04
12	24.900		0.5517	0.5733%	5517	732	7.5	2			1.0000E-04
13	25.820		1.1460	1.1909%	11460	1753	6.5	2			1.0000E-04
14	26.180	4,6-DINITROCREOSOL <50	0.6926	0.7197%	6926	1148	6.0	2	<50 ppb	-.9833	1.0000E-04
15	27.100		0.7345	0.7633%	7345	1131	6.5	1			1.0000E-04
16	29.000		1.3250	1.3769%	13250	1058	12.5	2			1.0000E-04
17	29.460	PENTACHLOROPHENOL <50	1.2149	1.2625%	12149	2380	5.1	2	<50 ppb	-.7412	1.0000E-04
18	30.300		1.3386	1.3910%	13386	2488	5.4	2			1.0000E-04
19	30.740		2.0205	2.0996%	20205	2236	9.0	2			1.0000E-04
20	31.360		0.7988	0.8301%	7988	848	9.4	1			1.0000E-04
21	32.400		1.8335	1.9054%	18335	3247	5.6	2			1.0000E-04
22	32.780		1.7295	1.7973%	17295	1540	11.2	2			1.0000E-04
23	33.240		4.3250	4.4944%	43250	4661	9.3	2			1.0000E-04
24	33.740		3.9579	4.1129%	39579	7045	5.6	2			1.0000E-04

TOTAL AMOUNT = 96.2302

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
PHENOL	7.10 <20	PHENOL
2-CHLOROPHENOL	7.74	2-CHLOROPHENOL
2-NITROPHENOL	12.54	2-NITROPHENOL
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL
2,4-DICHLOROPHENOL	13.80	2,4-DICHLOROPHENOL
4-CHLORO3METHYLPHE	17.64	4-CHLORO3METHYLPHE
2,4-DINITROPHENOL	23.86 <50	2,4-DINITROPHENOL
4-NITROPHENOL	24.20	4-NITROPHENOL

Data File = L:AH15-8.PTS Printed on 08-16-1989 at 09:13:05
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:13:38 Version 4.1 **********

* Sample Name: 89-07-497-1 s1 500ml/2.5ml Data File: L:AH15-9 *
* Date: 08-15-1989 19:40:50 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
* Interface: 1 Cycle#: 9 Operator G.D Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

* Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
* Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
* Detector 0: FID Detector 1: *
* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00
Area reject: 100 One sample per 1.200 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	7.020	phenol	146.0367	0.2460%	1460367	261848	5.6	1	61.1/100 = 61%		1.0000E-04
2	7.680	2-CHLOROPHENOL	12680.4678	21.3568%	1110391	194277	5.7	1	63.4/100 = 63%	-.7751	1.1420E-02
3	8.540		0.8852	0.0015%	8852	1203	7.4	2			1.0000E-04
4	8.900		0.5468	0.0009%	5468	710	7.7	2			1.0000E-04
5	9.880		0.3313	0.0006%	3313	656	5.1	1			1.0000E-04
6	12.420	2-Nitrophenol	59.9701	0.1010%	599701	107640	5.6	2	65.6/100 = 66%		1.0000E-04
7	12.620	~~2-NITROPHENOL~~ 2,4 Dimethyl	179.7991	0.3028%	1797991	288486	6.2	2	69.9/100 = 70%	.6379	1.0000E-04
8	13.700	2,4-DICHLOROPHENOL	14172.1680	23.8692%	924705	154870	6.0	2	70.8/100 = 71%	-.7246	1.5326E-02
9	14.880		0.9241	0.0016%	9242	754	12.3	2			1.0000E-04
10	15.600		1.6729	0.0028%	16729	1715	9.8	2			1.0000E-04
11	16.060		3.0334	0.0051%	30334	4911	6.2	2			1.0000E-04
12	16.680		1.6943	0.0029%	16943	873	19.4	2			1.0000E-04
13	17.560	4-CHLORO3METHYLPHE	16053.4219	27.0377%	1198275	236205	5.1	2	80.2/100 = 80%	-.4535	1.3397E-02
14	18.640		1.6307	0.0027%	16307	1432	11.4	2			1.0000E-04
15	19.760	2,4,6,TRICHLOROPHE	15949.8818	26.8633%	710312	140782	5.0	1	79.70/100 = 80%	.5035	2.2455E-02
16	23.240		0.3644	0.0006%	3644	600	6.1	1			1.0000E-04
17	23.740	2,4-DINITROPHENOL	7.3147	0.0123%	73147	7312	10.0	2	61.6/100 = 62%	-.5029	1.0000E-04
18	24.080	4-NITROPHENOL	37.2734	0.0628%	372734	56070	6.6	3	106.99/100 = 107%	.4958	1.0000E-04
19	25.100		0.7630	0.0013%	7630	785	9.7	4			1.0000E-04
20	25.800		1.2736	0.0021%	12736	1463	8.7	2			1.0000E-04
21	26.160		0.1905	0.0003%	1905	428	4.4	2			1.0000E-04
22	26.320	4,6-DINITROCREOSOL	23.7791	0.0400%	237791	40658	5.8	2	86.2/100 = 86%	-.4538	1.0000E-04
23	27.080		0.3673	0.0006%	3673	739	5.0	1			1.0000E-04
24	28.960		3.9077	0.0066%	39077	2986	13.1	1			1.0000E-04
25	29.560	PENTACHLOROPHENOL	20.3720	0.0343%	203720	39260	5.2	2	86.00/100 = 86%	.4043	1.0000E-04
26	30.280		1.8517	0.0031%	18517	2303	8.0	2			1.0000E-04
27	30.600		6.7667	0.0114%	67667	5874	11.5	2			1.0000E-04
28	31.160		0.4908	0.0008%	4908	370	13.3	2			1.0000E-04
29	32.380		2.0092	0.0034%	20092	1752	11.5	2			1.0000E-04
30	32.760		3.4549	0.0058%	34549	2948	11.7	2			1.0000E-04
31	33.200		6.4396	0.0108%	64396	3872	16.6	2			1.0000E-04
32	33.700		3.9432	0.0066%	39432	5291	7.5	2			1.0000E-04
33	33.920		1.2598	0.0021%	12598	2208	5.7	2			1.0000E-04

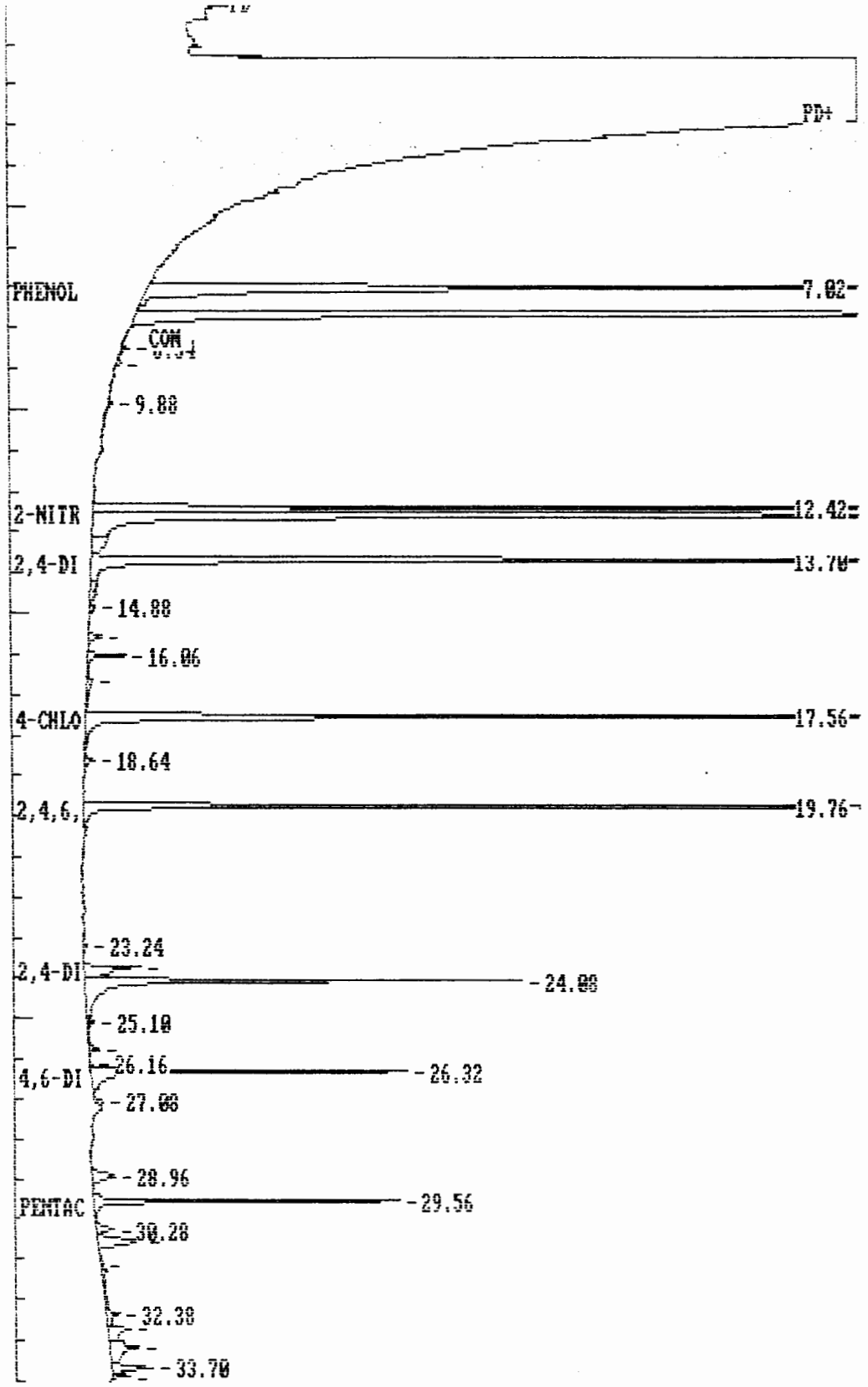
TOTAL AMOUNT = 59374.2810

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK

PHENOL	7.10	PHENOL
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL

Data File = L:AH15-9.PTS Printed on 08-16-1989 at 09:13:53
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:14:34 Version 4.1 **********

* Sample Name: 89-07-497-2 1000ml/5ml Data File: L:AH15-10 *
* Date: 08-15-1989 20:20:44 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
* Interface: 1 Cycle#: 10 Operator G.D Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

* Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
* Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
* Detector 0: FID Detector 1: *
* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00
Area reject: 100 One sample per 1.200 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.700		6.4661	0.3494%	64661	2005	32.3	1			1.0000E-04
2	6.180		0.8743	0.0472%	8743	1363	6.4	1			1.0000E-04
3	6.400		0.7216	0.0390%	7216	1347	5.4	1			1.0000E-04
4	7.020		3.9352	0.2126%	39352	6552	6.0	1			1.0000E-04
5	7.460		1.3057	0.0706%	13057	2451	5.3	2			1.0000E-04
6	7.680	2-CHLOROPHENOL	359.5530	19.4284%	31485	4811	6.5	2	<20 0	-.7751	1.1420E-02
7	8.680		2.5275	0.1366%	25275	4654	5.4	2			1.0000E-04
8	8.880		8.4968	0.4591%	84968	14951	5.7	2			1.0000E-04
9	9.180		6.2326	0.3368%	62326	10927	5.7	2			1.0000E-04
10	12.600	2-NITROPHENOL	5.1362	0.2775%	51362	6685	7.7	2	<20 0	.4784	1.0000E-04
11	13.700	2,4-DICHLOROPHENOL	460.7961	24.8991%	30066	3563	8.4	2	<20 0	-.7246	1.5326E-02
12	15.540		0.5734	0.0310%	5734	367	15.6	2			1.0000E-04
13	16.660		0.6596	0.0356%	6596	482	13.7	2			1.0000E-04
14	17.560	4-CHLORO3METHYLPHE	490.9451	26.5282%	36646	4914	7.5	2	<20 0	-.4535	1.3397E-02
15	19.760	2,4,6,TRICHLOROPHE	476.2112	25.7320%	21208	3435	6.2	1	<20 0	-.5035	2.2455E-02
16	20.300		0.2113	0.0114%	2113	427	5.0	1			1.0000E-04
17	23.220		0.4831	0.0261%	4831	622	7.8	1			1.0000E-04
18	23.880	2,4-DINITROPHENOL	0.4954	0.0268%	4954	407	12.2	1	<50 0	0	1.0000E-04
19	26.360	4,6-DINITROCREOSOL	0.5238	0.0283%	5238	490	10.7	2	<50 0	-.3025	1.0000E-04
20	27.060		1.0785	0.0583%	10785	1258	8.6	2			1.0000E-04
21	28.920		2.4250	0.1310%	24250	2025	12.0	2			1.0000E-04
22	29.560	PENTACHLOROPHENOL	0.3523	0.0190%	3523	648	5.4	1	<50 0	-.4043	1.0000E-04
23	30.240		6.7851	0.3666%	67851	4505	15.1	2			1.0000E-04
24	30.560		3.1381	0.1696%	31381	2556	12.3	2			1.0000E-04
25	31.100		0.6256	0.0338%	6256	593	10.6	2			1.0000E-04
26	31.320		0.6724	0.0363%	6724	957	7.0	2			1.0000E-04
27	32.360		0.9480	0.0512%	9480	689	13.8	2			1.0000E-04
28	32.720		3.6478	0.1971%	36478	3891	9.4	2			1.0000E-04
29	33.040		1.6367	0.0884%	16367	1800	9.1	2			1.0000E-04
30	33.680		1.4274	0.0771%	14274	1478	9.7	2			1.0000E-04
31	33.920		1.7697	0.0956%	17697	2674	6.6	2			1.0000E-04

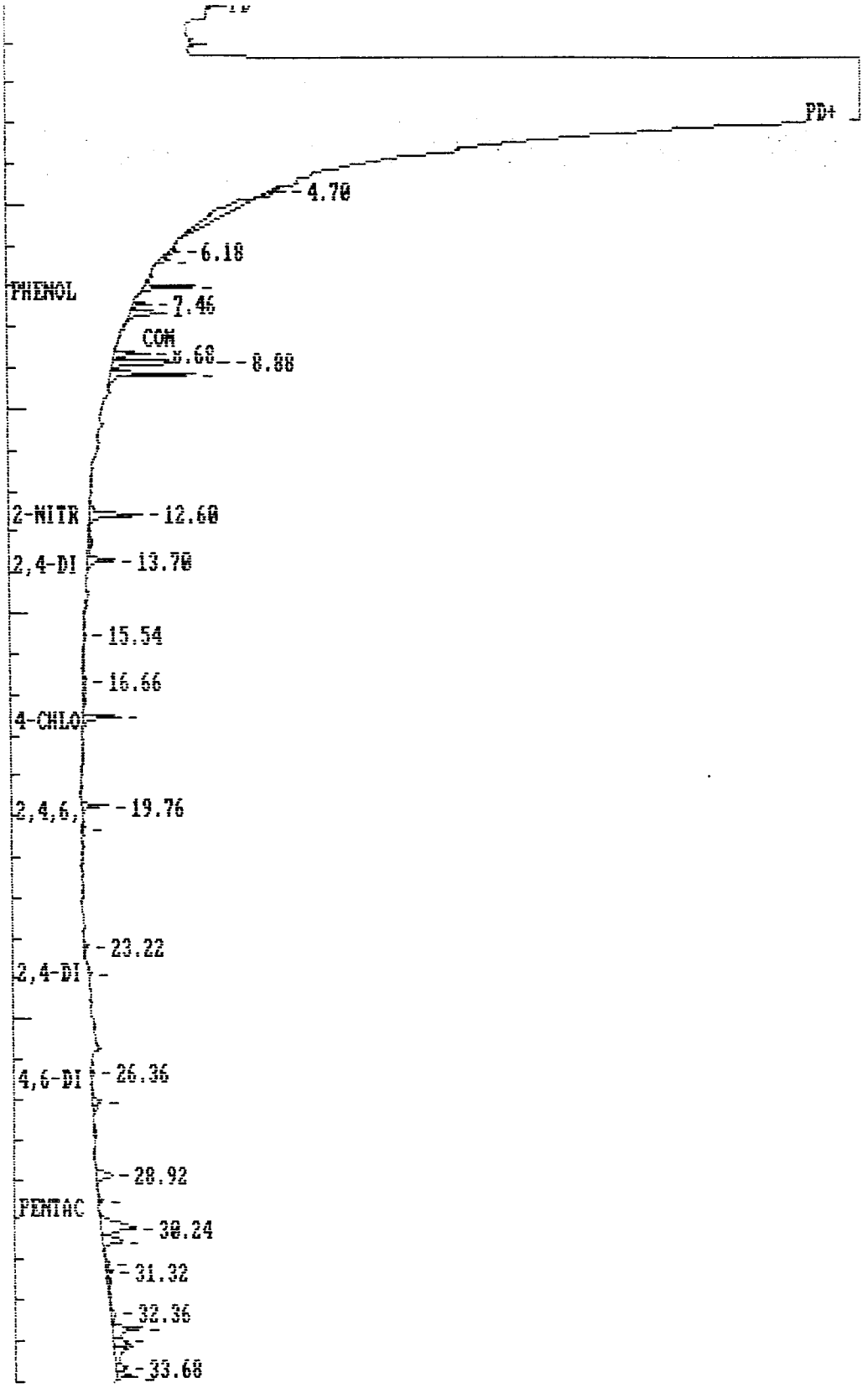
TOTAL AMOUNT = 1850.6545

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK	
PHENOL	7.10	PHENOL	<20
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL	<20

4-NITROPHENOL 24.20 4-NITROPHENOL <50

Data File = L:AH15-10.PTS Printed on 08-16-1989 at 09:14:49
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:15:25 Version 4.1 **********

* Sample Name: 89-07-497-3 1000ml/5ml Data File: L:AH15-11 *
* Date: 08-15-1989 21:01:06 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
Interface: 1 Cycle#: 11 Operator G.D Channel#: 0 Vial#: N.A. *
Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
Detector 0: FID Detector 1: *
Misc. Information: *

Starting Delay: 0.00 Ending retention time: 34.00
rea reject: 100 One sample per 1.200 sec.
mount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

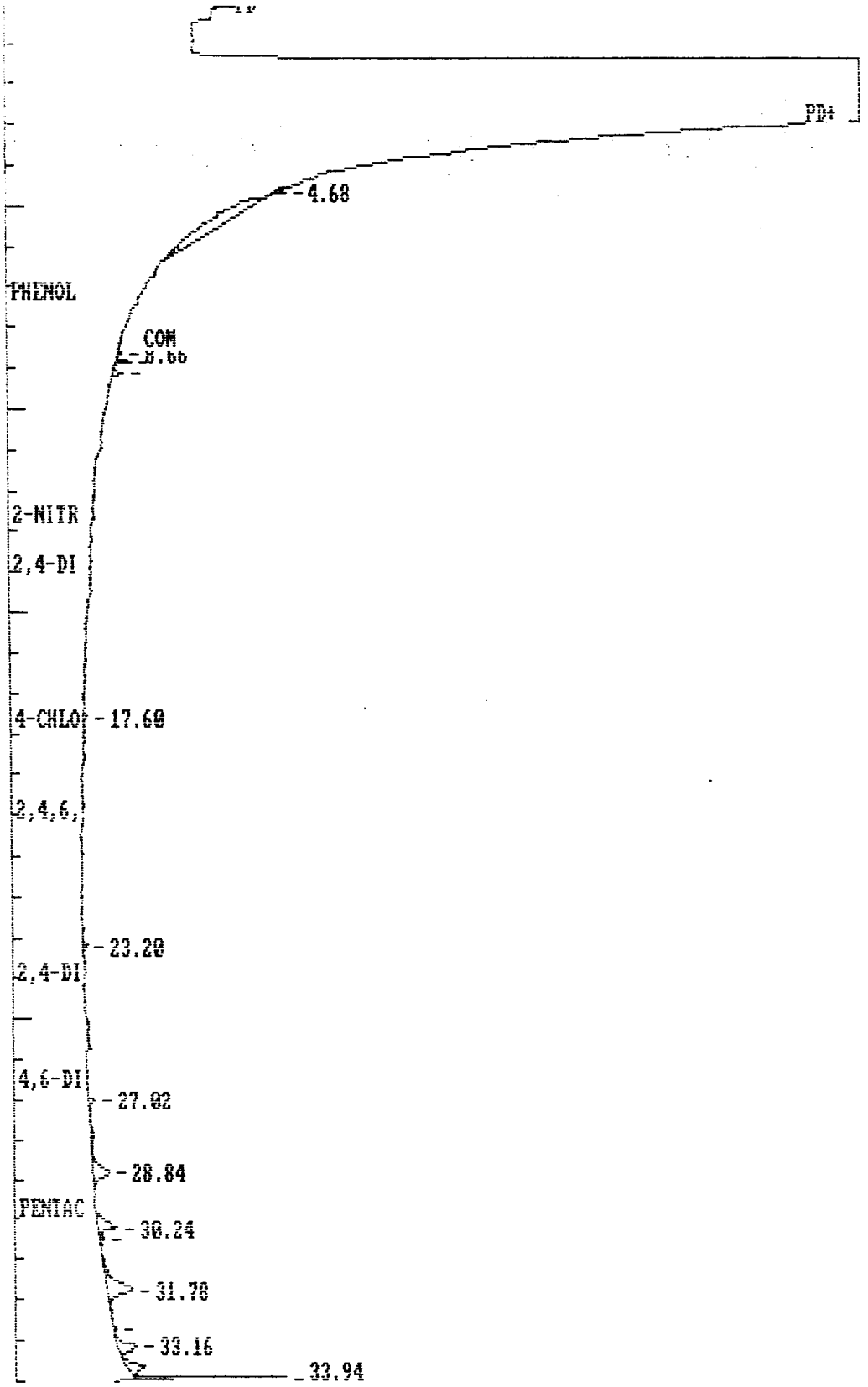
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.680		15.9671	17.0253%	159671	1498	106.6	1			1.0000E-04
2	8.660		0.3956	0.4218%	3956	672	5.9	2			1.0000E-04
3	8.860		1.2349	1.3168%	12349	2091	5.9	2			1.0000E-04
4	9.160		0.7010	0.7475%	7010	1487	4.7	1			1.0000E-04
5	17.600	4-CHLORO3METHYLPHE	49.4032	52.6774%	3688	508	7.3	1	<50ppb	-.2267	1.3397E-02
6	23.200		0.4199	0.4478%	4199	625	6.7	1			1.0000E-04
7	27.020		0.6473	0.6902%	6473	931	7.0	2			1.0000E-04
8	28.840		4.2518	4.5336%	42518	2051	20.7	2			1.0000E-04
9	30.240		3.4705	3.7005%	34705	2460	14.1	2			1.0000E-04
10	30.520		0.5631	0.6004%	5631	523	10.8	2			1.0000E-04
11	31.780		7.5605	8.0616%	75605	3352	22.6	2			1.0000E-04
12	32.720		0.2152	0.2295%	2152	397	5.4	1			1.0000E-04
13	33.160		3.0523	3.2546%	30523	2494	12.2	1			1.0000E-04
14	33.940		5.9018	6.2930%	59018	19402	3.0	1			1.0000E-04

TOTAL AMOUNT = 93.7844

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.		REFERENCE PEAK
PHENOL	7.10	<20 ppb	PHENOL
-CHLOROPHENOL	7.74		2-CHLOROPHENOL
-NITROPHENOL	12.54		2-NITROPHENOL
2,4-DIMETHYLPHENOL	12.72		2,4-DIMETHYLPHENOL
,4-DICHLOROPHENOL	13.80		2,4-DICHLOROPHENOL
,4,6,TRICHLOROPHE	19.86		2,4,6,TRICHLOROPHE
2,4-DINITROPHENOL	23.86	<50 ppb	2,4-DINITROPHENOL
4-NITROPHENOL	24.20		4-NITROPHENOL
,6-DINITROCREOSOL	26.44		4,6-DINITROCREOSOL
ENTACHLOROPHENOL	29.68		PENTACHLOROPHENOL

Data File = L:AH15-11.PTS Printed on 08-16-1989 at 09:15:36
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:16:10 Version 4.1 **********

* Sample Name: 89-07-497-4 1000ml/5ml Data File: L:AH15-12 *
* Date: 08-15-1989 21:40:48 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
* Interface: 1 Cycle#: 12 Operator G.D Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

* Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
* Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
* Detector 0: FID Detector 1: *
* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00
Area reject: 100 One sample per 1.200 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

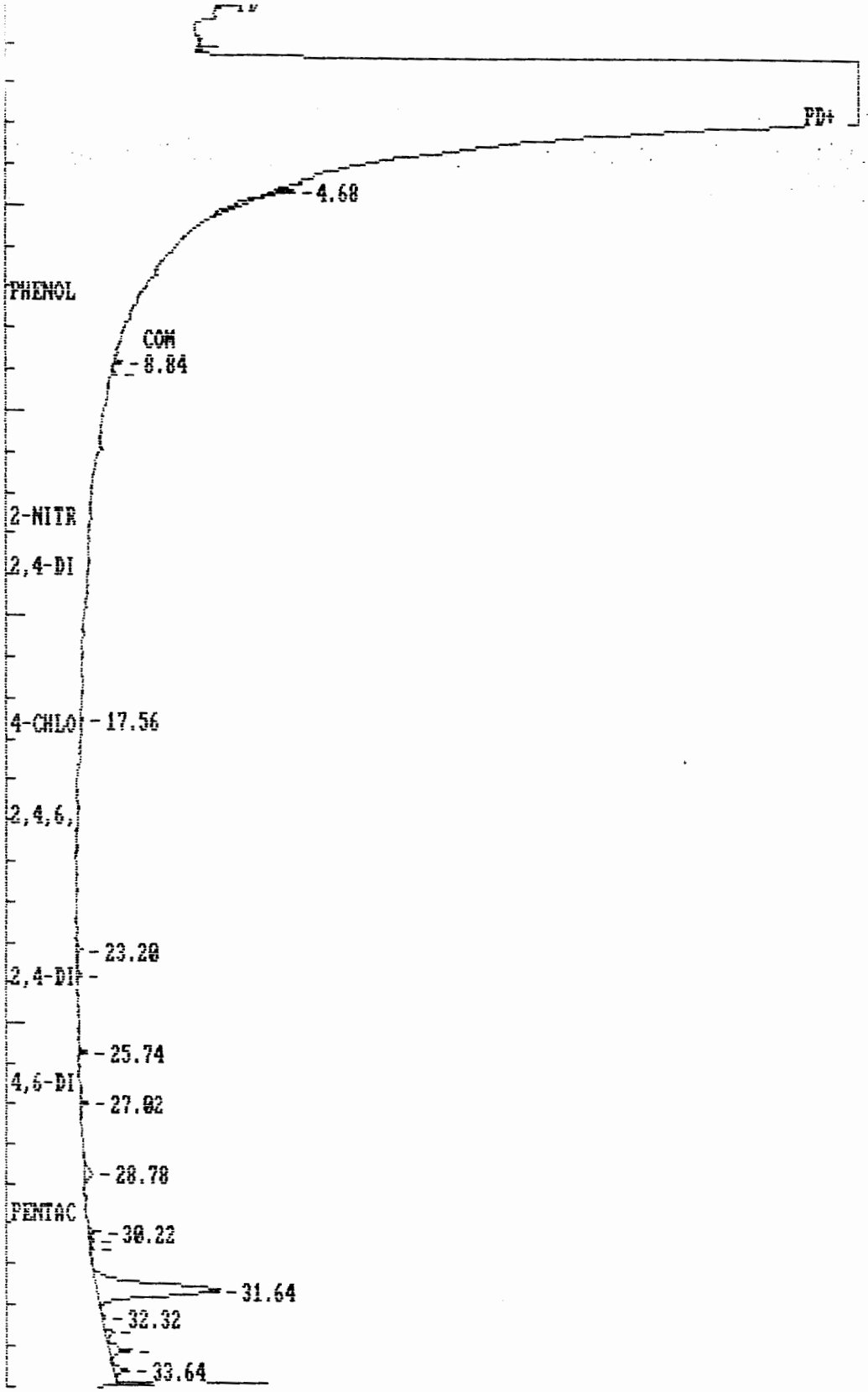
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.680		0.3629	0.4011%	3629	3028	1.2	1			1.0000E-04
2	8.840		0.6691	0.7396%	6691	1132	5.9	1			1.0000E-04
3	9.140		0.3890	0.4300%	3890	858	4.5	1			1.0000E-04
4	17.560	4-CHLORO3METHYLPHE	42.7153	47.2194%	3188	455	7.0	1	<20ppb	-.4535	1.3397E-02
5	23.200		0.4765	0.5268%	4765	712	6.7	2			1.0000E-04
6	23.820	2,4-DINITROPHENOL	0.3804	0.4206%	3804	588	6.5	2	<50ppb	-.1676	1.0000E-04
7	25.740		0.7536	0.8331%	7536	1211	6.2	1			1.0000E-04
8	27.020		0.7048	0.7791%	7048	1005	7.0	1			1.0000E-04
9	28.780		1.9740	2.1821%	19740	1139	17.3	1			1.0000E-04
10	30.220		0.7712	0.8526%	7712	1525	5.1	1			1.0000E-04
11	30.460		0.5256	0.5811%	5256	620	8.5	2			1.0000E-04
12	30.680		0.2962	0.3275%	2962	506	5.9	2			1.0000E-04
13	31.640		33.7447	37.3029%	337447	15775	21.4	1			1.0000E-04
14	32.320		0.2952	0.3263%	2952	509	5.8	1			1.0000E-04
15	32.680		1.0501	1.1608%	10501	1235	8.5	2			1.0000E-04
16	33.140		3.4040	3.7629%	34040	2997	11.4	2			1.0000E-04
17	33.640		1.9487	2.1542%	19487	2110	9.2	2			1.0000E-04

TOTAL AMOUNT = 90.4614

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
PHENOL	7.10 <20ppb	PHENOL
2-CHLOROPHENOL	7.74	2-CHLOROPHENOL
2-NITROPHENOL	12.54	2-NITROPHENOL
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL
2,4-DICHLOROPHENOL	13.80	2,4-DICHLOROPHENOL
2,4,6,TRICHLOROPHE	19.86	2,4,6,TRICHLOROPHE
4-NITROPHENOL	24.20 <50 ppb	4-NITROPHENOL
4,6-DINITROCREOSOL	26.44	4,6-DINITROCREOSOL
PENTACHLOROPHENOL	29.68	PENTACHLOROPHENOL

ata File = L:AH15-12.PTS Printed on 08-16-1989 at 09:16:22
start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:16:56 Version 4.1 **********

* Sample Name: 89-07-497-5 1000ml/5ml Data File: L:AH15-13 *
Date: 08-15-1989 22:20:48 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*
Interface: 1 Cycle#: 13 Operator G.D Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

Instrument Type: Varian 3400 Column Type: DB-5 Capillary *
* Solvent Description: *
* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *
Detector 0: FID Detector 1: *
* Misc. Information: *

tarting Delay: 0.00 Ending retention time: 34.00
rea reject: 100 One sample per 1.200 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

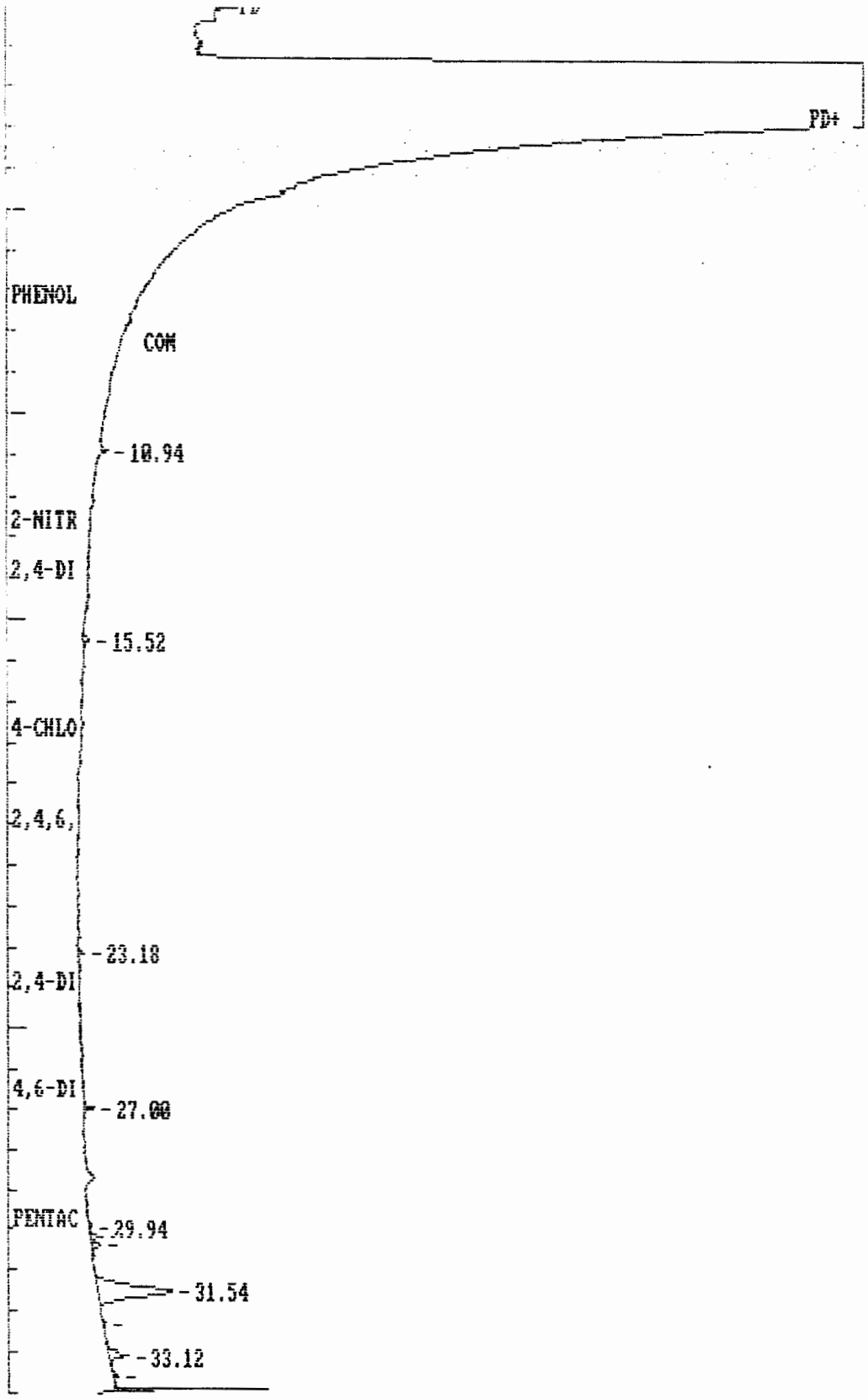
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	10.940		0.5254	1.9061%	5254	949	5.5	1			1.0000E-04
2	15.520		0.8357	3.0320%	8357	867	9.6	1			1.0000E-04
3	23.180		0.6068	2.2014%	6068	864	7.0	2			1.0000E-04
4	27.000		0.8806	3.1950%	8806	1379	6.4	2			1.0000E-04
5	29.940	PENTACHLOROPHENOL	0.4110	1.4912%	4110	347	11.9	2	<50ppb	.8760	1.0000E-04
6	30.200		0.9419	3.4173%	9419	1667	5.7	2			1.0000E-04
7	30.400		1.1834	4.2937%	11834	1197	9.9	2			1.0000E-04
8	31.540		18.9280	68.6742%	189280	9494	19.9	1			1.0000E-04
9	32.320		0.2496	0.9056%	2496	390	6.4	1			1.0000E-04
10	33.120		2.6324	9.5507%	26324	2571	10.2	1			1.0000E-04
11	33.640		0.3673	1.3327%	3673	638	5.8	1			1.0000E-04

TOTAL AMOUNT = 27.5621

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.	REFERENCE PEAK
'HENOL	7.10 <20ppb	PHENOL
2-CHLOROPHENOL	7.74	2-CHLOROPHENOL
2-NITROPHENOL	12.54	2-NITROPHENOL
2,4-DIMETHYLPHENOL	12.72	2,4-DIMETHYLPHENOL
2,4-DICHLOROPHENOL	13.80	2,4-DICHLOROPHENOL
4-CHLORO3METHYLPHE	17.64	4-CHLORO3METHYLPHE
2,4,6,TRICHLOROPHE	19.86	2,4,6,TRICHLOROPHE
2,4-DINITROPHENOL	23.86 <50ppb	2,4-DINITROPHENOL
4-NITROPHENOL	24.20	4-NITROPHENOL
4,6-DINITROCREOSOL	26.44	4,6-DINITROCREOSOL

Data File = L:AH15-13.PTS Printed on 08-16-1989 at 09:17:07
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 08-16-1989 09:17:40 Version 4.1 **********

* Sample Name: 89-07-497-6 1000ml/5ml Data File: L:AH15-14 *

Date: 08-15-1989 23:00:52 Method: G:PHENOLS 08-16-1989 09:11:42 # 190*

Interface: 1 Cycle#: 14 Operator G.D Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 12 Threshold: 1 Area Threshold: 1000 *

****

Instrument Type: Varian 3400 Column Type: DB-5 Capillary *

* Solvent Description: *

* Conditions: 40 for 4min. 10/min. to 250 hold for 5min *

Detector 0: FID Detector 1: *

Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 34.00

Area reject: 100 One sample per 1.200 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.000000

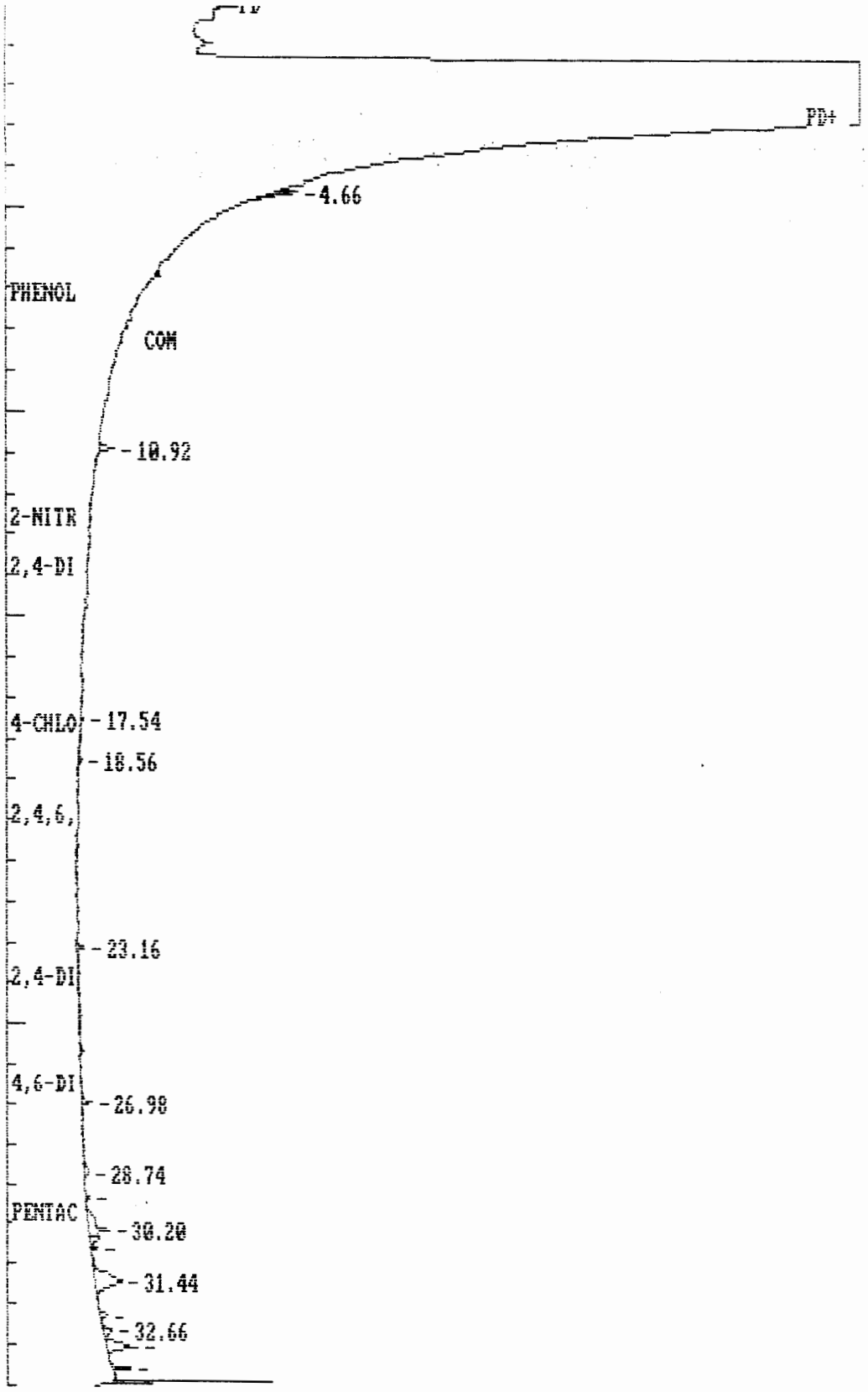
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/KG	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.660		2.5339	3.4907%	25339	3155	8.0	1			1.0000E-04
2	10.920		0.8587	1.1830%	8587	1968	4.4	1			1.0000E-04
3	17.540	4-CHLORO3METHYLPHE	46.1638	63.5959%	3446	496	6.9	2	<50ppb	-.5668	1.3397E-02
4	18.560		0.4842	0.6670%	4842	507	9.6	2			1.0000E-04
5	23.160		0.7182	0.9894%	7182	978	7.3	2			1.0000E-04
6	26.980		0.9456	1.3026%	9456	1389	6.8	2			1.0000E-04
7	28.740		1.1829	1.6296%	11829	693	17.1	2			1.0000E-04
8	29.360		0.3658	0.5039%	3658	591	6.2	1			1.0000E-04
9	30.200		4.0858	5.6286%	40858	2725	15.0	2			1.0000E-04
10	30.640		0.5946	0.8192%	5946	978	6.1	2			1.0000E-04
11	31.440		7.4128	10.2119%	74128	3470	21.4	1			1.0000E-04
12	32.300		0.6681	0.9204%	6681	945	7.1	2			1.0000E-04
13	32.660		1.1516	1.5864%	11516	1186	9.7	2			1.0000E-04
14	33.100		4.2556	5.8626%	42556	3906	10.9	2			1.0000E-04
15	33.620		1.1678	1.6088%	11678	2287	5.1	1			1.0000E-04

TOTAL AMOUNT = 72.5892

PEAKS NOT FOUND IN THIS RUN

NAME	ADJUSTED RET.TIME.		REFERENCE PEAK
PHENOL	7.10	<20ppb	PHENOL
2-CHLOROPHENOL	7.74		2-CHLOROPHENOL
2-NITROPHENOL	12.54		2-NITROPHENOL
2,4-DIMETHYLPHENOL	12.72		2,4-DIMETHYLPHENOL
2,4-DICHLOROPHENOL	13.80		2,4-DICHLOROPHENOL
2,4,6,TRICHLOROPHE	19.86		2,4,6,TRICHLOROPHE
2,4-DINITROPHENOL	23.86	<50ppb	2,4-DINITROPHENOL
4-NITROPHENOL	24.20		4-NITROPHENOL
4,6-DINITROCREOSOL	26.44		4,6-DINITROCREOSOL
PENTACHLOROPHENOL	29.68		PENTACHLOROPHENOL

Data File = L:AH15-14.PTS Printed on 08-16-1989 at 09:17:51
Start time: 0.00 min. Stop time: 34.00 min. Offset: 0 mv.
Full Range: 100 millivolts



ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No 5848-5
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System Name: 4th Quarter Monitoring Wells-Bermite Division of Whittaker Field Blank #5 7/27/89 System Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: |-| (G/S) User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed			8 9 0 9 0 8 (Y Y M M D D)	
	Analyzing Agency Code (Lab)				
	Intensive Survey Number				
ug/L	Acenapthene		34205	N D	1 0
ug/L	Acenaphthylene		34200	N D	1 0
ug/L	Anthracene		34220	N D	1 0
ug/L	Aldrin		39330	N D	1 0
ug/L	Benzo (a) anthracene		34526	N D	2 0
ug/L	Benzo (b) fluoranthene		34230	N D	2 0
ug/L	Benzo (k) fluoranthene		34242	N D	2 0
ug/L	Benzo (a) pyrene		34247	N D	2 0
ug/L	Benzo (ghi) perylene		34521	N D	2 0
ug/L	Benzyl butyl phthalate		34292	N D	2 0
ug/L	β - BHC		39338	N D	1 0
ug/L	δ - BHC		34259	N D	1 0
ug/L	bis (2-chloroethyl) ether		34273	N D	1 0
ug/L	bis (2-chloroethoxy) methane		34278	N D	1 0
ug/L	bis (2-ethylhexyl) phthalate		39100	N D	1 0
ug/L	bis (2-chloroisopropyl) ether		34283	N D	1 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
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Base Neutrals and Acids (Continued)

Lab #:5848-5 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.00
ug/L	Chlordane		39350	ND	10.00
ug/L	2-Chloronapthalene		34581	ND	10.00
ug/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
ug/L	Crysene		34320	ND	10.00
ug/L	4,4'-DDD		39310	ND	20.00
ug/L	4,4'-DDE		39320	ND	20.00
ug/L	4,4'-DDT		39300	ND	20.00
ug/L	Dibenzo (a,h) anthracene		34556	ND	10.00
ug/L	Di-n-butylphthalate		39100	ND	10.00
ug/L	1,3-Dichlorobenzene		34566	ND	10.00
ug/L	1,2-Dichlorobenzene		34536	ND	10.00
ug/L	1,4-Dichlorobenzene		34571	ND	10.00
ug/L	3,3-Dichlorobenzidine		34631	ND	40.00
ug/L	Dieldrin		39380	ND	20.00
ug/L	Diethyl phthalate		34336	ND	10.00
ug/L	Dimethyl phthalate		34341	ND	10.00
ug/L	2,4-Dinitrotoluene		34611	ND	10.00
ug/L	2,6-Dinitrotoluene		34626	ND	10.00
ug/L	Di-n-octylphthalate		34596	ND	10.00
ug/L	Endosulfan sulfate		34351	ND	20.00
ug/L	Endrin Aldehyde		34366	ND	10.00
ug/L	Fluoranthene		34376	ND	10.00
ug/L	Fluorene		34381	ND	10.00
ug/L	Heptachlor		39410	ND	10.00
ug/L	Heptachlor epoxide		39420	ND	10.00
ug/L	Hexachlorobenzene		39700	ND	10.00
ug/L	Hexachlorobutadiene		34391	ND	10.00
ug/L	Hexachloroethane		34396	ND	10.00
ug/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
ug/L	Isophorone		34408	ND	20.00
ug/L	Napthalene		34696	ND	10.00
ug/L	Nitrobenzene		34447	ND	10.00
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.00
ug/L	PCB-1016		34671	ND	10.00
ug/L	PCB-1221		39488	ND	10.00
ug/L	PCB-1232		39492	ND	10.00
ug/L	PCB-1242		39496	ND	10.00
ug/L	PCB-1248		39500	ND	10.00
ug/L	PCB-1254		39504	ND	10.00
ug/L	PCB-1260		39508	ND	10.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
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4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-5 (Cont.)

SYSTEM NAME & NUMBER

ug/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	_	0	0
ug/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	_	0	0

ACID EXTRACTABLES

ug/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	_	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT				
ug/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	γ - BHC	_	39340	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	_	0	0
ug/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	_	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

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4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/15/89 Lab Sample ID No. 5848-6
Laboratory Name: B C Laboratories Signature Lab Director:
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: Travel Blank to cover 1 thru 5 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|-|-|-|-|-|-|-|-|-|
Date & Time of Sample |Y|Y|M|M|D|D|T|T|T|T| Water Type: G/S |-| User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
ug/L	Acenapthene	-	34205	- - N D - -	- 1 0 - 0 0
ug/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 - 0 0
ug/L	Anthracene	-	34220	- - N D - -	- 1 0 - 0 0
ug/L	Aldrin	-	39330	- - N D - -	- - 1 - 0 0
ug/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 - 0 0
ug/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 - 0 0
ug/L	β - BHC	-	39338	- - N D - -	- - 1 - 0 0
ug/L	δ - BHC	-	34259	- - N D - -	- - 1 - 0 0
ug/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 - 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-6 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.0
ug/L	Chlordane		39350	ND	2.0
ug/L	2-Chloronapthalene		34581	ND	10.0
ug/L	4-Chlorophenyl phenyl ether		34641	ND	10.0
ug/L	Crysene		34320	ND	10.0
ug/L	4,4'-DDD		39310	ND	2.0
ug/L	4,4'-DDE		39320	ND	2.0
ug/L	4,4'-DDT		39300	ND	2.0
ug/L	Dibenzo (a,h) anthracene		34556	ND	10.0
ug/L	Di-n-butylphthalate		39100	ND	10.0
ug/L	1,3-Dichlorobenzene		34566	ND	1.0
ug/L	1,2-Dichlorobenzene		34536	ND	1.0
ug/L	1,4-Dichlorobenzene		34571	ND	1.0
ug/L	3,3-Dichlorobenzidine		34631	ND	40.0
ug/L	Dieldrin		39380	ND	2.0
ug/L	Diethyl phthalate		34336	ND	10.0
ug/L	Dimethyl phthalate		34341	ND	10.0
ug/L	2,4-Dinitrotoluene		34611	ND	10.0
ug/L	2,6-Dinitrotoluene		34626	ND	10.0
ug/L	Di-n-octylphthalate		34596	ND	10.0
ug/L	Endosulfan sulfate		34351	ND	2.0
ug/L	Endrin Aldehyde		34366	ND	1.0
ug/L	Fluoranthene		34376	ND	10.0
ug/L	Fluorene		34381	ND	10.0
ug/L	Heptachlor		39410	ND	1.0
ug/L	Heptachlor epoxide		39420	ND	1.0
ug/L	Hexachlorobenzene		39700	ND	10.0
ug/L	Hexachlorobutadiene		34391	ND	10.0
ug/L	Hexachloroethane		34396	ND	10.0
ug/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.0
ug/L	Isophorone		34408	ND	20.0
ug/L	Napthalene		34696	ND	10.0
ug/L	Nitrobenzene		34447	ND	10.0
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.0
ug/L	PCB-1016		34671	ND	1.0
ug/L	PCB-1221		39488	ND	1.0
ug/L	PCB-1232		39492	ND	1.0
ug/L	PCB-1242		39496	ND	1.0
ug/L	PCB-1248		39500	ND	1.0
ug/L	PCB-1254		39504	ND	1.0
ug/L	PCB-1260		39508	ND	1.0

ENVIRONMENTAL
CHEMICAL ANALYSIS
/
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-6 (Cont.)

SYSTEM NAME & NUMBER

ug/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	_	0	0
ug/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	_	0	0

ACID EXTRACTABLES

ug/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	_	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS							DETECTION LIMIT				
ug/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	γ - BHC	_	39340	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	_	0	0
ug/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	_	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-5

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: Field Blank #1
Sampled by: Chris Thompson, Wenck
Date Sampled: July 26, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-6

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: Field Blank #2
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-7

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: Travel Blank
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-0834 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 943-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-2

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: Duplicate MW2/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: Spike - MW1/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	Spike Recovery	Compound	Spike Recovery
Acetone	62	1,1-Dichloroethene	84
Benzene	86	trans-1,2-Dichloroethene	85
Bromodichloromethane	87	1,2-Dichloropropane	82
Bromoform	93	cis-1,3-Dichloropropene	80
Bromomethane	92	trans-1,3-Dichloropropene	84
Carbon Tetrachloride	84	Ethyl Benzene	85
Chlorobenzene	86	Methylene Chloride	82
Chloroethane	83	Methyl Ethyl Ketone	71
Chloroform	83	1,1,2,2-Tetrachloroethane	78
Chloromethane	86	Tetrachloroethene	88
Dibromochloromethane	92	Toluene	84
1,2-Dichlorobenzene	90	1,1,1-Trichloroethane	81
1,3-Dichlorobenzene	90	1,1,2-Trichloroethane	84
1,4-Dichlorobenzene	90	Trichloroethene	87
1,1-Dichloroethane	82	Trichlorofluoromethane	84
1,2-Dichloroethane	80	Vinyl Chloride	91
		Xylenes	84

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

RECEIVED BY
WENCK ASSOCIATES INC.
AUG 17 1989

GC/MS Tuning and Mass Calibration

BROMOFLUOROBENZENE

Case Number:		Laboratory:		Contract:	
Inst ID:	5100	Sens Date:	08/08/89	Sens Time:	8:34:00
Lab ID:	891293	Cali Date:		Analyst:	EL

Data release authorized by:

_____

m/z	Ion Abundance Criteria	Spec #1695	
50	15 to 40% of mass 95	34.13	
75	30 to 60% of mass 95	54.22	
95	base peak, 100% relative abundance	100.00	
96	5 to 9% of mass 95	7.13	
173	less than 1% of mass 95	0.00	
174	greater than 50% of mass 95	58.49	
175	5 to 9% of mass 174	4.29	(7.33) 1
176	between 95% and 101% of mass 174	57.05	(97.53) 1
177	5 to 9% of mass 176	3.80	(6.67) 2

1 - value in parenthesis is % of mass 174
2 - value in parenthesis is % of mass 176

Quantitation Report File: 891293

Data: 891293.TI
08/08/89 8:34:00
Sample: VO STD @ 15 PPB WITH IS,SS STD @ 10 PPB 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: EL Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	845	7:02	1	1.000	A BB	14638.	10.000 UG/KG	1.75
2	114	974	8:07	2	1.000	A BB	120134.	10.000 UG/KG	1.75
3	117	1454	12:07	3	1.000	A BB	86610.	10.000 UG/KG	1.75
4	65	916	7:38	1	1.084	A BV	44678.	9.924 UG/KG	1.74
5	100	1195	9:57	3	0.822	A VB	96540.	10.058 UG/KG	1.76
6	95	1694	14:07	3	1.165	A BB	47941.	9.697 UG/KG	1.70
7	50	520	4:20	1	0.615	A BV	150488.	13.816 UG/KG	2.42
8	62	529	4:24	1	0.626	A BB	114322.	13.315 UG/KG	2.34
9	94	558	4:39	1	0.660	A BB	58983.	13.145 UG/KG	2.31
10	64	568	4:44	1	0.672	A BB	75977.	13.652 UG/KG	2.39
11	101	589	4:54	1	0.697	A BB	45779.	13.349 UG/KG	2.34
12	96	636	5:18	1	0.753	A BB	38452.	13.648 UG/KG	2.39
13	84	683	5:41	1	0.808	A BB	54189.	13.625 UG/KG	2.39
14	96	709	5:54	1	0.839	A BB	63846.	13.837 UG/KG	2.43
15	63	753	6:16	1	0.891	A BB	147738.	14.027 UG/KG	2.46
16	83	855	7:07	1	1.012	A BB	123535.	13.597 UG/KG	2.38
17	97	874	7:17	2	0.897	A BB	94953.	14.079 UG/KG	2.47
18	62	926	7:43	1	1.096	A BB	74840.	13.673 UG/KG	2.40
19	78	921	7:40	2	0.946	A BB	262704.	14.323 UG/KG	2.51
20	117	893	7:26	2	0.917	A BB	69189.	13.812 UG/KG	2.42
21	63	1042	8:41	2	1.070	A BB	71708.	13.689 UG/KG	2.40
22	130	1008	8:24	2	1.035	A BB	57929.	13.973 UG/KG	2.45
23	83	1085	9:02	2	1.114	A BB	73203.	14.435 UG/KG	2.53
24	75	1155	9:37	2	1.186	A BB	104191.	20.064 UG/KG	3.52
25	75	1251	10:25	2	1.284	A BB	38503.	8.459 UG/KG	1.48
26	92	1206	10:03	3	0.829	A BB	149187.	14.077 UG/KG	2.47
27	97	1282	10:41	2	1.316	A BB	25156.	13.345 UG/KG	2.34
28	129	1349	11:14	2	1.385	A BB	31172.	14.387 UG/KG	2.52
29	164	1297	10:48	3	0.892	A BB	44545.	13.947 UG/KG	2.45
30	112	1459	12:09	3	1.003	A BB	126804.	13.780 UG/KG	2.42
31	106	1482	12:21	3	1.019	A BB	79234.	13.741 UG/KG	2.41
32	106	1506	12:33	3	1.036	A BB	95259.	27.358 UG/KG	4.80
33	106	1585	13:12	3	1.090	A BB	80982.	13.737 UG/KG	2.41
34	173	1625	13:32	2	1.668	A BB	14626.	13.753 UG/KG	2.41
35	83	1736	14:28	3	1.194	A BB	23956.	12.085 UG/KG	2.12
36	146	1928	16:04	3	1.326	A BB	80920.	13.584 UG/KG	2.38
37	146	1950	16:15	3	1.341	A BB	97149.	13.627 UG/KG	2.39
38	146	2031	16:55	3	1.397	A BB	63327.	13.516 UG/KG	2.37
39	43	674	5:37	1	0.798	A BV	5336.	13.989 UG/KG	2.45
40	76	655	5:27	1	0.775	A BB	84397.	13.920 UG/KG	2.44
41	43	820	6:50	2	0.842	A BV	26707.	15.352 UG/KG	2.69
42	104	1590	13:15	3	1.094	A BB	126814.	13.787 UG/KG	2.42

Quantitation Report File: 891294

Data: 891294.TI
08/08/89 9:39:00
Sample: BLANK ITH IS SS STD @10 PPB 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: EL Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	845	7:02	1	1.000	A BB	12705.	10.000	UG/KG	15.88
2	114	975	8:07	2	1.000	A BB	102384.	10.000	UG/KG	15.88
3	117	1455	12:07	3	1.000	A BB	73370.	10.000	UG/KG	15.88
4	65	917	7:38	1	1.085	A BB	38136.	9.760	UG/KG	15.50
5	100	1196	9:58	3	0.822	A BB	81200.	9.986	UG/KG	15.86
6	95	1695	14:07	3	1.165	A BB	39064.	9.328	UG/KG	14.81
7	50	520	4:20	1	0.615	A BB	487.	0.052	UG/KG	0.08
8	62	529	4:24	1	0.626	A BB	505.	0.068	UG/KG	0.11
9	94	558	4:39	1	0.660	A BB	205.	0.053	UG/KG	0.08
10	64	567	4:43	1	0.671	A BB	302.	0.063	UG/KG	0.10
11	101	589	4:54	1	0.697	A BB	377.	0.127	UG/KG	0.20
12	96	636	5:18	1	0.753	A BB	138.	0.056	UG/KG	0.09
13	84	683	5:41	1	0.808	A BB	1779.	0.515	UG/KG	0.82
14	96	709	5:54	1	0.839	A BB	197.	0.049	UG/KG	0.08
15	63	753	6:16	1	0.891	A BB	387.	0.042	UG/KG	0.07
16	83	855	7:07	1	1.012	A BB	539.	0.068	UG/KG	0.11
17	97	873	7:16	2	0.895	A BB	536.	0.093	UG/KG	0.15
18	NOT FOUND									
19	78	921	7:40	2	0.945	A BB	937.	0.060	UG/KG	0.10
20	117	893	7:26	2	0.916	A BB	310.	0.073	UG/KG	0.12
21	NOT FOUND									
22	130	1009	8:24	2	1.035	A BB	550.	0.156	UG/KG	0.25
23	NOT FOUND									
24	75	1155	9:37	2	1.185	A BV	394.	0.089	UG/KG	0.14
25	NOT FOUND									
26	92	1207	10:03	3	0.830	A BB	1194.	0.133	UG/KG	0.21
27	NOT FOUND									
28	NOT FOUND									
29	164	1298	10:49	3	0.892	A BB	230.	0.085	UG/KG	0.13
30	112	1459	12:09	3	1.003	A BB	399.	0.051	UG/KG	0.08
31	106	1484	12:22	3	1.020	A BB	218.	0.045	UG/KG	0.07
32	106	1507	12:33	3	1.036	A BB	386.	0.131	UG/KG	0.21
33	106	1587	13:13	3	1.091	A BB	230.	0.046	UG/KG	0.07
34	NOT FOUND									
35	NOT FOUND									
36	146	1928	16:04	3	1.325	A BB	326.	0.065	UG/KG	0.10
37	146	1950	16:15	3	1.340	A BB	535.	0.089	UG/KG	0.14
38	146	2033	16:56	3	1.397	A BB	164.	0.041	UG/KG	0.07
39	43	674	5:37	1	0.798	A BB	310.	0.936	UG/KG	1.49
40	76	655	5:27	1	0.775	A BB	619.	0.118	UG/KG	0.19
41	43	821	6:50	2	0.842	A BB	870.	0.587	UG/KG	0.93
42	104	1591	13:15	3	1.093	A BB	161.	0.021	UG/KG	0.03

Quantitation Report File: 891295

Data: 891295.TI
08/08/89 10:13:00
Sample: LAB NO 19707-6 CLIENT ID FIELD BLANK #2 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	844	7:02	1	1.000	A BB	12207.	10.000 UG/KG	15.16
2	114	974	8:07	2	1.000	A BB	106762.	10.000 UG/KG	15.16
3	117	1454	12:07	3	1.000	A BB	75062.	10.000 UG/KG	15.16
4	65	916	7:38	1	1.085	A BB	36027.	9.596 UG/KG	14.55
5	100	1195	9:57	3	0.822	A BB	84097.	10.109 UG/KG	15.33
6	95	1695	14:07	3	1.166	A BB	38914.	9.082 UG/KG	13.77
7	50	520	4:20	1	0.616	A BB	293.	0.032 UG/KG	0.05
8	62	529	4:24	1	0.627	A BB	266.	0.037 UG/KG	0.06
9	NOT FOUND								
10	64	567	4:43	1	0.672	A BB	154.	0.033 UG/KG	0.05
11	101	588	4:54	1	0.697	A BB	323.	0.113 UG/KG	0.17
12	96	634	5:17	1	0.751	A BB	107.	0.046 UG/KG	0.07
13	84	682	5:41	1	0.808	A BB	13693.	4.129 UG/KG	6.26
14	96	707	5:53	1	0.838	A BB	115.	0.030 UG/KG	0.05
15	63	752	6:16	1	0.891	A BB	123.	0.014 UG/KG	0.02
16	83	854	7:07	1	1.012	A BB	783.	0.103 UG/KG	0.16
17	97	874	7:17	2	0.897	A BB	248.	0.041 UG/KG	0.06
18	NOT FOUND								
19	78	920	7:40	2	0.945	A BB	777.	0.048 UG/KG	0.07
20	NOT FOUND								
21	NOT FOUND								
22	130	1007	8:23	2	1.034	A BB	173.	0.047 UG/KG	0.07
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1205	10:02	3	0.829	A BB	1351.	0.147 UG/KG	0.22
27	NOT FOUND								
28	NOT FOUND								
29	164	1296	10:48	3	0.891	A BB	167.	0.060 UG/KG	0.09
30	112	1460	12:10	3	1.004	A BB	310.	0.039 UG/KG	0.06
31	106	1483	12:21	3	1.020	A BB	177.	0.035 UG/KG	0.05
32	106	1507	12:33	3	1.036	A BB	401.	0.133 UG/KG	0.20
33	106	1585	13:12	3	1.090	A BB	271.	0.053 UG/KG	0.08
34	NOT FOUND								
35	NOT FOUND								
36	146	1929	16:04	3	1.327	A BB	318.	0.062 UG/KG	0.09
37	146	1950	16:15	3	1.341	A BB	516.	0.084 UG/KG	0.13
38	146	2032	16:56	3	1.398	A BB	166.	0.041 UG/KG	0.06
39	43	673	5:36	1	0.797	A BB	268.	0.843 UG/KG	1.28
40	76	654	5:27	1	0.775	A BB	864.	0.171 UG/KG	0.26
41	43	819	6:49	2	0.841	A BV	1280.	0.828 UG/KG	1.26
42	NOT FOUND								

Quantitation Report File: 891296

Data: 891296.TI
08/08/89 10:47:00
Sample: LAB NO 19707-3 CLIENT ID MW3/0/4 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	844	7:02	1	1.000	A BB	13372.	10.000 UG/KG	16.40
2	114	974	8:07	2	1.000	A BB	118094.	10.000 UG/KG	16.40
3	117	1454	12:07	3	1.000	A BB	82290.	10.000 UG/KG	16.40
4	65	916	7:38	1	1.085	A BB	38871.	9.451 UG/KG	15.50
5	100	1195	9:57	3	0.822	A BB	93050.	10.203 UG/KG	16.73
6	95	1694	14:07	3	1.165	A BB	43179.	9.193 UG/KG	15.07
7	50	519	4:19	1	0.615	A BB	353.	0.035 UG/KG	0.06
8	62	528	4:24	1	0.626	A BB	356.	0.045 UG/KG	0.07
9	NOT FOUND								
10	64	566	4:43	1	0.671	A BB	132.	0.026 UG/KG	0.04
11	101	587	4:53	1	0.695	A BB	287.	0.092 UG/KG	0.15
12	NOT FOUND								
13	84	682	5:41	1	0.808	A BB	433.	0.119 UG/KG	0.20
14	96	708	5:54	1	0.839	A BB	116.	0.028 UG/KG	0.05
15	63	752	6:16	1	0.891	A BB	186.	0.019 UG/KG	0.03
16	NOT FOUND								
17	97	874	7:17	2	0.897	A BB	230.	0.035 UG/KG	0.06
18	NOT FOUND								
19	78	920	7:40	2	0.945	A BB	447.	0.025 UG/KG	0.04
20	NOT FOUND								
21	NOT FOUND								
22	130	1007	8:23	2	1.034	A BB	255.	0.063 UG/KG	0.10
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1205	10:02	3	0.829	A BB	917.	0.091 UG/KG	0.15
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	112	1460	12:10	3	1.004	A BB	163.	0.019 UG/KG	0.03
31	NOT FOUND								
32	106	1506	12:33	3	1.036	A BB	105.	0.032 UG/KG	0.05
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	146	1929	16:04	3	1.327	A BB	167.	0.030 UG/KG	0.05
37	146	1949	16:14	3	1.340	A BB	349.	0.052 UG/KG	0.08
38	NOT FOUND								
39	43	672	5:36	1	0.796	A BB	273.	0.784 UG/KG	1.28
40	76	654	5:27	1	0.775	A BB	1060.	0.191 UG/KG	0.31
41	43	819	6:49	2	0.841	A BV	781.	0.457 UG/KG	0.75
42	NOT FOUND								

Quantitation Report File: 891297

Data: 891297.TI
08/08/89 11:17:00
Sample: LAB NO 19707-1 CLIENT ID MW1/0/4 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	843	7:01	1	1.000	A BB	13922.	10.000 UG/KG	16.37
2	114	973	8:06	2	1.000	A BB	112063.	10.000 UG/KG	16.37
3	117	1453	12:06	3	1.000	A BB	81035.	10.000 UG/KG	16.37
4	65	915	7:37	1	1.085	A BB	39821.	9.300 UG/KG	15.22
5	100	1194	9:57	3	0.822	A BB	88370.	9.840 UG/KG	16.11
6	95	1694	14:07	3	1.166	A BB	42418.	9.171 UG/KG	15.01
7	50	519	4:19	1	0.616	A BB	552.	0.053 UG/KG	0.09
8	62	528	4:24	1	0.626	A BB	605.	0.074 UG/KG	0.12
9	94	556	4:38	1	0.660	A BB	147.	0.034 UG/KG	0.06
10	64	566	4:43	1	0.671	A BB	256.	0.048 UG/KG	0.08
11	101	587	4:53	1	0.696	A BB	475.	0.146 UG/KG	0.24
12	96	634	5:17	1	0.752	A BB	218.	0.081 UG/KG	0.13
13	84	681	5:40	1	0.808	A BB	384.	0.102 UG/KG	0.17
14	96	706	5:53	1	0.837	A BB	255.	0.058 UG/KG	0.10
15	63	751	6:15	1	0.891	A BB	378.	0.038 UG/KG	0.06
16	83	854	7:07	1	1.013	A BB	298.	0.034 UG/KG	0.06
17	97	872	7:16	2	0.896	A BB	423.	0.067 UG/KG	0.11
18	NOT	FOUND							
19	78	919	7:39	2	0.945	A BB	867.	0.051 UG/KG	0.08
20	117	890	7:25	2	0.915	A BB	402.	0.086 UG/KG	0.14
21	NOT	FOUND							
22	130	1007	8:23	2	1.035	A BB	442.	0.114 UG/KG	0.19
23	NOT	FOUND							
24	75	1155	9:37	2	1.187	A BB	275.	0.057 UG/KG	0.09
25	NOT	FOUND							
26	92	1205	10:02	3	0.829	A BB	903.	0.091 UG/KG	0.15
27	NOT	FOUND							
28	NOT	FOUND							
29	164	1297	10:48	3	0.893	A BB	316.	0.106 UG/KG	0.17
30	112	1458	12:09	3	1.003	A BB	361.	0.042 UG/KG	0.07
31	106	1482	12:21	3	1.020	A BB	180.	0.033 UG/KG	0.05
32	106	1506	12:33	3	1.036	A BB	243.	0.075 UG/KG	0.12
33	106	1584	13:12	3	1.090	A BB	103.	0.019 UG/KG	0.03
34	NOT	FOUND							
35	NOT	FOUND							
36	146	1927	16:03	3	1.326	A BB	397.	0.071 UG/KG	0.12
37	146	1948	16:14	3	1.341	A BB	475.	0.071 UG/KG	0.12
38	146	2030	16:55	3	1.397	A BB	161.	0.037 UG/KG	0.06
39	43	671	5:35	1	0.796	A BB	222.	0.612 UG/KG	1.00
40	76	653	5:26	1	0.775	A BB	739.	0.128 UG/KG	0.21
41	43	819	6:49	2	0.842	A BB	727.	0.448 UG/KG	0.73
42	104	1589	13:14	3	1.094	A BB	107.	0.012 UG/KG	0.02

Quantitation Report File: 891298

Data: 891298.TI
08/08/89 11:47:00
Sample: LAB NO 19707-7 CLIENT ID TRAVEL BLANK 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	842	7:01	1	1.000	A BB	12645.	10.000 UG/KG	16.55
2	114	972	8:06	2	1.000	A BB	100485.	10.000 UG/KG	16.55
3	117	1454	12:07	3	1.000	A BB	73064.	10.000 UG/KG	16.55
4	65	914	7:37	1	1.086	A BB	36409.	9.362 UG/KG	15.49
5	100	1194	9:57	3	0.821	A BB	78387.	9.680 UG/KG	16.02
6	95	1694	14:07	3	1.165	A BB	38197.	9.159 UG/KG	15.16
7	50	519	4:19	1	0.616	A BB	278.	0.030 UG/KG	0.05
8	62	528	4:24	1	0.627	A BB	216.	0.029 UG/KG	0.05
9	94	556	4:38	1	0.660	A BB	112.	0.029 UG/KG	0.05
10	64	565	4:42	1	0.671	A BB	120.	0.025 UG/KG	0.04
11	101	586	4:53	1	0.696	A BB	235.	0.079 UG/KG	0.13
12	NOT FOUND								
13	84	680	5:40	1	0.808	A BB	471.	0.137 UG/KG	0.23
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	97	872	7:16	2	0.897	A BB	187.	0.033 UG/KG	0.05
18	NOT FOUND								
19	78	919	7:39	2	0.945	A BB	462.	0.030 UG/KG	0.05
20	NOT FOUND								
21	NOT FOUND								
22	130	1007	8:23	2	1.036	A BB	109.	0.031 UG/KG	0.05
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1205	10:02	3	0.829	A BB	700.	0.078 UG/KG	0.13
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	106	1506	12:33	3	1.036	A BB	156.	0.053 UG/KG	0.09
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	146	1949	16:14	3	1.340	A BB	107.	0.018 UG/KG	0.03
38	NOT FOUND								
39	43	671	5:35	1	0.797	A BB	337.	1.023 UG/KG	1.69
40	76	652	5:26	1	0.774	A BB	488.	0.093 UG/KG	0.15
41	43	818	6:49	2	0.842	A BV	790.	0.543 UG/KG	0.90
42	NOT FOUND								

Quantitation Report File: 891299

Data: 891299.TI
08/08/89 12:17:00
Sample: LAB NO 19707-5 CLIENT ID FIELD BLANK #1 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	844	7:02	1	1.000	A BB	13626.	10.000 UG/KG	15.51
2	114	974	8:07	2	1.000	A BB	108213.	10.000 UG/KG	15.51
3	117	1455	12:07	3	1.000	A BB	78767.	10.000 UG/KG	15.51
4	65	916	7:38	1	1.085	A BB	38934.	9.290 UG/KG	14.41
5	100	1196	9:58	3	0.822	A BB	84468.	9.676 UG/KG	15.01
6	95	1695	14:07	3	1.165	A BB	41906.	9.321 UG/KG	14.46
7	50	519	4:19	1	0.615	A BB	218.	0.022 UG/KG	0.03
8	62	529	4:24	1	0.627	A BB	214.	0.027 UG/KG	0.04
9	NOT FOUND								
10	64	565	4:42	1	0.669	A BB	123.	0.024 UG/KG	0.04
11	101	587	4:53	1	0.695	A BB	317.	0.099 UG/KG	0.15
12	NOT FOUND								
13	84	681	5:40	1	0.807	A BB	13410.	3.622 UG/KG	5.62
14	NOT FOUND								
15	NOT FOUND								
16	83	855	7:07	1	1.013	A BB	692.	0.082 UG/KG	0.13
17	97	874	7:17	2	0.897	A BB	166.	0.027 UG/KG	0.04
18	NOT FOUND								
19	78	921	7:40	2	0.946	A BB	567.	0.034 UG/KG	0.05
20	NOT FOUND								
21	NOT FOUND								
22	130	1009	8:24	2	1.036	A BB	117.	0.031 UG/KG	0.05
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1207	10:03	3	0.830	A BB	1113.	0.115 UG/KG	0.18
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	106	1508	12:34	3	1.036	A BB	233.	0.074 UG/KG	0.11
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	146	1951	16:15	3	1.341	A BB	106.	0.016 UG/KG	0.03
38	NOT FOUND								
39	43	673	5:36	1	0.797	A BB	388.	1.093 UG/KG	1.69
40	76	653	5:26	1	0.774	A BB	764.	0.135 UG/KG	0.21
41	43	820	6:50	2	0.842	A BV	1239.	0.791 UG/KG	1.23
42	NOT FOUND								

Quantitation Report File: 891300

Data: 891300.TI
08/08/89 13:03:00
Sample: LAB NO 19707-2 CLIENT ID MW2/0/4 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	847	7:03	1	1.000	A BB	12886.	10.000 UG/KG	16.02
2	114	976	8:08	2	1.000	A BB	103913.	10.000 UG/KG	16.02
3	117	1455	12:07	3	1.000	A BB	75317.	10.000 UG/KG	16.02
4	65	918	7:39	1	1.084	A BB	36677.	9.254 UG/KG	14.83
5	100	1196	9:58	3	0.822	A BB	81071.	9.712 UG/KG	15.56
6	95	1695	14:07	3	1.165	A BB	39337.	9.150 UG/KG	14.66
7	50	525	4:22	1	0.620	A BB	433.	0.045 UG/KG	0.07
8	62	535	4:27	1	0.632	A BB	192.	0.025 UG/KG	0.04
9	NOT FOUND								
10	NOT FOUND								
11	101	593	4:56	1	0.700	A BB	129.	0.043 UG/KG	0.07
12	NOT FOUND								
13	84	686	5:43	1	0.810	A BB	2134.	0.610 UG/KG	0.98
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	78	922	7:41	2	0.945	A BB	2171.	0.137 UG/KG	0.22
20	NOT FOUND								
21	NOT FOUND								
22	130	1010	8:25	2	1.035	A BB	7861.	2.192 UG/KG	3.51
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1208	10:04	3	0.830	A BB	546.	0.059 UG/KG	0.09
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	43	676	5:38	1	0.798	A BB	222.	0.661 UG/KG	1.06
40	76	659	5:29	1	0.778	A BB	414.	0.078 UG/KG	0.12
41	43	822	6:51	2	0.842	A BB	687.	0.457 UG/KG	0.73
42	NOT FOUND								

Quantitation Report File: 891301

Data: 891301.TI
08/08/89 13:33:00
Sample: LAB NO 19707-2 DUP. CLIENT ID MW2/0/4 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	844	7:02	1	1.000	A BB	13266.	10.000 UG/KG	16.16
2	114	975	8:07	2	1.000	A BB	107413.	10.000 UG/KG	16.16
3	117	1454	12:07	3	1.000	A BB	78569.	10.000 UG/KG	16.16
4	65	917	7:38	1	1.086	A BB	36728.	9.002 UG/KG	14.54
5	100	1196	9:58	3	0.823	A BB	83258.	9.562 UG/KG	15.45
6	95	1695	14:07	3	1.166	A BB	42171.	9.403 UG/KG	15.19
7	50	517	4:18	1	0.613	A BB	421.	0.043 UG/KG	0.07
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	84	681	5:40	1	0.807	A BB	2122.	0.589 UG/KG	0.95
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	78	921	7:40	2	0.945	A BB	2056.	0.125 UG/KG	0.20
20	NOT FOUND								
21	NOT FOUND								
22	130	1009	8:24	2	1.035	A BB	8173.	2.205 UG/KG	3.56
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1207	10:03	3	0.830	A BB	498.	0.052 UG/KG	0.08
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	43	672	5:36	1	0.796	A BB	162.	0.469 UG/KG	0.76
40	76	652	5:26	1	0.773	A BB	318.	0.058 UG/KG	0.09
41	43	820	6:50	2	0.841	A BB	619.	0.398 UG/KG	0.64
42	NOT FOUND								

Quantitation Report File: 891302

Data: 891302.TI
08/08/89 14:04:00
Sample: LAB NO 19707-4 CLIENT ID MW4/0/4 0.2 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.000
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	844	7:02	1	1.000	A BB	14630.	10.000 UG/KG	14.14
2	114	974	8:07	2	1.000	A BB	120053.	10.000 UG/KG	14.14
3	117	1455	12:07	3	1.000	A BB	87173.	10.000 UG/KG	14.14
4	65	916	7:38	1	1.085	A BB	40892.	9.088 UG/KG	12.85
5	100	1195	9:57	3	0.821	A BB	94246.	9.755 UG/KG	13.80
6	95	1695	14:07	3	1.165	A BB	45420.	9.128 UG/KG	12.91
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	96	634	5:17	1	0.751	A BB	155.	0.055 UG/KG	0.08
13	84	681	5:40	1	0.807	A BB	1548.	0.389 UG/KG	0.55
14	NOT FOUND								
15	NOT FOUND								
16	83	854	7:07	1	1.012	A BB	272.	0.030 UG/KG	0.04
17	97	872	7:16	2	0.895	A BB	164.	0.024 UG/KG	0.03
18	NOT FOUND								
19	78	920	7:40	2	0.945	A BB	337.	0.018 UG/KG	0.03
20	NOT FOUND								
21	NOT FOUND								
22	130	1008	8:24	2	1.035	A BB	46713.	11.275 UG/KG	15.95
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	92	1207	10:03	3	0.830	A BB	905.	0.085 UG/KG	0.12
27	NOT FOUND								
28	NOT FOUND								
29	164	1299	10:49	3	0.893	A BB	113.	0.035 UG/KG	0.05
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	43	672	5:36	1	0.796	A BB	129.	0.338 UG/KG	0.48
40	76	653	5:26	1	0.774	A BB	228.	0.038 UG/KG	0.05
41	43	820	6:50	2	0.842	A BB	773.	0.445 UG/KG	0.63
42	NOT FOUND								

Quantitation Report File: 891303

Data: 891303.TI
08/08/89 14:36:00
Sample: LAB NO 19707-1 SPIKE @10 PPB CLIENT ID MW1/0/4 25 ML PAT
Conds.: (35 TO 180 @ C/MIN)
Formula: (EPA 624/8240) Instrument: 5100 Weight: 0.0
Submitted by: BERMITE Analyst: EL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE **IS1**
2	1,4-DIFLUOROBENZENE **IS2**
3	CHLOROBENZENE-D5 **IS3**
4	1,2-DICHLOROETHANE-D4 **SU1**
5	TOLUENE-D8 **SU2**
6	4-BROMOFLUOROBENZENE **SU3**
7	CHLOROMETHANE
8	VINYL CHLORIDE
9	BROMOMETHANE
10	CHLOROETHANE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHENE
13	METHYLENE CHLORIDE
14	TRANS-1,2-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	CHLOROFORM
17	1,1,1-TRICHLOROETHANE
18	1,2-DICHLOROETHANE
19	BENZENE
20	CARBON TETRACHLORIDE
21	1,2-DICHLOROPROPANE
22	TRICHLOROETHENE
23	BROMODICHLOROMETHANE
24	TRANS-1,3-DICHLOROPROPENE
25	CIS-1,3-DICHLOROPROPENE
26	TOLUENE
27	1,1,2-TRICHLOROETHANE
28	DIBROMOCHLOROMETHANE
29	TETRACHLOROETHENE
30	CHLOROBENZENE
31	ETHYLBENZENE
32	XYLENE
33	XYLENE
34	BROMOFORM
35	1,1,2,2-TETRACHLOROETHANE
36	1,3-DICHLOROBENZENE
37	1,4-DICHLOROBENZENE
38	1,2-DICHLOROBENZENE
39	ACETONE
40	CARBON DISULFIDE
41	METHYL ETHYL KETONE
42	STYRENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	843	7:01	1	1.000	A BB	14494.	10.000	UG/KG	2.70
2	114	973	8:06	2	1.000	A BB	119766.	10.000	UG/KG	2.70
3	117	1454	12:07	3	1.000	A BB	87547.	10.000	UG/KG	2.70
4	65	915	7:37	1	1.085	A BV	41000.	9.197	UG/KG	2.48
5	100	1195	9:57	3	0.822	A VB	93346.	9.621	UG/KG	2.60
6	95	1694	14:07	3	1.165	A BB	48037.	9.613	UG/KG	2.59
7	50	518	4:19	1	0.614	A BV	93210.	8.642	UG/KG	2.33
8	62	527	4:23	1	0.625	A BB	77410.	9.105	UG/KG	2.46
9	94	556	4:38	1	0.660	A BB	40743.	9.170	UG/KG	2.47
10	64	565	4:42	1	0.670	A BB	45913.	8.332	UG/KG	2.25
11	101	587	4:53	1	0.696	A BB	28536.	8.403	UG/KG	2.27
12	96	633	5:16	1	0.751	A BB	23424.	8.397	UG/KG	2.27
13	84	681	5:40	1	0.808	A BB	32407.	8.229	UG/KG	2.22
14	96	707	5:53	1	0.839	A BB	38774.	8.487	UG/KG	2.29
15	63	751	6:15	1	0.891	A BB	85972.	8.244	UG/KG	2.22
16	83	854	7:07	1	1.013	A BB	74680.	8.302	UG/KG	2.24
17	97	872	7:16	2	0.896	A BB	54397.	8.091	UG/KG	2.18
18	62	925	7:42	1	1.097	A BB	43181.	7.967	UG/KG	2.15
19	78	919	7:39	2	0.945	A BB	157520.	8.615	UG/KG	2.32
20	117	892	7:26	2	0.917	A BB	41817.	8.373	UG/KG	2.26
21	63	1041	8:40	2	1.070	A BB	42799.	8.195	UG/KG	2.21
22	130	1007	8:23	2	1.035	A BB	35943.	8.696	UG/KG	2.35
23	83	1085	9:02	2	1.115	A BB	43925.	8.688	UG/KG	2.34
24	75	1155	9:37	2	1.187	A BB	60997.	11.782	UG/KG	3.18
25	75	1251	10:25	2	1.286	A BB	21878.	4.821	UG/KG	1.30
26	92	1206	10:03	3	0.829	A BB	90109.	8.411	UG/KG	2.27
27	97	1281	10:40	2	1.317	A BB	15770.	8.392	UG/KG	2.26
28	129	1349	11:14	2	1.386	A BB	19964.	9.242	UG/KG	2.49
29	164	1297	10:48	3	0.892	A BB	28511.	8.831	UG/KG	2.38
30	112	1459	12:09	3	1.003	A BB	80382.	8.642	UG/KG	2.33
31	106	1483	12:21	3	1.020	A BB	49329.	8.463	UG/KG	2.28
32	106	1506	12:33	3	1.036	A BB	59541.	16.917	UG/KG	4.56
33	106	1585	13:12	3	1.090	A BB	50057.	8.401	UG/KG	2.27
34	173	1626	13:33	2	1.671	A BB	9909.	9.346	UG/KG	2.52
35	83	1737	14:28	3	1.195	A BB	15690.	7.830	UG/KG	2.11
36	146	1929	16:04	3	1.327	A BB	53893.	8.951	UG/KG	2.41
37	146	1950	16:15	3	1.341	A BB	65017.	9.022	UG/KG	2.43
38	146	2032	16:56	3	1.398	A BB	42397.	8.952	UG/KG	2.42
39	43	672	5:36	1	0.797	A BV	2360.	6.249	UG/KG	1.69
40	76	653	5:26	1	0.775	A BB	50337.	8.385	UG/KG	2.26
41	43	819	6:49	2	0.842	A BB	12306.	7.096	UG/KG	1.91
42	104	1590	13:15	3	1.094	A BB	79392.	8.539	UG/KG	2.30

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

Clayton S.O.P. M-HPLC/EE-1/P
Formaldehyde Analysis of Water by HPLC
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab No:	8907206-01	Date Analyzed:	08/04/89
Spike:	8907206-01MS	Matrix:	Water
Duplicate Spike:	8907206-01MSD	Units:	µg/L
Sample I.D.:	MW1/Q/4		

Compound	Fraction	Conc. Sample	Conc. Spiked	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD
Formaldlehyde	HPLC	<20	50	41	82	42	81	1

ND = Not Detected above Limit of Detection

MS = Matrix Spike MSD = Matrix Spike Duplicate

$$\% \text{ Recovery} = \frac{\text{Con. MS} - \text{Conc Sample}}{\text{Conc. Spike}} \times 100$$

Con. MS = Compound Concentration found in Matrix Spike sample

Conc. Spiked = Compound Concentration spiked amount in Matrix Spike sample

Conc. Sample = Compound Concentration found in sample

$$\text{RPD} = \text{Relative Percent Difference} = \frac{\% \text{ Rec. MS} - \% \text{ Rec. MSD}}{\frac{[\% \text{ Rec. MS} + \% \text{ Rec. MSD}]}{2}} \times 100\%$$

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

Clayton S.O.P. M-HPLC/EE-1/P
Formaldehyde Analysis of Water by HPLC
METHOD SPIKE/METHOD SPIKE DUPLICATE RECOVERY

Lab No:	8907206-MB	Date Analyzed:	08/04/89
Spike:	8907206-MBS	Matrix:	Water
Duplicate Spike:	8907206-MBSD	Units:	µg/L
Sample I.D.:	Method Spike		

Compound	Fraction	Conc. Sample	Conc. Spiked	Conc. MS	% Rec. MS	Conc. MSD	% Rec. MSD	RPD
Formaldlehyde	HPLC	<20	50	44	88	43	86	2

ND = Not Detected above Limit of Detection

MS = Method Spike MSD = Method Spike Duplicate

$$\% \text{ Recovery} = \frac{\text{Con. MS} - \text{Conc Sample}}{\text{Conc. Spike}} \times 100$$

Con. MS = Compound Concentration found in Method Spike sample

Conc. Spiked = Compound Concentration spiked amount in Method Spike sample

Conc. Sample = Compound Concentration found in sample

$$\text{RPD} = \text{Relative Percent Difference} = \frac{\% \text{ Rec. MS} - \% \text{ Rec. MSD}}{\frac{[\% \text{ Rec. MS} + \% \text{ Rec. MSD}]}{2}} \times 100\%$$

577

8907206-01 Processed: 08-03-1989 16:07:35, segment 8, cycle 12 678
RAW DATA SAVED IN FILE F:AA03H12.PTS

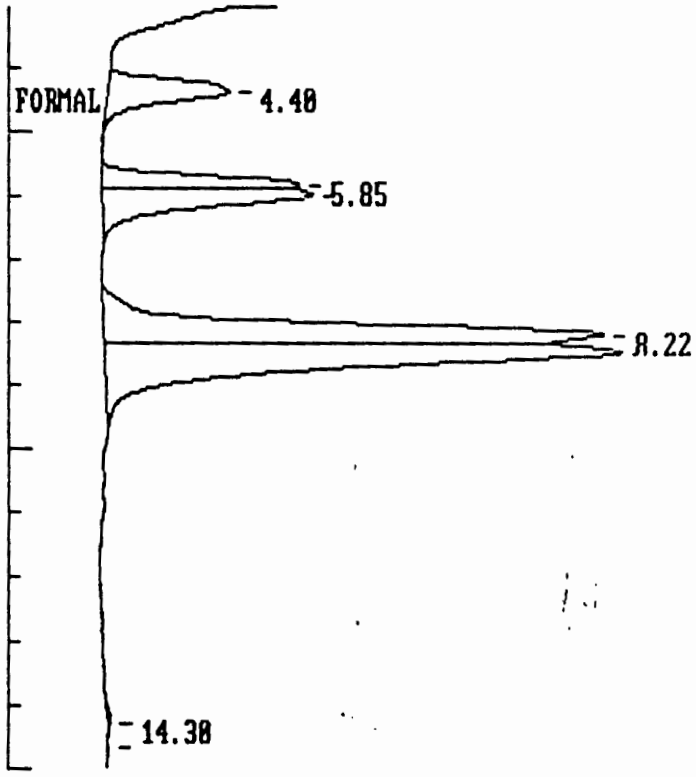
EXTERNAL STANDARD TABLE

```
******************** 08-03-1989 16:07:38 Version 4.1 ********************
* Sample Name: 8907206-01A/FGL-JM  @ 1X          Data File: F:AA03H12      *
* Date: 08-03-1989 15:34:56 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  12   Operator EA  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL       *
*              Solvent Description: ACN/H2O/                               *
* Conditions: ROOM TEMP                                                    *
*             Detector 0: WATERS 484          Detector 1:                  *
* Misc. Information: WATERS484UV @360nm                                    *
*****************************************************************************
Starting Delay:   3.00                      Ending retention time:   15.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:        1.00                Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.400	FORMALDEHYDE -DNP	1778.5070	99.6176%	135737	5817	23.3	1	0	.3802	3.0573E-01
2	5.850		0.9400	0.0527%	115193	9400	12.3	2			1.0000E-04
3	6.017		1.0056	0.0563%	202654	10056	20.2	2			1.0000E-04
4	8.217		2.3901	0.1339%	456130	23901	19.1	2			1.0000E-04
5	8.500		2.4783	0.1388%	657707	24783	26.5	2			1.0000E-04
6	14.300		0.0070	0.0004%	1330	70	19.0	1			1.0000E-04
7	14.700		0.0060	0.0003%	485	60	8.1	1			1.0000E-04

TOTAL AMOUNT = 1785.3339

Data File = F:AA03H12.PTS Printed on 08-03-1989 at 16:07:44
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 5086 uv High Value: 30111 uv Scale factor: 0.5



8907206-02 Processed: 08-03-1989 16:11:46, Segment 9, Cycle 13
RAW DATA SAVED IN FILE F:AA03H13.PTS

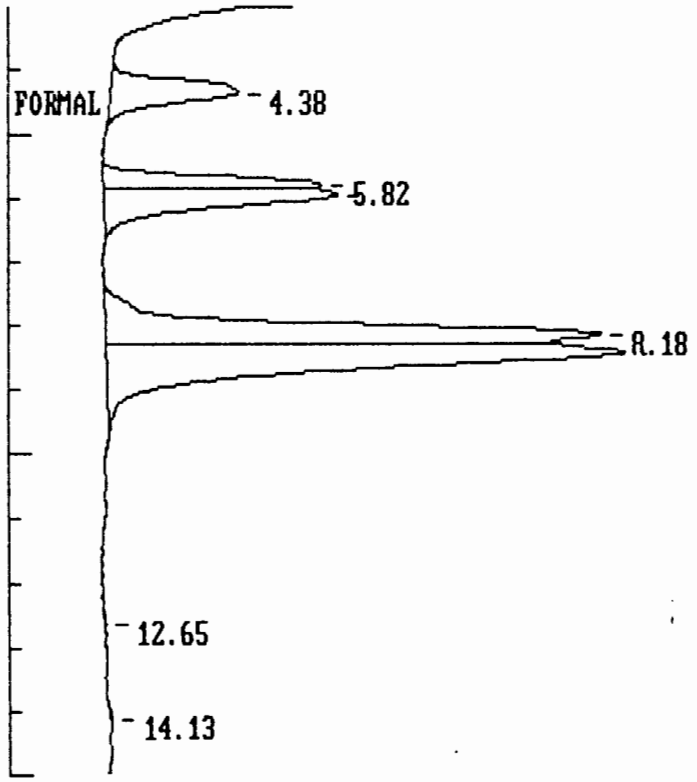
EXTERNAL STANDARD TABLE

```
******************** 08-03-1989 16:11:52 Version 4.1 ********************
* Sample Name: 8907206-02A/FGL-JM  @ 1X          Data File: F:AA03H13      *
* Date: 08-03-1989 15:56:40 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  13   Operator EA  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL       *
*              Solvent Description: ACN/H2O/                               *
* Conditions: ROOM TEMP                                                    *
*             Detector 0: WATERS 484          Detector 1:                  *
* Misc. Information: WATERS484UV @360nm                                    *
*****************************************************************************
Starting Delay:    3.00                    Ending retention time:    15.00
Area reject:        0                      One sample per    1.000 sec.
Amount injected:        1.00               Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.383	FORMALDEHYDE -DNP	1822.7743	99.6248%	137417	5962	23.0	1	0	0	3.0573E-01
2	5.817		1.0139	0.0554%	126377	10139	12.5	2			1.0000E-04
3	5.983		1.0876	0.0594%	217895	10876	20.0	2			1.0000E-04
4	8.183		2.3189	0.1267%	451273	23189	19.5	2			1.0000E-04
5	8.467		2.4318	0.1329%	639008	24318	26.3	2			1.0000E-04
6	12.650		0.0059	0.0003%	579	59	9.8	1			1.0000E-04
7	14.133		0.0067	0.0004%	687	67	10.3	1			1.0000E-04

TOTAL AMOUNT = 1829.6392

Data File = F:AA03H13.PTS Printed on 08-03-1989 at 16:11:58
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4999 uv High Value: 29539 uv Scale factor: 0.5



[illegible] processed: 08-03-1989 16:55:17, segment 11, cycle 15
RAW DATA SAVED IN FILE F:AA03H15.PTS

EXTERNAL STANDARD TABLE

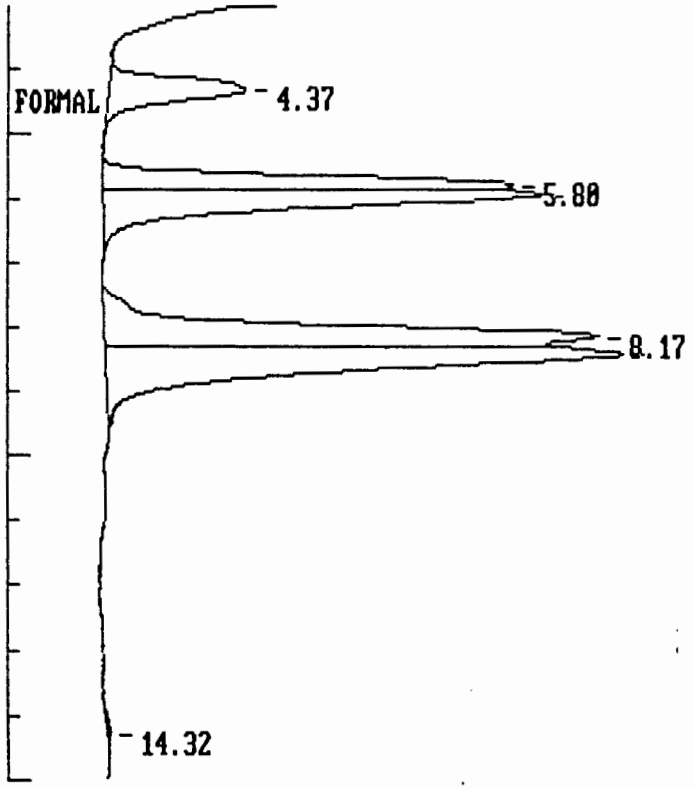
****
* Sample Name: 8907206-03A /FGL-JM @ 1X Data File: F:AA03H15 *
* Date: 08-03-1989 16:40:10 Method: F:FORMALDE 08-03-1989 15:07:36 # 46 *
* Interface: 1 Cycle#: 15 Operator EA Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: WATERS600E/700WISP Column Type: C18./SUPELCOSIL *
* Solvent Description: ACN/H2O/ *
* Conditions: ROOM TEMP *
* Detector 0: WATERS 484 Detector 1: *
* Misc. Information: WATERS484UV @360nm *
****

Starting Delay: 3.00 Ending retention time: 15.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.367	FORMALDEHYDE -DNP	1965.7208	99.5588%	152936	6430	23.8	1	0	-.3802	3.0573E-01
2	5.800		1.9135	0.0969%	233559	19135	12.2	2			1.0000E-04
3	5.967		2.0511	0.1039%	424959	20511	20.7	2			1.0000E-04
4	8.167		2.3119	0.1171%	451939	23119	19.5	2			1.0000E-04
5	8.450		2.4236	0.1227%	638492	24236	26.3	2			1.0000E-04
6	14.317		0.0116	0.0006%	3362	116	29.0	1			1.0000E-04

TOTAL AMOUNT = 1974.4324

Data File = F:AA03H15.PTS Printed on 08-03-1989 at 16:55:28
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4962 uv High Value: 29518 uv Scale factor: 0.5



8907206-04 Processed: 08-03-1989 17:17:02, segment 12, cycle 16
RAW DATA SAVED IN FILE F:AA03H16.PTS

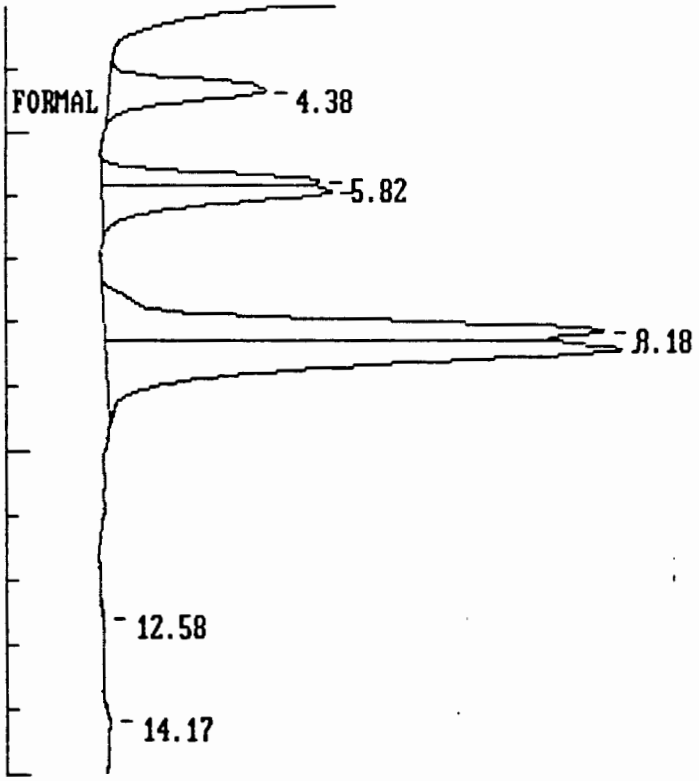
EXTERNAL STANDARD TABLE

```
********************* 08-03-1989 17:17:07 Version 4.1 *********************
* Sample Name: 8907206-04A /FGL-JM @ 1X          Data File: F:AA03H16      *
* Date: 08-03-1989 17:01:56 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  16   Operator EA  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL       *
*              Solvent Description: ACN/H2O/                               *
* Conditions: ROOM TEMP                                                    *
*             Detector 0: WATERS 484          Detector 1:                  *
* Misc. Information: WATERS484UV @360nm                                    *
*****************************************************************************
Starting Delay:    3.00                        Ending retention time:    15.00
Area reject:          0                        One sample per    1.000 sec.
Amount injected:        1.00                   Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.383	FORMALDEHYDE -DNP	1674.6892	99.6948%	129777	5478	23.7	1	0	0	3.0573E-01
2	5.817		0.7632	0.0454%	96470	7632	12.6	2			1.0000E-04
3	5.983		0.8032	0.0478%	163478	8032	20.4	2			1.0000E-04
4	8.183		1.7459	0.1039%	353836	17459	20.3	2			1.0000E-04
5	8.467		1.8023	0.1073%	471872	18023	26.2	2			1.0000E-04
6	12.583		0.0061	0.0004%	837	61	13.7	1			1.0000E-04
7	14.167		0.0063	0.0004%	609	63	9.6	1			1.0000E-04

TOTAL AMOUNT = 1679.8163

Data File = F:AA03H16.PTS Printed on 08-03-1989 at 17:17:13
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 5082 uv High Value: 23360 uv Scale factor: 0.5



8907206-05 Processed: 08-03-1989 17:38:47, segment 13, cycle 17
RAW DATA SAVED IN FILE F:AA03H17.PTS

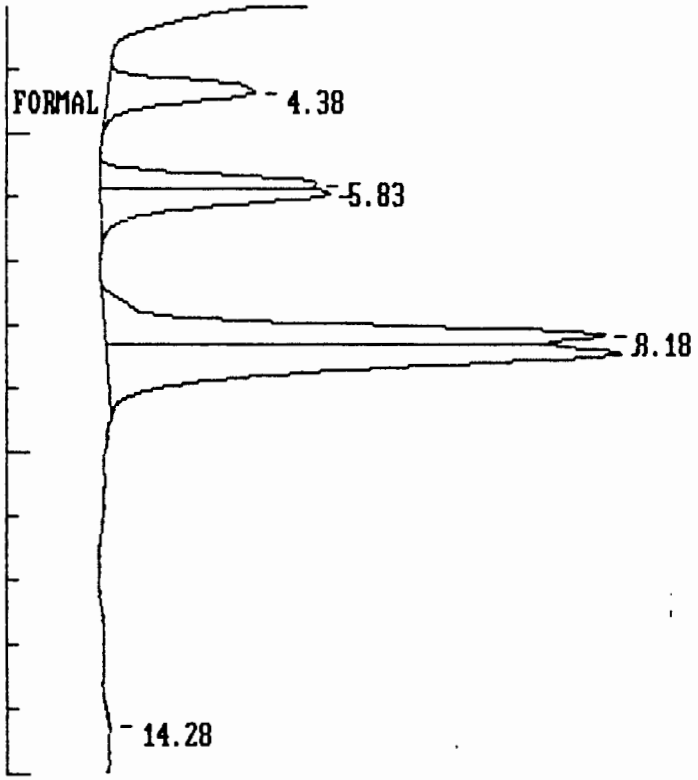
EXTERNAL STANDARD TABLE

```
******************** 08-03-1989 17:38:52 Version 4.1 ********************
* Sample Name: 8907206-05A /FGL-JM @ 1X          Data File: F:AA03H17     *
* Date: 08-03-1989 17:23:40 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  17   Operator EA  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL      *
*              Solvent Description: ACN/H2O/                              *
* Conditions: ROOM TEMP                                                   *
*             Detector 0: WATERS 484          Detector 1:                 *
* Misc. Information: WATERS484UV @360nm                                   *
*************************************************************************
Starting Delay:    3.00                        Ending retention time:    15.00
Area reject:          0                        One sample per    1.000 sec.
Amount injected:        1.00                   Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.383	FORMALDEHYDE -DNP	1843.6738	99.6773%	143645	6030	23.8	1	0	0	3.0573E-01
2	5.833		0.8819	0.0477%	115600	8819	13.1	2			1.0000E-04
3	6.000		0.9356	0.0506%	189223	9356	20.2	2			1.0000E-04
4	8.183		2.0424	0.1104%	399862	20424	19.6	2			1.0000E-04
5	8.483		2.1034	0.1137%	561692	21034	26.7	2			1.0000E-04
6	14.283		0.0063	0.0003%	1312	63	20.9	1			1.0000E-04

TOTAL AMOUNT = 1849.6433

Data File = F:AA03H17.PTS Printed on 08-03-1989 at 17:38:58
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4994 uv High Value: 26360 uv Scale factor: 0.5



8907206-06 Processed: 08-03-1989 18:22:17, segment 15, cycle 19
RAW DATA SAVED IN FILE F:AA03H19.PTS

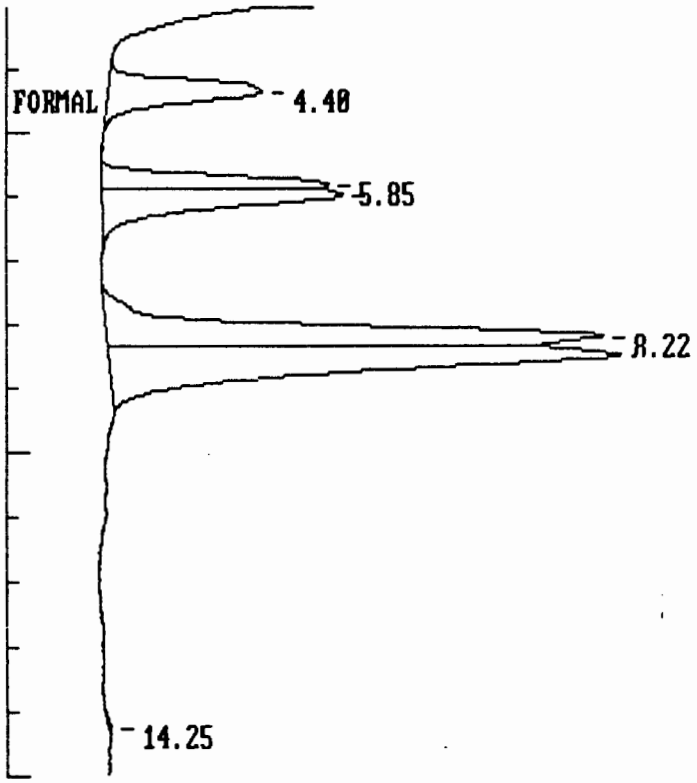
EXTERNAL STANDARD TABLE

```
******************** 08-03-1989 18:22:22 Version 4.1 ********************
* Sample Name: 8907206-06A/FGL-JM @ 1X          Data File: F:AA03H19      *
* Date: 08-03-1989 18:07:10 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  19   Operator EA  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL      *
*              Solvent Description: ACN/H2O/                              *
* Conditions: ROOM TEMP                                                   *
*             Detector 0: WATERS 484          Detector 1:                 *
* Misc. Information: WATERS484UV @360nm                                   *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:    15.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.400	FORMALDEHYDE -DNP	1835.1095	99.6868%	144958	6002	24.1	1	0	.3802	3.0573E-01
2	5.850		0.8807	0.0478%	113184	8807	12.9	2			1.0000E-04
3	6.017		0.9356	0.0508%	192842	9356	20.6	2			1.0000E-04
4	8.217		1.9390	0.1053%	392662	19390	20.3	2			1.0000E-04
5	8.517		2.0013	0.1087%	521101	20013	26.0	2			1.0000E-04
6	14.250		0.0087	0.0005%	980	87	11.2	1			1.0000E-04

TOTAL AMOUNT = 1840.8748

Data File = F:AA03H19.PTS Printed on 08-03-1989 at 18:22:28
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4937 uv High Value: 25361 uv Scale factor: 0.5



METH.BLANK Processed: 08-03-1989 15:28:16, segment 7, cycle 11
RAW DATA SAVED IN FILE F:AA03H11.PTS

EXTERNAL STANDARD TABLE

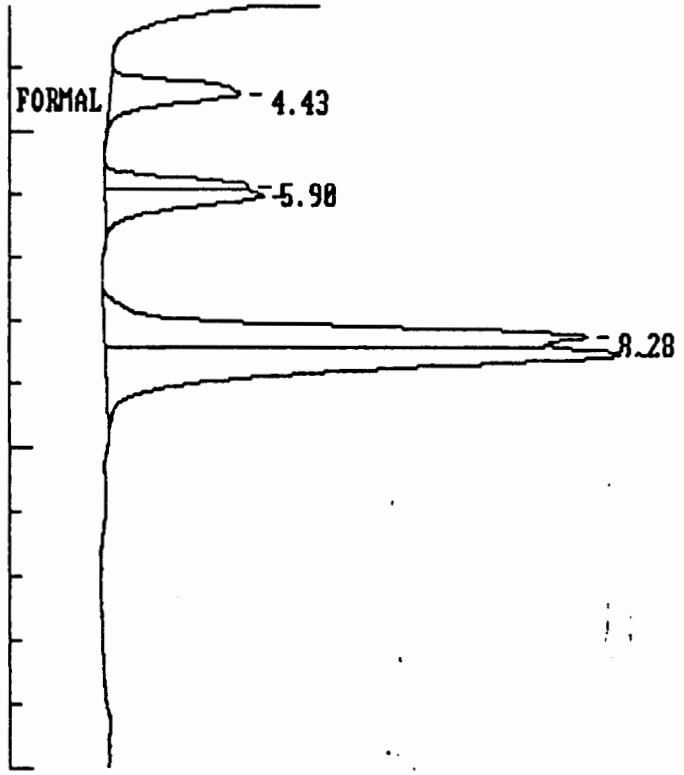
********** 08-03-1989 15:28:22 Version 4.1 **********
* Sample Name: METH.BLANK(100ML MILLI .0 H20) Data File: F:AA03H11 *
* Date: 08-03-1989 15:13:12 Method: F:FORMALDE 08-03-1989 15:07:36 # 46 *
* Interface: 1 Cycle#: 11 Operator EA Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: WATERS600E/700WISP Column Type: C18./SUPELCOSIL *
* Solvent Description: ACN/H20/ *
* Conditions: ROOM TEMP *
* Detector 0: WATERS 484 Detector 1: *
* Misc. Information: WATERS484UV @360nm *
****

Starting Delay: 3.00 Ending retention time: 15.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.433	FORMALDEHYDE -DNP	1881.9260	99.6726%	143344	6156	23.3	1	0	1.140	3.0573E-01
2	5.900		0.6797	0.0360%	87314	6797	12.8	2			1.0000E-04
3	6.067		0.7495	0.0397%	148110	7495	19.8	2			1.0000E-04
4	8.283		2.2884	0.1212%	446810	22884	19.5	2			1.0000E-04
5	8.567		2.4646	0.1305%	646825	24646	26.2	2			1.0000E-04

TOTAL AMOUNT = 1888.1082

Data File = F:AA03H11.PTS Printed on 08-03-1989 at 15:28:27
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4991 uv High Value: 29862 uv Scale factor: 0.5



MTH.BLANK Processed: 08-04-1989 18:44:47, segment 3, cycle 24
End of sequence file reached at cycle 24
RAW DATA SAVED IN FILE F:AA03H24.PTS

EXTERNAL STANDARD TABLE

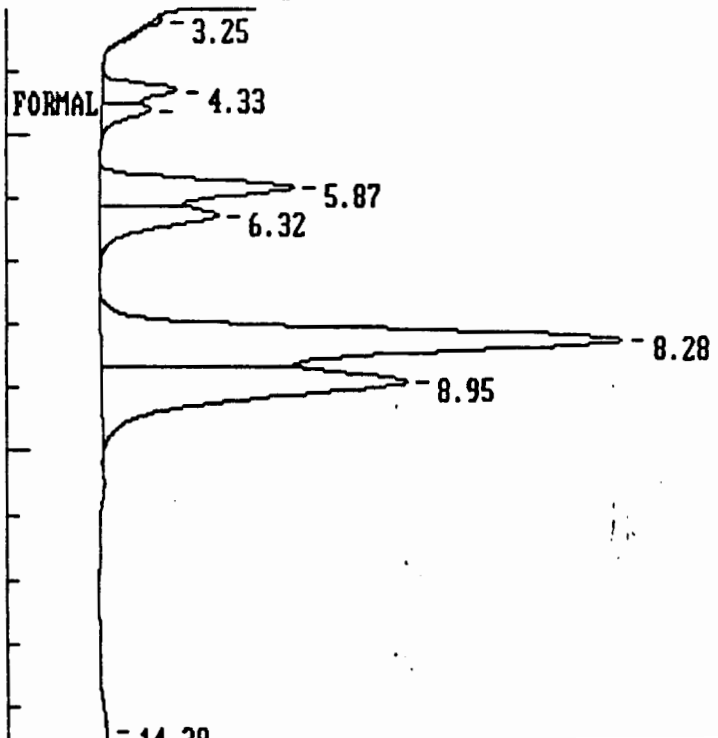
********** 08-04-1989 18:44:53 Version 4.1 **********
* Sample Name: MTH.BLANK (100mlMILLI.Q H2O) Data File: F:AA03H24 *
* Date: 08-04-1989 18:29:46 Method: F:FORMALDE 08-03-1989 15:07:36 # 46 *
* Interface: 1 Cycle#: 24 Operator EA Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: WATERS600E/700WISP Column Type: C18./SUPELCOSIL *
* Solvent Description: ACN/H2O/ *
* Conditions: ROOM TEMP *
* Detector 0: WATERS 484 Detector 1: *
* Misc. Information: WATERS484UV @360nm *
****

Starting Delay: 3.00 Ending retention time: 15.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.250		0.0733	0.0040%	10883	733	14.8	1			1.0000E-04
2	4.333	FORMALDEHYDE -DNP	1843.7907	99.4743%	93978	6031	15.6	2	0	-1.140	3.0573E-01
3	4.633		0.3913	0.0211%	65417	3913	16.7	2			1.0000E-04
4	5.867		1.5694	0.0847%	314964	15694	20.1	2			1.0000E-04
5	6.317		0.9586	0.0517%	218331	9586	22.8	2			1.0000E-04
6	8.283		4.2512	0.2294%	1189837	42512	28.0	2			1.0000E-04
7	8.950		2.4926	0.1345%	802075	24926	32.2	2			1.0000E-04
8	14.383		0.0082	0.0004%	1236	82	15.1	1			1.0000E-04

TOTAL AMOUNT = 1853.5354

Data File = F:AA03H24.PTS Printed on 08-04-1989 at 18:44:59
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4985 uv High Value: 47656 uv Scale factor: 0.5



METHOD SPI Processed: 08-04-1989 20:49:04, segment 1, cycle 27
RAW DATA SAVED IN FILE F:AA03H27.PTS

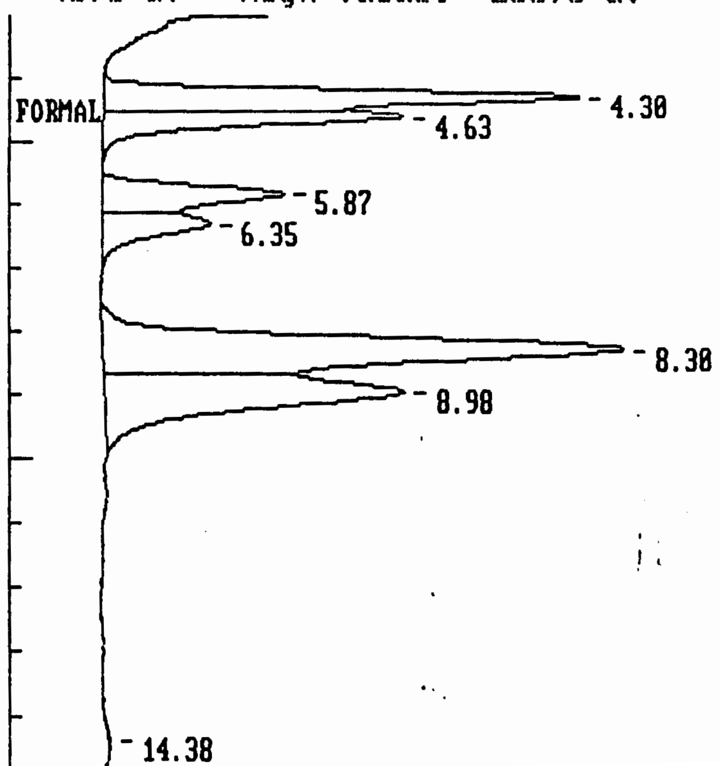
***** EXTERNAL STANDARD TABLE *****
******************** 08-04-1989 20:49:10 Version 4.1 ***********************
* Sample Name: METHOD SPIKE @ 1X   Data File: F:AA03H27 *
* Date: 08-04-1989 20:34:02 Method: F:FORMALDE 08-03-1989 15:07:36 # 46 *
* Interface: 1 Cycle#: 27 Operator EA Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: WATERS600E/700WISP Column Type: C18./SUPELCOSIL *
* Solvent Description: ACN/H2O/ *
* Conditions: ROOM TEMP *
* Detector 0: WATERS 484 Detector 1: *
* Misc. Information: WATERS484UV @360nm *
****

Starting Delay: 3.00 | Ending retention time: 15.00
Area reject: 0 | One sample per 1.000 sec.
Amount injected: 1.00 | Dilution factor: 1.00
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.300	FORMALDEHYDE -DNP	5216.9385	99.9028%	266895	17064	15.6	2	0	-1.901	3.0573E-01
2	4.633		1.0760	0.0206%	191208	10760	17.8	2			1.0000E-04
3	5.867		0.6532	0.0125%	134647	6532	20.6	2			1.0000E-04
4	6.350		0.3901	0.0075%	92117	3901	23.6	2			1.0000E-04
5	8.300		1.8728	0.0359%	535815	18728	28.6	2			1.0000E-04
6	8.983		1.0787	0.0207%	353654	10787	32.8	2			1.0000E-04
7	14.383		0.0057	0.0001%	606	57	10.6	1			1.0000E-04

TOTAL AMOUNT = 5222.0151

Data File = F:AA03H27.PTS Printed on 08-04-1989 at 20:49:16
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4896 uv High Value: 23696 uv Scale factor: 0.5



METHOD SPI Processed: 08-04-1989 21:09:07, segment 2, cycle 28
RAW DATA SAVED IN FILE F:AA03H28.PTS

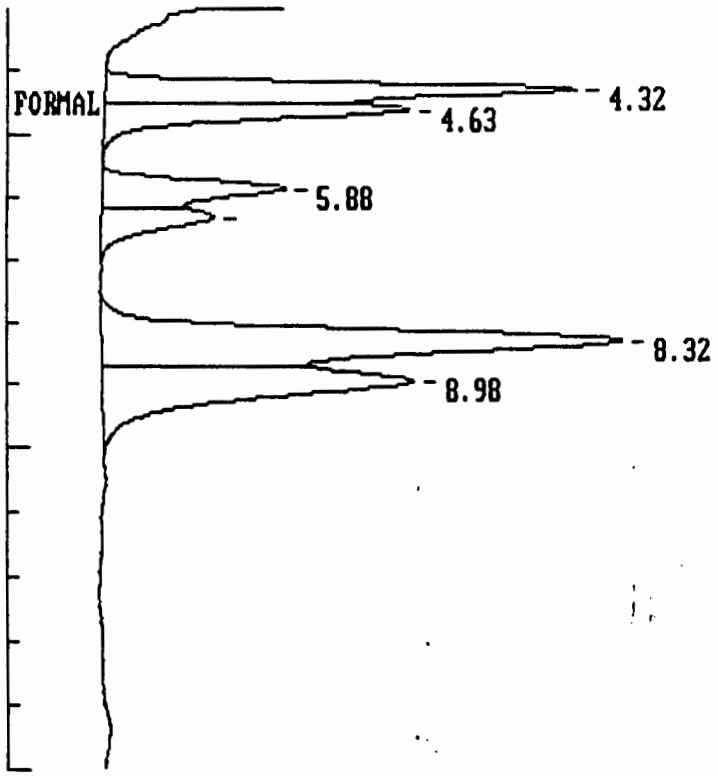
EXTERNAL STANDARD TABLE

```
******************** 08-04-1989 21:09:13 Version 4.1 ********************
* Sample Name: METHOD SPIKE DUP. @ 1X              Data File: F:AA03H28      *
* Date: 08-04-1989 20:54:04 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  28   Operator EA  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL        *
*              Solvent Description: ACN/H2O/                                *
* Conditions: ROOM TEMP                                                     *
*            Detector 0: WATERS 484          Detector 1:                    *
* Misc. Information: WATERS484UV @360nm                                     *
*****************************************************************************
Starting Delay:    3.00                        Ending retention time:    15.00
Area reject:         0                         One sample per   1.000 sec.
Amount injected:        1.00                   Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.317	FORMALDEHYDE -DNP	5148.4097	99.9013%	265704	16840	15.8	2	0	-1.520	3.0573E-01
2	4.633		1.0824	0.0210%	192932	10824	17.8	2			1.0000E-04
3	5.883		0.6480	0.0126%	134017	6480	20.7	2			1.0000E-04
4	6.333		0.3979	0.0077%	93426	3979	23.5	2			1.0000E-04
5	8.317		1.8536	0.0360%	531497	18536	28.7	2			1.0000E-04
6	8.983		1.1043	0.0214%	365819	11043	33.1	2			1.0000E-04

TOTAL AMOUNT = 5153.4961

Data File = F:AA03H28.PTS Printed on 08-04-1989 at 21:09:18
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4895 uv High Value: 23539 uv Scale factor: 0.5



8907206-1A Processed: 08-04-1989 23:43:07, segment 5, cycle 31
RAW DATA SAVED IN FILE F:AA03H31.PTS

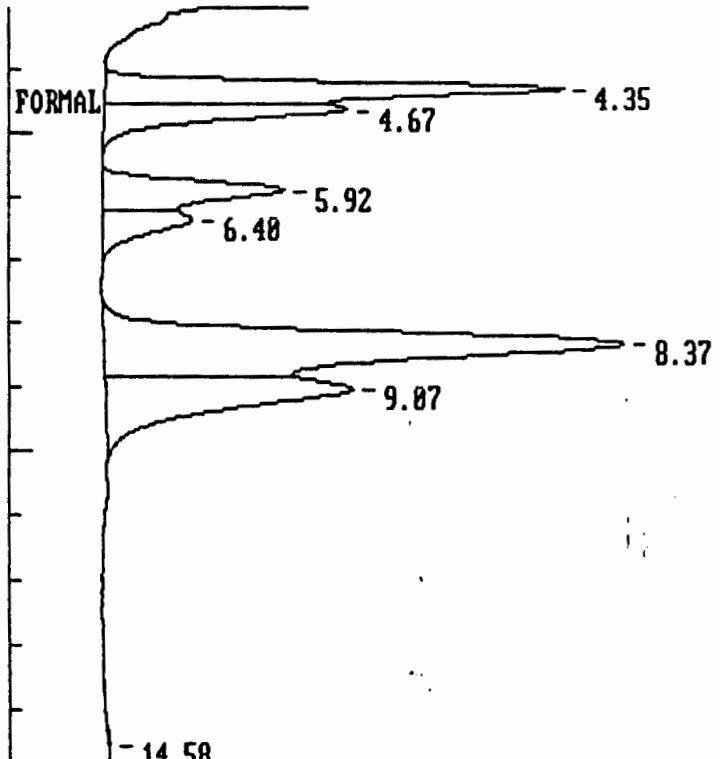
EXTERNAL STANDARD TABLE

```
******************** 08-04-1989 23:43:13 Version 4.1 ********************
* Sample Name: 8907206-1A MATRIX SPIKE @ 1X        Data File: F:AA03H31      *
* Date: 08-04-1989 23:28:02 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  31   Operator EA  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL        *
*              Solvent Description: ACN/H2O/                                *
* Conditions: ROOM TEMP                                                     *
*             Detector 0: WATERS 484          Detector 1:                   *
* Misc. Information: WATERS484UV @360nm                                     *
*****************************************************************************
Starting Delay:   3.00                      Ending retention time:   15.00
Area reject:        0                       One sample per   1.000 sec.
Amount injected:       1.00                 Dilution factor:        1.00
Sample Weight:         1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.350	FORMALDEHYDE -DNP	4901.8647	99.9086%	271408	16033	16.9	2	0	-.7604	3.0573E-01
2	4.667		0.8488	0.0173%	153516	8488	18.1	2			1.0000E-04
3	5.917		0.6358	0.0130%	140019	6358	22.0	2			1.0000E-04
4	6.400		0.3148	0.0064%	76583	3148	24.3	2			1.0000E-04
5	8.367		1.8153	0.0370%	553132	18153	30.5	2			1.0000E-04
6	9.067		0.8645	0.0176%	292584	8645	33.8	2			1.0000E-04
7	14.583		0.0067	0.0001%	1092	67	16.2	1			1.0000E-04

TOTAL AMOUNT = 4906.3506

Data File = F:AA03H31.PTS Printed on 08-04-1989 at 23:43:19
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4771 uv High Value: 23023 uv Scale factor: 0.5



8907206-1A Processed: 08-05-1989 00:09:21, segment 6, cycle 32
RAW DATA SAVED IN FILE F:AA03H32.PTS

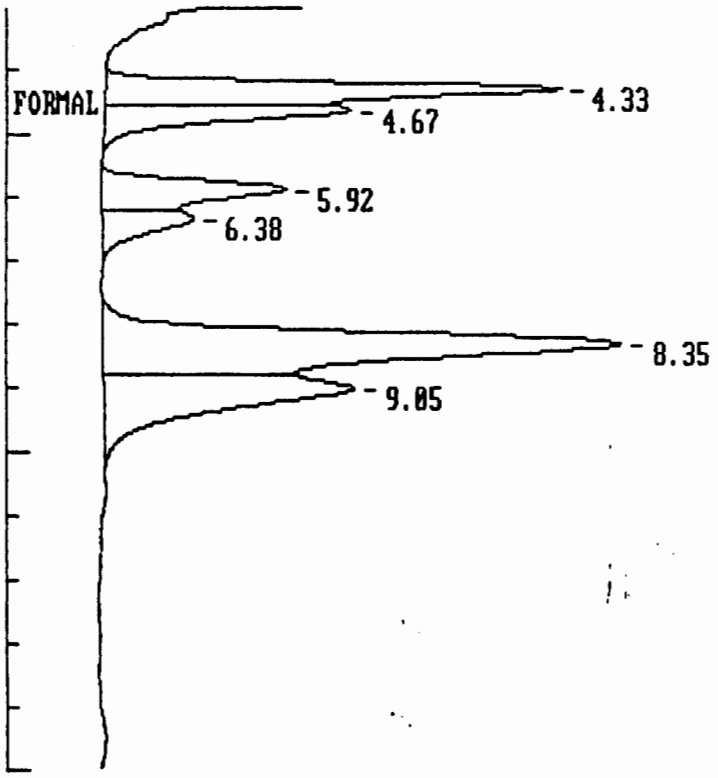
EXTERNAL STANDARD TABLE

```
******************** 08-05-1989 00:09:27 Version 4.1 ********************
* Sample Name: 8907206-1A MATRIX SPIKE DUP @ 1X  Data File: F:AA03H32     *
* Date: 08-04-1989 23:54:16 Method: F:FORMALDE 08-03-1989 15:07:36  #  46 *
* Interface: 1   Cycle#:  32   Operator EA  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: WATERS600E/700WISP   Column Type: C18./SUPELCOSIL      *
*              Solvent Description: ACN/H2O/                              *
* Conditions: ROOM TEMP                                                   *
*             Detector 0: WATERS 484          Detector 1:                 *
* Misc. Information: WATERS484UV @360nm                                   *
*************************************************************************
Starting Delay:    3.00                      Ending retention time:    15.00
Area reject:         0                       One sample per    1.000 sec.
Amount injected:        1.00                 Dilution factor:        1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ug/l	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.333	FORMALDEHYDE -DNP	4966.0737	99.9080%	278719	16244	17.2	2	0	-1.140	3.0573E-01
2	4.667		0.8729	0.0176%	155814	8729	17.8	2			1.0000E-04
3	5.917		0.6501	0.0131%	145063	6501	22.3	2			1.0000E-04
4	6.383		0.3235	0.0065%	77597	3235	24.0	2			1.0000E-04
5	8.350		1.8427	0.0371%	569593	18427	30.9	2			1.0000E-04
6	9.050		0.8854	0.0178%	307137	8854	34.7	2			1.0000E-04

TOTAL AMOUNT = 4970.6484

Data File = F:AA03H32.PTS Printed on 08-05-1989 at 00:09:33
Start time: 3.00 min. Stop time: 15.00 min. Offset: 0 mv.
Low Value: 4813 uv High Value: 23415 uv Scale factor: 0.5



ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-5
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: Field Blank #5 7/27/89 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|-|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| Y Y M M D D T T T T Water Type: |-| G/S User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed			8 9 0 9 0 8 (Y Y M M D D)	
	Analyzing Agency Code (Lab)				
	Intensive Survey Number				
µg/L	Acenapthene		34205	ND	10.00
µg/L	Acenaphthylene		34200	ND	10.00
µg/L	Anthracene		34220	ND	10.00
µg/L	Aldrin		39330	ND	1.00
µg/L	Benzo (a) anthracene		34526	ND	20.00
µg/L	Benzo (b) fluoranthene		34230	ND	20.00
µg/L	Benzo (k) fluoranthene		34242	ND	20.00
µg/L	Benzo (a) pyrene		34247	ND	20.00
µg/L	Benzo (ghi) perylene		34521	ND	20.00
µg/L	Benzyl butyl phthalate		34292	ND	20.00
µg/L	β - BHC		39338	ND	1.00
µg/L	δ - BHC		34259	ND	1.00
µg/L	bis (2-chloroethyl) ether		34273	ND	10.00
µg/L	bis (2-chloroethoxy) methane		34278	ND	10.00
µg/L	bis (2-ethylhexyl) phthalate		39100	ND	10.00
µg/L	bis (2-chloroisopropyl) ether		34283	ND	10.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-5 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	10.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4´-DDD		39310	ND	2.00
µg/L	4,4´-DDE		39320	ND	2.00
µg/L	4,4´-DDT		39300	ND	2.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	2.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	2.00
µg/L	Endrin Aldehyde		34366	ND	1.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	1.00
µg/L	Heptachlor epoxide		39420	ND	1.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	1.00
µg/L	PCB-1221		39488	ND	1.00
µg/L	PCB-1232		39492	ND	1.00
µg/L	PCB-1242		39496	ND	1.00
µg/L	PCB-1248		39500	ND	1.00
µg/L	PCB-1254		39504	ND	1.00
µg/L	PCB-1260		39508	ND	1.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-5 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	.	0	0
µg/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS							DETECTION LIMIT				
µg/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	τ - BHC	_	39340	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	.	0	0
µg/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	.	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

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ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/15/89 Lab Sample ID No. 5848-6
Laboratory Name: B C Laboratories Signature Lab Director:
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: Travel Blank to cover 1 thru 5 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: G/S |-| User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT					
	Date Analysis Completed			8 Y	9 Y	0 M	9 M	0 D	8 D						
	Analyzing Agency Code (Lab)														
	Intensive Survey Number														
µg/L	Acenapthene		34205			N	D				1	0	.	0	0
µg/L	Acenaphthylene		34200			N	D				1	0	.	0	0
µg/L	Anthracene		34220			N	D				1	0	.	0	0
µg/L	Aldrin		39330			N	D					1	.	0	0
µg/L	Benzo (a) anthracene		34526			N	D				2	0	.	0	0
µg/L	Benzo (b) fluoranthene		34230			N	D				2	0	.	0	0
µg/L	Benzo (k) fluoranthene		34242			N	D				2	0	.	0	0
µg/L	Benzo (a) pyrene		34247			N	D				2	0	.	0	0
µg/L	Benzo (ghi) perylene		34521			N	D				2	0	.	0	0
µg/L	Benzyl butyl phthalate		34292			N	D				2	0	.	0	0
µg/L	β - BHC		39338			N	D					1	.	0	0
µg/L	δ - BHC		34259			N	D					1	.	0	0
µg/L	bis (2-chloroethyl) ether		34273			N	D				1	0	.	0	0
µg/L	bis (2-chloroethoxy) methane		34278			N	D				1	0	.	0	0
µg/L	bis (2-ethylhexyl) phthalate		39100			N	D				1	0	.	0	0
µg/L	bis (2-chloroisopropyl) ether		34283			N	D				1	0	.	0	0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-6 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	2.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4'-DDD		39310	ND	2.00
µg/L	4,4'-DDE		39320	ND	2.00
µg/L	4,4'-DDT		39300	ND	2.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	2.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	2.00
µg/L	Endrin Aldehyde		34366	ND	1.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	1.00
µg/L	Heptachlor epoxide		39420	ND	1.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	1.00
µg/L	PCB-1221		39488	ND	1.00
µg/L	PCB-1232		39492	ND	1.00
µg/L	PCB-1242		39496	ND	1.00
µg/L	PCB-1248		39500	ND	1.00
µg/L	PCB-1254		39504	ND	1.00
µg/L	PCB-1260		39508	ND	1.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-6 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	.	0	0
µg/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS							DETECTION LIMIT				
µg/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	τ - BHC	_	39340	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	.	0	0
µg/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	.	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

Date Rec'd: 7-28-89

BC CHAIN OF CUSTODY

NO. L- 2812

Client:	Sampler:	Sample Type:
Name: FGL Address: Attn:	Name: Address: -Same-	Water X Soil ____ Sludge ____ Oil ____ Other: (specify) ____

Analysis Requested:

Lab #	Description: 4th Quarter Monitoring Wells Permite Div. of Whittaker	Other Tests	EPA 502.1/8010	EPA 503.1/8020	EPA 502.2/8010/8020	EPA 504 EDB/DBCP	EPA 524.2/8240	EPA 625/8270	PCB	BTX/TPH Gas	BTX/TPH Diesel	EPA 608/8080
48-1	MW1-P-4 7-27-89 @ 7:50							X				
-2	MW2-P-4 7-26-89 @ 2:50							X				
-3	MW3-P-4 7-26-89 @ 3:55							X				
-4	MW4-P-4 7-27-89 @ 9:25							X				
-5	Field blank #5 7-27-89							X				
486	also: travel blank to							X				
	cover 1 thru 5											

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Comments:
Chris Barrett	7-28-89	9:15	[illegible]	7-28-89	10:25	*Per FGL's client, please
[illegible]	7-28-89	10:36	Yosi [illegible]	7/28/89	10:45	provide QA/QC info., GC
						readings, dups & spikes.
						also, don't staple or
						fold reports.
						10-12 days

White: Return to Customer with Report
Yellow: BC Lab Copy

BC Laboratories

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FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CONFIRMATION OF RECEIPT

Client Name: Bermite Client Lab Number: 19709

Laboratory Name: BC LABS Chris Harrett

Date Received: 7-28-89 Person to Contact: _____

Expected date of completion: _____

If sample is RUSH, can you accommodate our date needed? YES: ____ NO: ____

If NO, please contact this office immediately.

PLEASE RETURN THIS CONFIRMATION SHEET TO OUR OFFICE AS SOON AS POSSIBLE

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272

BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205

#5848-1 thru-6

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CHAIN OF CUSTODY

DATE: 7-27-89

CLIENT: Bermite Division of Whittaker

ADDRESS:

PHONE NUMBER:

PROJECT NAME: 4th Quarter Monitoring Wells

PROJECT MANAGER: Chris Thompson

SAMPLERS:

Sample Number	Location Description	Date Sampled	Time Sampled	Number of Containers	Tests Required	Date Needed by
1	MW1/P/4	7/27/89	7:50	3	625	
2	MW2/P/4	7/26/89	2:50	3		
3	MW3/P/4	7/26/89	3:55	3		
4	MW4/P/4	7/27/89	9:25	3		
5	Field Blk. #5	7/27		1		
6	Travel Blank			1		

Relinquished By:	Received By:	Date	Time
Julie McCalister	Chris Garrett	7-28-89	9:00a
Relinquished By:	Received By:	Date	Time
Relinquished By:	Received By:	Date	Time

MAIN OFFICE – LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-2324 – (805) 659-0910

BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 948-8160

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

LABORATORY TESTING SUBMISSION FORM

Client: Permite Our Lab No.: 19709

Person submitting sample: Julie McCalister

Laboratory sample is being submitted to: BC

Date Mailed: 7/27/89 Shipped Via: O/N Mail

Number of samples being submitted: 6 Solid: ____ Liquid: ✓

RUSH YES ✓ NO ____ If ~~yes~~, date needed by: 10-12

Type of analyses to be performed: 625

See Chain of Custody for descriptions

*** LABORATORY - Attached is a confirmation of receipt, please answer questions and PLEASE RETURN TO US AS SOON AS POSSIBLE ***

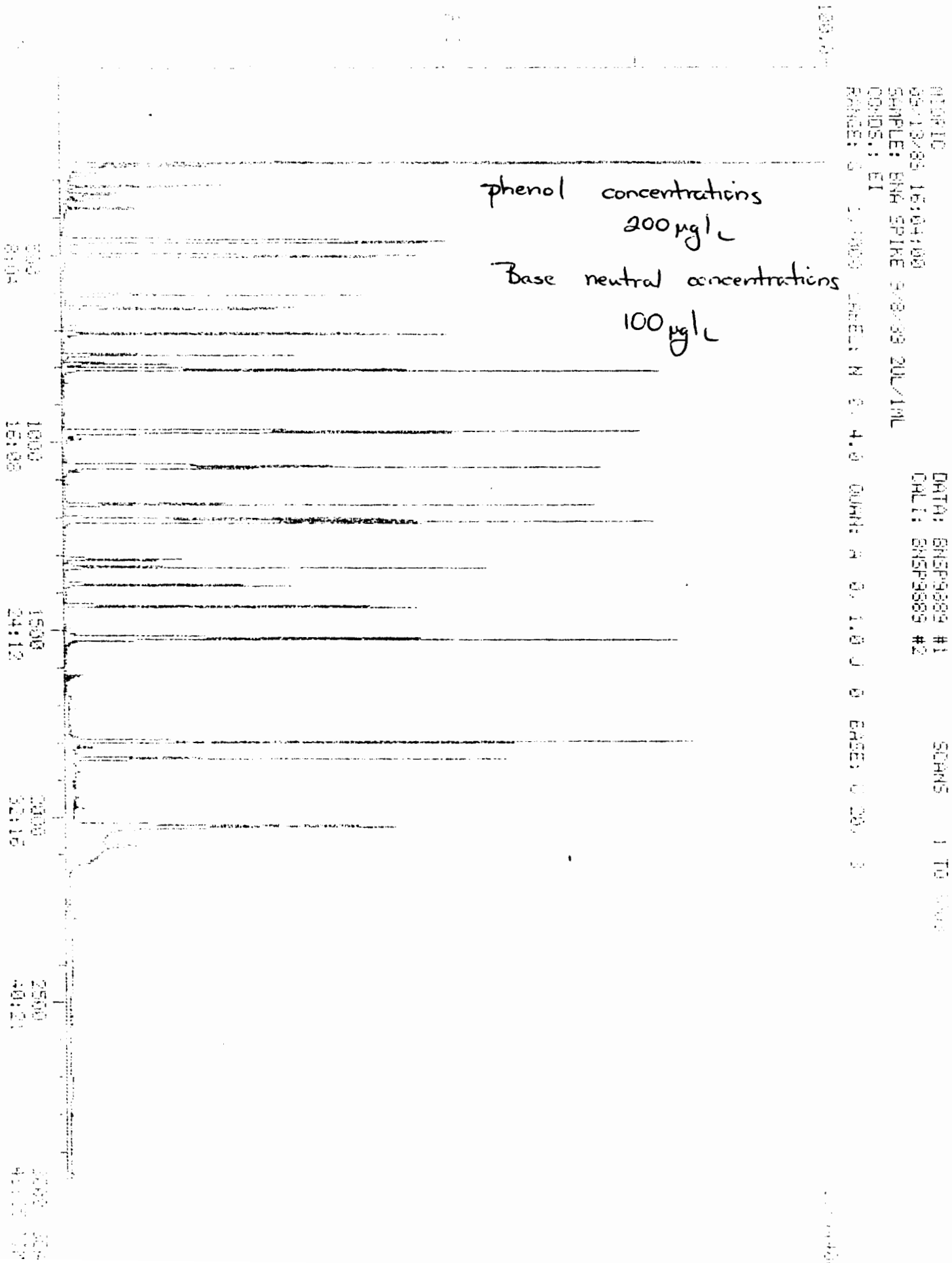
Per our Client please provide QA/QC info., Chromotography readings, dups & spikes. Also please don't fold or staple reports. If you have any questions please call.

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 (805) 659-0910

BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

6100

MATRIX Spike SET # 5848-1



Quantitation Report File: [illegible]

Date: [illegible]
09/13/89 16:04:00
Sample: BNA SPIKE 9/8/89 20U/1M
Conds: EI +
Formula: VBA Instrument: 5100 Weight: 25.000
Submitted by: DC LABS Analyst: SGB Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	D4-DICHLOROBENZENE (IS#1)
2	2-FLUOROPHENOL (BNA SURROGATE #1)
3	D8-NAPHTHELENE(IS#2)
4	PHENOL D5 (BNA SURROGATE #2)
5	NITROBENZENE D5 (BNA SURROGATE #3)
6	D10-ACENAPHTHENE(BNA IS#3)
7	2-FLUOROBIPHENYL (BNA SURROGATE #4)
8	D10-PHENANTHRENE(IS#4)
9	D12-CHRYSENE(IS#5)
10	1,4-DICHLOROBENZENE
11	2,4,6-TRIBROMOPHENOL (BNA SURROGATE #5)
12	D12-PERYLENE(IS#6)
13	PHENOL
14	P-TERPHENYL D14 (BNA SURROGATE #6)
15	ISOPHORONE
16	DIMETHYLPHENOL
17	NAPHTHALENE
18	2-METHYLNAPHTHALENE
19	4-CHLORO-3-METHYLPHENOL
20	2,4,5-TRICHLOROPHENOL
21	2,4-DICHLOROPHENOL
22	ACENAPHTHYLENE
23	ACENAPHTHENE
24	4-CHLOROPHENYLPHENYL ETHER
25	4-BROMOPHENYLPHENYL ETHER
26	PHENANTHRENE
27	PYRENE
28	BENZO(A)ANTHRACENE
29	CHRYSENE
30	2-METHYLPHENOL

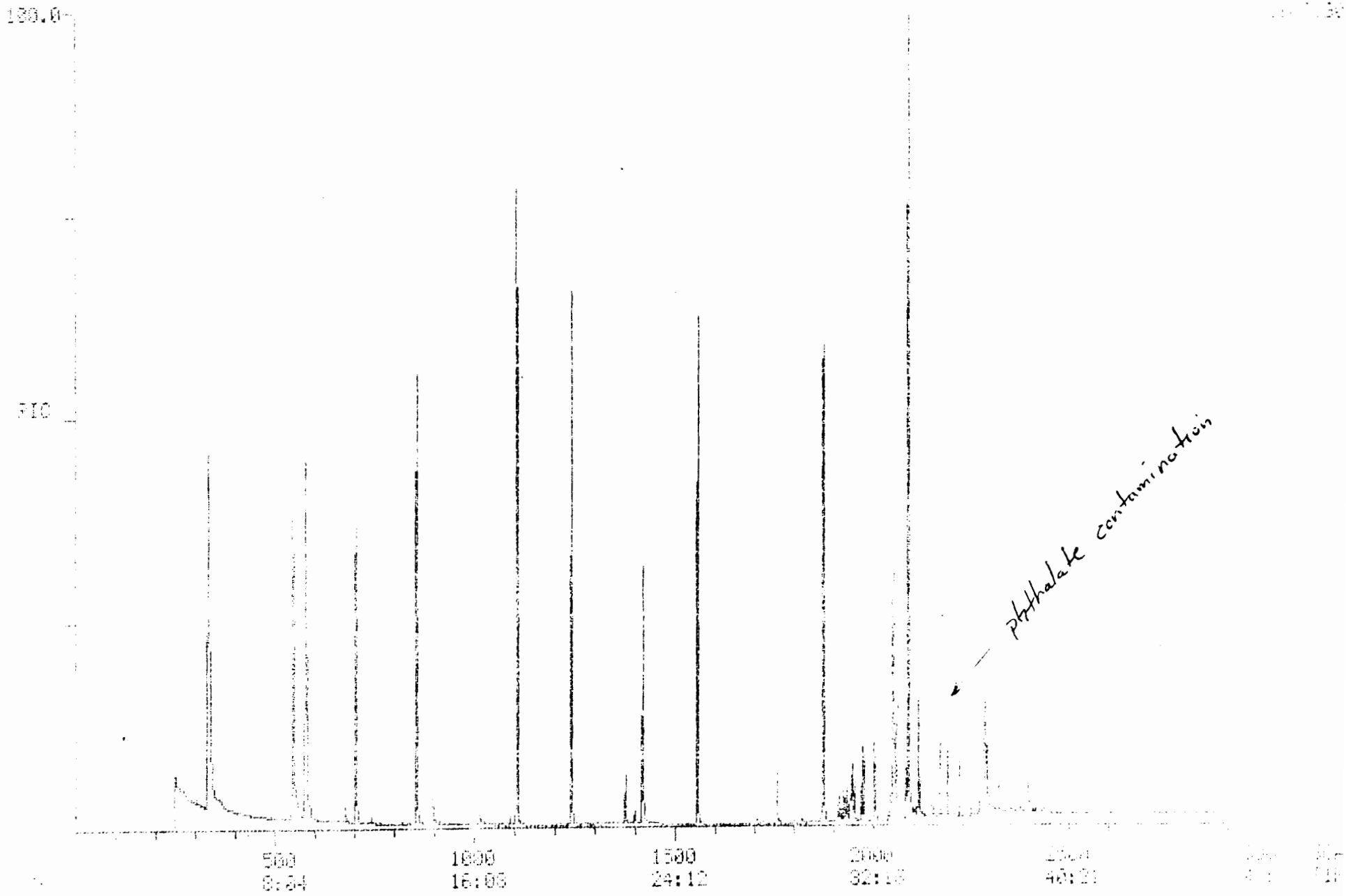
Scan	Time	Area(Hgt)	Amount		Name
501	8:35	4655990	40.000	UG/L	D4-DICHLOROBENZENE (IS#1)
259	4:11	12675100	277.211	UG/L	2-FLUOROPHENOL (BNA SURROGAT
808	13:02	9450470	40.000	UG/L	D8-NAPHTHELENE(IS#2)
464	7:37	13538500	221.934	UG/L	PHENOL D5 (BNA SURROGATE #2)
643	10:27	5915060	104.041	UG/L	NITROBENZENE D5 (BNA SURROGA
1204	19:25	4063720	40.000	UG/L	D10-ACENAPHTHENE(BNA IS#3)
1071	17:17	10624900	86.934	UG/L	2-FLUOROBIPHENYL (BNA SURROG
1522	24:34	7660920	40.000	UG/L	D10-PHENANTHRENE(IS#4)
2026	32:47	1633080	40.000	UG/L	D12-CHRYSENE(IS#5)
505	8:05	6323700	76.925	UG/L	1,4-DICHLOROBENZENE
1[illegible]	22:[illegible]	[illegible]	[illegible]	UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2877	[illegible]:46	[illegible]	[illegible]	UG/L	D12-PERYLENE(IS#6)
[illegible]	[illegible]	[illegible]	[illegible]	UG/L	PHENOL

Scan	Time	Area(Height)	Amount	Name
1846	29:47	9705880.	292.314 UG/L	P-TERPHENYL D14 (RNA SURROGA
712	11:29	14076800	85.562 UG/L	ISOPHORONE
770	12:26	9387920	202.948 UG/L	DIMETHYLPHENOL
813	13:07	16190400	69.780 UG/L	NAPHTHALENE
981	15:50	383488.	144.247 UG/L	2-METHYLNAPHTHALENE
980	15:49	5554420	146.809 UG/L	4-CHLORO-3-METHYLPHENOL
1064	17:10	3134280.	137.911 UG/L	2,4,5-TRICHLOROPHENOL
1206	19:28	17273300.	203.982 UG/L	2,4-DICHLOROPHENOL
1170	18:53	15030900	78.025 UG/L	ACENAPHTHYLENE
1213	19:34	9754280	81.322 UG/L	ACENAPHTHENE
1306	21:34	4926640	74.141 UG/L	4-CHLOROPHENYLPHENYL ETHER
1439	23:13	3000300.	72.573 UG/L	4-BROMOPHENYLPHENYL ETHER
1527	24:38	15931100.	85.359 UG/L	PHENANTHRENE
1799	29:02	6619130.	94.483 UG/L	PYRENE
2025	32:41	5586940.	141.949 UG/L	BENZO(A)ANTHRACENE
2025	32:41	5025790.	104.970 UG/L	CHRYSENE
608	9:49	10963700	174.735 UG/L	2-METHYLPHENOL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	0.87	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	0.78	0.573	0.90	277.21	200.00	0.544	0.393	1.39
3	13:50	0.94	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	8:50	0.85	0.946	0.98	221.93	200.00	0.582	0.524	1.11
5	11:23	0.91	1.220	1.05	104.04	100.00	0.508	0.488	1.04
6	20:04	0.97	1.000	1.00	40.00	40.00	1.000	1.000	1.00
7	17:54	0.97	0.891	1.00	86.93	100.00	1.046	1.203	0.87
8	25:05	0.98	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	33:07	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	9:11	0.89	0.984	1.02	76.92	50.00	1.087	0.706	1.54
11	22:56	0.97	0.912	1.00	245.87	200.00	0.029	0.024	1.23
12	36:50	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
13	8:51	0.85	0.948	0.99	228.61	50.00	3.346	0.732	4.57
14	30:15	0.98	0.914	1.00	232.31	100.00	2.377	1.023	2.32
15	12:23	0.93	0.895	0.98	85.56	50.00	1.192	0.696	1.71
16	13:14	0.94	0.957	1.00	202.95	50.00	0.795	0.196	4.06
17	13:55	0.94	1.006	1.00	69.78	50.00	1.371	0.982	1.40
18	16:45	0.95	1.211	1.00	144.25	50.00	0.032	0.011	2.88
19	16:28	0.96	0.820	0.99	146.81	50.00	1.094	0.372	2.94
20	17:41	0.97	0.861	1.00	137.91	50.00	0.617	0.224	2.76
21	20:04	0.97	1.402	1.05	203.98	50.00	1.462	0.358	4.08
22	19:34	[illegible]	0.921	[illegible]	78.02	50.00	2.959	1.896	1.56
23	20:11	0.97	1.006	[illegible]	81.32	50.00	1.920	1.181	1.63
24	22:03	0.97	1.105	[illegible]	74.14	50.00	0.970	0.654	1.48
25	23:48	0.98	0.947	1.00	72.87	50.00	0.313	0.215	1.46
26	25:13	0.98	1.003	1.00	85.36	50.00	1.664	0.974	1.71
27	29:33	0.99	0.992	1.00	94.48	50.00	3.243	1.716	1.89
28	33:07	[illegible]	[illegible]	1.00	141.95	50.00	2.732	0.964	2.84
29	35:1[illegible]	[illegible]	[illegible]	[illegible]	104.97	50.00	2.462	1.173	2.10
30	11:26	0.88	0.527	0.91	174.74	50.00	[illegible]	0.266	3.49

5102

MTDRIC DATA: BN58481 #1 SCANS 1 TO 3000
05/08/85 11:02:00 CALI: BN58481 #2
SAMPLE: SAMPLE 5848-1 2UL/1ML (625)
CONDS.: CI
RANGE: 0 1.0000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: 0 20, 3



TCA FINISHED AT FOUND
PINICHLE [illegible] 08:26:25
Quantitation Report File: BN5848I

Data [illegible]
09/08/[illegible] 11:[illegible]:00
Sample: SAMPLE 5848-1 2UL/1ML (625)
Cond: FT
Formula: BNA Instrument: S100 Weight: 2.000
Submitted by: BC LABS Analyst: SGB Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp [illegible] from Library Entry

Scan	Time	Area	Amount		Name
336	5:25	8060280	148.728	UG/L	2-FLUOROPHENOL (BNA SURROGAT
580	9:22	5518580.	40.000	UG/L	D4-DICHLOROBENZENE (IS#1)
548	8:51	6091650.	84.251	UG/L	PHENOL D5 (BNA SURROGATE #2)
858	13:51	9665150.	40.000	UG/L	D8-NAPHTHELENE(IS#2)
1245	20:05	4559560.	40.000	UG/L	D10-ACENAPHTHENE(BNA IS#3)
704	11:24	4588300.	68.090	UG/L	NITROBENZENE D5 (BNA SURROGA
1110	17:55	8659300.	63.146	UG/L	2-FLUOROBIPHENYL (BNA SURROG
1559	25:09	7645300.	40.000	UG/L	D10-PHENANTHRENE(IS#4)
2059	33:08	8732490	40.000	UG/L	D12-CHRYSENE(IS#5)
1422	22:57	914369.	200.971	UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2283	36:58	2184370	40.000	UG/L	D12-PERYLENE(IS#6)
1876	30:16	7195350.	75.353	UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	5:20	1.02	0.573	1.01	148.73	200.00	0.292	0.393	0.74
2	9:20	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
3	8:50	1.00	0.946	1.00	84.25	200.00	0.221	0.524	0.42
4	13:50	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	20:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	11:20	1.00	1.220	1.00	68.09	100.00	0.333	0.488	0.68
7	17:54	1.00	0.691	1.00	63.15	100.00	0.760	1.203	0.63
8	25:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	33:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	22:56	1.00	0.912	1.00	200.97	200.00	0.024	0.024	1.00
11	33:5[illegible]	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
12	30:15	1.00	0.914	1.00	75.35	100.00	0.771	1.023	0.75

PROCEDURE: TCA DIAGNOSTIC REPORT 9/11/89 8:09:51
DATA FILE: BN58481
REFERENCE: T485689
NAME LIST: 58 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: 41

< ---- STANDARDS ----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	0	1	0	8	1	1	0	X1/SB1
1	1	1	0	8	4	1	117	X1/SB2
1	1	1	0	8	2	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
1	1	1	0	9	2	1	353	X3/SB5
1	1	1	0	11	7	1	82	X3/SB6
1	1	1	0	7	5	1	234	X4/SB7
1	1	1	0	7	2	2	139	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	2	1	0	X6/SB11
1	1	1	0	4	4	1	290	X1/SB12
1	1	1	0	2	2	1	0	X3/SB13
1	1	1	0	2	2	1	0	X4/SB14
1	1	1	0	2	2	1	0	X5/SB15
1	1	1	0	8	3	1	12	X4/SB16
1	1	1	0	7	2	1	0	X5/SB17
1	1	1	0	5	2	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 31 FOUND

< COMPOUND		>< ---------- SEARCH ----------					>< SAT	>< ------ CHRO ------- >		
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	IS	1	-566	566	.	.	.	.	.	150	.	.	.
2	EP	1	-455	455	.	.	.	.	.	74	.	.	.
3	EP	2	-724	724	.	.	.	.	.	93	.	.	.
4	EP	3	-542	542	.	.	.	.	.	128	.	.	.
5	EP	4	-565	565	.	.	.	.	.	146	.	.	.
6	EP	5	-565	565	.	.	.	.	.	146	.	.	.
7	EP	6	-544	544	.	.	.	.	.	94	.	.	.
8	EP	7	-593	593	.	.	.	.	.	146	.	.	.
9	EP	8	-660	661	.	.	.	.	.	45	663	.	1
10	EP	9	-679	683	.	.	.	.	.	117	.	.	.
11	EP	10	-687	691	692	1	1	933	.	70	692	.	1
12	EP	11	-754	758	.	.	.	.	.	77	.	.	.
13	EP	12	-761	767	768	1	1	966	.	82	768	.	1
14	EP	13	[illegible]	[illegible]	.	.	.	.	.	139	.	.	.
15	EP	14	-822	830	829	-1	1	973	.	93	829	.	1
16	IS	2	857	858	858	.	1	987	.	136	858	.	1
17	EP	15	-812	813	.	.	.	.	.	107	.	.	.
18	EP	[illegible]	[illegible]	[illegible]	.	.	.	.	.	180	853	.	1
19	EP	[illegible]	[illegible]	[illegible]	.	.	1	997	.	128	862	.	1
20	EP	[illegible]	[illegible]	[illegible]	.	.	.	.	.	225	.	.	.
21	EP	19	-1037	1038	.	.	.	.	.	142	.	.	.
22	EP	20	-1019	1020	.	.	.	.	.	107	.	.	.
23	EP	21	-1093	1093	.	.	.	.	.	237	.	.	.
24	EP	[illegible]	-1096	1097	.	.	.	.	.	196	1097	.	1
25	EP	[illegible]	[illegible]	[illegible]	.	.	.	.	.	148	1097	.	1
26	EP	[illegible]	[illegible]	[illegible]	.	.	.	.	.	142	1101	.	1
27	EP	[illegible]	[illegible]	[illegible]	.	.	.	.	.	142	1146	.	1
28	EP	22	[illegible]	[illegible]	.	.	.	.	.	152	1209	.	1

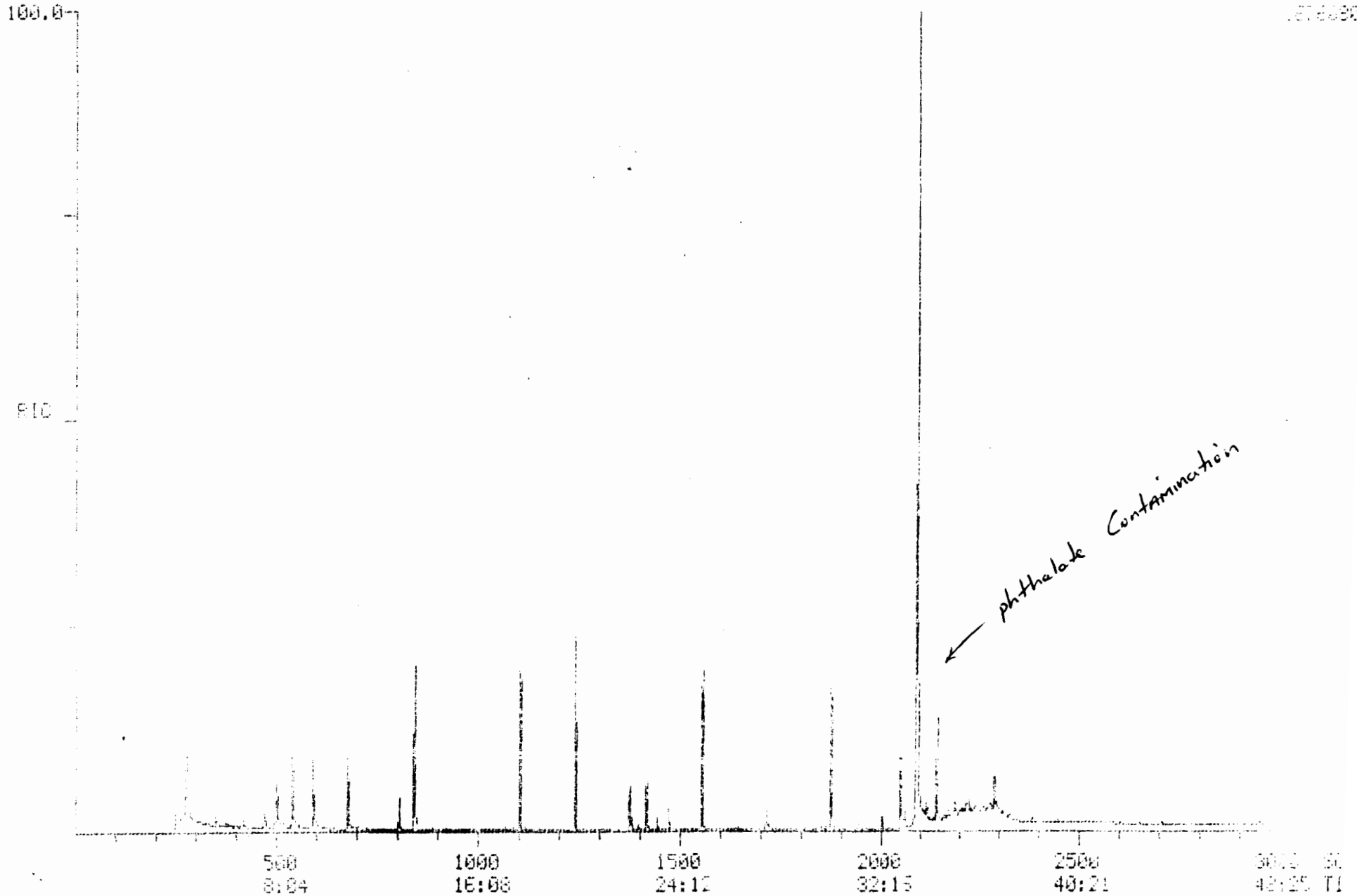
33	EP	29	-1255	1256	1251	-2	1	928	.	154	1251	.	.	1
34	EP	30	-1279	1277	.	.	.	.	.	164	.	.	.	.
35	EP	31	-1429	1427	.	.	.	.	.	166	.	.	.	.
36	EP	32	-1331	1327	.	.	.	.	.	165	.	.	.	.
37	EP	33	-1357	1355	.	.	.	.	.	139	.	.	.	.
38	EP	34	-1438	1436	.	.	.	.	.	204	.	.	.	.
39	EP	35	-1369	1370	1370	.	1	852	.	149	1370	.	.	1
40	EP	36	1400	1401	1401	.	1	986	.	169	1401	.	.	1
41	EP	37	-1377	1378	.	.	.	.	.	198	.	.	.	.
42	EP	38	-1473	1474	.	.	.	.	.	248	1475	.	.	1
43	EP	39	-1496	1497	.	.	.	.	.	284	1499	.	.	1
44	EP	40	-1538	1539	.	.	.	.	.	266	.	.	.	.
45	EP	41	-1562	1563	1562	-1	1	957	.	178	1562	.	.	1
46	EP	42	-1562	1563	1562	-1	1	957	.	178	1562	.	.	1
47	EP	43	-1791	1793	1793	1	1	900	.	202	1793	.	.	1
48	EP	46	1976	1977	1976	-1	1	982	.	149	1976	.	.	1
49	IS	4	1558	1559	1559	.	1	966	.	188	1559	.	.	1
50	EP	43	1709	1712	1709	-3	1	966	.	149	1709	.	.	1
51	EP	45	-1824	1830	1832	2	1	963	.	202	1832	.	.	1
52	EP	47	-2036	2047	.	.	.	.	.	228	.	.	.	.
53	EP	48	-1707	1710	.	.	.	.	.	149	1709	.	.	1
54	EP	49	-2073	2085	2085	.	1	955	.	149	2085	.	.	1
55	EP	50	-2213	2228	2228	.	1	888	.	252	.	.	.	.
56	EP	51	-2232	2232	2231	-1	2	956	.	252	2232	1	.	1
57	EP	52	-2056	2056	.	.	.	.	.	228	2057	.	.	1
58	EP	53	-2277	2277	.	.	.	.	.	252	2277	.	.	1
59	EP	54	-2463	2463	.	.	.	.	.	276	.	.	.	.
60	EP	55	-2468	2466	.	.	.	.	.	278	.	.	.	.
61	EP	56	-2511	2511	.	.	.	.	.	276	.	.	.	.
62	IS	5	2053	2053	2053	.	1	984	.	240	2053	.	.	1
63	EP	57	-1427	1427	.	.	.	.	.	77	.	.	.	.
64	EP	58	-2270	2270	.	.	.	.	.	252	.	.	.	.
65	EP	59	-870	870	.	.	.	.	.	93	.	.	.	.
66	EP	60	-673	673	.	.	.	.	.	79	675	.	.	1
67	EP	61	-741	741	.	.	.	.	.	108	.	.	.	.
68	EP	62	-709	709	.	.	.	.	.	107	.	.	.	.
69	EP	63	-902	902	.	.	.	.	.	105	.	.	.	.
70	EP	65	-1382	1382	.	.	.	.	.	138	.	.	.	.
71	EP	66	-1248	1248	.	.	.	.	.	138	.	.	.	.
72	EP	67	-1248	1248	.	.	.	.	.	138	.	.	.	.
73	IS	6	2288	2285	2285	.	1	947	.	264	2285	.	.	1
74	EP	64	-991	997	.	.	.	.	.	127	.	.	.	.
75	EP	68	-1289	1290	.	.	.	.	.	168	1288	.	.	1
76	EP	69	1558	1558	1558	.	1	888	.	184	1559	1	.	1
77	EP	70	-1866	1866	.	.	.	.	.	143	.	.	.	.
78	SU	1	328	335	336	1	1	993	.	112	336	.	.	1
79	SU	2	543	547	548	1	1	975	.	99	548	.	.	1
80	SU	3	703	704	706	2	1	994	.	82	706	.	.	1
81	SU	4	1109	1110	1110	.	1	994	.	172	1110	.	.	1
82	SU	5	1421	1422	1422	.	1	919	.	62	1422	.	.	1
83	SU	6	1876	1876	1876	.	1	987	.	244	1876	.	.	1
84	PE	1	-1481	1483	.	.	.	.	.	181	1481	.	.	1
85	PE	2	-1536	1537	1537	.	1	882	.	181	1535	-2	.	1
86	PE	3	-1672	1673	.	.	.	.	.	100	.	.	.	.
87	PE	4	-1543	1543	.	.	.	.	.	181	1544	.	.	1
88	PE	5	-1727	1727	.	.	.	.	.	66	1725	.	.	1
89	PE	6	-1791	1793	.	.	.	.	.	81	1792	.	.	1
90	PE	7	1846	1847	.	.	.	.	.	227	.	.	.	.
91	PE	8	-1932	1933	1933	.	1	926	.	235	1932	-1	.	1
[illegible]	[illegible]	[illegible]	[illegible]	1806	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	67	1810	[illegible]	[illegible]	1

96	PE	13	-1978	1977						237				
97	PE	14	-1985	1984	1984		1	924		235	1984			1
98	PE	15	-1908	1906						81	1908			1
99	PE	16	-1841	1838						195				

6108

MIDRIC
05/08/89 11:57:00
SAMPLE: SAMPLE 5848-2 2UL/1ML (625)
CONDS.: EI
RANGE: C 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BN58482 #1 SCANS 1 TO 3000
CALI: BN58482 #2



TOA [illegible]
FINISHED at [illegible] 8:52:46
Quantitation Report File: DN58482

Data: DN58482.FI
09/03/89 11:5/:20
Sample: SAMPLE 5848-2 2UL/1ML (625)
Cond: FI
Formula: BNA Instrument: 5100 Weight: 2.000
Submitted by: RC LABC Analyst: SCB Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp: Rel. Com. (Internal Std)

Scan	Time	Quantitation	Amount	Name
543	8:46	2062720.	40.000 UG/L	D4-DICHLOROBENZENE (IS#1)
278	4:29	2022590.	99.799 UG/L	2-FLUOROPHENOL (BNA SURROGAT
845	13:38	5070780.	40.000 UG/L	D8-NAPHTHELENE(IS#2)
503	8:07	2253150.	83.332 UG/L	PHENOL D5 (BNA SURROGATE #2)
1242	20:03	2241690.	40.000 UG/L	D10-ACENAPHTHENE(BNA IS#3)
690	10:58	1849720.	74.156 UG/L	NITROBENZENE D5 (BNA SURROGA
1105	17:50	3246200.	48.149 UG/L	2-FLUOROBIPHENYL (BNA SURROG
1558	25:08	3520010.	40.000 UG/L	D10-PHENANTHRENE(IS#4)
1420	22:[illegible]	[illegible]	140.365 UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2053	33:05	1759890.	40.000 UG/L	D12-CHRYSENE(IS#5)
2290	36:57	1124480.	40.000 UG/L	D12-PERYLENE(IS#6)
1876	30:16	3041920.	67.565 UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R Fac(L)	Ratio
1	9.26	0.94	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	0.84	0.572	0.89	99.80	200.00	0.196	0.393	0.50
3	13:38	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	5:20	0.93	0.946	0.95	83.33	200.00	0.218	0.524	0.42
5	[illegible]	[illegible]	1.000	[illegible]	40.00	40.00	1.000	1.000	1.00
6	[illegible]	[illegible]	1.220	[illegible]	74.16	100.00	0.362	0.488	0.74
7	[illegible]	[illegible]	0.871	[illegible]	40.15	100.00	0.579	1.203	0.48
8	[illegible]	[illegible]	1.000	[illegible]	40.00	40.00	1.000	1.000	1.00
9	[illegible]	1.00	0.912	[illegible]	140.27	200.00	0.017	0.024	0.70
10	[illegible]	[illegible]	1.000	[illegible]	40.00	40.00	1.000	1.000	1.00
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.000	1.000	1.00
12	[illegible]	[illegible]	0.914	[illegible]	67.56	100.00	0.891	1.023	0.68

PROCEDURE: TCA DIAGNOSTIC REPORT 9/11/89 8:36:10
DATA FILE: EN58482
REFERENCE: TAB9489
NAME LIST: SB INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: R1

< ---- STANDARDS ----- >< --- PLUS UNKNOWNS --- >< - LIST NAMES - >								
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	0	1	0	8	1	1	0	X1/SB1
1	1	1	0	8	2	2	190	X1/SB2
1	1	1	0	8	1	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
1	1	1	0	9	1	1	0	X3/SB5
1	1	1	0	11	3	1	166	X3/SB6
1	1	1	0	7	2	1	147	X4/SB7
1	1	1	0	7	1	1	0	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	2	1	0	X6/SB11
1	1	1	0	4	3	3	42	X1/SB12
1	1	1	0	2	2	1	0	X3/SB13
1	1	1	0	2	1	1	0	X4/SB14
1	1	1	0	2	2	1	0	X5/SB15
1	1	1	0	6	2	1	0	X4/SB16
1	1	1	0	7	1	1	0	X5/SB17
1	1	1	0	5	1	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND >< ---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >												
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA PEAKS
1	IS	1	-566	566	.	.	.	.	.	150	.	. .
2	EP	1	-455	455	.	.	.	.	.	74	.	. .
3	EP	2	-724	724	.	.	.	.	.	93	.	. .
4	EP	3	-542	542	.	.	.	.	.	128	.	. .
5	EP	4	-565	565	.	.	.	.	.	146	.	. .
6	EP	5	-565	565	.	.	.	.	.	146	.	. .
7	EP	6	-544	544	.	.	.	.	.	94	.	. .
8	EP	7	-593	593	.	.	.	.	.	146	.	. .
9	EP	8	-661	660	.	.	.	.	.	45	664	. 1
10	EP	9	-683	685	.	.	.	.	.	117	.	. .
11	EP	10	692	694	695	1	2	866	.	70	.	. .
12	EP	11	780	778	.	.	.	.	.	77	.	. .
13	EP	12	768	770	.	.	.	.	.	82	.	. .
14	EP	13	-779	781	.	.	.	.	.	139	.	. .
15	EP	14	829	831	.	.	.	.	.	93	.	. .
16	IS	2	858	845	845	.	1	980	.	136	845	. 1
17	EP	15	-813	801	.	.	.	.	.	107	.	. .
18	EP	16	-882	899	.	.	.	.	.	180	.	. .
19	EP	17	862	845	.	.	.	.	.	128	849	. 1
20	EP	18	-921	907	.	.	.	.	.	225	.	. .
21	EP	19	-1038	1022	.	.	.	.	.	142	.	. .
22	EP	20	-1020	1005	.	.	.	.	.	107	.	. .
23	EP	21	-1092	1075	.	.	.	.	.	237	.	. .
24	EP	22	-1095	1070	.	.	.	.	.	196	.	. .
25	EP	23	[illegible]	[illegible]	.	.	.	.	.	198	.	. .
26	EP	24	[illegible]	[illegible]	.	.	.	.	.	162	.	. .
27	EP	25	[illegible]	[illegible]	.	.	.	.	.	162	.	. .

33	EP	29	1261	1248	.	.	.	.	.	154	.	.	.
34	EP	30	-1277	1274	.	.	.	.	.	154	.	.	.
35	EP	31	-1427	1424	.	.	.	.	.	166	.	.	.
36	EP	32	-1329	1326	.	.	.	.	.	165	.	.	.
37	EP	33	-1355	1352	.	.	.	.	.	139	.	.	.
38	EP	34	-1436	1433	.	.	.	.	.	204	.	.	.
39	EP	35	1370	1369	.	.	.	.	.	149	1368	.	1
40	EP	36	1401	1400	1401	1	1	988	.	169	1400	-1	1
41	EP	37	-1378	1377	.	.	.	.	.	198	1376	.	1
42	EP	38	-1474	1473	.	.	.	.	.	248	.	.	.
43	EP	39	-1497	1496	.	.	.	.	.	284	.	.	.
44	EP	40	-1539	1538	.	.	.	.	.	266	.	.	.
45	EP	41	1562	1561	.	.	.	.	.	178	1562	.	1
46	EP	42	1562	1561	.	.	.	.	.	178	1562	.	1
47	EP	44	1793	1793	.	.	.	.	.	202	1794	.	1
48	EP	46	1976	1977	1977	.	1	982	.	149	1976	-1	1
49	IS	4	1559	1558	1558	.	1	964	.	188	1558	.	1
50	EP	43	1709	1710	1709	-1	1	950	.	149	1710	1	1
51	EP	45	1832	1836	.	.	.	.	.	202	.	.	.
52	EP	47	-2047	2055	.	.	.	.	.	228	.	.	.
53	EP	48	-1710	1711	.	.	.	.	.	149	1710	.	1
54	EP	49	2085	2094	2094	.	1	960	.	149	2094	.	1
55	EP	50	2228	2240	.	.	.	.	.	252	.	.	.
56	EP	51	2231	2230	.	.	.	.	.	252	.	.	.
57	EP	52	-2056	2055	.	.	.	.	.	228	.	.	.
58	EP	53	-2277	2276	.	.	.	.	.	252	.	.	.
59	EP	54	-2463	2461	.	.	.	.	.	276	.	.	.
60	EP	55	-2468	2466	.	.	.	.	.	278	.	.	.
61	EP	56	-2511	2509	.	.	.	.	.	276	.	.	.
62	IS	5	2053	2053	2053	.	1	985	.	240	2053	.	1
63	EP	57	-1427	1427	.	.	.	.	.	77	1428	.	1
64	EP	58	-2270	2270	.	.	.	.	.	252	.	.	.
65	EP	59	-870	870	.	.	.	.	.	93	.	.	.
66	EP	60	-673	673	.	.	.	.	.	79	.	.	.
67	EP	61	-741	741	.	.	.	.	.	108	.	.	.
68	EP	62	-709	709	.	.	.	.	.	107	.	.	.
69	EP	63	-902	902	.	.	.	.	.	105	.	.	.
70	EP	65	-1382	1382	.	.	.	.	.	138	.	.	.
71	EP	66	-1248	1248	.	.	.	.	.	138	.	.	.
72	EP	67	-1248	1248	.	.	.	.	.	138	.	.	.
73	IS	6	2285	2290	2290	.	1	900	.	264	2290	.	1
74	EP	64	894	889	.	.	.	.	.	187	.	.	.
75	EP	68	[illegible]	[illegible]	.	.	.	.	.	168	.	.	.
76	EP	69	1558	1558	1558	.	1	877	.	184	1558	.	1
77	EP	70	[illegible]	1567	.	.	.	.	.	143	.	.	.
78	SU	1	336	339	339	.	1	868	.	112	340	1	1
79	SU	2	548	549	.	.	.	.	.	99	.	.	.
80	SU	3	706	705	705	.	3	934	.	82	.	.	.
81	SU	4	1110	1106	1105	.	1	990	.	172	1105	.	1
82	SU	5	1422	1421	.	.	.	.	.	62	1420	.	1
83	SU	6	1876	1876	1876	.	1	990	.	244	1876	.	1
84	PE	1	-1483	1482	.	.	.	.	.	181	.	.	.
85	PE	2	1537	1536	.	.	.	.	.	101	.	.	.
86	PE	3	-1673	1672	.	.	.	.	.	100	.	.	.
87	PE	4	1544	1543	.	.	.	.	.	101	.	.	.
88	[illegible]	1	[illegible]	[illegible]	.	.	.	.	.	66	.	.	.
89	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	.	.	61	.	.	.
90	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	.	.	[illegible]	.	.	.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	.	.	205	.	.	.

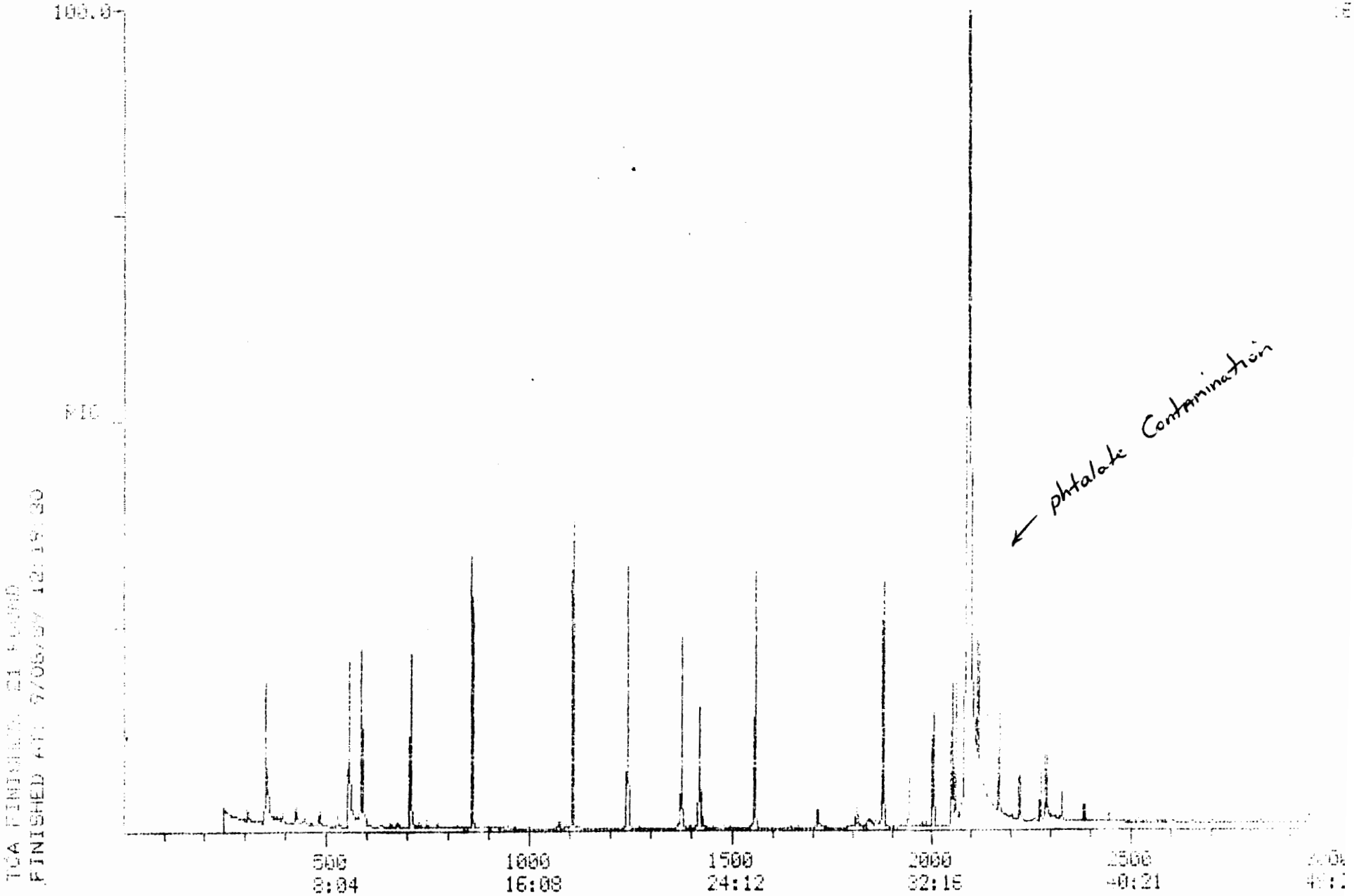
95	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	.	.	[illegible]	.	.	.
96	PE	12	[illegible]	1977	.	.	.	.	.	257	.	.	.
97	PE	14	1964	1964	.	.	.	.	.	235	.	.	.
98	PE	15	[illegible]	[illegible]	.	.	.	.	.	81	.	.	.
99	PE	16	[illegible]	[illegible]	.	.	.	.	.	175	.	.	.

613

MIDRIC
09/08/89 13:06:00
SAMPLE: SAMPLE 5848-3 2UL/1ML (625)
CONDS.: EI
RANGE: G 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BN58483 #1
CALI: BN58483 #2

SCANS 1 TO 3000



TIA [illegible] IS Found
FINISHED at: 9/13/[illegible] 9:25:23
Quantitation Report File: [illegible]

Data: [illegible]
09/08/89 [illegible]
Sample: SAMPLE 5848-3 2UL/1ML (625)
Conds : E1
Formula: BNA Instrument: 5100 Weight: 2.000
Submitted by: NC LABS Analyst: SGD Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Initial Entry

Scan	Time	Area(Right)	Amount	Name
590	9:21	2882630.	40.000 UG/L	D4-DICHLOROBENZENE (IS#1)
356	5:45	4040230.	142.720 UG/L	2-FLUOROPHENOL (BNA SURROGAT
560	9:02	4938230.	130.752 UG/L	PHENOL D5 (BNA SURROGATE #2)
862	13:55	7751980.	40.000 UG/L	D8-NAPHTHELENE(IS#2)
1246	20:06	3477270.	40.000 UG/L	D10-ACENAPHTHENE(BNA IS#3)
712	11:29	4057660	115.277 UG/L	NITROBENZENE D5 (BNA SURROGA
1111	17:54	5969270.	57.078 UG/L	2-FLUOROBIPHENYL (BNA SURROG
1559	25:09	5697450.	40.000 UG/L	D10-PHENANTHRENE(IS#4)
1423	22:58	786342.	231.920 UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2054	33:09	2942600	40.000 UG/L	D12-CHRYSENE(IS#5)
2290	36:57	1780000.	40.000 UG/L	D12-PERYLENE(IS#6)
1877	30:17	5445390.	72.335 UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	1.02	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	1.08	0.573	1.05	142.72	200.00	0.280	0.393	0.71
3	8:50	1.02	0.946	1.00	130.75	200.00	0.343	0.524	0.65
4	13:50	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
5	20:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	11:29	1.01	1.000	0.99	115.28	100.00	0.563	0.488	1.15
7	17:54	1.00	0.891	1.00	57.08	100.00	0.687	1.203	0.57
8	25:09	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	22:58	1.00	0.912	1.00	231.92	200.00	0.028	0.024	1.16
10	33:09	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
11	36:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
12	30:17	1.00	0.914	1.00	72.33	100.00	0.740	1.023	0.72

PROGRAM: [illegible] DIAGNOSTIC REPORT 9/11/87 9:08:37
DATA FILE: [illegible]
REFERENCE: [illegible]
NAME LIST: [illegible] INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
NUMBER: [illegible]

< STANDARDS				PLUS UNKNOWNS				LIST NAMES >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	0	1	0	8	1	1	0	X1/SB1
1	1	1	0	8	1	1	0	X1/SB2
1	1	1	0	8	1	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
1	1	1	0	9	1	1	0	X3/SB5
1	1	1	0	11	3	1	240	X3/SB6
1	1	1	0	7	3	1	67	X4/SB7
1	1	1	0	7	1	1	0	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	3	1	454	X6/SB11
1	1	1	0	4	3	1	786	X1/SB12
1	1	1	0	2	2	1	0	X3/SB13
1	1	1	0	2	1	1	0	X4/SB14
1	1	1	0	2	2	1	0	X5/SB15
1	1	1	0	8	2	1	0	X4/SB16
1	1	1	0	7	1	1	0	X5/SB17
1	1	1	0	5	1	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND			SEARCH					SAT	CHRO		
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	IS	1	-566	566						150			
2	EP	1	-455	455						74			
3	EP	2	-724	724						93			
4	EP	3	-542	542						128			
5	EP	4	-565	565						146			
6	EP	5	-565	565						146			
7	EP	6	-544	544						94			
8	EP	7	-593	593						146			
9	EP	8	-663	663						45	662		1
10	EP	9	-685	685						117			
11	[illegible]	10	695	[illegible]						70			
12	[illegible]	11	[illegible]	[illegible]						77	692		1
13	EP	12	-770	770						62	772		1
14	EP	13	781	781						139			
15	EP	14	-831	831						93			
16	IS	7	845	862	862		1	982		136	862		1
17	EP	15	-801	817						107			
18	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]			
19	[illegible]	[illegible]	[illegible]	[illegible]						170	865		1
20	EP	16	[illegible]	[illegible]						225			
21	EP	17	-1072	1042						142	1042		1
22	EP	20	-1042	1042						177			
23	EP	21	-1029	[illegible]						207			
24	EP	22	[illegible]	[illegible]						196			
25	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]			
26	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]			
27	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]			
28	[illegible]	[illegible]	[illegible]	[illegible]						112			

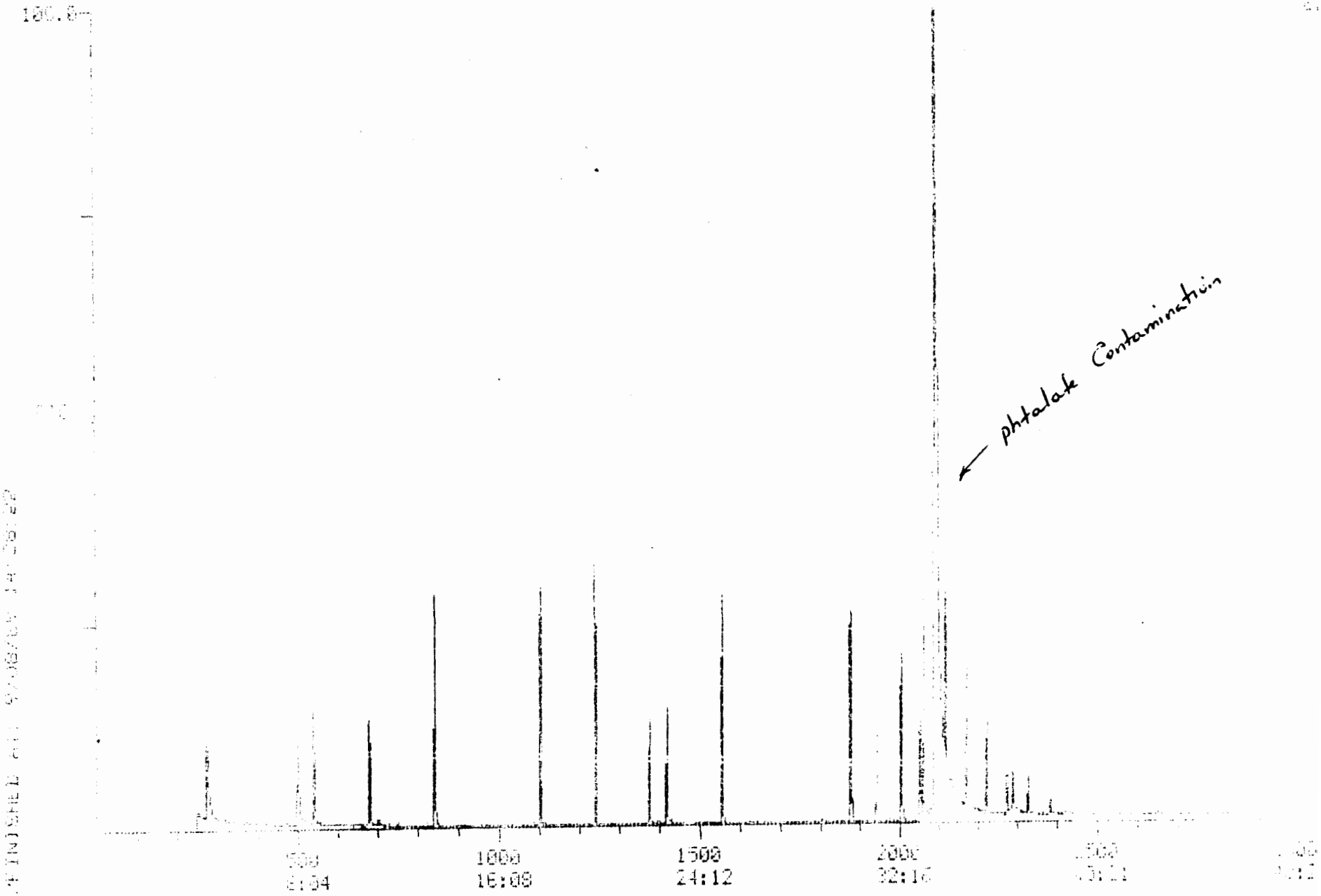
33	EP	2	-1240	1242						154				
34	EP	30	-1274	1275						154				
35	EP	31	-1424	1424						166				
36	EP	32	-1366	1366						165				
37	EP	33	-1356	1356						159				
38	EP	34	1420	1420						204				
39	EP	35	-1365	1370						149	1371			1
40	EP	36	1401	1402	1399	-3	1	991		169	1399			1
41	EP	37	-1377	1378						170	1377			1
42	EP	38	-1473	1474						248				
43	EP	39	-1496	1497						284				
44	EP	40	-1536	1537						266				
45	EP	41	-1561	1561						178	1562			1
46	EP	42	-1561	1562						178	1562			1
47	EP	43	-1793	1794						202	1794			1
48	EP	44	1977	1976	1977	1	1	983		149	1977			1
49	IS	4	1558	1559	1559		1	967		188	1559			1
50	EP	43	1709	1711	1710	-1	1	975		149	1710			1
51	EP	45	-1836	1838						202				
52	EP	47	-2058	2059						228				
53	EP	48	-1711	1713						149				
54	EP	49	2094	2098	2098		1	954	-1	149	2098			1
55	EP	50	-2240	2245						252				
56	EP	51	-2250	2251						252				
57	EP	52	-2055	2056						228	2054			1
58	EP	53	-2276	2277						252	2278			1
59	EP	54	-2461	2463						276				
60	EP	55	-2466	2468						278				
61	EP	56	-2509	2511						276				
62	IS	5	2053	2054	2054		1	983		240	2054			1
63	EP	57	-1427	1428						77				
64	EP	58	-2270	2271						252				
65	EP	59	-870	870						93				
66	EP	60	-673	673						79				
67	EP	61	-741	741						108				
68	EP	62	-709	709						107				
69	EP	63	-902	902						105	901			2
70	EP	65	-1382	1383						138				
71	EP	66	-1248	1249						138				
72	EP	67	-1248	1249						138				
73	IS	6	2290	2290	2290		1	938		264	2290			1
74	EP	68	-688	688						107				
75	EP	69	756	757						168				
76	EP	69	1558	1557	1559	2	1	891		154	1559			1
77	EP	70	-1867	1866	1862	-4	1	981		143				
78	SU	1	339	344						112				
79	SU	2	-349	355	560	5	1	983		99	560			1
80	SU	3	705	713	712	1	1	995		82	712			1
81	SU	4	1105	1113	1111		1	991		102	1111			1
82	SU	5	-1402	1412						62	1403			1
83	SU	6	1870	1877	1877		1	992		244	1877			1
84	SU	1	-1402	1403						181				
85	SU	2	-1556	1557						151	1555			1
86	SU	3	-1677	1677						160				
87	SU	4	1947	1949						103				
88														
89	SU		1	1778						91	1781			1
90														
91	SU			1						235				

96	[illegible]	13	-1971	1970	.	.	.	.	237	.	.	.	.
97	PE	14	-1904	1905	.	.	.	.	235	.	.	.	.
98	PE	15	-1902	1907	.	.	.	.	81	1905	.	.	1
99	PE	16	-1835	1836	.	.	.	.	195	.	.	.	.

MIDRIC
09/08/89 14:[illegible]:00
SAMPLE: SAMPLE 5843-4 2UL/1ML (625)
CONDS.: EI
RANGE: G [illegible] LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 0

DATA: BN58484 #1
CALI: BN58484 #2

SCANS 1 TO 3000



TCA FINISHED AT: 15:[illegible]
FINISHED AT: 9/11/89 10:02:05
Quantitation Report File: BN58474

Data: BN58474.TI
09/08/89 14:02:06
Sample: SAMPLE 5846-4 2UL/1ML (625)
Conds: FT
Formula: BNA Instrument: 5100 Weight: 2.000
Submitted by: DC LABS Analyst: SGB Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp fac. from Library Entry

Scan	Time	Area/Height	Amount	Name
542	8.45	2772160.	40.000 UG/L	D4-DICHLOROBENZENE (IS#1)
277	4.28	2704760.	99.353 UG/L	2-FLUOROPHENOL (BNA SURROGAT
845	13:38	6599390.	40.000 UG/L	D8-NAPHTHELENE(IS#2)
502	8.06	3291320.	88.966 UG/L	PHENOL D5 (BNA SURROGATE #2)
1243	20.04	3001450.	40.000 UG/L	D10-ACENAPHTHENE(BNA IS#3)
681	10.59	2571050	75.953 UG/L	NITROBENZENE D5 (BNA SURROGA
1106	17.51	4437750	49.161 UG/L	2-FLUOROBIPHENYL (BNA SURROG
1558	25.08	5221630.	40.000 UG/L	D10-PHENANTHRENE(IS#4)
2053	33:08	2455430.	40.000 UG/L	D12-CHRYSENE(IS#5)
1421	22:56	646319.	207.992 UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2289	36:56	1512150.	40.000 UG/L	D12-PERYLENE(IS#6)
1877	30:17	4354860.	69.326 UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	0.94	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	0.84	0.573	0.89	99.35	200.00	0.195	0.393	0.50
3	13:50	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	8:50	0.92	0.546	0.98	88.97	200.00	0.233	0.524	0.44
5	20:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	11:23	0.97	1.220	1.03	75.95	100.00	0.371	0.488	0.76
7	17:54	1.00	0.891	1.00	49.16	100.00	0.591	1.203	0.49
8	25:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	33:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	22:56	1.00	0.912	1.00	207.99	200.00	0.025	0.024	1.04
11	36:53	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
12	30:15	1.00	0.914	1.00	69.33	100.00	0.709	1.023	0.69

PROGRAM [illegible] DIAGNOSTIC REPORT 9/11/89 9:46:04
DATA FILE [illegible]
REFERENCE [illegible]
NAME LIST [illegible] INVESTIGATION OPTION [illegible] PROCESSING OPTION 3
SEARCH [illegible]

< ---- STANDARDS ---- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	0	1	0	9	1	1	0	X1/SB1
1	1	1	0	8	1	1	0	X1/SB2
1	1	1	0	8	1	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
1	1	1	0	7	1	1	0	X3/SB5
1	1	1	0	11	1	1	432	X3/SB6
1	1	1	1	2	2	1	101	X4/SB7
1	1	1	0	7	1	1	0	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	2	1	0	X6/SB11
1	1	1	0	4	3	3	144	X1/SB12
1	1	1	0	2	2	2	174	X3/SB13
1	1	1	0	2	2	1	0	X4/SB14
1	1	1	0	2	2	1	0	X5/SB15
1	1	1	0	8	2	1	0	X4/SB16
1	1	1	0	7	1	1	0	X5/SB17
1	1	1	0	5	1	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 15 FOUND

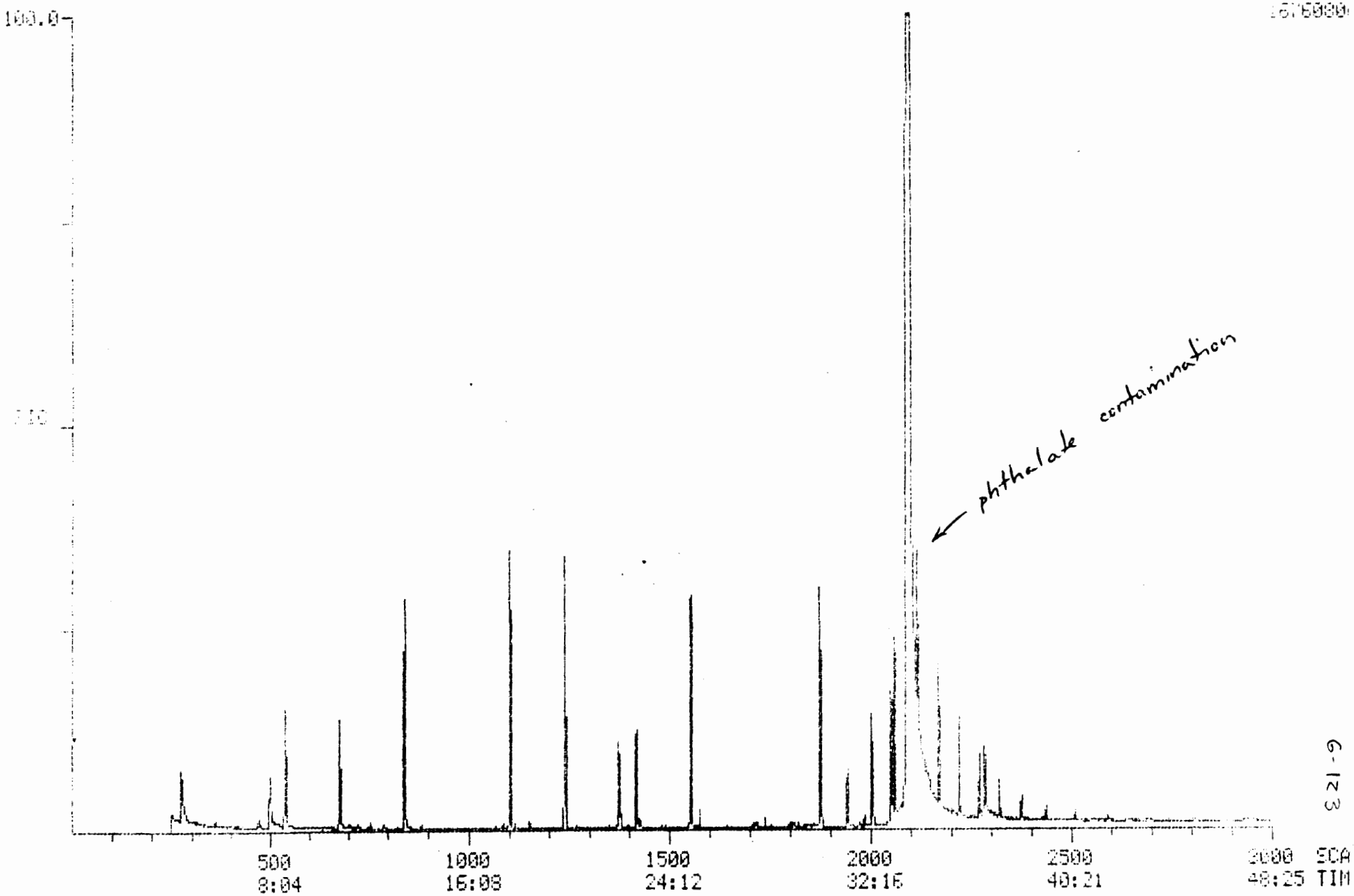
< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ----- CHRO ------- >		
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA PEAKS
1	IS	1	-566	566	.	.	.	.	.	150	.	. .
2	EP	1	-455	455		.	.	.	.	74	.	. .
3	EP	2	-724	724			.		.	93	.	. .
4	EP	3	-542	542		.	.	.	.	128	.	. .
5	EP	4	-560	560		.	.	.	.	146	.	. .
6	EP	5	-565	565			.			146	.	. .
7	EP	6	-544	544		.	.	.	.	94	.	. .
8	EP	7	-593	593	.	.	.		.	146	.	. .
9	EP	8	[illegible]	[illegible]		.	.			15	664	2
10	EP	9	-685	685					.	117	.	. .
11	EP	[illegible]	[illegible]	[illegible]						[illegible]		
12	EP	[illegible]	[illegible]	[illegible]						[illegible]		
13	EP	[illegible]	[illegible]	[illegible]						82	769	1
14	EP	13	781	781						139		. .
15	EP	14	-831	831	.	.			.	93		. .
16	IS	2	845	845	845		1	984	.	136	845	1
17	EP	15	917	901						107		. .
18	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]		
19	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]	845	1
20	EP	16	[illegible]	[illegible]						[illegible]		
21	EP	19	-1042	1042						142		.
22	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]		
23	EP	[illegible]	[illegible]	[illegible]						[illegible]		.
24	EP	[illegible]	[illegible]	[illegible]						196		.
[illegible]				[illegible]						[illegible]		
[illegible]				[illegible]								
[illegible]				[illegible]								
[illegible]				[illegible]						1 2		

33	EP	29	[illegible]	[illegible]						154			
34	EP	30	-1278	[illegible]						184			
35	EP	[illegible]	[illegible]	[illegible]						166			
36	EP	[illegible]	[illegible]	[illegible]						[illegible]			
37	EP	[illegible]	[illegible]	1393						129			
38	EP	34	[illegible]	1435						204			
39	EP	35	-1370	1370						149	1369		1
40	EP	36	1399	1399	1402	3	1	985		169	1401	-1	1
41	EP	37	-1378	1378						198	1377		1
42	EP	38	-1474	1474						248			
43	EP	39	-1497	1497						284			
44	EP	40	-1539	1539						266			
45	EP	41	-1562	1562						178	1562		1
46	EP	42	-1562	1562						178	1562		1
47	EP	44	-1792	1793						202	1794		1
48	EP	46	1977	1977	1976	-1	1	966		149	1976		1
49	IS	4	1559	1559	1559		1	959		188	1558	-1	1
50	EP	43	1710	1710	1709	-1	1	969		149	1709		1
51	EP	45	-1838	1838						202			
52	EP	47	-2059	2060						228			
53	EP	48	-1713	1713						149			
54	EP	49	2098	2099	2099		1	951	-1	149	2099		1
55	EP	50	-2245	2246						252			
56	EP	51	-2231	2231						252			
57	EP	52	-2056	2056						228	2054		1
58	EP	53	-2277	2277						252	2277		1
59	EP	54	-2463	2463						276			
60	EP	55	-2468	2468						278			
61	EP	56	-2511	2511						276			
62	IS	5	2054	2053	2053		1	984		240	2053		1
63	EP	57	-1428	1427						77			
64	EP	58	-2271	2270						252			
65	EP	59	-870	870						93			
66	EP	60	-673	673						79			
67	EP	61	-741	741						108			
68	EP	62	-709	709						107			
69	EP	63	-902	902						105			
70	EP	65	-1383	1382						138			
71	EP	66	-1249	1248						138			
72	EP	67	-1249	1248						138			
73	IS	6	2290	2289	2289		1	936		264	2289		1
74	EP	68	-885	[illegible]						127			
75	EP	68	-1207	[illegible]						168			
76	EP	69	1559	1559	1559		1	959		184	1558	-1	1
77	EP	70	1862	1862						143			
78	SL	1	-344	338	338		1	871		112			
79	SL	2	560	556						99	561		1
80	EP	2	712	714	712	-1	2	947		82			
[illegible]			[illegible]	[illegible]						[illegible]	[illegible]		1
[illegible]		[illegible]	[illegible]	[illegible]						[illegible]	[illegible]		1
83		[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]		1
84	EP	1	-1486	[illegible]						191			
85		[illegible]	[illegible]	[illegible]						191			
86		[illegible]	[illegible]	[illegible]						[illegible]			
87		[illegible]	[illegible]	[illegible]						191			
[illegible]										[illegible]			
89			[illegible]							[illegible]	[illegible]		[illegible]
[illegible]													
91			[illegible]	[illegible]						235			

96	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	207	.	.	.	.
97	[illegible]	14	[illegible]	[illegible]	.	.	.	235	.	.	.	.
98	[illegible]	15	[illegible]	[illegible]	.	.	.	81	1908	.	.	2
99	[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	195	.	.	.	.

MIDRIC
09/08/89 14:58:00
SAMPLE: SAMPLE 5848-5 2UL/1ML (625)
CONDS.: EI
RANGE: G 1.3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BN58485 #2096 SCANS 1 TO 3000
CALI: BN58485 #2



TCA FINISHED AT: 9/08/89 18:15:1

6-123

TOA FINISHED 14 FOUND
FINISHED AT 9/11/89 10:34:42
Quantitation Report File DN5848T

Data: DN5848S T1
09/08/89 14:50:00
Sample: SAMPLE 5848-5 2UL/1ML (625)
Conds.: EI
Formula: BNA Instrument: 5100 Weight 2.000
Submitted by: BC LABS Analyst: SGD Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac from Library Entry

Scan	Time	Area(Ngt)	Amount	Name
542	8:45	3044160.	40.000 UG/L	D4-DICHLOROBENZENE (IS#1)
277	4:28	1897520.	63.473 UG/L	2-FLUOROPHENOL (BNA SURROGAT
844	13:37	7347110.	40.000 UG/L	D8-NAPHTHELENE(IS#2)
502	8:06	2328750.	58.388 UG/L	PHENOL D5 (BNA SURROGATE #2)
1242	20:03	3313030.	40.000 UG/L	D10-ACENAPHTHENE(BNA IS#3)
680	10:58	2769070.	74.494 UG/L	NITROBENZENE D5 (BNA SURROGA
1557	25:08	5334610.	40.000 UG/L	D10-PHENANTHRENE(IS#4)
1105	17:50	5230970.	52.498 UG/L	2-FLUOROBIPHENYL (BNA SURROG
1420	22:55	664732.	209.387 UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2052	33:07	2789610.	40.000 UG/L	D12-CHRYSENE(IS#5)
2285	36:52	1795550.	40.000 UG/L	D12-PERYLENE(IS#6)
1876	30:16	4892290.	68.552 UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	0.94	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	0.84	0.573	0.89	63.47	200.00	0.125	0.393	0.32
3	13.50	0.98	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	8:50	0.92	0.946	0.98	58.39	200.00	0.153	0.524	0.29
5	20.04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	11:23	0.96	1.220	1.03	74.49	100.00	0.364	0.488	0.74
7	25:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
8	17:54	1.00	0.891	1.00	52.50	100.00	0.632	1.203	0.52
9	22:56	1.00	0.912	1.00	209.39	200.00	0.025	0.024	1.05
10	33:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
11	36.53	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
12	30:15	1.00	0.914	1.00	68.55	100.00	0.702	1.023	0.69

PROCEDURE: [illegible] DIAGNOSTIC REPORT 9/11/89 10:17:27
DATA FILE: UNSD4E8
REFERENCE: TAB[illegible]
NAME LIST: SB [illegible] CATION OPTION: 2 PROCESSING OPTION: 0
REPORT: A1

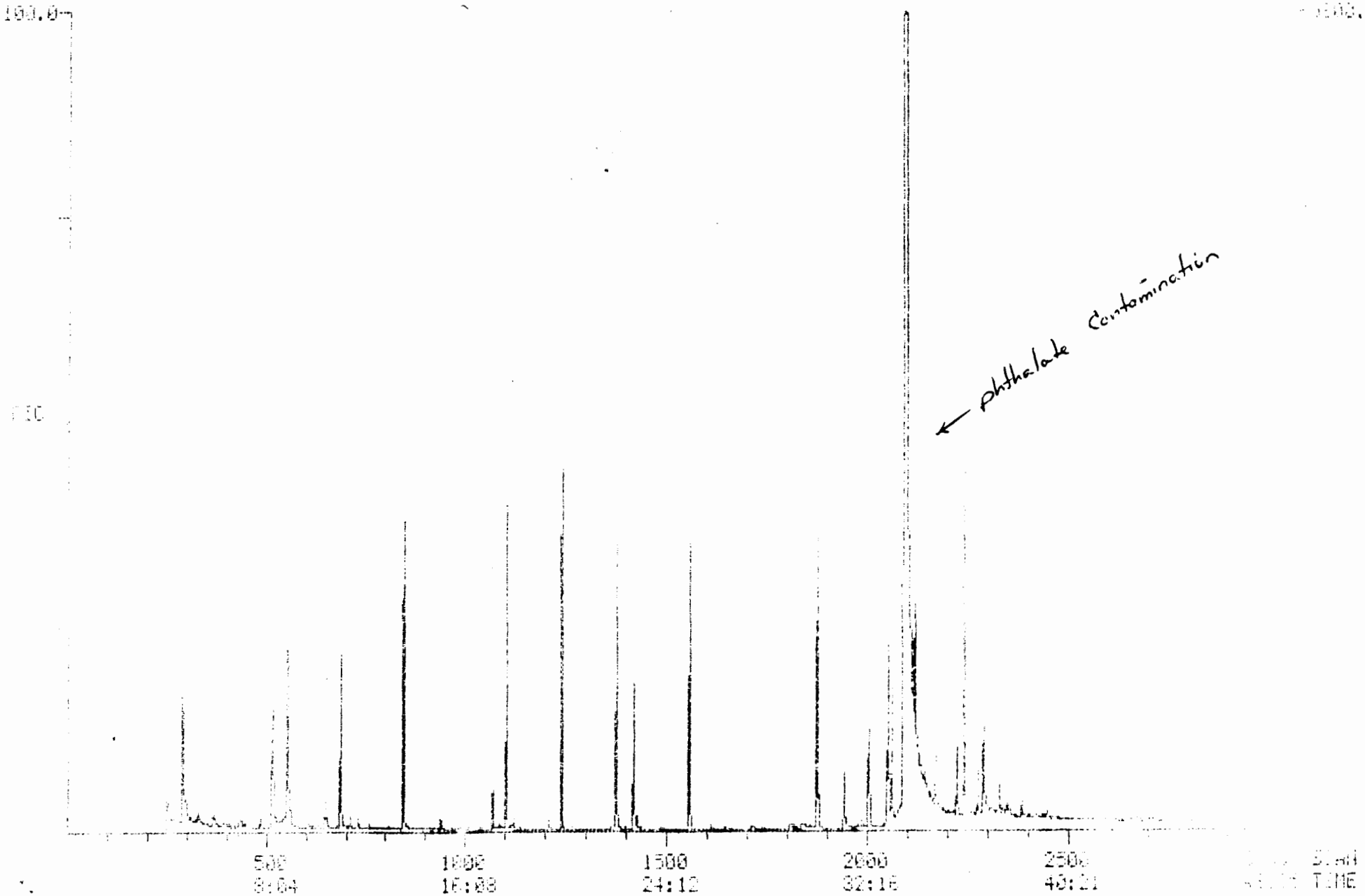
< STANDARDS				> < PLUS UNKNOWNS				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	8	1	1	0	X1/SB1
1	1	1	0	8	1	1	0	X1/SB2
1	1	1	0	8	1	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
[illegible]	[illegible]	2	[illegible]	9	1	1	0	X3/SB5
1	1	1	0	11	2	1	79	X3/SB6
1	[illegible]	[illegible]	1	7	2	1	35	X4/SB7
1	1	1	0	7	1	1	0	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	2	1	0	X6/SB11
1	1	1	0	4	2	1	0	X1/SB12
1	1	1	0	2	2	1	0	X3/SB13
1	1	1	0	2	2	3	7	X4/SB14
1	1	1	0	2	2	2	6	X5/SB15
1	1	1	0	8	2	1	0	X4/SB16
1	1	1	0	7	1	1	0	X5/SB17
1	1	1	0	5	1	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 14 FOUND

< COMPOUND		> < SEARCH						> < SAT			< CHRO			>
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS		M/Z	TOP	DELTA	PEAKS
1	IS	1	-566	566	.	.	.	.	.		100	.	.	.
2	EP	1	-455	455	.	.	.	.	.		74	.	.	.
3	EP	2	-724	724	.	.	.	.	.		93	.	.	.
4	EP	3	-542	542	.	.	.	.	.		128	.	.	.
5	EP	4	-565	565	.	.	.	.	.		146	.	.	.
6	EP	5	-565	565	.	.	.	.	.		146	.	.	.
7	EP	6	-544	544				.	.		94	542	.	2
8	EP	7	-593	593	.	.	.	.	.		146		.	.
9	EP	8	[illegible]	[illegible]	.	.	.	.	.		75		.	.
10	EP	9	-685	685	.	.	.	.	.		117	.	.	.
11	EP	10	[illegible]	[illegible]				.	.		79	676	.	1
12	EP	11	[illegible]	[illegible]							77			
13	EP	12	[illegible]	[illegible]	.	.	.	.	.		67			.
14	EP	13	-781	[illegible]				.	.		135			.
15	EP	14	-821	[illegible]	.	.	.	.	.		98			.
16	IS	2	845	844	844		1	983	.		136	844	.	1
17	EP	15	-890	890			.	.	.		107		.	.
18	EP	16	[illegible]	[illegible]			.				[illegible]			
19	EP	17	-848	848							138	848	.	1
20	EP	18	[illegible]	[illegible]							135			
21	EP	19	1020	[illegible]							142			
22	EP	20	-1001	[illegible]							147			
23	EP	21	[illegible]	[illegible]							77			.
24	EP	22	[illegible]	[illegible]							116			.
[illegible]											[illegible]			
[illegible]											.			
[illegible]											.			
26	EP	24	[illegible]	[illegible]							133			

33	EP	[illegible]	-1[illegible]	[illegible]							154			
34	EP	[illegible]	[illegible]	[illegible]							184			
35	EP	[illegible]	-1[illegible]	[illegible]							166			
36	EP	[illegible]	-1327	[illegible]							[illegible]			
37	EP	[illegible]	-1355	1352							139			
38	EP	[illegible]	[illegible]	[illegible]							204			
39	EP	35	-1370	1369							149	1368		1
40	EP	[illegible]	1402	1401	1400	-1	1	978			169	1400		1
41	EP	[illegible]	-1376	1377							198	1376		1
42	EP	30	-1474	1473							248			
43	EP	[illegible]	-1497	1496							204			
44	EP	[illegible]	-1529	[illegible]							266			
45	EP	[illegible]	-1560	[illegible]							178	1561		1
46	EP	[illegible]	[illegible]	[illegible]							178	1561		1
47	EP	[illegible]	-1793	[illegible]							202			
48	EP	46	1976	1975	1975		1	980			149	1975		1
49	IS	4	1559	1558	1558		1	963			188	1557	-1	1
50	EP	43	1709	1709	1709		1	971			149	1709		1
51	EP	[illegible]	-1839	1838							202			
52	EP	47	-2060	2061							228			
53	EP	45	-1713	1713							149			
54	EP	49	2099	2100	2100		1	969		-1	149	2099	-1	1
55	EP	50	2246	2248							252			
56	EP	[illegible]	-2231	2230							252			
57	EP	52	-2056	2055							228	2057		1
58	EP	53	-2277	2276							252			
59	EP	54	-2463	2461							276			
60	EP	55	-2468	2466							278			
61	EP	56	-2511	2509							276			
62	IS	5	2053	2052	2052		1	987			240	2052		1
63	EP	[illegible]	[illegible]	1426							77	1428		1
64	EP	58	-2270	2269							[illegible]			
65	EP	[illegible]	-870	870							93			
66	EP	[illegible]	675	673							79	675		1
67	EP	[illegible]	-741	741							108			
68	EP	62	-709	709							107			
69	EP	[illegible]	-902	902							105			
70	EP	65	-1382	1381							138			
71	EP	66	-1248	1247							138			
72	EP	[illegible]	[illegible]	[illegible]							178			
73	IS	4	2289	2285	2285		1	933			264	2285		1
74	[illegible]	[illegible]	[illegible]	[illegible]							[illegible]			
75	EP	[illegible]	-1[illegible]	[illegible]							[illegible]			
76	EP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	85[illegible]			[illegible]	[illegible]	-1	1
77	EP	[illegible]	1862	[illegible]							143	1859		1
78	SU	1	936	932							112			
79	SU	2	-559	55[illegible]							99	557		1
80	SU	[illegible]	713	717	717		1	878			62			
81	SU	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]			[illegible]	[illegible]		1
82	SU	[illegible]	1420	1420	[illegible]		3	[illegible]			[illegible]	1420		1
83	SU	[illegible]	[illegible]	[illegible]	[illegible]		2	988			284	1876		1
84	PE	[illegible]	-1482	1482							161			
85	PE	[illegible]	-1537	1536							181			
86	PE	[illegible]	-1672	[illegible]							100			
87	PE	[illegible]	[illegible]	[illegible]							[illegible]			
88	[illegible]	[illegible]	[illegible]	[illegible]							[illegible]			
89	[illegible]	[illegible]	[illegible]	[illegible]							[illegible]	[illegible]		1
90	[illegible]	[illegible]	[illegible]								[illegible]			
91	EP	[illegible]	[illegible]	[illegible]							[illegible]			

MIDRIC DATA: BN58486 #1 SCANS 1 TO 3000
09/08/85 15:53:00 CALI: BN58486 #2
SAMPLE: SAMPLE 5848-6 2UL/1ML (625) FB
CONDS.: EI
RANGE: 0 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: 0 20, 3



[illegible]
FINISHED AT: 5/11/89 11:02:00
Quantitation [illegible]

Data: [illegible]
07/06/8[illegible] 11:53:00
Sample: SAMPLE 5848-6 2UL/1ML (625) FB
Cond: [illegible] FI
Formula: BNA Instrument: 5100 Weight: 2.000
Submitted by: BC LABS Analyst: SGB Acct. No.:

AMOUNT=AREA * RLF AMNT/(RET AREA * RESP FACT)
Resp. Fac. [illegible] Factor [illegible]

Scan	Time	Area (Ight)	Amount	Name
553	8:55	3892750.	40.000 UG/L	D4-DICHLOROBENZENE (IS#1)
290	4:41	4431810.	115.929 UG/L	2-FLUOROPHENOL (BNA SURROGAT
849	13:42	9192830.	40.000 UG/L	D8-NAPHTHELENE(IS#2)
516	8:20	4404340.	86.355 UG/L	PHENOL D5 (BNA SURROGATE #2)
1244	20:04	4152730.	40.000 UG/L	D10-ACENAPHTHENE(BNA IS#3)
689	11:07	4116330.	86.598 UG/L	NITROBENZENE D5 (BNA SURROGA
1559	25:09	6980820.	40.000 UG/L	D10-PHENANTHRENE(IS#4)
1108	17:53	6061110.	48.529 UG/L	2-FLUOROBIPHENYL (BNA SURROG
1422	22:57	895724.	215.631 UG/L	2,4,6-TRIBROMOPHENOL (BNA SU
2055	33:10	4057700.	40.000 UG/L	D12-CHRYSENE(IS#5)
2291	36:58	2704540.	40.000 UG/L	D12-PERYLENE(IS#6)
1877	30:17	5772100.	55.604 UG/L	P-TERPHENYL D14 (BNA SURROGA

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	0.96	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	5:20	0.88	0.573	0.92	115.93	200.00	0.228	0.393	0.58
3	13:50	0.99	1.000	1.00	40.00	40.00	1.000	1.000	1.00
4	8:50	0.94	0.946	0.95	86.36	200.00	0.226	0.524	0.43
5	20:04	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
6	11:20	0.98	1.220	1.02	86.60	100.00	0.423	0.488	0.87
7	25:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
8	17:54	1.00	0.891	1.00	48.53	100.00	0.584	1.203	0.49
9	22:56	1.00	0.912	1.00	215.63	200.00	0.026	0.024	1.08
10	23:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
11	26:54	1.01	1.000	1.00	40.00	40.00	1.000	1.000	1.00
12	30:15	1.00	0.914	1.00	55.60	100.00	0.569	1.023	0.56

PROCEDURE: FCA DIAGNOSTIC REPORT 9/11/89 10:46:14
DATA FILE: BN06486
REFERENCE: TAP9A99
NAME LIST: 01 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: Y1

< ---- STANDARDS ----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	0	1	0	8	1	1	0	X1/SB1
1	1	1	0	8	2	1	0	X1/SB2
1	1	1	0	8	1	1	0	X2/SB3
1	1	1	0	7	1	1	0	X2/SB4
1	1	1	0	9	1	1	0	X3/SB5
1	1	1	0	11	3	1	0	X3/SB6
1	1	1	0	7	3	1	0	X4/SB7
1	1	1	0	7	1	1	0	X4/SB8
1	1	1	0	8	1	1	0	X5/SB9
1	1	1	0	4	1	1	0	X5/SB10
1	1	1	0	5	2	1	0	X6/SB11
1	1	1	0	4	1	1	0	X1/SB12
1	1	1	0	2	2	2	91	X3/SB13
1	1	1	0	2	2	3	6	X4/SB14
1	1	1	0	2	2	1	0	X5/SB15
1	1	1	0	8	2	1	0	X4/SB16
1	1	1	0	7	1	1	0	X5/SB17
1	1	1	0	5	1	1	0	X5/SB18

99 COMPOUNDS PROCESSED, 14 FOUND

< COMPOUND		>< ---------- SEARCH ----------					>< SAT >< ------ CHRO ------- >					
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	IS	1	-566	566	.	.	.	.	.	150	.	.	.
2	EP	1	-455	455						74	.	.	.
3	EP	2	-724	724	.	.	.	.	.	93	.	.	.
4	EP	3	-542	542	.	.	.	.	.	128	.	.	.
5	EP	4	-565	565	.	.	.	.	.	146	.	.	.
6	EP	5	-565	565	.	.	.	.	.	146	.	.	.
7	EP	6	-544	544	.	.	.	.	.	94	.	.	.
8	EP	7	-593	593	.	.	.	.		146	.	.	.
9	EP	8	-663	671				.		45	670		1
10	EP	9	-685	695			.	.		117	.	.	.
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		.	1	[illegible]	70	[illegible]		1
12	EP	[illegible]	[illegible]	[illegible]						77	.	.	.
13	EP	12	-770	785						82	786	.	1
14	EP	13	-781	799	.	.	.	.		139		.	.
15	EP	14	-831	854			.	.		93	.	.	.
16	IS	2	844	850	850	.	1	980	.	136	849	-1	1
17	EP	15	-800	806			.	.		107		.	.
18	EP	[illegible]	[illegible]	[illegible]						100			.
19	EP	17	-848	854			.			178	853		1
20	EP	18	-906	912						225			.
21	EP	19	-1021	1028						142		.	.
22	EP	[illegible]	-1004	1011						107			.
23	EP	[illegible]	-1074	1082				.		237			.
24	[illegible]	[illegible]	[illegible]	[illegible]						176			.
[illegible]	[illegible]		[illegible]	[illegible]						148			
[illegible]	[illegible]		[illegible]	[illegible]						[illegible]			
[illegible]	[illegible]		[illegible]	[illegible]						142			
26	EP	[illegible]	-1180	[illegible]						152			

33	EP	29	-1240	1250						154				
34	EP	30	-1274	1276						184				
35	EP	31	-1425	1427						166				
36	EP	32	-1326	1326						165				
37	EP	33	-1312	1352						139				
38	EP	34	-1424	1424						204				
39	EP	35	-1369	1371						149	1370			1
40	EP	37	1400	1400	1400		1	978		169	1402			1
41	EP	37	-1377	1379						198	1378			1
42	EP	38	-1473	1475						248				
43	EP	39	-1492	1492						284				
44	EP	40	-1540	1540						286				
45	EP	41	[illegible]	[illegible]						178	1563			1
46	EP	42	[illegible]	1563						178	1563			1
47	EP	43	[illegible]	[illegible]						222				
48	EP	46	1975	1977	1977		1	982		149	1977			1
49	IS	4	1558	1559	1559		1	966		188	1559			1
50	EP	43	1709	1710	1710		1	977		149	1710			1
51	EP	45	-1838	1839						202				
52	EP	47	-2061	2062						228				
53	EP	48	-1713	1714						149				
54	EP	49	2100	2101	2101		1	995	-1	149	2101			1
55	EP	50	-2248	2249						252				
56	EP	51	-2230	2231						252				
57	EP	52	-2055	2056						228	2055			1
58	EP	53	-2276	2277						252	2279			1
59	EP	54	-2461	2463						276				
60	EP	55	-2466	2468						278				
61	EP	56	-2509	2511						276				
62	IS	5	2052	2055	2055		1	983		240	2055			1
63	EP	57	-1426	1428						77	1428			1
64	EP	58	-2269	2272						252				
65	EP	59	-870	871						93				
66	EP	60	-673	674						79				
67	EP	61	-741	742						108				
68	EP	62	-709	710						107				
69	EP	63	-902	903						105				
70	EP	65	-1381	1383						138				
71	EP	66	-1247	1249						138				
72	EP	67	-1247	1249						138				
73	IS	6	2285	2291	2291		1	929		264	2291			1
74	EP	64	-671	672						127				
75	EP	68	-1227	1228						168				
76	EP	69	1558	1559	1559		1	882		184	1559			1
77	EP	70	-1863	1861						143	1865			1
78	SU	1	-332	332						112				
79	SU	2	-559	559						99				
80	SU	3	717	717						82				
81	SU	4	[illegible]	[illegible]	1108		1	995		[illegible]	1108			1
82	SU	5	[illegible]	1423	1423		1	944		62	1420		1	1
83	SU	6	1874	1878	1878		1	988		244	1877		-1	1
84	EP	3	-1482	1485						181				
85	EP	7	-1546	1547						263				
86	EP	8	-1678	1681						100				
87	EP	4	-1543	1544						181				
88	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]				
89	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]	[illegible]			[illegible]
90	[illegible]	[illegible]	[illegible]	[illegible]						[illegible]				
91	[illegible]	[illegible]	[illegible]	[illegible]						295				

6132

[illegible]	[illegible]	[illegible]	[illegible]	.	.	.	.	[illegible]		.	.
96	PE	[illegible]	1977	.	.	.	.	237		.	.
97	PE	[illegible]	1980	.	.	.	.	235	.	.	.
98	PE	[illegible]	1987	.	.	.	.	81	1910	.	2
99	PE	[illegible]	1840	.	.	.	.	155		.	.

608 Quality Control

Date: 8/23/89
QC Set: ~~6044-1~~ 6052-44
System Blank: NONE DETECTED

Instrument: V4600A
Side: LEFT
Column: 1.5% SP-2250/1.95% sp-2401

Constituent	ARF	Intercept	MRS Conc.	MRS Area	RPD
A-BHC	5009.74	-4976.00	10	45242	0.24
B-BHC	1876.53	-16319.41	50	81461	4.21
D-BHC	5086.81	-57245.39	40	131479	7.25
OP-DDE	0.30	2.10	50	17	1.94
Dieldrin	9965.38	-111510.00	50	363987	4.57
OP-DDT	1972.63	-64415.00	200	355981	6.56
Beta-Endosulfan	2867.16	10847.50	100	274601	8.01
Endrin Aldehyde	2634.95	-97925.50	300	727208	4.38
Endosulfan Sulfate	2587.80	-219004.67	300	779092	28.56
Lindane	4534.00	-946.33	20	90931	1.32
Heptachlor	3374.80	11780.67	20	85142	8.69
Aldrin	4069.45	5478.50	30	130893	2.73
Heptachlor Epoxide	3006.60	11638.00	30	105881	4.48
α-Endosulfan	3903.05	-25933.10	40	167076	23.63
PP-DDE	3786.60	-9199.50	50	177148	1.58
OP-DDD	1956.20	-18483.50	100	173024	2.10
Endrin	2155.23	-23338.50	100	178423	6.39
PP-DDD	3125.77	13859.18	50	174396	2.72
PP-DDT	2040.40	-72937.33	200	369080	8.32
Chlordane	988.71	-133740.67	1000	842542	1.26
Toxaphene	307.33	-169417.56	3500	1050630	13.42

Comments:

Daily Spike Quality Control for 608

Date: 8/~~09~~ 23/89 (EXTRACTION 8/02/89)

QC Set#: ~~5462-6~~ 6052-44

Lab # Spiked:

Constituent	Sample Conc.	Spike Conc.	Spike PR	Spike Dup PR	RPD of Spikes
Lindane	ND	20.0000	85.04	60.00	34.52
Heptachlor	ND	20.0000	93.66	64.57	36.77
Aldrin	ND	40.0000	95.03	66.26	35.68
Heptachlor Epoxide	ND	40.0000	39.55	28.70	31.79
α-Endosulfan	ND	40.0000	92.49	72.86	23.75
pp-DDE	ND	80.0000	35.46	15.54	78.10
op-DDD	ND	100.0000	78.19	59.60	26.99
Endrin	ND	80.0000	98.96	78.03	23.65
pp-DDD	ND	40.0000	92.52	64.58	35.57
pp-DDT	ND	200.0000	94.99	73.79	25.12
Toxaphene	ND	3000.0000	101.62	109.94	7.86
Surrogate 1	ND	0.0000	ERR	ERR	ERR
Surrogate 2	ND	0.0000	ERR	ERR	ERR

Comments:

PR - Percent Recovery
ND - None Detected
RPD - Relative Percent Difference

6125

Daily Spike Quality Control for 608

Date: 9/06/89

QC Set#: 6418-3

Lab # Spiked: REAGENT WATER

Constituent	Sample Conc.	Spike Conc.	Spike PR	Spike Dup PR	RPD of Spikes
Lindane	ND	20.0000	74.80	85.42	13.25
Heptachlor	ND	20.0000	100.16	101.98	1.80
Aldrin	ND	40.0000	92.40	93.91	1.62
Heptachlor Epoxide	ND	40.0000	52.91	51.16	3.36
α-Endosulfan	ND	40.0000	95.80	95.38	0.43
pp-DDE	ND	80.0000	*27.27	*26.31	*3.57
op-DDD	ND	100.0000	89.18	88.99	0.21
Endrin	ND	80.0000	106.62	107.98	1.27
pp-DDD	ND	40.0000	100.12	99.75	0.37
pp-DDT	ND	200.0000	91.98	93.93	2.10
Toxaphene	ND	3000.0000	89.05	92.60	3.91
Surrogate 1	ND	0.0000	ERR	ERR	ERR
Surrogate 2	ND	0.0000	ERR	ERR	ERR

Comments: 8/05/89 EXTRACTION RE-CHECK.
* Surrogate interference

PR - Percent Recovery
ND - None Detected
RPD - Relative Percent Difference

6136

608 Quality Control

Date: 9/06/89
QC Set: 6418-3
System Blank: none detected

Instrument: v4600a
Side: left
Column: 1.5% sp-2250/1.95% sp-2401

Constituent	ARF	Intercept	MRS Conc.	MRS Area	RPD
A-BHC	5897.0429	1657.5	10	57730	4.91
B-BHC	2331.3154	-13511.26	50	98558	3.86
D-BHC	7594.4404	-113958.2	40	156376	11.01
OP-DDE	0.4538462	0.7692308	50	21	10.85
Dieldrin	4564.4029	-20898.57	50	202308	2.20
OP-DDT	2864.57	-103197.7	200	453215	2.88
Beta-Endosulfan	3862.9729	-49511.5	100	306400	7.87
Endrin Aldehyde	3201.995	-110135.8	300	838532	1.24
Endosulfan Sulfate	2553.455	-236026.7	400	734048	5.02
Lindane	6428.35	-13382.33	20	109266	4.60
Heptachlor	5282.25	-7877.333	20	96902	0.82
Aldrin	6528	-33052	30	157289	2.81
Heptachlor Epoxide	3966.5	3109	30	121140	0.81
α-Endosulfan	4812.2731	-34111.05	50	196778	4.04
PP-DDE	5388.5314	-20601	50	239610	3.42
OP-DDD	2117.0171	-16429	100	188433	3.23
Endrin	2229.4371	-20662	100	193271	4.04
PP-DDD	3774.3923	-1426.872	50	189829	1.34
PP-DDT	3268.005	-162343	200	477968	2.03
Chlordane	2006.678	-606074	1000	1185470	10.72
Toxaphene	562.11111	-484505.1	3500	1425890	2.90

Comments:

GLENN DID THIS

APPENDIX H

Laboratory Sample Analytical Reports and Chromotograms

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

RECEIVED BY
WENCK ASSOCIATES INC.

AUG 11 1989

August 4, 1989
Lab. No. 19715

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

	ug/L		mg/L		
	Manganese	Iron	Nitrate	Sulfate	Sodium
MW1/H/4	*30	*100	9	13	42
MW2/H/4	*30	*100	2	9	82
MW3/H/4	*30	200	2	65	46
MW4/H/4	*30	100	3	33	64
MW1/H/4 Duplicate	*30	*100	--	--	--
Spike Recovery:	96%	101%	--	--	--

* = less than

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 28, 1989
Lab No.: 19714

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Attention: Glen Abdun-Nur

RE: WATER ANALYSES - WELLS 1 THRU 4

Dear Glen:

Attached are the results of the analyses performed on your water samples received on July 27, 1989. The samples have been described, as received, along with the data.

Please note that the analyses was performed by Brown and Caldwell Laboratories, Inc.

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

J.G. Patel, M.S.
Environmental Chemist

JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19710

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your sixteen (16) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

Sampled 7/27/89 by Chris Thompson

	pH	EC umhos/cm
MW1/A/4/1	7.4	502
MW1/A/4/2	7.5	502
MW1/A/4/3	7.5	502
MW1/A/4/4	7.5	495
MW2/A/4/1	6.8	4246
MW2/A/4/2	6.9	4298
MW2/A/4/3	6.7	4298
MW2/A/4/4	6.9	4298
MW3/A/4/1	7.5	661
MW3/A/4/2	7.5	661
MW3/A/4/3	7.5	661
MW3/A/4/4	7.5	661
MW4/A/4/1	7.8	595
MW4/A/4/2	7.7	595
MW4/A/4/3	7.8	595
MW4/A/4/4	7.8	599

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

TOTAL ORGANIC HALOGEN IN WATER
EPA METHOD 9020

August 3, 1989
Lab No. 19712

RECEIVED BY
WENCK ASSOCIATES INC.

AUG 7 1989

Bermite Division of Whittaker
22116 W. Soledad Canyon Rd.
Saugus, CA 91350

Sample Description: 4th Quarter Monitoring Wells
Sampled By: Chris Thompson
Date Sampled: July 26 & 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 1, 1989

REPORT OF ANALYSIS

Sample Description	ug/l	Detection Limit ug/l	MCL
MW1/C/4/1	ND	100	500
MW1/C/4/2	ND	100	500
MW1/C/4/3	ND	100	500
MW1/C/4/4	ND	100	500
MW2/C/4/1	125**	100	500
MW2/C/4/2	120**	100	500
MW2/C/4/3	100**	100	500
MW2/C/4/4	100**	100	500
MW3/C/4/1	ND	100	500
MW3/C/4/2	ND	100	500
MW3/C/4/3	ND	100	500
MW3/C/4/4	ND	100	500
MW4/C/4/1	990	100	500
MW4/C/4/2	730	100	500
MW4/C/4/3	910	100	500
MW4/C/4/4	800	100	500
Field Blank #7	8.7	100	500
Trip Blank	4.5	100	500

Average Blank Spike = 100% Recovery

** = Sample received with headspace in sample container. Possible loss of organics. Result may not be reliable.

ug/L = ppb

Very truly yours,
FGL ENVIRONMENTAL

Jeanine Egner, B.S
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

JE/JP:jlm

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 18, 1989
Lab No.: 19717

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: WATER ANALYSES - MW1 - MW4

Attached are the results of the analyses performed on your water samples received on July 27, 1989. The samples have been described, as received, along with data.

Please note that the analyses was performed by Brown and Caldwell Laboratories.

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

JGPatel

J.G. Patel, M.S.
Environmental Chemist

JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-2824 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-1	MW1/B/4/1	27 JUL 89
07-498-2	MW1/B/4/2	27 JUL 89
07-498-3	MW1/B/4/3	27 JUL 89
07-498-4	MW1/B/4/4	27 JUL 89
07-498-5	MW2/B/4/1	26 JUL 89

PARAMETER	07-498-1	07-498-2	07-498-3	07-498-4	07-498-5
Total Organic Carbon (TOC), mg/L	<3	<3	5	<3	<3

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-6	MW2/B/4/2	26 JUL 89
07-498-7	MW2/B/4/3	26 JUL 89
07-498-8	MW2/B/4/4	26 JUL 89
07-498-9	MW3/B/4/1	26 JUL 89
07-498-10	MW3/B/4/2	26 JUL 89

PARAMETER	07-498-6	07-498-7	07-498-8	07-498-9	07-498-10
Total Organic Carbon (TOC), mg/L	9	<3	<3	<3	<3

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-11	MW3/B/4/3	26 JUL 89
07-498-12	MW3/B/4/4	26 JUL 89
07-498-13	MW4/B/4/1	27 JUL 89
07-498-14	MW4/B/4/2	27 JUL 89
07-498-15	MW4/B/4/3	27 JUL 89

PARAMETER	07-498-11	07-498-12	07-498-13	07-498-14	07-498-15
Total Organic Carbon (TOC), mg/L	<3	<3	<3	8	4

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-498

Received: 29 JUL 89
Reported: 15 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-498-16	MW4/B/4/4	27 JUL 89

PARAMETER	07-498-16
Total Organic Carbon (TOC), mg/L	<3

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19704

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA (TOTAL METALS)

1 = MW1/J/4
2 = MW2/J/4
3 = MW3/J/4
4 = MW4/J/4
5 = MW1/J/4 Dup
6 = MW1/J/4 Spike Recovery

	1	2	3	4	5	6
Antimony	*100	*100	*100	*100	*100	106%
Arsenic	*10	*10	*10	*10	*10	95%
Barium	*100	600	*100	*100	*100	86%
Cadmium	*1	*1	*1	*1	*1	103%
Chromium	*10	*10	11	14	*10	101%
Copper	*50	*50	*50	*50	*50	109%
Lead	*10	*10	23	*10	*10	93%
Mercury	*1	*1	*1	*1	*1	100%
Selenium	*5	*5	*5	*5	*5	59%
Thallium	*100	*100	*100	*100	*100	100%

* = less than

Results for samples 1 through 5 are expressed as ug/L.

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 – (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19705

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA (DISSOLVED METALS)

1 = MW1/K/4
2 = MW2/K/4
3 = MW3/K/4
4 = MW4/K/4

	1	2	3	4
Antimony	*100	*100	*100	*100
Arsenic	*10	*10	*10	*10
Barium	*100	600	*100	*100
Cadmium	*1	*1	1	*1
Chromium	*10	*10	*10	*10
Copper	*50	*50	*50	*50
Lead	*10	*10	*10	*10
Mercury	*1	*1	*1	*1
Selenium	*5	*5	*5	*5
Thallium	*100	*100	*100	*100

* = less than

All results are expressed as ug/L.

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 – (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19703

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

Sampled 7/27/89 by Chris Thompson

	Dissolved Silver, ug/L
MW1/M/4	*10
MW2/M/4	*10
MW3/M/4	*10
MW4/M/4	*10

* = less than

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 – (805) 659-0910

BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19702

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

Sampled 7/27/89 by Chris Thompson

	Total Silver, ug/L
MW1/M/4	*10
MW2/M/4	*10
MW3/M/4	*10
MW4/M/4	*10

* = less than

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW1/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-2

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW2/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 26, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-3

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW3/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 26, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19706-4

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: MW4/D/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989

TITLE 22 ORGANIC CHEMICALS
REPORT OF ANALYSIS

Parameter	Test Results mg/l	Detection Limit mg/l	MCL mg/l
Endrin	ND	0.00002	0.0002
Lindane	ND	0.0004	0.004
Methoxychlor	ND	0.01	0.1
Toxaphene	ND	0.0005	0.005
2,4-D	ND	0.01	0.1
2,4,5-TP Silvex	ND	0.001	0.01

ND = Not detected at or above the concentration of the detection limit.

mg/l = ppm

Analysis performed in accordance with EPA method 608 Organochlorine Pesticides and PCB's, and Standard Methods 509B Chlorinated Phenoxy Acid Herbicides by Gas Chromotography

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 29, 1989
Lab. No. 19713

RECEIVED BY
WENCK ASSOCIATES INC

SEP 5 1989

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

pC/Liter

	Gross Alpha	Gross Beta	Total Radium
MW1/E/4	0 ± 1	3 ± 2	*1.0 ± 1.0
MW2/E/4	0 ± 4	6 ± 6	*1.0 ± 1.0
MW3/E/4	0 ± 2	2 ± 2	*1.0 ± 1.0
MW4/E/4	2 ± 2	0 ± 2	*1.0 ± 1.0

* = less than

Gross Alpha and Gross Beta values that are less than 1 picoCurie/Liter are only provided for statistical purposes.

The State of California accepts Total Radium analysis in lieu of Radium 226 analysis when the value obtained from the Total Radium analysis is less than 3 p Ci/liter.

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-2824 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

July 31, 1989
Lab No.: 19701

RE: BACTERIOLOGICAL ANALYSIS

Client: Bermite Division of Whittaker

Address: 22116 W. Soledad Canyon Rd.
Saugus, CA 91350
Date Collected: July 26 & 27, 1989
Collected By: Chris Thompson

TYPE OF SAMPLE[2]	REASON FOR TEST[3]	
1 Source (Well,etc)	A	Routine
2 Distribution System	B	Recheck
3 Waste Water	C	Special

Sample No.	Time Coll.	Set-up Time	Sampling Point	2	3	Presumptive 24 Hr.	Presumptive 48 Hr.	Confirmed 24 Hr.	Confirmed 48 Hr.	Number of Positive Tubes MPN/100 ml Coliform	Fecal
1	8:15A	5:48P	MW1/F/4	2	A	0	0	-	-	*2.2	
2	3:20P	5:47P	MW2/F/4	2	A	0	0	-	-	*2.2	
3	4:15P	5:46P	MW3/F/4	2	A	0	0	-	-	*2.2	
4	9:35A	5:49P	MW4/F/4	2	A	0	0	-	-	*2.2	

NOTE: The analysis of the bacteriological content of this water indicates that ALL samples DO meet the public health standards for drinking water.

* = Less than
** = Greater than

Remarks: All analyses done by "Standard Methods", 16th Edition, APHA.

Date Started: July 27, 1989
Required Notification:
Date Notified:

Date Completed: July 29, 1989
None: X
Person Notified:

FGL ENVIRONMENTAL

By Raquel Nelson
Raquel Nelson
RRN:jlm
cc: Wenck Associates

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19711

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

Sampled 7/27/89 by Chris Thompson

	Total Phosphate, mg/L
MW1/I/4	*0.1
MW2/I/4	*0.1
MW3/I/4	*0.1
MW4/I/4	*0.1

* = less than

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

CG:cem

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 – (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 4, 1989
Lab. No. 19716

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: WATER ANALYSES - PROJECT NO. 85-01.4

Presenting results of analyses performed on your four (4) water samples received July 27, 1988. The samples have been described, as received, along with the data.

DATA

Sampled 7/27/89 by Chris Thompson

	mg/L Fluoride
MW1/N/4	0.2
MW2/N/4	*0.1
MW3/N/4	0.2
MW4/N/4	0.2

* = less than

If there are questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Charles Green

Charles Green

CG:cem

BROWN AND CALDWELL LABORATORIES

801 WESTERN AVENUE, GLENDALE, CA 91201
(818) 247-5737

FAX: (818) 247-9797

ANALYTICAL REPORT

LOG NO: G89-07-497

Received: 29 JUL 89
Reported: 18 AUG 89

Ms. Martha Hamblin
FGL Environmental
853 Corporation, P.O. Box 272
Santa Paula,CA 93060

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-497-1	MW1/G/4	27 JUL 89
07-497-2	MW2/G/4	27 JUL 89
07-497-3	MW3/G/4	27 JUL 89
07-497-4	MW4/G/4	27 JUL 89

PARAMETER	07-497-1	07-497-2	07-497-3	07-497-4
EPA Method 604 - Phenols				
Date Extracted	08/02/89	08/02/89	08/02/89	08/02/89
Date Analyzed	08/15/89	08/15/89	08/15/89	08/15/89
Dilution Factor, Times 1	1	1	1	1
2,4,6-Trichlorophenol, ug/L	<20	<20	<20	<20
2,4-Dichlorophenol, ug/L	<20	<20	<20	<20
2,4-Dimethylphenol, ug/L	<20	<20	<20	<20
2,4-Dinitrophenol, ug/L	<20	<20	<20	<20
2-Nitrophenol, ug/L	<20	<20	<20	<20
2-Chlorophenol, ug/L	<20	<20	<20	<20
2-Methyl-4,6-dinitrophenol, ug/L	<50	<50	<50	<50
4-Chloro-3-methylphenol, ug/L	<20	<20	<20	<20
4-Nitrophenol, ug/L	<50	<50	<50	<50
Pentachlorophenol, ug/L	<50	<50	<50	<50
Phenol, ug/L	<20	<20	<20	<20

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 18, 1989
Lab No.: 19708

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: WATER ANALYSES - MW1 - MW4

Attached are the results of the analyses performed on your water samples received on July 27, 1989. The samples have been described, as received, along with data.

Please note that the analyses was performed by Clayton Environmental Consultants, Inc.

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

JGPatel

J.G. Patel, M.S.
Environmental Chemist

JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-2824 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

Clayton Environmental Consultants, Inc.

P.O. Box 9019 • 1252 Quarry Lane • Pleasanton, CA 94566 • (415) 426-2600

August 9, 1989

Ms. Julie McCalister
FGL ENVIRONMENTAL
853 Corporation Street
P. O. Box 272
Santa Paula, CA 93060-0272

Client Ref. No.: 19708
Lab Batch No.: 8907206
Clayton Project No.: 89072.06
Client Code No.: 77875

Dear Ms. McCalister:

Attached is our analytical laboratory report for the samples received on July 28, 1989. A copy of the Chain of Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be retained at our facility for approximately 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please call Maryann Gambino, Client Services Representative, at (415) 426-2657.

Sincerely,

Ronald H. Peters

Ronald H. Peters, CIH
Manager, Laboratory Services

RHP/pf
Attachment

Clayton Environmental Consultants, Inc.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Sample I.D.:	See below	Client:	FGL
Sample Received:	07/28/89	Client Ref. No.:	19708
Sample Analyzed:	08/03/89, 08/04/89	Lab Client Code:	77878
Sample Matrix:	Water	Lab No.:	8907206

Batch Sub. No.	Sample Identification	Formaldehyde(a) (µg/L)
-01	MW1/Q/4	<20
-02	MW2/Q/4	<20
-03	MW3/Q/4	<20
-04	MW4/Q/4	<20
-05	Field Blank #6	<20
-06	Trip Blank	<20
-MB	Method Blank	30

Limit of detection: 20

Method Reference: Clayton S.O.P

< = less than, below limit of detection

(a) Results have been corrected for Method Blank value.

RECEIVED BY
WENCK ASSOCIATES INC.
SEP 19 1989

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5040-1
Laboratory Name: B C Laboratories Signature Lab Director:
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW1-P-4 7/27/89 @ 7:50 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: G/S |-| User ID: | | |-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number			- - - - - -	- - - - - -
ug/L	Acenapthene	-	34205	- - N D - -	- 1 0 - 0 0
ug/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 - 0 0
ug/L	Anthracene	-	34220	- - N D - -	- 1 0 - 0 0
ug/L	Aldrin		39330	- - N D - -	- - 1 - 0 0
ug/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (ghi) perylene		34521	- - N D - -	- 2 0 - 0 0
ug/L	Benzyl butyl phthalate		34292	- - N D - -	- 2 0 - 0 0
ug/L	β - BHC	-	39338	- - N D - -	- - 1 - 0 0
ug/L	δ - BHC	-	34259	- - N D - -	- - 1 - 0 0
ug/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 - 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-1 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.00
ug/L	Chlordane		39350	ND	10.00
ug/L	2-Chloronapthalene		34581	ND	10.00
ug/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
ug/L	Crysene		34320	ND	10.00
ug/L	4,4'-DDD		39310	ND	2.00
ug/L	4,4'-DDE		39320	ND	2.00
ug/L	4,4'-DDT		39300	ND	2.00
ug/L	Dibenzo (a,h) anthracene		34556	ND	10.00
ug/L	Di-n-butylphthalate		39100	ND	10.00
ug/L	1,3-Dichlorobenzene		34566	ND	1.00
ug/L	1,2-Dichlorobenzene		34536	ND	1.00
ug/L	1,4-Dichlorobenzene		34571	ND	1.00
ug/L	3,3-Dichlorobenzidine		34631	ND	40.00
ug/L	Dieldrin		39380	ND	2.00
ug/L	Diethyl phthalate		34336	ND	10.00
ug/L	Dimethyl phthalate		34341	ND	10.00
ug/L	2,4-Dinitrotoluene		34611	ND	10.00
ug/L	2,6-Dinitrotoluene		34626	ND	10.00
ug/L	Di-n-octylphthalate		34596	ND	10.00
ug/L	Endosulfan sulfate		34351	ND	2.00
ug/L	Endrin Aldehyde		34366	ND	1.00
ug/L	Fluoranthene		34376	ND	10.00
ug/L	Fluorene		34381	ND	10.00
ug/L	Heptachlor		39410	ND	1.00
ug/L	Heptachlor epoxide		39420	ND	1.00
ug/L	Hexachlorobenzene		39700	ND	10.00
ug/L	Hexachlorobutadiene		34391	ND	10.00
ug/L	Hexachloroethane		34396	ND	10.00
ug/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
ug/L	Isophorone		34408	ND	20.00
ug/L	Napthalene		34696	ND	10.00
ug/L	Nitrobenzene		34447	ND	10.00
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.00
ug/L	PCB-1016		34671	ND	1.00
ug/L	PCB-1221		39488	ND	1.00
ug/L	PCB-1232		39492	ND	1.00
ug/L	PCB-1242		39496	ND	1.00
ug/L	PCB-1248		39500	ND	1.00
ug/L	PCB-1254		39504	ND	1.00
ug/L	PCB-1260		39508	ND	1.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-1 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene		34461			N	D				1	0	.	0	0
µg/L	Pyrene		34469			N	D				1	0	.	0	0
µg/L	Toxaphene		39400			N	D					3	.	0	0
µg/L	1,2,4-Trichlorobenzene		34551			N	D				1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol		34452			N	D				1	0	.	0	0
µg/L	2-Chlorophenol		34586			N	D				1	0	.	0	0
µg/L	2,4-Dichlorophenol		34601			N	D				1	0	.	0	0
µg/L	2,4-Dimethylphenol		34606			N	D				1	0	.	0	0
µg/L	2,4-Dinitrophenol		34616			N	D				1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol		34657			N	D				1	0	.	0	0
µg/L	2-Nitrophenol		34591			N	D				1	0	.	0	0
µg/L	4-Nitrophenol		34646			N	D				1	0	.	0	0
µg/L	Pentachlorophenol		39032			N	D					1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT					
µg/L	Phenol		34694			N	D				1	0	.	0	0
µg/L	2,4,6-Trichlorophenol		34621			N	D				1	0	.	0	0
µg/L	Benzidine		39120			N	D				1	0	.	0	0
µg/L	α - BHC		39337			N	D					1	.	0	0
µg/L	γ - BHC		39340			N	D					1	.	0	0
µg/L	Endosulfan I		34361			N	D					2	.	0	0
µg/L	Endosulfan II		34356			N	D					2	.	0	0
µg/L	Endrin		39390			N	D					1	.	0	0
µg/L	Hexachlorocyclopentadiene		34386			N	D				4	0	.	0	0
µg/L	N-Nitrosodimethylamine		34438			N	D				1	0	.	0	0
µg/L	N-Nitrosodiphenylamine		34433			N	D				1	0	.	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-2
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Employed By:
Date/Time Sample Collected: 7/26/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW2-P-4 7/26/89 @ 2:50 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| Y Y M M D D T T T T Water Type: G/S User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
		-			
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
ug/L	Acenapthene	-	34205	- - N D - -	- 1 0 . 0 0
ug/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 . 0 0
ug/L	Anthracene	-	34220	- - N D - -	- 1 0 . 0 0
ug/L	Aldrin	-	39330	- - N D - -	- 1 0 . 0 0
ug/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 . 0 0
ug/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 . 0 0
ug/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 . 0 0
ug/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 . 0 0
ug/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 . 0 0
ug/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 . 0 0
ug/L	β - BHC	-	39338	- - N D - -	- 1 0 . 0 0
ug/L	δ - BHC	-	34259	- - N D - -	- 1 0 . 0 0
ug/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 . 0 0
ug/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 . 0 0
ug/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 . 0 0
ug/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 . 0 0

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l utrals and Acids (Continued)

Lab #:5848-2 (Cont.)

EM NAME & NUMBER					
OPTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.00
ug/L	Chlordane		39350	ND	100.00
u /L	2-Chloronapthalene		34581	ND	10.00
g/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
ug/L	Crysene		34320	ND	10.00
ug/L	4.4'-DDD		39310	ND	20.00
ug/L	4.4'-DDE		39320	ND	20.00
ug/L	4.4'-DDT		39300	ND	20.00
ug/L	Dibenzo (a.h) anthracene		34556	ND	10.00
ug/L	Di-n-butylphthalate		39100	ND	10.00
ug/L	1.3-Dichlorobenzene		34566	ND	1.00
ug/L	1.2-Dichlorobenzene		34536	ND	1.00
ug/L	1.4-Dichlorobenzene		34571	ND	1.00
ug/L	3.3-Dichlorobenzidine		34631	ND	40.00
ug/L	Dieldrin		39380	ND	20.00
ug/L	Diethyl phthalate		34336	ND	10.00
ug/L	Dimethyl phthalate		34341	ND	10.00
ug/L	2.4-Dinitrotoluene		34611	ND	10.00
ug/L	2.6-Dinitrotoluene		34626	ND	10.00
ug/L	Di-n-octylphthalate		34596	ND	10.00
ug/L	Endosulfan sulfate		34351	ND	20.00
ug/L	Endrin Aldehyde		34366	ND	10.00
ug/L	Fluoranthene		34376	ND	10.00
ug/L	Fluorene		34381	ND	10.00
ug/L	Heptachlor		39410	ND	10.00
ug/L	Heptachlor epoxide		39420	ND	10.00
ug/L	Hexachlorobenzene		39700	ND	10.00
ug/L	Hexachlorobutadiene		34391	ND	10.00
ug/L	Hexachloroethane		34396	ND	10.00
ug/L	Ideno (1.2.3-cd) Pyrene		34403	ND	20.00
ug/L	Isophorone		34408	ND	20.00
ug/L	Napthalene		34696	ND	10.00
ug/L	Nitrobenzene		34447	ND	10.00
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.00
ug/L	PCB-1016		34671	ND	10.00
ug/L	PCB-1221		39488	ND	10.00
ug/L	PCB-1232		39492	ND	10.00
ug/L	PCB-1242		39496	ND	10.00
ug/L	PCB-1248		39500	ND	10.00
ug/L	PCB-1254		39504	ND	10.00
ug/L	PCB-1260		39508	ND	10.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

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Base Neutrals and Acids (Continued)

Lab #:5848-2 (Cont.)

SYSTEM NAME & NUMBER

ug/L	Phenanthrene		34461			N	D				1	0		0	0
ug/L	Pyrene		34469			N	D				1	0		0	0
ug/L	Toxaphene		39400			N	D				3	0		0	0
ug/L	1,2,4-Trichlorobenzene		34551			N	D				1	0		0	0

ACID EXTRACTABLES

ug/L	4-Chloro-3-methylphenol		34452			N	D				1	0		0	0
ug/L	2-Chlorophenol		34586			N	D				1	0		0	0
ug/L	2,4-Dichlorophenol		34601			N	D				1	0		0	0
ug/L	2,4-Dimethylphenol		34606			N	D				1	0		0	0
ug/L	2,4-Dinitrophenol		34616			N	D				1	0		0	0
ug/L	2-Methyl-4,6-dinitrophenol		34657			N	D				1	0		0	0
ug/L	2-Nitrophenol		34591			N	D				1	0		0	0
ug/L	4-Nitrophenol		34646			N	D				1	0		0	0
ug/L	Pentachlorophenol		39032			N	D					1		0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT				
ug/L	Phenol		34694			N	D				1	0		0	0
ug/L	2,4,6-Trichlorophenol		34621			N	D				1	0		0	0
ug/L	Benzidine		39120			N	D				1	0		0	0
ug/L	α - BHC		39337			N	D				1	0		0	0
ug/L	γ - BHC		39340			N	D				1	0		0	0
ug/L	Endosulfan I		34361			N	D				2	0		0	0
ug/L	Endosulfan II		34356			N	D				2	0		0	0
ug/L	Endrin		39390			N	D				1	0		0	0
ug/L	Hexachlorocyclopentadiene		34386			N	D				4	0		0	0
ug/L	N-Nitrosodimethylamine		34438			N	D				1	0		0	0
ug/L	N-Nitrosodiphenylamine		34433			N	D				1	0		0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
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FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-3
Laboratory Name: B C Laboratories Signature Lab Director: D. Schutz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/26/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW3-P-4 7/26/89 @ 3:55 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|-|-|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: G/S |-| User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
ug/L	Acenapthene	-	34205	- - N D - -	- 1 0 - 0 0
ug/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 - 0 0
ug/L	Anthracene	-	34220	- - N D - -	- 1 0 - 0 0
ug/L	Aldrin	-	39330	- - N D - -	- - 1 - 0 0
ug/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 - 0 0
ug/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 - 0 0
ug/L	β - BHC	-	39338	- - N D - -	- - 1 - 0 0
ug/L	δ - BHC	-	34259	- - N D - -	- - 1 - 0 0
ug/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 - 0 0

ENVIRONMENTAL
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Base Neutrals and Acids (Continued)

Lab #:5848-3 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.00
ug/L	Chlordane		39350	ND	10.00
ug/L	2-Chloronapthalene		34581	ND	10.00
ug/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
ug/L	Crysene		34320	ND	10.00
ug/L	4.4'-DDD		39310	ND	20.00
ug/L	4.4'-DDE		39320	ND	20.00
ug/L	4.4'-DDT		39300	ND	20.00
ug/L	Dibenzo (a.h) anthracene		34556	ND	10.00
ug/L	Di-n-butylphthalate		39100	ND	10.00
ug/L	1.3-Dichlorobenzene		34566	ND	10.00
ug/L	1.2-Dichlorobenzene		34536	ND	10.00
ug/L	1.4-Dichlorobenzene		34571	ND	10.00
ug/L	3.3-Dichlorobenzidine		34631	ND	40.00
ug/L	Dieldrin		39380	ND	20.00
ug/L	Diethyl phthalate		34336	ND	10.00
ug/L	Dimethyl phthalate		34341	ND	10.00
ug/L	2.4-Dinitrotoluene		34611	ND	10.00
ug/L	2.6-Dinitrotoluene		34626	ND	10.00
ug/L	Di-n-octylphthalate		34596	ND	10.00
ug/L	Endosulfan sulfate		34351	ND	20.00
ug/L	Endrin Aldehyde		34366	ND	10.00
ug/L	Fluoranthene		34376	ND	10.00
ug/L	Fluorene		34381	ND	10.00
ug/L	Heptachlor		39410	ND	10.00
ug/L	Heptachlor epoxide		39420	ND	10.00
ug/L	Hexachlorobenzene		39700	ND	10.00
ug/L	Hexachlorobutadiene		34391	ND	10.00
ug/L	Hexachloroethane		34396	ND	10.00
ug/L	Ideno (1.2.3-cd) Pyrene		34403	ND	20.00
ug/L	Isophorone		34408	ND	20.00
ug/L	Napthalene		34696	ND	10.00
ug/L	Nitrobenzene		34447	ND	10.00
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.00
ug/L	PCB-1016		34671	ND	10.00
ug/L	PCB-1221		39488	ND	10.00
ug/L	PCB-1232		39492	ND	10.00
ug/L	PCB-1242		39496	ND	10.00
ug/L	PCB-1248		39500	ND	10.00
ug/L	PCB-1254		39504	ND	10.00
ug/L	PCB-1260		39508	ND	10.00

ENVIRONMENTAL
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Base Neutrals and Acids (Continued)

Lab #:5848-3 (Cont.)

SYSTEM NAME & NUMBER

ug/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	_	0	0
ug/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	_	0	0

ACID EXTRACTABLES

ug/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	_	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS							DETECTION LIMIT				
ug/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	γ - BHC	_	39340	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	_	0	0
ug/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	_	0	0
ug/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	_	0	0
ug/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	_	0	0
ug/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	_	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

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FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-4
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW4-P-4 7/27/89 @ 9:25 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| Y Y M M D D T T T T Water Type: G/S User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
ug/L	Acenapthene	-	34205	- - N D - -	- 1 0 - 0 0
ug/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 - 0 0
ug/L	Anthracene	-	34220	- - N D - -	- 1 0 - 0 0
ug/L	Aldrin	-	39330	- - N D - -	- - 1 - 0 0
ug/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 - 0 0
ug/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 - 0 0
ug/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 - 0 0
ug/L	β - BHC	-	39338	- - N D - -	- - 1 - 0 0
ug/L	δ - BHC	-	34259	- - N D - -	- - 1 - 0 0
ug/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 - 0 0
ug/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 - 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
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4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-4 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
ug/L	4-Bromophenyl phenyl ether		34636	ND	10.00
ug/L	Chlordane		39350	ND	10.00
ug/L	2-Chloronapthalene		34581	ND	10.00
ug/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
ug/L	Chrysene		34320	ND	10.00
ug/L	4,4'-DDD		39310	ND	20.00
ug/L	4,4'-DDE		39320	ND	20.00
ug/L	4,4'-DDT		39300	ND	20.00
ug/L	Dibenzo (a,h) anthracene		34556	ND	10.00
ug/L	Di-n-butylphthalate		39100	ND	10.00
ug/L	1,3-Dichlorobenzene		34566	ND	10.00
ug/L	1,2-Dichlorobenzene		34536	ND	10.00
ug/L	1,4-Dichlorobenzene		34571	ND	10.00
ug/L	3,3-Dichlorobenzidine		34631	ND	40.00
ug/L	Dieldrin		39380	ND	20.00
ug/L	Diethyl phthalate		34336	ND	10.00
ug/L	Dimethyl phthalate		34341	ND	10.00
ug/L	2,4-Dinitrotoluene		34611	ND	10.00
ug/L	2,6-Dinitrotoluene		34626	ND	10.00
ug/L	Di-n-octylphthalate		34596	ND	10.00
ug/L	Endosulfan sulfate		34351	ND	20.00
ug/L	Endrin Aldehyde		34366	ND	10.00
ug/L	Fluoranthene		34376	ND	10.00
ug/L	Fluorene		34381	ND	10.00
ug/L	Heptachlor		39410	ND	10.00
ug/L	Heptachlor epoxide		39420	ND	10.00
ug/L	Hexachlorobenzene		39700	ND	10.00
ug/L	Hexachlorobutadiene		34391	ND	10.00
ug/L	Hexachloroethane		34396	ND	10.00
ug/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
ug/L	Isophorone		34408	ND	20.00
ug/L	Napthalene		34696	ND	10.00
ug/L	Nitrobenzene		34447	ND	10.00
ug/L	N-Nitosodi-n-propylamine		34428	ND	10.00
ug/L	PCB-1016		34671	ND	10.00
ug/L	PCB-1221		39488	ND	10.00
ug/L	PCB-1232		39492	ND	10.00
ug/L	PCB-1242		39496	ND	10.00
ug/L	PCB-1248		39500	ND	10.00
ug/L	PCB-1254		39504	ND	10.00
ug/L	PCB-1260		39508	ND	10.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-4 (Cont.)

SYSTEM NAME & NUMBER

ug/L	Phenanthrene		34461			N	D				1	0		0	0
ug/L	Pyrene		34469			N	D				1	0		0	0
ug/L	Toxaphene		39400			N	D					3		0	0
ug/L	1,2,4-Trichlorobenzene		34551			N	D				1	0		0	0

ACID EXTRACTABLES

ug/L	4-Chloro-3-methylphenol		34452			N	D				1	0		0	0
ug/L	2-Chlorophenol		34586			N	D				1	0		0	0
ug/L	2,4-Dichlorophenol		34601			N	D				1	0		0	0
ug/L	2,4-Dimethylphenol		34606			N	D				1	0		0	0
ug/L	2,4-Dinitrophenol		34616			N	D				1	0		0	0
ug/L	2-Methyl-4,6-dinitrophenol		34657			N	D				1	0		0	0
ug/L	2-Nitrophenol		34591			N	D				1	0		0	0
ug/L	4-Nitrophenol		34646			N	D				1	0		0	0
ug/L	Pentachlorophenol		39032			N	D					1		0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT				
ug/L	Phenol		34694			N	D				1	0		0	0
ug/L	2,4,6-Trichlorophenol		34621			N	D				1	0		0	0
ug/L	Benzidine		39120			N	D				1	0		0	0
ug/L	α - BHC		39337			N	D					1		0	0
ug/L	γ - BHC		39340			N	D					1		0	0
ug/L	Endosulfan I		34361			N	D					2		0	0
ug/L	Endosulfan II		34356			N	D					2		0	0
ug/L	Endrin		39390			N	D					1		0	0
ug/L	Hexachlorocyclopentadiene		34386			N	D				4	0		0	0
ug/L	N-Nitrosodimethylamine		34438			N	D				1	0		0	0
ug/L	N-Nitrosodiphenylamine		34433			N	D				1	0		0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: MW1/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-2824 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205

#39

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-2

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: MW2/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 26, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 – (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 942-0181

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-3

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: MW3/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 26, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	50.0	1,1-Dichloroethene	ND	5.0
Benzene	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromoform	ND	5.0	cis-1,3-Dichloropropene	ND	5.0
Bromomethane	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	Ethyl Benzene	ND	5.0
Chlorobenzene	ND	5.0	Methylene Chloride	ND	5.0
Chloroethane	ND	5.0	Methyl Ethyl Ketone	ND	50.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	5.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	5.0
			Xylenes	ND	5.0

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

MAIN OFFICE – & LABORATORY 853 CORPORATION STREET – P.O. BOX 272 SANTA PAULA, CALIFORNIA 93060-0272 (805) 525-3824 (805) 659-0910
BRANCH OFFICE – & LABORATORY 2500 STAGECOACH ROAD STOCKTON, CALIFORNIA 95205 (209) 948-9191

#41

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

August 11, 1989
Lab No. 19707-4

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91306

Sample Description: MW4/0/4
Sampled by: Chris Thompson, Wenck
Date Sampled: July 27, 1989
Date Received: July 27, 1989 Date Analyzed: August 8, 1989

VOLATILE ORGANICS IN WATER (GC/MS)
EPA METHOD 624
REPORT OF ANALYSIS

Compound	ug/l	Detection Limit ug/l	Compound	ug/l	Detection Limit ug/l
Acetone	ND	625	1,1-Dichloroethene	ND	62.5
Benzene	ND	62.5	trans-1,2-Dichloroethene	ND	62.5
Bromodichloromethane	ND	62.5	1,2-Dichloropropane	ND	62.5
Bromoform	ND	62.5	cis-1,3-Dichloropropene	ND	62.5
Bromomethane	ND	62.5	trans-1,3-Dichloropropene	ND	62.5
Carbon Tetrachloride	ND	62.5	Ethyl Benzene	ND	62.5
Chlorobenzene	ND	62.5	Methylene Chloride	ND	62.5
Chloroethane	ND	62.5	Methyl Ethyl Ketone	ND	625
Chloroform	ND	62.5	1,1,2,2-Tetrachloroethane	ND	62.5
Chloromethane	ND	62.5	Tetrachloroethene	ND	62.5
Dibromochloromethane	ND	62.5	Toluene	ND	62.5
1,2-Dichlorobenzene	ND	62.5	1,1,1-Trichloroethane	ND	62.5
1,3-Dichlorobenzene	ND	62.5	1,1,2-Trichloroethane	ND	62.5
1,4-Dichlorobenzene	ND	62.5	Trichloroethene	1,390	62.5
1,1-Dichloroethane	ND	62.5	Trichlorofluoromethane	ND	62.5
1,2-Dichloroethane	ND	62.5	Vinyl Chloride	ND	62.5
			Xylenes	ND	62.5

ND = Not detected at or above the concentration of the detection limit.

ug/l = ppb

Very truly yours,
FGL ENVIRONMENTAL

Eric Lu, Ph.D.
Environmental Chemist

J.G. Patel, M.S.
Environmental Chemist

EL/JP:mlh

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

WENCK INC.
SEP 22 1989

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89
Lab Sample ID No. 5848-1
Laboratory Name: B C Laboratories
Signature Lab Director: Don Schultz
Name of Sampler:
Sampler Employed By:
Date/Time Sample Collected: 7/27/89
Date/Time Sample Received @ Lab: 7/28/89
Were Holding Times Observed? YES
Test Methods: EPA 625
Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW1-P-4 7/27/89 @ 7:50
Number:
Description of Sampling Point:
County Name:
Name/No. of Sample Source:
Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| Y Y M M D D T T T T
Water Type: |-| G/S
User ID: |-| |-|
Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
µg/L	Acenapthene	-	34205	- - N D - -	- 1 0 . 0 0
µg/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 . 0 0
µg/L	Anthracene	-	34220	- - N D - -	- 1 0 . 0 0
µg/L	Aldrin	-	39330	- - N D - -	- - 1 . 0 0
µg/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 . 0 0
µg/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 . 0 0
µg/L	β - BHC	-	39338	- - N D - -	- - 1 . 0 0
µg/L	δ - BHC	-	34259	- - N D - -	- - 1 . 0 0
µg/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 . 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-1 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	10.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4'-DDD		39310	ND	2.00
µg/L	4,4'-DDE		39320	ND	2.00
µg/L	4,4'-DDT		39300	ND	2.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	2.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	2.00
µg/L	Endrin Aldehyde		34366	ND	1.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	1.00
µg/L	Heptachlor epoxide		39420	ND	1.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	1.00
µg/L	PCB-1221		39488	ND	1.00
µg/L	PCB-1232		39492	ND	1.00
µg/L	PCB-1242		39496	ND	1.00
µg/L	PCB-1248		39500	ND	1.00
µg/L	PCB-1254		39504	ND	1.00
µg/L	PCB-1260		39508	ND	1.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-1 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	.	0	0
µg/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT					
µg/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	τ - BHC	_	39340	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	.	0	0
µg/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	.	0	0

California D.O.H.S. Cert. #81

Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-2
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/26/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW2-P-4 7/26/89 @ 2:50 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: |-| (G/S) User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
µg/L	Acenapthene	-	34205	- - N D - -	- 1 0 . 0 0
µg/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 . 0 0
µg/L	Anthracene	-	34220	- - N D - -	- 1 0 . 0 0
µg/L	Aldrin	-	39330	- - N D - -	- 1 0 . 0 0
µg/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 . 0 0
µg/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 . 0 0
µg/L	β - BHC	-	39338	- - N D - -	- 1 0 . 0 0
µg/L	δ - BHC	-	34259	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 . 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-2 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	100.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4'-DDD		39310	ND	20.00
µg/L	4,4'-DDE		39320	ND	20.00
µg/L	4,4'-DDT		39300	ND	20.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	20.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	20.00
µg/L	Endrin Aldehyde		34366	ND	10.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	10.00
µg/L	Heptachlor epoxide		39420	ND	10.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	10.00
µg/L	PCB-1221		39488	ND	10.00
µg/L	PCB-1232		39492	ND	10.00
µg/L	PCB-1242		39496	ND	10.00
µg/L	PCB-1248		39500	ND	10.00
µg/L	PCB-1254		39504	ND	10.00
µg/L	PCB-1260		39508	ND	10.00

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-2 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Toxaphene	_	39400	_	_	N	D	_	_	_	3	0	.	0	0
µg/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS							DETECTION LIMIT				
µg/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	α - BHC	_	39337	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	γ - BHC	_	39340	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	2	0	.	0	0
µg/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	2	0	.	0	0
µg/L	Endrin	_	39390	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	.	0	0
µg/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	.	0	0

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Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-3
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/26/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW3-P-4 7/26/89 @ 3:55 Number:
Description of Sampling Point: County Name:
Name/No. of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: |-| (G/S) User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
µg/L	Acenapthene	-	34205	- - N D - -	- 1 0 . 0 0
µg/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 . 0 0
µg/L	Anthracene	-	34220	- - N D - -	- 1 0 . 0 0
µg/L	Aldrin	-	39330	- - N D - -	- - 1 . 0 0
µg/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 . 0 0
µg/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 . 0 0
µg/L	β - BHC	-	39338	- - N D - -	- - 1 . 0 0
µg/L	δ - BHC	-	34259	- - N D - -	- - 1 . 0 0
µg/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 . 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
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4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

FGL Environmental

853 Corporation St
Santa Paula, CA 93060-0272

BASE/NEUTRALS AND ACIDS
ORGANIC ANALYSIS

Date of Report: 9/14/89 Lab Sample ID No. 5848-4
Laboratory Name: B C Laboratories Signature Lab Director: D. Schultz
Name of Sampler: Sampler Employed By:
Date/Time Sample Collected: 7/27/89 Date/Time Sample Received @ Lab: 7/28/89 Were Holding Times Observed? YES
Test Methods: EPA 625 Were all the constituents listed below quantified? YES

==========

System 4th Quarter Monitoring Wells-Bermite Division of Whittaker System
Name: MW4-P-4 7/27/89 @ 9:25 Number:
Description of Sampling Point: County Name:
Name/No of Sample Source: Station Number |-|-|-|4|-|-|-|=|-|-|-|-|-|-|-|
Date & Time of Sample |-|-|-|-|-|-|-|-|-|-| (Y Y M M D D T T T T) Water Type: |-| (G/S) User ID: |-|-|-| Submitted to SWQIS By:

Place an "X" in box to delete all data for this station/date/time. |-|

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
	Date Analysis Completed	-		8 9 0 9 0 8 (Y Y M M D D)	- - - - - -
	Analyzing Agency Code (Lab)	-		- - - - - -	- - - - - -
	Intensive Survey Number	-		- - - - - -	- - - - - -
µg/L	Acenapthene	-	34205	- - N D - -	- 1 0 . 0 0
µg/L	Acenaphthylene	-	34200	- - N D - -	- 1 0 . 0 0
µg/L	Anthracene	-	34220	- - N D - -	- 1 0 . 0 0
µg/L	Aldrin	-	39330	- - N D - -	- - 1 . 0 0
µg/L	Benzo (a) anthracene	-	34526	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (b) fluoranthene	-	34230	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (k) fluoranthene	-	34242	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (a) pyrene	-	34247	- - N D - -	- 2 0 . 0 0
µg/L	Benzo (ghi) perylene	-	34521	- - N D - -	- 2 0 . 0 0
µg/L	Benzyl butyl phthalate	-	34292	- - N D - -	- 2 0 . 0 0
µg/L	β - BHC	-	39338	- - N D - -	- - 1 . 0 0
µg/L	δ - BHC	-	34259	- - N D - -	- - 1 . 0 0
µg/L	bis (2-chloroethyl) ether	-	34273	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroethoxy) methane	-	34278	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-ethylhexyl) phthalate	-	39100	- - N D - -	- 1 0 . 0 0
µg/L	bis (2-chloroisopropyl) ether	-	34283	- - N D - -	- 1 0 . 0 0

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-4 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	10.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4'-DDD		39310	ND	2.00
µg/L	4,4'-DDE		39320	ND	2.00
µg/L	4,4'-DDT		39300	ND	2.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	2.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	2.00
µg/L	Endrin Aldehyde		34366	ND	1.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	1.00
µg/L	Heptachlor epoxide		39420	ND	1.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	1.00
µg/L	PCB-1221		39488	ND	1.00
µg/L	PCB-1232		39492	ND	1.00
µg/L	PCB-1242		39496	ND	1.00
µg/L	PCB-1248		39500	ND	1.00
µg/L	PCB-1254		39504	ND	1.00
µg/L	PCB-1260		39508	ND	1.00

ENVIRONMENTAL
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PETROLEUM

BC LABORATORIES, INC.
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Base Neutrals and Acids (Continued)

Lab #:5848-4 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene	_	34461	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pyrene	_	34469	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Toxaphene	_	39400	_	_	N	D	_	_	_	_	3	.	0	0
µg/L	1,2,4-Trichlorobenzene	_	34551	_	_	N	D	_	_	_	1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol	_	34452	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Chlorophenol	_	34586	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dichlorophenol	_	34601	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dimethylphenol	_	34606	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4-Dinitrophenol	_	34616	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol	_	34657	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2-Nitrophenol	_	34591	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	4-Nitrophenol	_	34646	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Pentachlorophenol	_	39032	_	_	N	D	_	_	_	_	1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT				
µg/L	Phenol	_	34694	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	2,4,6-Trichlorophenol	_	34621	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	Benzidine	_	39120	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	α - BHC	_	39337	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	γ - BHC	_	39340	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Endosulfan I	_	34361	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endosulfan II	_	34356	_	_	N	D	_	_	_	_	2	.	0	0
µg/L	Endrin	_	39390	_	_	N	D	_	_	_	_	1	.	0	0
µg/L	Hexachlorocyclopentadiene	_	34386	_	_	N	D	_	_	_	4	0	.	0	0
µg/L	N-Nitrosodimethylamine	_	34438	_	_	N	D	_	_	_	1	0	.	0	0
µg/L	N-Nitrosodiphenylamine	_	34433	_	_	N	D	_	_	_	1	0	.	0	0

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Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
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Base Neutrals and Acids (Continued)

Lab #:5848-3 (Cont.)

SYSTEM NAME & NUMBER

µg/L	Phenanthrene		34461			N	D				1	0	.	0	0
µg/L	Pyrene		34469			N	D				1	0	.	0	0
µg/L	Toxaphene		39400			N	D					3	.	0	0
µg/L	1,2,4-Trichlorobenzene		34551			N	D				1	0	.	0	0

ACID EXTRACTABLES

µg/L	4-Chloro-3-methylphenol		34452			N	D				1	0	.	0	0
µg/L	2-Chlorophenol		34586			N	D				1	0	.	0	0
µg/L	2,4-Dichlorophenol		34601			N	D				1	0	.	0	0
µg/L	2,4-Dimethylphenol		34606			N	D				1	0	.	0	0
µg/L	2,4-Dinitrophenol		34616			N	D				1	0	.	0	0
µg/L	2-Methyl-4,6-dinitrophenol		34657			N	D				1	0	.	0	0
µg/L	2-Nitrophenol		34591			N	D				1	0	.	0	0
µg/L	4-Nitrophenol		34646			N	D				1	0	.	0	0
µg/L	Pentachlorophenol		39032			N	D					1	.	0	0

ADDITIONAL EXTRACTABLE PARAMETERS

REPORTING UNITS	CONSITUENT	TT	STORET CODE	ANALYSIS RESULTS						DETECTION LIMIT				
µg/L	Phenol		34694			N	D				1	0	.	0	0
µg/L	2,4,6-Trichlorophenol		34621			N	D				1	0	.	0	0
µg/L	Benzidine		39120			N	D				1	0	.	0	0
µg/L	α - BHC		39337			N	D					1	.	0	0
µg/L	τ - BHC		39340			N	D					1	.	0	0
µg/L	Endosulfan I		34361			N	D					2	.	0	0
µg/L	Endosulfan II		34356			N	D					2	.	0	0
µg/L	Endrin		39390			N	D					1	.	0	0
µg/L	Hexachlorocyclopentadiene		34386			N	D				4	0	.	0	0
µg/L	N-Nitrosodimethylamine		34438			N	D				1	0	.	0	0
µg/L	N-Nitrosodiphenylamine		34433			N	D				1	0	.	0	0

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Note any unidentified peaks below

NOTE ND= NONE DETECTED

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.
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4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Base Neutrals and Acids (Continued)

Lab #:5848-3 (Cont.)

SYSTEM NAME & NUMBER

REPORTING UNITS	CONSTITUENT	TT	STORET CODE	ANALYSIS RESULTS	DETECTION LIMIT
µg/L	4-Bromophenyl phenyl ether		34636	ND	10.00
µg/L	Chlordane		39350	ND	10.00
µg/L	2-Chloronapthalene		34581	ND	10.00
µg/L	4-Chlorophenyl phenyl ether		34641	ND	10.00
µg/L	Crysene		34320	ND	10.00
µg/L	4,4´-DDD		39310	ND	2.00
µg/L	4,4´-DDE		39320	ND	2.00
µg/L	4,4´-DDT		39300	ND	2.00
µg/L	Dibenzo (a,h) anthracene		34556	ND	10.00
µg/L	Di-n-butylphthalate		39100	ND	10.00
µg/L	1,3-Dichlorobenzene		34566	ND	1.00
µg/L	1,2-Dichlorobenzene		34536	ND	1.00
µg/L	1,4-Dichlorobenzene		34571	ND	1.00
µg/L	3,3-Dichlorobenzidine		34631	ND	40.00
µg/L	Dieldrin		39380	ND	2.00
µg/L	Diethyl phthalate		34336	ND	10.00
µg/L	Dimethyl phthalate		34341	ND	10.00
µg/L	2,4-Dinitrotoluene		34611	ND	10.00
µg/L	2,6-Dinitrotoluene		34626	ND	10.00
µg/L	Di-n-octylphthalate		34596	ND	10.00
µg/L	Endosulfan sulfate		34351	ND	2.00
µg/L	Endrin Aldehyde		34366	ND	1.00
µg/L	Fluoranthene		34376	ND	10.00
µg/L	Fluorene		34381	ND	10.00
µg/L	Heptachlor		39410	ND	1.00
µg/L	Heptachlor epoxide		39420	ND	1.00
µg/L	Hexachlorobenzene		39700	ND	10.00
µg/L	Hexachlorobutadiene		34391	ND	10.00
µg/L	Hexachloroethane		34396	ND	10.00
µg/L	Ideno (1,2,3-cd) Pyrene		34403	ND	20.00
µg/L	Isophorone		34408	ND	20.00
µg/L	Napthalene		34696	ND	10.00
µg/L	Nitrobenzene		34447	ND	10.00
µg/L	N-Nitosodi-n-propylamine		34428	ND	10.00
µg/L	PCB-1016		34671	ND	1.00
µg/L	PCB-1221		39488	ND	1.00
µg/L	PCB-1232		39492	ND	1.00
µg/L	PCB-1242		39496	ND	1.00
µg/L	PCB-1248		39500	ND	1.00
µg/L	PCB-1254		39504	ND	1.00
µg/L	PCB-1260		39508	ND	1.00