

ENVIRONMENTAL  
PROTECTION

**Erler &  
Kalinowski, Inc.**

Consulting Engineers and Scientists

1730 So. Amphlett Blvd., Suite 320  
San Mateo, California 94402  
(415) 578-1172  
Fax (415) 578-9131

LETTER OF TRANSMITTAL 95 MAY -3 AM 8: 53

Mr. Sumadhu Arigala  
TO: Dr. Ravi Arulanantham  
Regional Water Quality Control Board  
2101 Webster Street, Suite 500  
Oakland, California 94612

DATE: 2 May 1995

CONTRACT NO: 940018.00

SUBJECT: Sybase, Inc.

**We are sending you:**

- |   |                                  |   |
|---|----------------------------------|---|
| <input type="checkbox"/> Plans                        | <input type="checkbox"/> Prints  | <input type="checkbox"/> Specifications |
| <input checked="" type="checkbox"/> Reports /Workplan | <input type="checkbox"/> Samples | <input type="checkbox"/> Shop Drawings  |
| <input type="checkbox"/> Copy of Letter               | <input type="checkbox"/> Other   | <input type="checkbox"/> Change Order   |

Dated: 2 May 1995

**Description:**

Workplan for Additional Soil and Groundwater Investigation  
at 64th and 65th Street Properties, Emeryville, California

**These are transmitted as checked below:**

- |   |  |
|---|--|
| <input type="checkbox"/> As Requested                   | <input type="checkbox"/> For Review & Comments     |
| <input checked="" type="checkbox"/> For Approval        | <input type="checkbox"/> Returned After Loan to us |
| <input type="checkbox"/> For Information & Coordination | <input type="checkbox"/> For Action Noted          |

**Remarks:**

Copy to: Susan Hugo, ACDEH

**ERLER & KALINOWSKI, INC.**

John Bruno, Sybase Inc.

Tom Sullivan, AMB Properties

Bill Wick, Crosby, Heafey, Roach & May

by:



Michelle Kriegman King

If enclosures are not as noted,  
please advise us at once.

Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville, California

Sybase Inc., Emeryville, California  
(EKI 940018.00)

2 May 1995

Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville California

Sybase Inc., Emeryville, California  
(EKI 940018.00)

**TABLE OF CONTENTS**

1.0 INTRODUCTION.....	1
2.0 SETTING.....	2
3.0 BACKGROUND.....	2
3.1 SUMMARY OF ENVIRONMENTAL REVIEW OF ADJACENT PROPERTIES.....	2
3.1.1 RIX Industries.....	3
3.1.2 Henry Horn & Sons Site.....	4
3.1.3 Federal Express Property.....	4
3.2 POTENTIAL SOURCE AREAS ON THE SITE.....	4
3.2.1 Former Oil Refinery Operation.....	5
3.2.2 Lowenberg Property Former Underground Fuel Tanks.....	5
3.2.3 Ryerson Steel Facility Former Underground Tanks.....	5
3.2.4 Ryerson Steel Facility Chemical Storage Areas	6
3.2.5 Ryerson Steel Facility Prior Soil and Groundwater Investigation.....	6
3.3 PRELIMINARY SOIL AND GROUNDWATER INVESTIGATION ON THE SITE.....	7
3.3.1 Soil Sampling.....	7
3.3.2 Groundwater Sampling.....	8
3.3.3 Groundwater Flow Direction.....	9
3.3.4 Summary of the Results from the Preliminary Soil and Groundwater Investigation.....	9
3.3.4.1 Metals.....	9
3.3.4.2 Petroleum Hydrocarbons.....	10
3.3.4.3 VOCs and Industrial Solvents.....	11
3.3.4.4 PCBs and PAHs.....	13
4.0 WORKPLAN.....	13
4.1 TASK 1 - ACQUIRE PERMITS, PERFORM UNDERGROUND UTILITY SURVEY, AND PREPARE SITE HEALTH & SAFETY PLAN.....	15
4.2 TASK 2 - SOIL AND GRAB GROUNDWATER SAMPLING.....	15
4.3 TASK 3 - LABORATORY ANALYSIS.....	16
4.4 TASK 4 - WATER LEVEL ELEVATION SURVEYING.....	17
4.5 TASK 5- EVALUATE SITE DATA AND PREPARE REPORT.....	17
5.0 REFERENCES.....	18

Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville California

Sybase Inc., Emeryville, California  
(EKI 940018.00)

**LIST OF TABLES**

Table 1	Summary of soil Sample Depths and Sample Compositing
Table 2	Results of Soil Sample Analyses for Metals, Petroleum Hydrocarbons, Halogenated VOCs, PAHs and PCBs
Table 3	Results of Groundwater Sample Analyses for Metals and Petroleum hydrocarbons
Table 4	Results of Groundwater Samples Analyses for Halogenated VOCs, PAHs and Industrial Solvents
Table 5	Summary of Well Construction and Water Levels
Table 6	Summary of Proposed Laboratory Analyses



Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville California

Sybase Inc., Emeryville, California  
(EKI 940018.00)

**LIST OF FIGURES**

- |          |   |
|----------|---|
| Figure 1 | Site Location   |
| Figure 2 | Site Plan   |
| Figure 3 | Concentrations of Arsenic, Chromium, and Lead<br>in Soil              |
| Figure 4 | Concentrations of Total Recoverable Petroleum<br>Hydrocarbons in Soil |
| Figure 5 | Concentrations of Arsenic, Chromium and Lead<br>in Groundwater        |
| Figure 6 | Concentrations of Petroleum Hydrocarbons in<br>Groundwater            |
| Figure 7 | Concentrations of VOCs Detected in Groundwater                        |
| Figure 8 | Groundwater Elevation Contours  |
| Figure 9 | Location of Proposed Piezometers                                      |

Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville California

Sybase Inc., Emeryville, California  
(EKI 940018.00)

**APPENDICES**

- Appendix A     Boring Logs
- Appendix B     Soil Laboratory Data Sheets
- Appendix C     Groundwater Laboratory Data Sheets

Workplan for Additional  
Soil and Groundwater Investigations  
at 64th and 65th Street Properties  
Emeryville, California

Sybase Inc.  
(EKI 940018.00)

## 1.0 INTRODUCTION

At the request of AMB Corporate Real Estate Advisors, Inc. ("AMB") and its client, Sybase, Inc., Erler & Kalinowski, Inc. ("EKI") has prepared this workplan for additional soil and groundwater investigation on the properties at 1410 and 1450 64th Street and 1465 65th Street ("the Site") in Emeryville, California (Figure 1).

Sybase, Inc., is interested in acquiring the Site. Tentative plans include redevelopment of the Site to commercial/office uses. This investigation is being conducted to further evaluate potential environmental concerns associated with the Site.

This workplan first presents background data followed by a workplan for additional soil and groundwater sampling. The background data includes:

- a review of adjacent properties with documented chemical releases,
- a historical background on potential sources for chemicals of concern from the Site, and
- the results of a preliminary soil and groundwater investigation conducted on the Site by EKI in March 1995.

The objectives of the additional soil and groundwater investigation are as follows:

- further evaluate concentrations of petroleum hydrocarbons and volatile organic compounds ("VOCs") migrating onto the Site from upgradient sources;
- investigate the source of arsenic detected in groundwater samples collected in the vicinity of the railroad tracks during EKI's preliminary investigation conducted in March 1995;



- further characterize the potential sources of petroleum hydrocarbons in groundwater on the Site; and
- analyze soil and groundwater for 13 priority metals in response to a request by Regional Water Quality Control Board, San Francisco Bay Region ("RWQCB") staff.

## 2.0 SETTING

The Site is located on Hollis Street between and 64th and 65th streets in Emeryville, California and incorporates 1410 and 1450 64th Street and 1465 65th Street addresses. The southern portion of the Site is occupied by the former Bruener's warehouse ("Lowenberg property") and an asphalt paved storage area ("Ryerson paved lot property") (see Figure 2). The northern portion of the Site is occupied by the Ryerson Steel facility. The Site is bounded to the west by the Southern Pacific Railroad tracks and to the east by Hollis Street.

## 3.0 BACKGROUND

A review of regulatory agency records identified several off-site sources for chemical of concern present in the soil and groundwater on the Site. Review of the historic uses on the Site indicates that there are several potential sources for chemicals of concern present in the soil and groundwater on the Site. In March 1995, EKI conducted a preliminary soil and groundwater investigation at the Site. This investigation included installation of 6 groundwater monitoring wells and soil sampling at 27 locations on the Site.

This section reviews the results of each of the above investigations.

### 3.1 SUMMARY OF ENVIRONMENTAL REVIEW OF ADJACENT PROPERTIES

Based on a regulatory agency records search, three reported chemical release sites were identified which exist upgradient and within several hundred feet of the Site:

- RIX Industries  
6460 Hollis Street



- Henry Horn & Sons  
1301 65th Street
- Federal Express  
1600 63rd Street

Chemicals released to groundwater at these sites, listed below, and shown on Figure 2, may be impacting the Site.

### 3.1.1 RIX Industries

The RIX Industries site is located directly across Hollis Street east of the Site (see Figure 2). Files reviewed at the Alameda County Department of Environmental Health ("ACDEH") indicate that there are ten underground storage tanks on the RIX Industries site. These tanks reportedly contain or have contained: chlorinated solvents, sec-butyl alcohol, isopropyl alcohol, methyl ethyl ketone, ethylsilicate, diesel, mineral spirits, sec-butanol and tetrachloroethene ("PCE"). Subsurface investigations at the RIX Industries site revealed the presence of chlorinated solvents, industrial solvents, alcohols, and petroleum hydrocarbons in soil and groundwater (Hageman-Aguiar, Inc., 1992).

VOCs and their maximum concentration detected in groundwater samples collected in July 1992 from the RIX Industries site are as follows (Hageman-Aguiar, Inc., 1992):

Compound	Maximum Concentration (ug/L)
Tetrachloroethene (PCE)	2,200
Trichloroethene (TCE)	300
cis-1,2-Dichloroethene (c-1,2-DCE)	630
Vinyl Chloride	46
1,1,1-Trichloroethene (1,1,1-TCA)	81
1,1-Dichloroethane (1,1-DCA)	36
1,2-Dichloroethane (1,2-DCA)	450
Carbon Tetrachloride	980

Petroleum hydrocarbons quantified as gasoline, diesel, kerosene and mineral spirits have also been detected at very high concentrations (i.e., up to 21,000 ug/L) in the groundwater samples collected from the RIX Industries site in July 1992 (Hageman-Aguiar, Inc.).

The extent of the chemical plume in groundwater from the RIX Industries site has not been determined. The RIX Industries site is directly upgradient from the Site and may be a



source for the VOC and petroleum hydrocarbons detected on the Site.

### 3.1.2 Henry Horn & Sons Site

The Henry Horn & Sons site ("Henry Horn site") is located directly across Hollis Street from the northeast corner of the Ryerson Steel building (Figure 2). In 1988, a 2,000-gallon underground gasoline tank was removed from the Henry Horn site. Soil samples collected from the bottom of the excavation contained gasoline at concentrations up to 180 mg/kg. A groundwater monitoring well was installed in the inferred downgradient direction of the tank. Gasoline, benzene, toluene, ethylbenzene, and total xylenes ("BTEX") were not detected above reporting limits in a groundwater sample collected from the well in May 1994. According to the ACDEH staff, the well may not be located in the true downgradient direction from the former tank location. Additional investigations are being requested by ACDEH. A potential exists for impact to the Site from the Henry Horn site.

### 3.1.3 Federal Express Property

The Federal Express property is located directly across 64th Street and to the south of the Lowenberg property and the Ryerson paved lot property (Figure 2). ACDEH files indicate that a leak was discovered from a 10,000-gallon underground fuel tank in 1988. Three groundwater monitoring wells were subsequently installed. Groundwater samples obtained from the wells were found to contain gasoline at concentrations up to 2,700 ug/L. The file did not indicate whether additional characterization or remediation had been performed. Given that the tank is located on the west portion of the property, near the Southern Pacific railroad tracks, chemicals detected in groundwater on the Federal Express site are not likely to impact the Site.

## 3.2 POTENTIAL SOURCE AREAS ON THE SITE

Based on a review of historical site records (i.e., aerial photographs and Sanborn maps), and observations made during site walk-throughs, areas of potential environmental concern exist on the Site. These areas are listed below and are presented on Figure 2:

- former oil refinery operation;



- former underground fuel tanks on Lowenberg property;
- former underground diesel tank on Ryerson property; and
- former and current chemical storage areas on Ryerson property.

### 3.2.1 Former Oil Refinery Operation

Based on a review of a Sanborn Fire Insurance map for the Site from the year 1911, the Ryerson Paved Lot property and the western portion of the Lowenberg property were occupied by an oil refinery (Figure 2). Features of the oil refinery listed on the Sanborn map include "oil tanks, oil stills, coal oil department, oil reservoir, oil boiler, asphalt boiler, and refinery". As discussed below in Section 3.3, chemicals of concern have been detected in soil and groundwater in the area of the former oil refinery.

### 3.2.2 Lowenberg Property Former Underground Fuel Tanks

Two underground fuel storage tanks were removed from the 1410 64th Street property in February 1990 (Figure 2). At the time of tank removal operations, the tanks showed no signs of leakage. However, groundwater sampled from inside the tank excavation was found to contain diesel, gasoline, and BTEX. Analysis of soil samples from the excavation also indicated the presence of diesel, gasoline, and BTEX. Three groundwater wells were installed near the former fuel tank site. The analytical results of groundwater samples obtained semi-annually from April 1990 to January 1993 indicate the presence of Total Petroleum Hydrocarbons ("TPH") as gasoline and BTEX in groundwater samples from two of the wells (TMW-1 and TMW-2). Groundwater flow direction has varied historically from south to northwest in the vicinity of these monitoring wells. Closure with regard to these underground tanks has not been achieved.

### 3.2.3 Ryerson Steel Facility Former Underground Tanks

A 10,000-gallon underground diesel storage tank was removed from the Ryerson Steel facility on 11 March 1993. Soil samples collected from the east and west ends of the excavation pit at depths of 9.5 and 8.5 feet below ground surface ("ft bgs") did not contain TPH and BTEX above the method reporting limits (SEMCO, 1993). A grab groundwater sample collected from the excavation pit contained 850 ug/L TPH quantified as diesel (SEMCO, 1993).



Three monitoring wells (wells RMW-1, RMW-2 and RMW-3) surrounding the former tank location were installed on 6 August 1993 (Figure 2). Groundwater samples obtained since well installation have indicated the presence of the following compounds: TPH as gasoline in wells RMW-1 and RMW-2 at concentrations of 50 and 57 ug/L, respectively; free-phase hydrocarbons in well RMW-3; and benzene and xylenes in well RMW-2 at concentrations of 1.3 and 0.59 ug/L, respectively (Hydro-Environmental Technologies, Inc., December 1993). Groundwater flow direction on 24 November 1993 was determined to be to the north.

On 26 May 1994, ACDEH staff required Ryerson Steel to submit a work plan to begin an investigation/remediation program related to the petroleum hydrocarbons in the groundwater.

#### 3.2.4 Ryerson Steel Facility Chemical Storage Areas

During the site walk-through of the Ryerson Steel facility by EKI, two chemical storage areas were observed (Figure 2). Chemicals stored included petroleum hydrocarbons and various solvents. According to Ryerson Steel personnel, these two areas represent the only two areas on the Ryerson Steel facility where chemicals have historically been stored. At the time of the walk-through, no significant ground surface staining or other indicators of potential releases were observed.

#### 3.2.5 Ryerson Steel Facility Prior Soil and Groundwater Investigation

In 1988, a limited soil and groundwater investigation was performed by The Traverse Group at the Ryerson Steel facility in the vicinity of the railroad spur. Soil and groundwater samples were collected from 4 locations in the vicinity of the former railroad spur and were analyzed for VOCs using EPA Method 8240 (Figure 2). Compounds detected in soil samples and their maximum concentrations detected were as follows: carbon disulfide (0.064 mg/kg), 1,1-DCA (0.0034 mg/kg), and PCE (0.0067 mg/kg) (Traverse Group, 1989). Compounds detected in groundwater samples and their maximum concentrations detected were as follows (Traverse Group, 1989):



Compound	Maximum Concentration (ug/L)
TCE	14
t-1,2-DCE	5.8
1,2-DCA	3.9
1,1,1-TCA	0.7
1,1-DCA	240
1,1-Dichloroethene (1,1-DCE)	40
Carbon Disulfide	17

All of the compounds detected in the soil and groundwater samples, except carbon disulfide and 1,1-DCE, have been detected in groundwater samples collected upgradient of the Site on the RIX Industries site (see Section 3.1.1).

### 3.3 PRELIMINARY SOIL AND GROUNDWATER INVESTIGATION ON THE SITE

The preliminary soil and groundwater investigation of the Site conducted by EKI consisted of constructing 6 groundwater monitoring wells and sampling from 21 soil borings. Work was conducted from 6 to 24 March 1995. Five exploratory well borings (MW-1, and MW-3 through MW-6), and 11 soil-sample borings were drilled using a B-57 hollow stem auger drill rig (Figure 2). One well boring (MW-2) and 10 soil-sample borings were located inside structures (Figure 2) and, therefore, were drilled using a limited-access hollow stem drill rig. Boring logs and construction diagrams for monitoring wells are included in Appendix A. Prior to the initiation of the field work, all proposed soil borings were cleared for the presence of underground utilities by contacting Underground Services Alert ("USA") and surveying performed by Subdynamic Locating Service.

#### 3.3.1 Soil Sampling

Soil samples were obtained from 27 locations (Figure 2). One soil sample was collected from each location at shallow depths ranging from 2 and 9.5 ft bgs (Table 1). Samples collected from locations S-1A through S-8A and S-1B through S-8B that contained the same numerical label were composited in the laboratory (e.g., sample S-1A was composited with S-1B to form composited sample S1A/B). Soil samples were analyzed for the following compounds:

- total recoverable petroleum hydrocarbons ("TRPH") using EPA Method 5520 CF modified,

- VOCs using EPA Method 8240,
- polychlorinated biphenyls ("PCBs") using EPA Method 8080,
- polycyclic aromatic hydrocarbons ("PAHs") using EPA Method 8100, and
- arsenic, lead, and chromium using EPA 7000 Series Methods.

Soil sampling results are presented in Table 2 and shown on Figures 3 and 4. Laboratory reports for results of soil sample analyses are included in Appendix B.

### 3.3.2 Groundwater Sampling

Groundwater sampling from the newly installed monitoring wells (wells MW-1 through MW-6) and four of the existing wells (wells RMW-1, RMW-2, RMW-3, and TMW-1) was conducted from 23 March 1995 through 27 March 1995. Groundwater samples were analyzed for the following compounds:

- total purgeable petroleum hydrocarbons ("TPPH") and BTEX using EPA Methods 8015 modified and 8020, respectively,
- total extractable petroleum hydrocarbons ("TEPH") fuel fingerprint analysis using EPA Method 8015 modified,
- VOCs using EPA Method 8010,
- PAHs using EPA Method 8100,
- industrial solvents using EPA Method 8015, and
- arsenic, lead, and chromium using EPA 7000 Series Methods.

Groundwater sampling results are presented in Tables 3 and 4 and shown on Figures 5, 6 and 7. Laboratory reports for results of groundwater sample analyses are included in Appendix C.

### 3.3.3 Groundwater Flow Direction

Groundwater levels were measured on 24 March 1995 in each of the newly installed wells and five of the existing monitoring wells. Groundwater elevations ranged from 7.2 to 16.4 feet above mean sea level (1.7 to 5.8 ft bgs) and are summarized in Table 5. The estimated potentiometric surface contours indicate that groundwater is generally flowing to the west/southwest (Figure 8).

### 3.3.4 Summary of the Results from the Preliminary Soil and Groundwater Investigation

Chemicals of concern were detected in soil and groundwater samples collected from the Site. A summary is presented below by chemical class.

#### 3.3.4.1 Metals

##### Soil

Low concentrations of lead (up to 55 mg/kg) and chromium (up to 45 mg/kg) were detected in the soil samples collected from the Site (Figure 3). Arsenic was not detected above the laboratory reporting limits in any of the soil samples collected from the Site. The detected concentrations of lead and chromium are significantly less than the U.S. Environmental Protection Agency's ("EPA") Preliminary Remediation Goals ("PRGs") of 1,000 mg/kg for lead and 1,600 mg/kg for total chromium at industrial sites (EPA, 1995). PRGs are calculated based on human health risk estimates.

##### Groundwater

Lead and chromium were not detected in groundwater samples collected from the Site (Table 3). Concentrations of arsenic ranging from 7.6 to 68 ug/L were detected in four groundwater samples (MW-3, MW-5, MW-6, and RMW-2). The drinking water standard (i.e., Maximum Contaminant Level ("MCL")) for arsenic in groundwater is 50 ug/L (California Code of Regulations, 1994). All of the monitoring wells in which arsenic was detected are located adjacent to the Southern Pacific railroad tracks or the railroad spur on the Ryerson property (Figure 5). The arsenic in groundwater does not appear to originate from the Site because arsenic was not detected in any of the soil samples collected on site. Arsenic concentrations in the groundwater may originate from use of herbicides along the railroad tracks.

To further investigate the source of arsenic detected in groundwater on the Site, additional soil and grab groundwater samples will be obtained as part of the proposed workplan described below.

#### 3.3.4.2 Petroleum Hydrocarbons

##### Soil

TRPH concentrations detected in soil samples ranged from 16 mg/kg to 3,400 mg/kg (Table 2). The highest concentrations of hydrocarbons were detected in soil samples collected in the area of the former refinery (i.e., on the Lowenberg and Ryerson paved lot properties; Figure 4). Field notes indicate that black material observed in some soil samples looked like soft asphalt, suggesting that the hydrocarbons are of high molecular weight and not very mobile. The maximum TRPH concentration detected in soil samples collected from the Ryerson Steel Facility was 18 mg/kg. TRPH was detected in only 3 of the 9 samples collected from this portion of the Site (Figure 4).

##### Groundwater

Petroleum hydrocarbons were detected in groundwater samples collected from all wells on the Site (Figure 6). Detected concentrations ranged from 71 ug/L to 11,000 ug/L for TPPH and 97 ug/L to 97,000 ug/L for TEPH (Table 3). The only groundwater samples in which the petroleum hydrocarbons resembled common petroleum hydrocarbon standards were MW-1 and TMW-1, which were quantified as diesel and gasoline, respectively (Table 3). For the other samples containing detectable concentrations of petroleum hydrocarbons, the hydrocarbon patterns were reported as a range of carbon chain lengths (i.e., C9 to C24) because the laboratory indicated that gas chromatogram of the sample did not resemble typical hydrocarbon standards (Table 3). In many of the samples, TEPH was quantified to C24, although the laboratory indicated that the hydrocarbon pattern on the chromatogram extended beyond C36. Hydrocarbons in the range of C9 to C36 represent mid- to high-boiling point petroleum distillates.

There are several possible on-site sources for the hydrocarbons detected in groundwater on the Site: the former fuel tanks on the Lowenberg property, the former diesel tank on the Ryerson property, and the former refinery. Of these sources, only the fuel tanks on the

Lowenberg property contained gasoline. Groundwater sample TMW-1, collected adjacent to the Lowenberg fuel tanks, contained TPPH quantified as gasoline at a concentration of 100 ug/L (Figure 6).

The groundwater sample obtained from RMW-3, which is approximately 30 feet south of the former Ryerson diesel tank, contained the highest concentrations of both TPPH (11,000 ug/l) and TEPH (97,000 ug/l) detected on the Site (Figure 6). The source of the petroleum hydrocarbon concentrations measured in sample RMW-3 is unknown.

Concentrations of hydrocarbons detected in samples collected from wells RMW-1 and RMW-2, which are located closer to the former Ryerson underground tank, are more than 2 orders of magnitude lower than levels detected in samples from well RMW-3 (Figure 6). These results indicate that the hydrocarbons detected in sample RMW-3 may originate from another source. The TEPH concentration measured in the sample collected from well MW-5, which is downgradient of well RMW-3, was 29,000 ug/L. As discussed in the workplan below, an additional groundwater sample will be collected between wells RMW-3 and MW-5. This additional sampling should help clarify the source of petroleum hydrocarbons detected in sample RMW-3.

The TPPH and TEPH detected in groundwater collected from upgradient wells MW-1 and MW-2 may originate from upgradient, off-site sources. Petroleum hydrocarbon concentrations measured in samples from these wells indicate that a hydrocarbon plume may be migrating onto the Site. Possible upgradient sources are from the former gasoline tank on the Henry Horn property and the diesel and mineral spirits tanks on the RIX Industries site. Because the TEPH detected in sample MW-1 was quantified as diesel, and diesel concentrations up to 20,000 ug/L have been measured in groundwater samples collected from the RIX Industries site, it is likely that diesel released on the RIX Industries site is migrating onto the Site.

#### 3.3.4.3 VOCs and Industrial Solvents

##### Soil

There were no VOCs detected in 26 of the 27 soil samples collected from the Site. In one soil sample (S-9), very low concentrations of VOCs were detected (Table 2). The soil sample was collected near the chemical storage area on the

Ryerson Steel Facility (Figure 2). The compounds detected in sample S-9 and their respective PRGs are as follows:

<u>Compound</u>	<u>Concentration (mg/kg)</u>	<u>PRG (mg/kg)</u>
1,1-DCA	0.024	340
PCE	0.81	18
1,1,1-TCA	0.97	3,000

The concentrations of VOCs detected in soil are orders of magnitude less than the PRGs for industrial soil.

#### Groundwater

VOCs were detected in groundwater samples collected from the Site in March 1995 (Table 4; Figure 7). Many of the same compounds were detected in historic groundwater samples collected in the vicinity of the railroad spur in December 1988 and January 1989 (Figure 7) and upgradient of the Site on the RIX Industries site (Section 3.3.1).

Detected VOC concentrations in recent sampling ranged from 0.96 ug/L to 170 ug/L (Table 4). TCE was detected at the highest concentration, 170 ug/L, in the sample collected from upgradient well MW-1 (Figure 7). Figure 7 shows that elevated concentrations of TCE and other chlorinated VOCs appear to be migrating from the upgradient property boundary on Hollis Street through the center of the Site to the downgradient property boundary (i.e., wells MW-4 and MW-5).

Reports from the RIX Industries site indicate that one of the tanks on the property contained chlorinated solvents. PCE and TCE were detected in the groundwater samples collected from the RIX Industries site at concentrations of 2,200 ug/L and 300 ug/L, respectively. TCE, c-1,2-DCE, t-1,2 DCE, and vinyl chloride are anaerobic degradation products of the PCE (McCarty, 1988). Because high concentrations of petroleum hydrocarbons and other organic compounds have also been detected in groundwater upgradient of the Site, anaerobic conditions are likely to persist upgradient of the Site and on the Site. Thus, TCE, c-1,2-DCE, and t-1,2-DCE detected in samples collected from upgradient well MW-1 and in downgradient wells on the Site (i.e., wells RMW-1, RMW-2, RMW-3, MW-4, and MW-5) are likely migrating onto the Site from the RIX Industries site.

VOC concentrations downgradient of well MW-1 are lower than those in well MW-1 (Figure 7). Also, VOC concentrations in wells RMW-1, RMW-2, and RMW-3 are lower than those detected



in historic samples RS-3 and RS-4 collected in the same area of the Site in 1988/1989 (Figure 7). In addition to TCE and its anaerobic degradation products (i.e., c-1,2-DCE, t-1,2-DCE, and vinyl chloride), the compounds 1,1-DCA, 1,1-DCE, chloroethane, and 1,2-DCA have been detected downgradient of well MW-1.

The compounds 1,1-DCA, 1,1-DCE, and chloroethane may originate from chemical and biological transformation of 1,1,1-TCA (McCarty, 1988). 1,1,1-TCA was detected in one soil sample and one historic groundwater sample collected from the Site, and in groundwater upgradient of the Site at the RIX Industries site. However, impacts to groundwater quality due to a potential release of 1,1,1-TCA from the Site or from the RIX Industries site appear to be negligible because (1) 1,1,1-TCA was not detected in the recent groundwater sampling event; and (2) the concentrations of 1,1,1-TCA breakdown products are low (i.e., less than 18 ug/L).

Groundwater was also analyzed for industrial solvents by EPA Method 8015. There were no industrial solvents detected in 10 of the 11 groundwater samples collected from the Site (Table 4). Only the analysis of sample MW-5 indicated the possible presence of industrial solvents (Table 4). However, the laboratory indicated that the compounds quantified in the industrial solvents scan were likely false positive detections (Table 4) because the chlorinated compounds were not detected using EPA Method 8010, which uses a detector that is selective for chlorinated compounds and has lower detection limits than the industrial solvents method.

#### 3.3.4.4 PCBs and PAHs

There were no PCBs detected in 26 of the 27 soil samples collected from the Site. Soil sample MW-3, collected from a depth of 6 ft bgs, contained PCBs at concentration of 0.032 mg/kg. This concentration is an order of magnitude below the PRG of 0.34 mg/kg for industrial sites (EPA, 1995).

No PAHs were detected in any of the soil or groundwater samples collected from the Site.

#### 4.0 WORKPLAN

The objectives of this work plan are as follows:

- further evaluate concentrations of petroleum hydrocarbons and volatile organic compounds ("VOCs") migrating onto the Site from upgradient sources;
- investigate the source of arsenic detected in groundwater samples collected in the vicinity of the railroad tracks during EKI's preliminary investigation conducted in March 1995;
- further characterize the potential sources of petroleum hydrocarbons in groundwater on the Site; and
- analyze soil and groundwater for 13 priority metals in response to a request by RWQCB staff.

The highest VOC concentrations detected in groundwater on the Site were collected from well MW-1. Well MW-1 is directly downgradient from RIX Industries. To further define the extent of the VOC plume migrating onto the Site, three grab groundwater samples (P1, P2, and P3) will be obtained along Hollis Street (Figure 9).

One grab groundwater sample (P4) will also be obtained along 64th Street to evaluate if there is evidence of any additional off-site sources south of the Lowenberg and Ryerson paved lot properties (Figure 9).

Arsenic was detected in the groundwater samples collected from four wells located near the Southern Pacific railroad tracks and the railroad spur on the Ryerson property. However arsenic was not detected in any of the soil samples collected from the Site. RWQCB staff requested that additional investigation be performed to further investigate the possible origin of arsenic. A possible source may be historical herbicide spraying along the railroad tracks. To determine if an arsenic source exists on the Site, soil and groundwater will be sampled upgradient from monitoring well MW-5, the location in which groundwater samples contained the highest arsenic concentration (Figure 5). Soil and groundwater samples will be collected from two locations (P5 and P6) and analyzed for arsenic (Figure 9).

To further characterize the presence of petroleum hydrocarbon concentrations in groundwater on the Site, all groundwater monitoring wells will be checked for free-phase product prior to measuring water levels. Wells MW-5 and MW-6 will be resampled and analyzed for TEPH. Soil and groundwater samples from proposed locations P5 and P6 will also be analyzed for TEPH to further define the source of



the TEPH found at wells RMW-3 and MW-5. TEPH concentrations and gas chromatograms obtained from groundwater samples P5 and P6 will be compared to those from wells RMW-3 and MW-5.

Soil and grab groundwater sampling will be conducted with the following scope of work:

#### 4.1 TASK 1 - ACQUIRE PERMITS, PERFORM UNDERGROUND UTILITY SURVEY, AND PREPARE SITE HEALTH & SAFETY PLAN

Prior to the initiation of the field work, all applicable permits to collect grab groundwater samples will be obtained from the Alameda County Flood Control and Water Conservation District, Zone 7. All drilling locations will be cleared through contact with Underground Services Alert ("USA") and a private utility locating company.

Specific health and safety procedures will be defined in a project specific Health and Safety Plan which will be prepared by EKI prior to the initiation of field work. We have assumed that work on the Site can be conducted using EPA Level D protection (e.g., coveralls, hard hat, steel-toed boots). Air quality within the breathing zone will be monitored with an Organic Vapor Meter ("OVM") while work is in progress.

#### 4.2 TASK 2 - SOIL AND GRAB GROUNDWATER SAMPLING

A total of 6 borings (P1 through P6) will be constructed for the collection of soil and grab groundwater samples (Figure 9). The borings will be constructed with a drive sampling system. The system consists of a hydraulically-operated sampling rig that simultaneously drives an outer drive casing and a sample barrel attached to inner sampling rods. The sample barrel, measuring 1 5/8-inches outside diameter by three feet long, contains stainless steel liners that retain soil cores as the sample barrel is driven into the ground. Soil samples will be collected from two borings (P5 and P6) at a depth between 3 to 5 ft bgs. Each boring will be completed to a depth of 15 ft bgs.

After reaching total depth, the inner sampling rods and sample barrel will be removed from the borehole. In order to prevent the borehole from collapsing, the outer drive casing will remain in the borehole while the sample barrel is removed. When the sample barrel is removed, a small diameter PVC well screen will be placed through the drive casing to the bottom of the boring. Groundwater will be allowed to enter the casing and a grab groundwater sample

will be obtained with a small diameter bailer. The groundwater will be transferred into the appropriate sample containers, which will be labeled, placed on ice in a cooler, and transported to the laboratory for chemical analysis with a chain-of-custody record.

A geologist or engineer will be present during drilling and sampling activities to document encountered lithology, perform field screening, and prepare selected soil samples for chemical analyses. Soil samples for analysis will be collected in stainless steel liners at the selected depths. The 6-inch long steel liner will be covered with Teflon<sup>®</sup> sheets and capped with plastic end caps. A sample label will be attached to each liner, the samples will be placed on ice in a cooler and transported to the laboratory for chemical analysis with chain-of-custody records.

Upon completion of sampling activities, each boring will be backfilled to the surface using a cement and bentonite grout mixture.

#### 4.3 TASK 3 - LABORATORY ANALYSIS

The proposed soil and groundwater sample analyses are summarized in Table 6. The two shallow soil samples from locations P5 and P6 will be analyzed for the following chemical constituents:

- 13 Priority Metals (arsenic, beryllium, cadmium, total chromium, lead, mercury, nickel, selenium, tin, thallium, silver, and zinc).

The groundwater samples will be obtained from the six temporary piezometer locations (P-1 through P-6). The grab groundwater samples retained for metals analyses will be filtered in the laboratory. In addition to the 6 groundwater samples obtained from the temporary piezometers, EKI will obtain appropriate quality assurance and quality control samples, which will include a duplicate sample, a travel blank, and an equipment rinsate blank.

The 4 perimeter groundwater samples (locations P1 through P4) and one duplicate will be analyzed for the following chemical constituents (Table 6):

- TEPH (EPA Method 8015);
- VOCs (EPA Method 8240); and
- Arsenic (EPA 6000/7000 Series).

The groundwater samples from the temporary piezometers on the Ryerson paved lot (locations P5 and P6) will be analyzed for the following:

- TEPH (EPA Method 8015);
- VOCs (EPA Method 8240); and
- 13 Priority Metals (EPA 6000/7000 Series).

The groundwater samples will be collected from wells MW-5 and MW-6 if free-phase hydrocarbons are not present. Groundwater samples from wells MW-5 and MW-6 will be analyzed for TEPH (Table 6).

The travel blank sample will be analyzed for the VOCs by EPA Method 8240 (Table 6).

The equipment rinsate blank sample will be analyzed for the following chemical constituents (Table 6):

- TEPH (EPA Method 8015); and
- VOCs (EPA Method 8240).

#### 4.4 TASK 4 - WATER LEVEL ELEVATION SURVEYING

Prior to measuring water level elevations, a free product interface probe will be used to evaluate the presence and thickness of free-phase hydrocarbon product. Depths to groundwater will be measured in all monitoring wells (wells MW-1 through MW-6, RMW-1, RMW-2, RMW-3, and TMW-1) and temporary piezometers (locations P1 through P6) prior to destruction of the piezometers. Depth to groundwater measurements combined with casing elevation measurements will be used to determine the local hydrologic gradient at the Site. As part of this task, the surface elevations of the tops of the piezometers and the horizontal spacing between piezometers will be measured by a licensed land surveyor prior to their removal.

#### 4.5 TASK 5- EVALUATE SITE DATA AND PREPARE REPORT

Following completion of the above tasks, a written report will be prepared by EKI. The report will present the results of the preliminary soil and groundwater investigation conducted in March 1995 and the additional soil and groundwater sampling as outlined in Tasks 1 through

4 above. The report will summarize the field procedures, analytical procedures and analytical results. The report will conclude with a summary of the environmental conditions on the subject property (i.e., the nature of chemicals of concern in soils and groundwater) and recommendations for health-risk-based remediation of the soil and groundwater consistent with proposed future land use, if appropriate.

## **5.0 REFERENCES**

California Code of Regulations, Title 22, Section 64431, Revised 9 September 1994.

Hageman-Aguiar, Inc., 24 July 1992, *Report of Soil and Groundwater Investigation*, Rix Industries, Emeryville, California.

Hydro-Environmental Technologies, Inc., 21 December 1993, *Quarterly Monitoring Report*, Ryerson Steel and Aluminum, Inc., Emeryville, California.

McCarty, P.L., 1988, Bioengineering Issues Related to In Situ Remediation of Contaminated Soils and Groundwater, *Environmental Biotechnology*, G.S. Omenn, Ed., Plenum Publishing Corporation, pp. 143-162.

SEMCO Environmental and General Engineering Contractors, 1993, *Tank Removal Report*, Ryerson Steel and Aluminum, Emeryville, California.

The Traverse Group, 9 March 1989, *Technical Report and Assessment of Soil and Groundwater Contamination*, Ryerson Steel and Aluminum Company.

U.S. Environmental Protection Agency, 1 February 1995, *Region IX Preliminary Remediation Goals (PRGs) First Half 1995*, San Francisco, California.

**Table 1**  
**Summary of Soil Sample Depths and Sample Compositing**  
**Sybase, Inc**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

Sample ID	Sample Location (a)	Sample Interval Depth (ft bgs) (b)	Date Sample Collected
MW1-9.5	MW-1	9.5	3/6/95
MW2-6	MW-2	6	3/8/95
MW3-4	MW-3	4	3/7/95
MW4-8	MW-4	8	3/6/95
MW5-6	MW-5	6	3/7/95
MW6-2	MW-6	2	3/6/95
S1A/B	S1A, S1B	5, 5.5	3/9/95
S2A/B	S2A, S2B	4.5, 4	3/9/95
S3A/B	S3A, S3B	3, 3.5	3/9/95
S4A/B	S4A, S4B	4, 5.5	3/9/95
S5A/B	S5A, S5B	4.5, 4	3/7/95
S6-(A,B)	S6A, S6B	5, 3.5	3/6/95
S7A/B	S7A, S7B	4.5, 4	3/7/95
S8A/B	S8A, S8B	4, 4.5	3/7/95
S-9	S9A	4.5 - 5	3/6/95
S-10	S10	4.5 - 5	3/6/95
S11	S11	5.5 - 6	3/8/95
S12	S12	2.5 - 3	3/8/95
S13	S13	3.5 - 4	3/8/95

**NOTES:**

- (a) If two locations are indicated, then the sample was composited (see Figure 1 for boring locations).
- (b) Sample depth in feet below ground surface ("ft bgs") represents the bottom depth of a 0.5 foot sample.  
If two depths are indicated, they correspond to each respective location listed in previous column.

Table 2  
 Results of Soil Sample Analyses  
 for Metals, Petroleum Hydrocarbons, Halogenated VOCs, PAHs, and PCBs  
 Sybase, Inc  
 64th and 65th Street Properties  
 Emeryville, California  
 EKI 940018.00

Sample ID	Date Sample Collected	Metals EPA 6000/7000 Series			TRPH EPA Method 418.1 (mg/kg)	VOCs (a) EPA Method 8010			PAHs EPA Method 8100 (mg/kg)	PCBs (a) EPA Method 8080 PCB-1260 (mg/kg)
		Arsenic (mg/kg)	Lead (mg/kg)	Chromium (mg/kg)		1,1-DCA (mg/kg)	PCE (mg/kg)	1,1,1-TCA (mg/kg)		
MW1-9.5	3/6/95	<5 (b)	<5	26 (c)	16	<0.005	<0.005	<0.005	ND (d)	<0.020
MW2-6	3/8/95	<5	<5	26	16	<0.005	<0.005	<0.005	ND	<0.020
MW3-4	3/7/95	<5	6.7	33	<15	<0.005	<0.005	<0.005	ND	0.032
MW4-8	3/6/95	<5	8.1	36	<15	<0.005	<0.005	<0.005	ND	<0.020
MW5-6	3/7/95	<5	<5	17	22	<0.005	<0.005	<0.005	ND	<0.020
MW6-2	3/6/95	<5	42	36	3100	<0.02 (e)	<0.02 (e)	<0.02 (e)	ND	<0.020
S1A/B	3/9/95	<5	55	19	17	<0.005	<0.005	<0.005	ND	<0.020
S2A/B	3/9/95	<5	<5	19	87	<0.005	<0.005	<0.005	ND	<0.020
S3A/B	3/9/95	<5	12	22	3400	<0.005	<0.005	<0.005	ND	<0.020
S4A/B	3/9/95	<5	29	23	490	<0.005	<0.005	<0.005	ND	<0.020
S5A/B	3/7/95	<5	7.7	21	89	<0.005	<0.005	<0.005	ND	<0.020
S6-(A,B)	3/6/95	<5	<5	27	<15	<0.005	<0.005	<0.005	ND	<0.020
S7A/B	3/7/95	<5	<5	28	1400	<0.005	<0.005	<0.005	ND	<0.020
S8A/B	3/7/95	<5	<5	28	120	<0.005	<0.005	<0.005	ND	<0.020
S-9	3/6/95	<5	5.6	18	<15	0.024	0.81	0.97	ND	<0.020
S-10	3/6/95	<5	5.9	35	<15	<0.005	<0.005	<0.005	ND	<0.020
S11	3/8/95	<5	<5	45	16	<0.005	<0.005	<0.005	ND	<0.020
S12	3/8/95	<5	<5	34	<15	<0.005	<0.005	<0.005	ND	<0.020
S13	3/8/95	<5	5.1	39	18	<0.005	<0.005	<0.005	ND	<0.020

**Table 2**  
**Results of Soil Sample Analyses**  
**for Metals, Petroleum Hydrocarbons, Halogenated VOCs, PAHs, and PCBs**  
**Sybase, Inc**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

**NOTES:**

- (a) Only compounds detected in soil samples are included in table.
- (b) Less than symbol ("**<**") denotes that compound was not present above the laboratory detection limit indicated.
- (c) Compounds indicated in bold were present at concentrations that exceeded respective laboratory detection limits.
- (d) "ND" indicates that none of the compounds analyzed by the method listed were present above laboratory detection limits.
- (e) Laboratory report indicated detection limits raised; matrix effects necessitated sample dilution.

**ABBREVIATIONS:**

TRPH = Total Recoverable Petroleum Hydrocarbons  
VOCs = Volatile Organic Compounds  
1,1-DCA = 1,1-Dichloroethane  
PCE = Tetrachloroethene  
1,1,1-TCA = 1,1,1-Trichloroethane  
PAH = Polycyclic Aromatic Hydrocarbons  
PCBs = Polychlorinated Biphenyls

Table 3  
 Results of Groundwater Sample Analyses  
 for Metals and Petroleum Hydrocarbons  
 Sybase, Inc  
 64th and 65th Street Properties  
 Emeryville, California  
 EKI 940018.00

Sample ID	Date Sampled	Metals EPA 6000/7000 Series			Fuel Fingerprint EPA Method 8015		TPPH (a) EPA Method 8015/8020					
		Arsenic (ug/L)	Lead (ug/L)	Chromium (ug/L)	TEPH (ug/L)	Hydrocarbon Pattern (b)	TPPH (ug/L)	Hydrocarbon Pattern (b)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)
MW-1	3/23/95	<5 (c)	<5	<10	<b>5500 (d)</b>	diesel	170	C7-C12	<0.5	<0.5	<0.5	<0.5
MW-2	3/23/95	<5	<5	<10	260	C9-C24 (e)	71	<C8	<0.5	<0.5	<0.5	<0.5
MW-3	3/23/95	13	<5	<10	150	C9-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
MW-4	3/23/95	<5	<5	<10	190	C9-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
MW-5	3/27/95	68	<5	<10	29000	C9-C24 (e)	600	>C8	<0.5	<0.5	<0.5	<0.5
MW-6	3/27/95	16	<5	<10	13000	C9-C24 (e)	74	>C8	<0.5	<0.5	<0.5	<0.5
M-6Dup	3/27/95	NA (f)	NA	NA	5600	C9-C24(e)	250	>C8	<0.5	<0.5	<0.5	<0.5
RMW-1	3/24/95	<5	<5	<10	210	C13-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
R-1Dup	3/24/95	NA	NA	NA	97	C10-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
RMW-2	3/24/95	7.6	<5	<10	150	C10-C24 (e)	<50	ND	<0.5	<0.5	<0.5	<0.5
RMW-3	3/27/95	<5	<5	<10	97000	C9-C24 (e)	11000	>C8	<10	<10	<10	<10
TMW-1	3/28/95	<5	<5	<10	330	C9-24 (e)	100	gas	4.8	<0.5	1.8	3.2

NOTES:

- (a) TPPH = total purgeable petroleum hydrocarbons quantified against gasoline standard.
- (b) Hydrocarbon pattern indicates the identified hydrocarbon in the sample (i.e., diesel) or the range of carbon chain lengths quantified in the sample if the sample chromatogram did not resemble common hydrocarbon standards.
- (c) Less than symbol (" $<$ ") denotes that compound was not present above the detection limit indicated.
- (d) Compounds indicated in bold were present at concentrations that exceeded respective laboratory detection limits.
- (e) Sample was quantified in the diesel range (i.e., up to a carbon chain length of 24), but the hydrocarbon chain length range extended to C36.
- (f) Not analyzed.



**Table 3**  
**Results of Groundwater Sample Analyses**  
**for Metals and Petroleum Hydrocarbons**  
**Sybase, Inc**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

**ABBREVIATIONS:**

**TEPH = total extractable petroleum hydrocarbons**

**TPPH = total purgeable petroleum hydrocarbons**

**ND = not detected above laboratory detection limits.**

**NA = not analyzed.**

**BTEX = benzene, toluene, ethylbenzene, and xylenes.**

Table 4  
 Results of Groundwater Samples Analyses  
 for Halogenated VOCs, PAHs, and Industrial Solvents  
 Sybase, Inc  
 64th and 65th Street Properties  
 Emeryville, California  
 EKI 940018.00

Sample ID	Date Sampled	VOCs EPA Method 8010 (a)									PAHs Method 8100 (ug/L)	Industrial Solvents (ug/L)
		chloro-ethane (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	1,1-DCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	TCE (ug/L)	vinyl chloride (ug/L)	Freon 113 (ug/L)		
MW-1	3/23/95	<5 (b)	<2.5	<2.5	<2.5	<b>39 (c)</b>	<b>9.9</b>	<b>170</b>	<5	<b>9</b>	ND (d)	ND
MW-2	3/23/95	<2.5	<1.2	<1.2	<1.2	<b>60</b>	<b>46</b>	<b>2.5</b>	<2.5	<2.5	ND	ND
MW-3	3/23/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	ND	ND
MW-4	3/23/95	<2.5	<1.2	<1.2	<1.2	<b>28</b>	<b>16</b>	<b>54</b>	<2.5	<2.5	ND	ND
MW-5	3/27/95	<b>18</b>	<b>5.8</b>	<0.5	<0.5	<b>8.5</b>	<b>9.6</b>	<0.5	<b>10</b>	<1	ND	(e)
MW-6	3/27/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	ND	ND
M-6Dup	3/27/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	ND	ND
RMW-1	3/24/95	<2.5	<1.2	<b>1.4</b>	<1.2	<b>16</b>	<b>10</b>	<b>53</b>	<2.5	<2.5	ND	ND
R-1Dup	3/24/95	<2.5	<1.2	<b>1.3</b>	<1.2	<b>15</b>	<b>9.7</b>	<b>51</b>	<2.5	<2.5	NA (f)	NA
RMW-2	3/24/95	<1	<0.5	<b>0.96</b>	<0.5	<b>12</b>	<b>8.4</b>	<b>26</b>	<1	<1	ND	ND
RMW-3	3/27/95	<1	<b>11</b>	<0.5	<b>1.4</b>	<b>25</b>	<b>22</b>	<b>36</b>	<b>3.7</b>	<1	ND	ND
TMW-1	3/28/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<b>2.3</b>	<1	<1	ND	ND

NOTES:

- (a) Only compounds detected in groundwater samples are included in table.
- (b) Less than symbol (" $<$ ") denotes that compound was not present above the laboratory detection limit indicated.
- (c) Compounds indicated in bold were present at concentrations that exceeded its respective laboratory detection limits.
- (d) "ND" indicates that none of the compounds analyzed by the method listed were present above laboratory detection limits.
- (e) Compounds reported in this sample include: carbon tetrachloride ("CT") =260 ug/L, 1,2-DCA=380 ug/L, ethyl acetate=830 ug/L, ethylbenzene=100 ug/L, tetrachloroethene ("PCE") =200 ug/L, toluene=22 ug/L, and o-xylene=220 ug/L. However, the laboratory indicated that the detection of CT, 1,2-DCA, ethylbenzene, PCE, toluene, and o-xylene is likely attributed to false positive recovery of these compounds in the Industrial Solvent analysis. These compounds were not detected on the EPA 8010 and BTEX

**Table 4**  
**Results of Groundwater Samples Analyses**  
**for Halogenated VOCs, PAHs, and Industrial Solvents**  
**Sybase, Inc**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

analyses, which use electron capture ("ECD") and photoionization detectors ("PID"), respectively. ECD and PID detectors selectively analyze halogenated compounds and aromatic compounds, respectively. The Industrial Solvent analysis uses a flame ionization detector ("FID"), which is a non-selective detector. Taken together, the data suggests that the CT, 1,2-DCA, ethylbenzene, PCE, toluene, and o-xylene are not present above detection limits in this sample.

(f) Sample not analyzed.

**ABBREVIATIONS:**

VOCs = Volatile Organic Compounds  
1,1-DCA = 1,1-Dichloroethane  
1,2-DCA = 1,2-Dichloroethane  
1,1-DCE = 1,1-Dichloroethene

PAHs = Polycyclic Aromatic Hydrocarbons  
cis-1,2-DCE = cis-1,2-Dichloroethene  
trans-1,2-DCE = trans-1,2-Dichloroethene  
TCE = Trichloroethene

**Table 5**  
**Summary of Well Construction and Water Levels**  
**Sybase, Inc.**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

Well ID	Date Well Installed	Depth of Well (ft bgs)	Screen Interval (ft bgs)	Sand Pack Interval (ft bgs)	Top of Casing Elevation (ft msl)	Date Measured	Depth to Water (ft bgs)	Groundwater Elevation (ft msl)
MW-1	3/6/95	20	5 - 20	4 - 20	18.24	3/24/95	2.97	15.27
MW-2	3/8/95	15.5	5.5 - 15.5	4 - 15.5	19.45	3/24/95	3.03	16.42
MW-3	3/7/95	19	4 - 19	3 - 19	15.24	3/24/95	2.72	12.52
MW-4	3/6/95	20	5 - 20	4 - 20	14.02	3/24/95	4.57	9.45
MW-5	3/7/95	15	5 - 15	4 - 15	12.99	3/24/95	5.75	7.24
MW-6	3/6/95	14	4 - 14	3 - 14	12.66	3/24/95	2.55	10.11
RMW-1	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.38	3/24/95	3.61	10.77
RMW-2	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.55	3/24/95	3.35	11.2
RMW-3	8/6/93	15.5	4.5 - 15.5	4 - 15.5	14.15	3/24/95	2.95	11.2
TMW-1	4/12/90	15	5 - 15	4 - 15	16.31	3/24/95	2.59	13.72
TMW-2	4/12/90	15.5	5 - 15	4 - 15	15.57	3/24/95	NM	-
TMW-3	4/12/90	15.5	5 - 15	4 - 15	15.15	3/24/95	1.65	13.5

NOTES: "ft bgs" = feet below ground surface.  
 "ft msl" = feet relative to mean sea level  
 "NM" = not measured, well obstructed by dirt

**Table 6**  
**Summary of Proposed Laboratory Analyses**  
**Sybase, Inc.**  
**64th and 65th Street Properties**  
**Emeryville, California**  
**EKI 940018.00**

Sample Location	Laboratory Analyses (a)	
	Soil	Water
P-1	-	Arsenic, VOCs
P-2	-	Arsenic, VOCs
P-3	-	Arsenic, VOCs
P-4	-	Arsenic, VOCs
P-5	13 Metals	13 Metals, TEPH, VOCs
P-6	13 Metals	13 Metals, TEPH, VOCs
MW-5	-	TEPH
MW-6	-	TEPH
Trip Blank	-	VOCs
Equipment Blank	-	VOC, TEPH
Duplicate (P-5 or P-6)	-	Arsenic, TEPH, VOCs

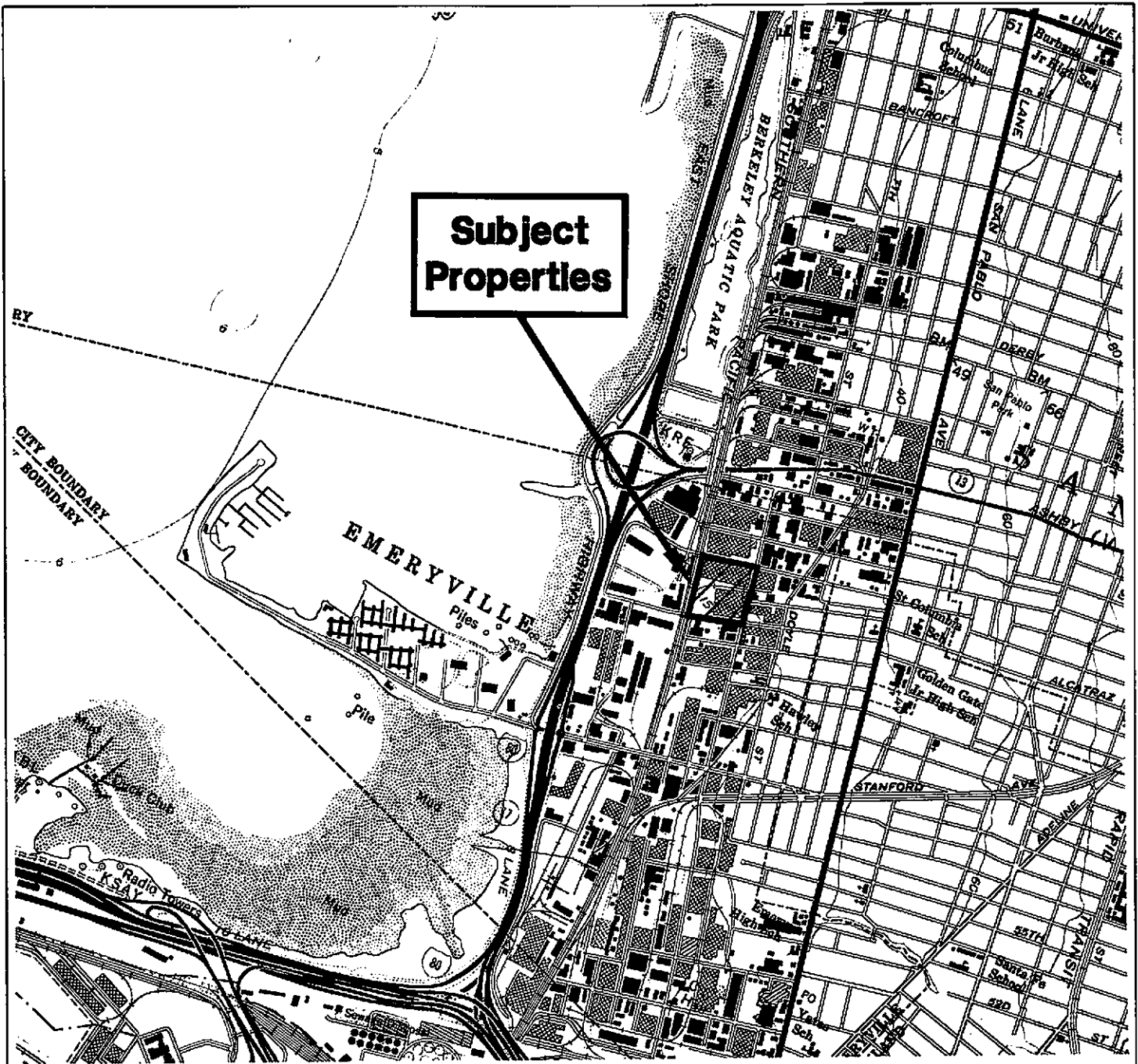
**NOTES:**

(a) Arsenic - Analysis by EPA Method 7060

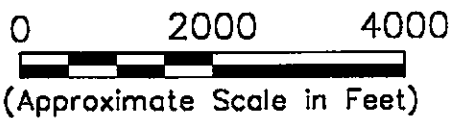
VOC - Volatile Organic Compounds analysis by EPA Method 8240

13 Metals - Priority Metals Analysis by EPA 600/7000 Series; includes arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, tin, thallium, and zinc.

TEPH - Total Extractable Petroleum Hydrocarbons analysis by EPA Method 8015 m



Basemap Source: 1980 U.S.G.S Quad Map, Oakland West, California.



**Notes:**

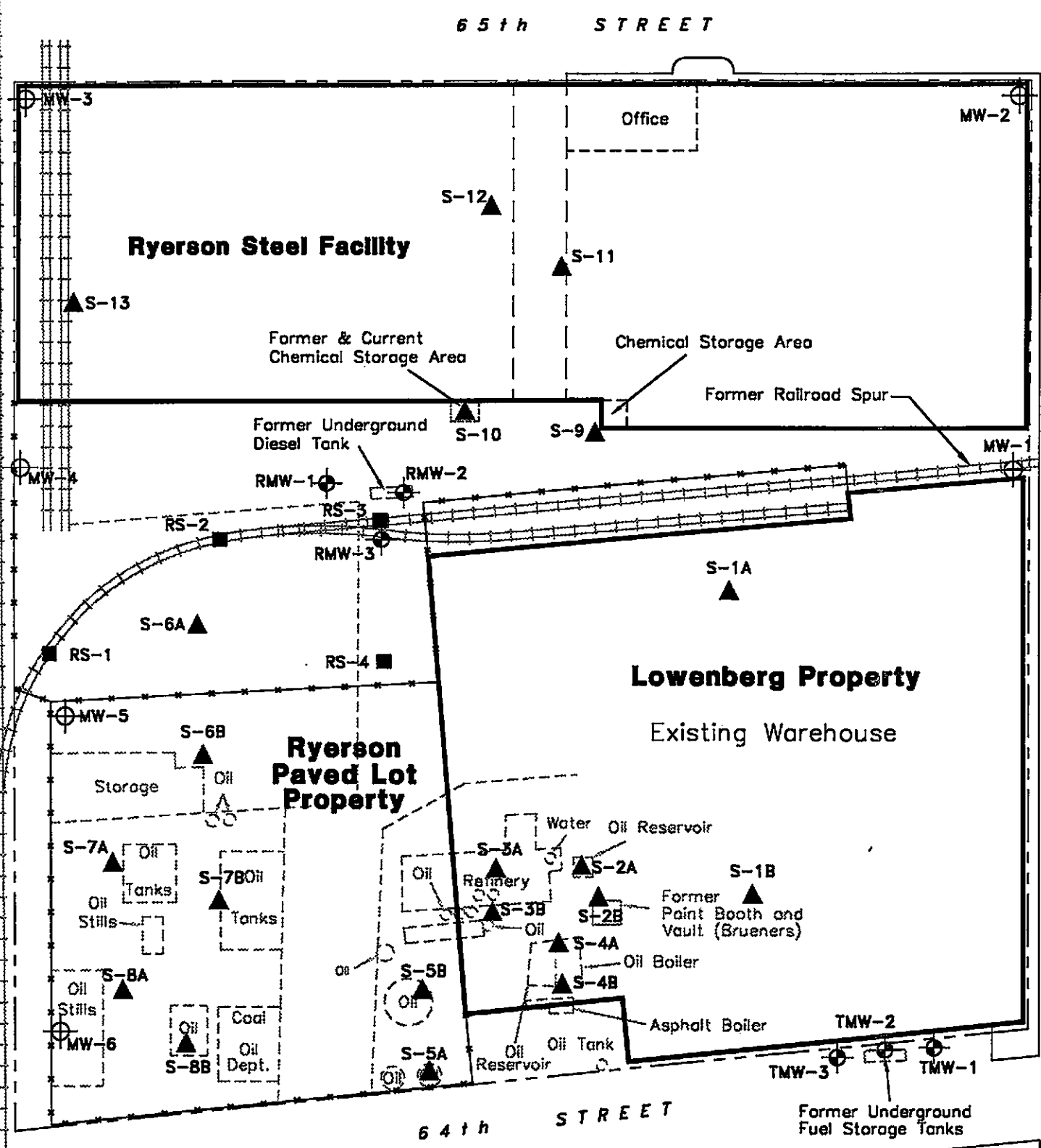
1. All locations are approximate.

# Erler & Kalinowski, Inc.

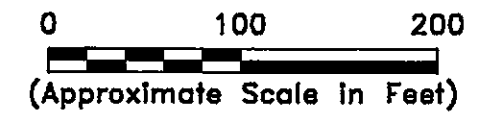
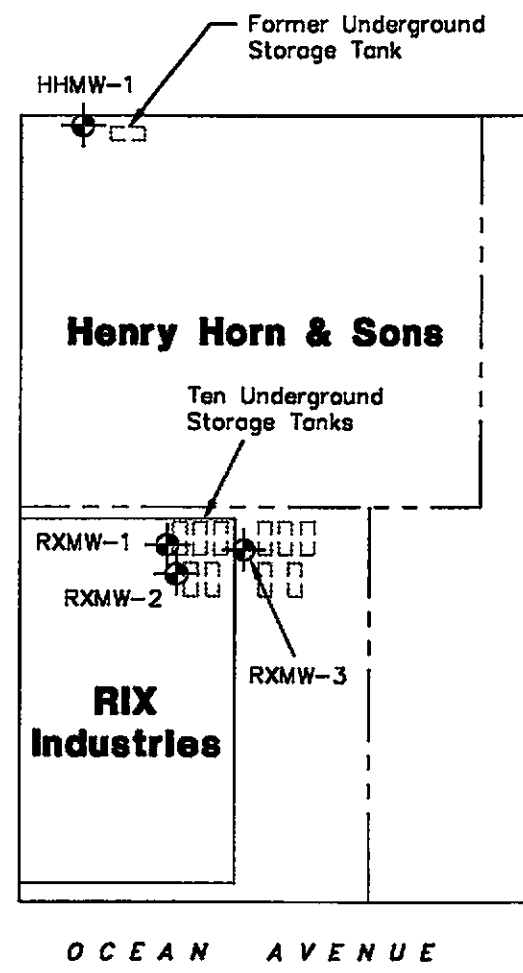
Site Location

64th & 65th Street Properties  
 Emeryville, CA  
 May 1995  
 EKI 940018.00  
 Figure 1

SOUTHERN PACIFIC RAILROAD



HOLLIS STREET



**LEGEND**

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring Installed by EKI
- Monitoring Well Installed by Others
- Soil and Grab Groundwater Sampling Location Collected by Others

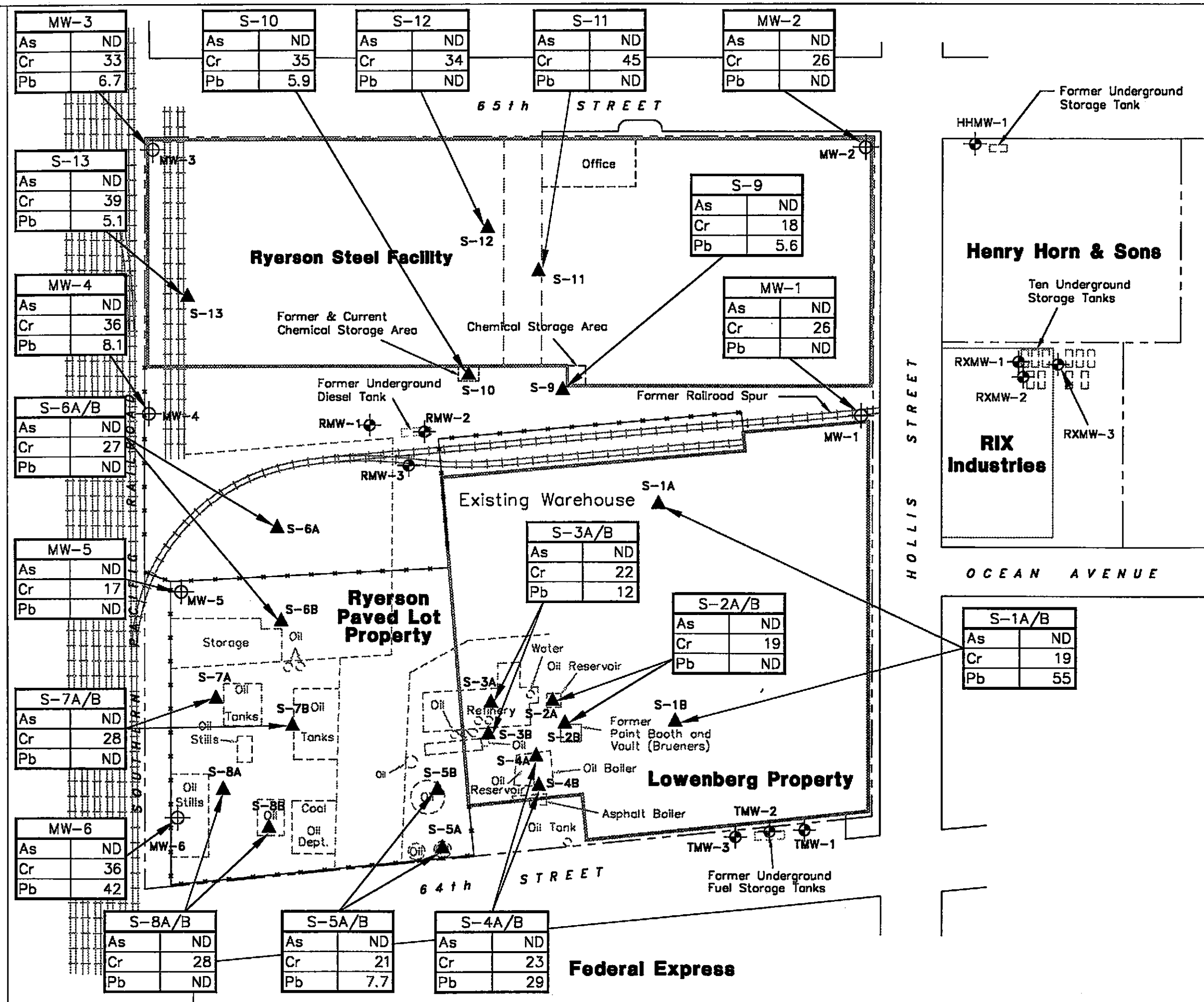
**Notes:**

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.

**Erler & Kalinowski, Inc.**

Site Plan

64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 2



(Approximate Scale in Feet)

**LEGEND**

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring Installed by EKI
- Monitoring Well Installed by Others
- As Arsenic Concentration (mg/kg)
- Pb Lead Concentration (mg/kg)
- Cr Chromium Concentration (mg/kg)
- ND Not Detected

**Notes:**

- All locations are approximate.
- Basemap taken from Sanborn maps dated 1911 and 1967.
- Samples collected 6-9 March 1995.
- Samples with the suffix A/B were composited from the two locations indicated.

**Erler & Kalinowski, Inc.**

Concentrations of Arsenic, Chromium, and Lead in Soil

64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 3

MW-3	
As	ND
Cr	33
Pb	6.7

S-10	
As	ND
Cr	35
Pb	5.9

S-12	
As	ND
Cr	34
Pb	ND

S-11	
As	ND
Cr	45
Pb	ND

MW-2	
As	ND
Cr	26
Pb	ND

S-13	
As	ND
Cr	39
Pb	5.1

S-9	
As	ND
Cr	18
Pb	5.6

MW-4	
As	ND
Cr	36
Pb	8.1

MW-1	
As	ND
Cr	26
Pb	ND

S-6A/B	
As	ND
Cr	27
Pb	ND

MW-5	
As	ND
Cr	17
Pb	ND

S-7A/B	
As	ND
Cr	28
Pb	ND

MW-6	
As	ND
Cr	36
Pb	42

S-8A/B	
As	ND
Cr	28
Pb	ND

S-5A/B	
As	ND
Cr	21
Pb	7.7

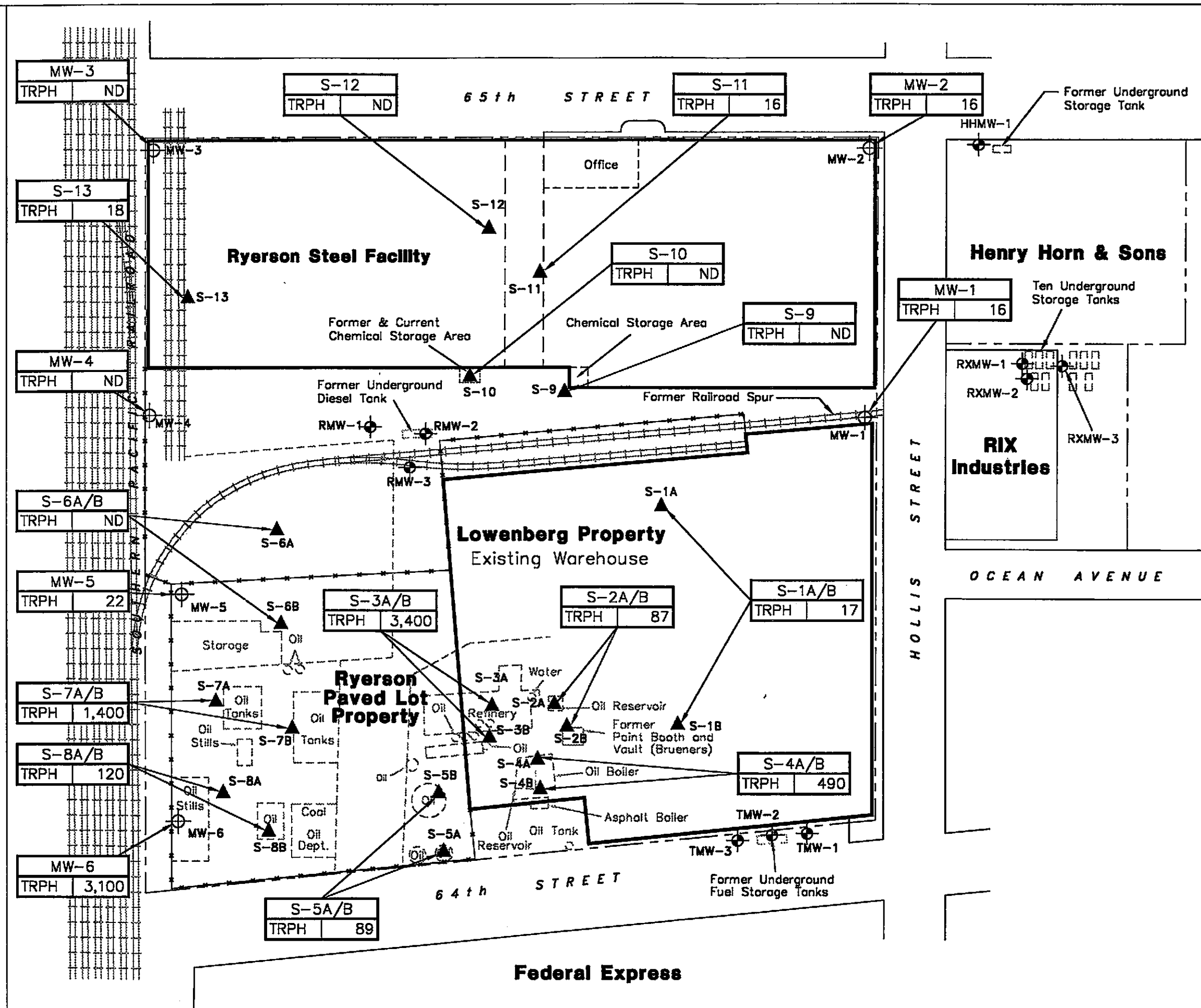
S-4A/B	
As	ND
Cr	23
Pb	29

S-3A/B	
As	ND
Cr	22
Pb	12

S-2A/B	
As	ND
Cr	19
Pb	ND

S-1A/B	
As	ND
Cr	19
Pb	55





**LEGEND**

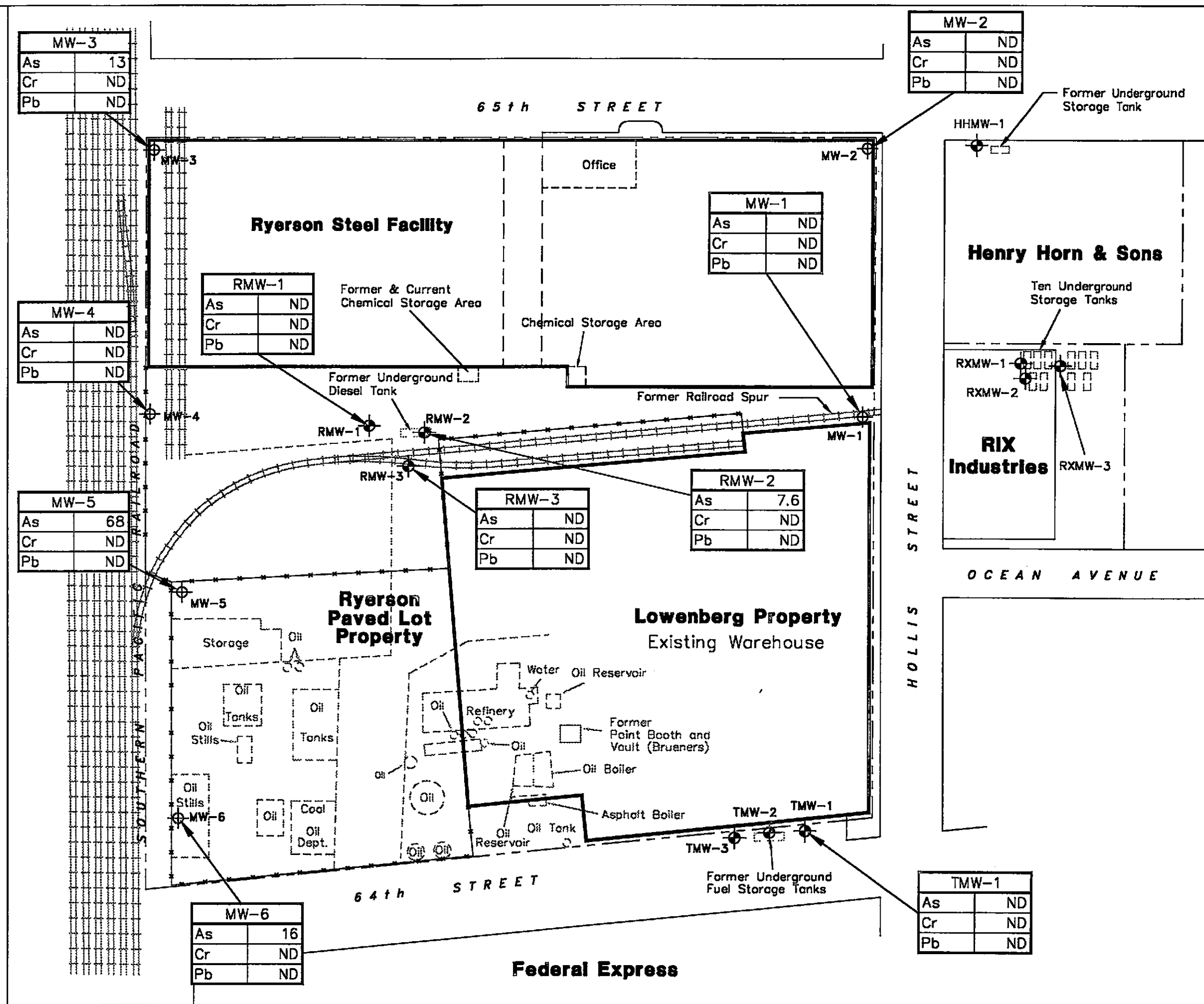
- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring Installed by EKI
- Monitoring Well Installed by Others
- TRPH Total Recoverable Petroleum Hydrocarbons Concentration (mg/kg)

**Notes:**

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Samples collected 6-9 March 1995.
4. Total Recoverable Petroleum Hydrocarbons analyzed using EPA Method 4181.
5. Samples with the suffix A/B were composited from the two locations indicated.

**Erler & Kalinowski, Inc.**

Concentrations of Total Recoverable Petroleum Hydrocarbons in Soil  
64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 4



MW-3	
As	13
Cr	ND
Pb	ND

MW-4	
As	ND
Cr	ND
Pb	ND

MW-5	
As	68
Cr	ND
Pb	ND

RMW-1	
As	ND
Cr	ND
Pb	ND

RMW-3	
As	ND
Cr	ND
Pb	ND

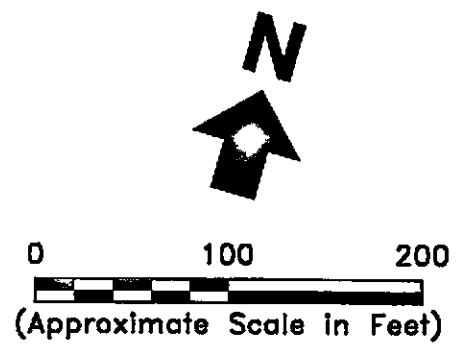
RMW-2	
As	7.6
Cr	ND
Pb	ND

MW-6	
As	16
Cr	ND
Pb	ND

MW-1	
As	ND
Cr	ND
Pb	ND

MW-2	
As	ND
Cr	ND
Pb	ND

TMW-1	
As	ND
Cr	ND
Pb	ND



**LEGEND**

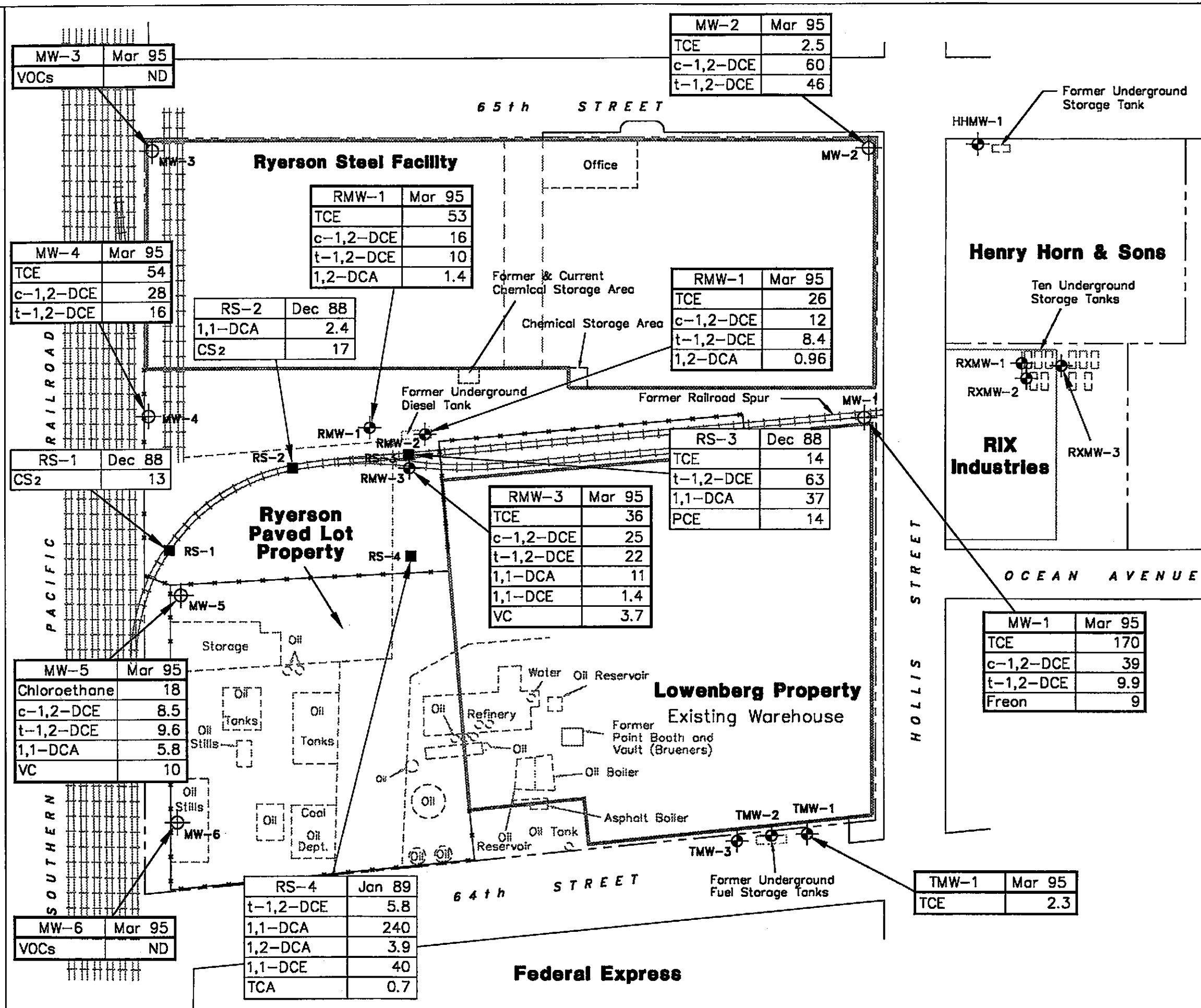
- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- As Arsenic Concentration (ug/L)
- Pb Lead Concentration (ug/L)
- Cr Chromium Concentration (ug/L)
- ND Not Detected

**Notes:**

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Samples collected 23-28 March 1995.

**Erler & Kalinowski, Inc.**

Concentrations of Arsenic, Chromium, and Lead in Groundwater  
 64th & 65th Street Properties  
 Emeryville, CA  
 May 1995  
 EKI 940018.00  
 Figure 5



**N**

0 100 200  
(Approximate Scale in Feet)

**LEGEND**

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Monitoring Well Installed by Others
- Grab Groundwater Samples Collected by Transvere Group

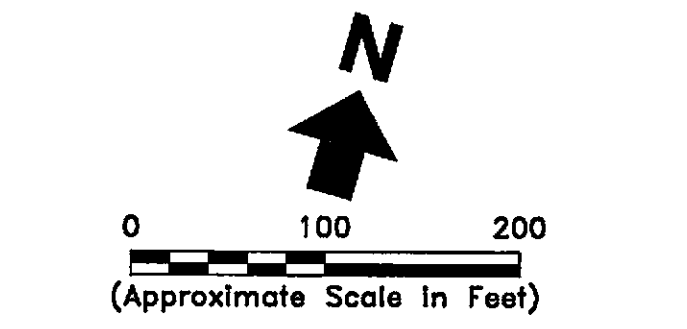
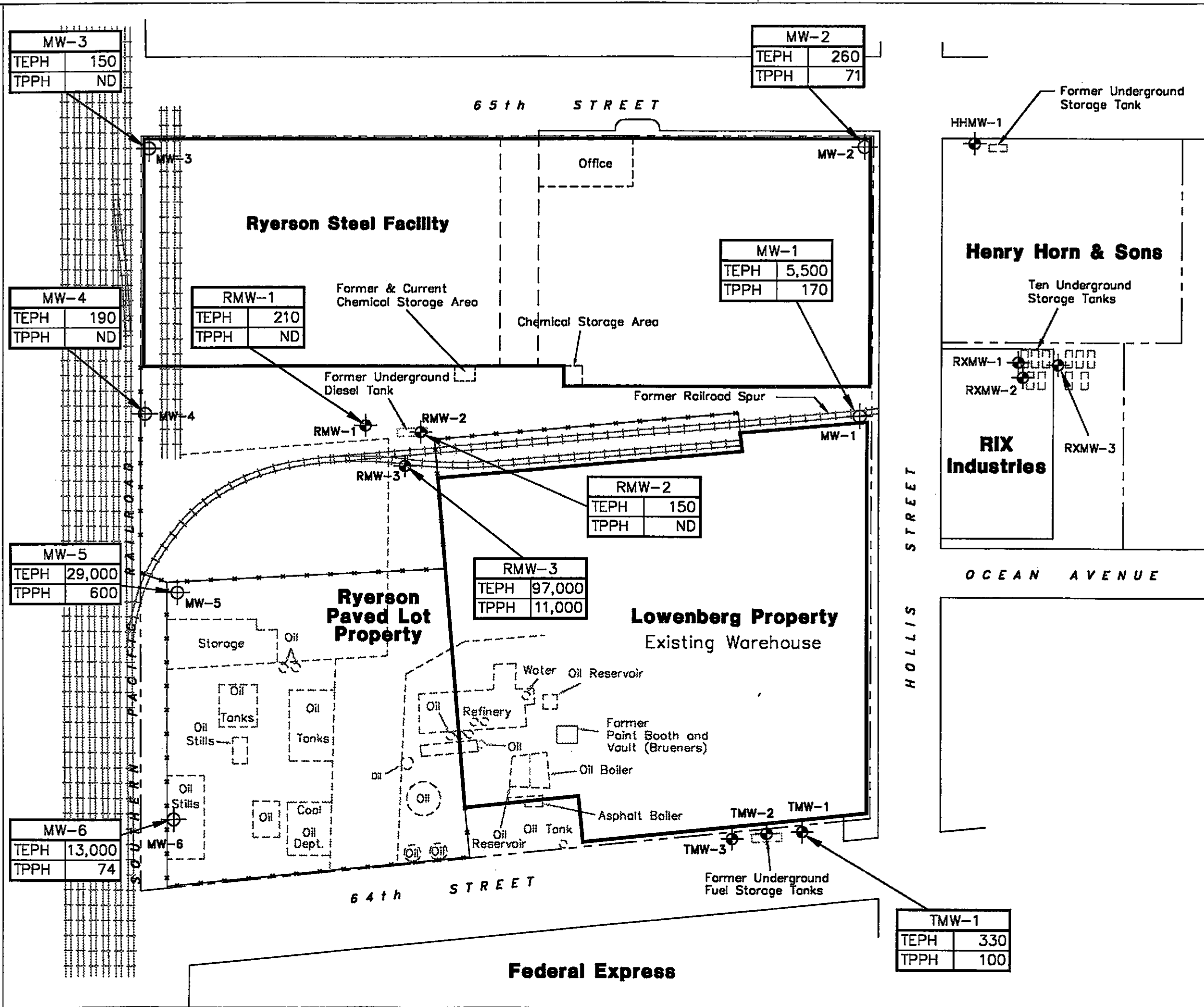
**VOCs**  
 c-1,2-DCE cis-1,2-dichloroethene (ug/L)  
 t-1,2-DCE trans-1,2-dichloroethene (ug/L)  
 TCE trichloroethene (ug/L)  
 Freon Freon 113 (ug/L)  
 1,2-DCA 1,2-dichloroethane (ug/L)  
 1,1-DCA 1,1-dichloroethane (ug/L)  
 1,1-DCE 1,1-dichloroethene (ug/L)  
 PCE tetrachloroethene (ug/L)  
 TCA 1,1,1-Trichloroethane (ug/L)  
 VC Vinyl Chloride (ug/L)  
 CS2 Carbon Disulfide (ug/L)  
 ND Not Detected

- Notes:**
- All locations are approximate.
  - Basemap taken from Sanborn maps dated 1911 and 1967.
  - Boxes indicated in bold represent data samples collected 23-28 March 1995.

## Erler & Kalinowski, Inc.

**Concentrations of VOCs Detected in Groundwater**

64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 7

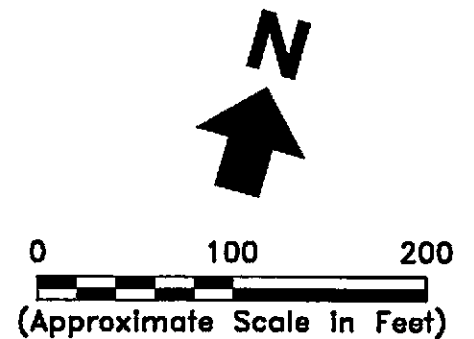
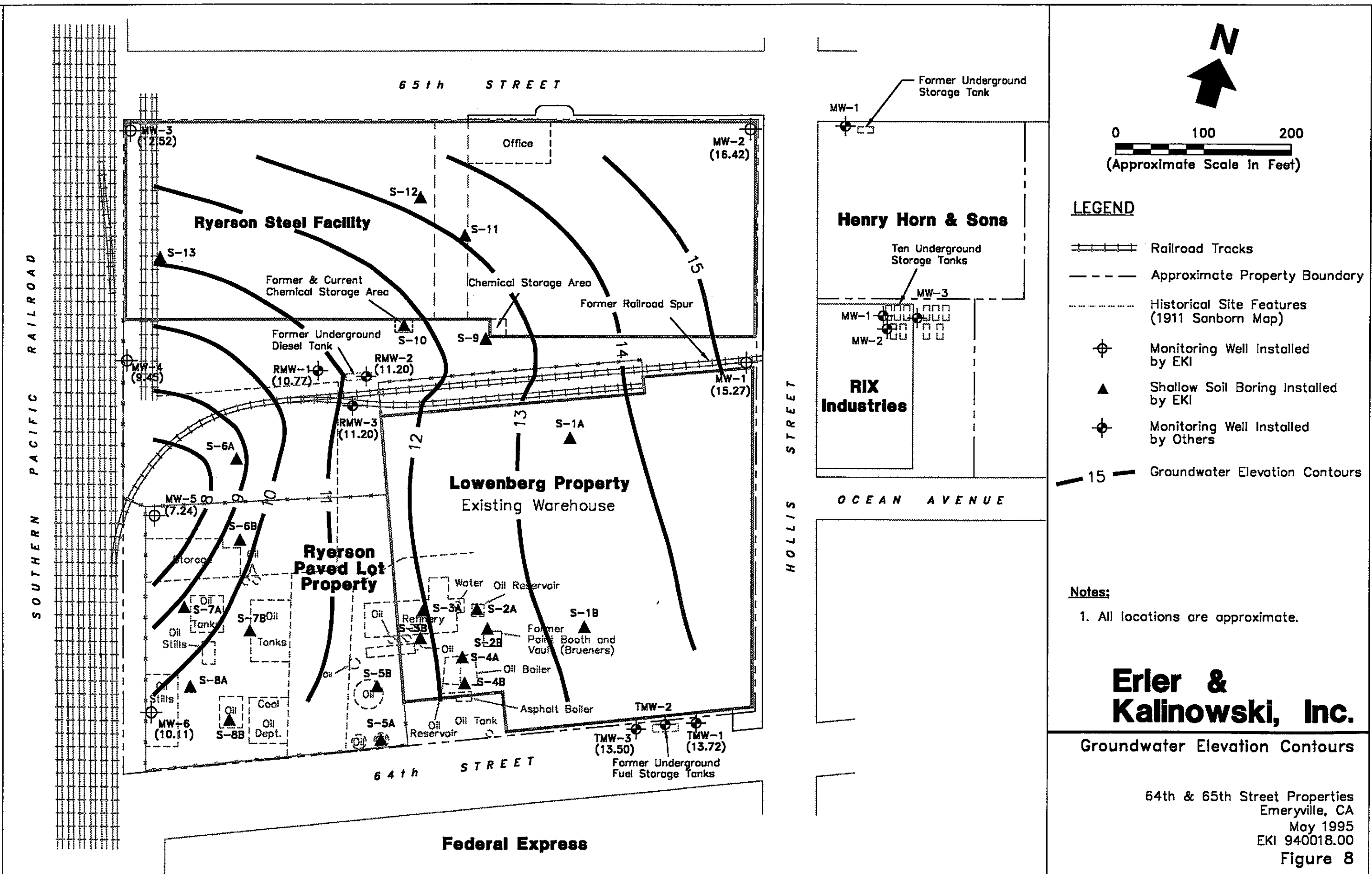


- LEGEND**
- Railroad Tracks
  - Approximate Property Boundary
  - Historical Site Features (1911 Sanborn Map)
  - Monitoring Well Installed by EKI
  - Monitoring Well Installed by Others
  - TEPH Total Extractable Petroleum Hydrocarbons (ug/L)
  - TPPH Total Purgeable Petroleum Hydrocarbons (ug/L)
  - ND Not Detected

- Notes:**
1. All locations are approximate.
  2. Basemap taken from Sanborn maps dated 1911 and 1967.
  3. Samples collected 23-28 March 1995.
  4. TEPH and TRPH quantified using EPA Method 8015m.

**Erler & Kalinowski, Inc.**

Concentrations of Petroleum Hydrocarbons in Groundwater  
 64th & 65th Street Properties  
 Emeryville, CA  
 May 1995  
 EKI 940018.00  
 Figure 6



- LEGEND**
- Railroad Tracks
  - Approximate Property Boundary
  - Historical Site Features (1911 Sanborn Map)
  - Monitoring Well Installed by EKI
  - Shallow Soil Boring Installed by EKI
  - Monitoring Well Installed by Others
  - Groundwater Elevation Contours

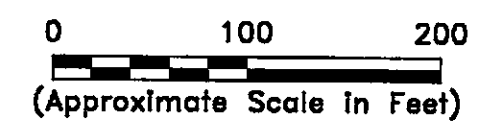
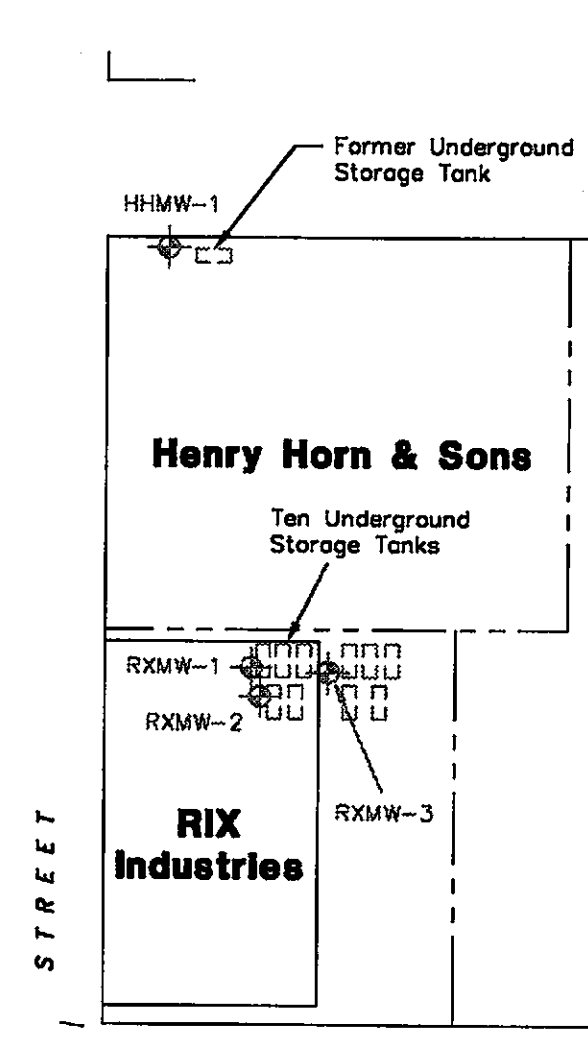
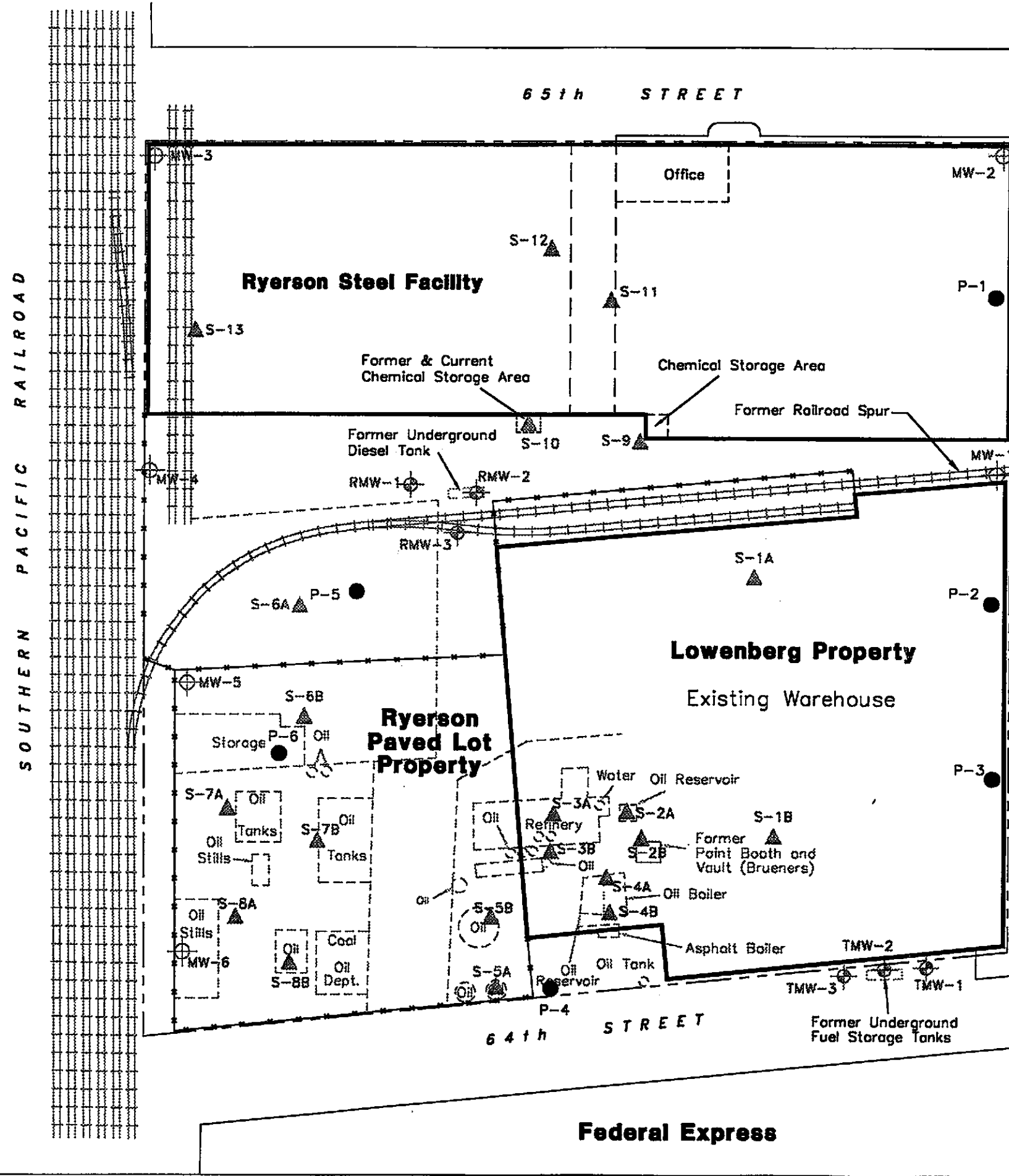
**Notes:**

- All locations are approximate.

# Erler & Kalinowski, Inc.

## Groundwater Elevation Contours

64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 8



**LEGEND**

- Railroad Tracks
- Approximate Property Boundary
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Installed by EKI
- Shallow Soil Boring by EKI
- Monitoring Well Installed by Others
- Proposed Piezometer Location

**Notes:**  
1. All locations are approximate.

**Erler & Kalinowski, Inc.**

Location of Proposed Piezometers

64th & 65th Street Properties  
Emeryville, CA  
May 1995  
EKI 940018.00  
Figure 9

# Boring & Well Construction Log

<b>BORING LOCATION</b> 84th and 85th Street Properties Emeryville, CA		<b>DRILLER</b> Gene Nunes		<b>Boring/Well Name: MW-1</b>	
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.		<b>DRILL BIT AND SIZE</b> 8-inch		<b>Project Name: Sybase</b>	
<b>DRILLING METHOD(S)</b> Hollow Stem Auger (Model B-57)				<b>Project Number: 940018.00</b>	
<b>ISOLATION CASING</b>		<b>FROM</b>	<b>TO</b>	<b>FT</b>	<b>ELEVATION AND DATUM</b>
<b>BLANK CASING</b> 2-inch Schedule 40 PVC		0.5	5		<b>TOTAL DEPTH</b> 20 Feet
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")		5	20		<b>DATE STARTED</b> 3/8/95
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/16		4	20		<b>DATE COMPLETED</b> 3/8/95
<b>SEAL</b> Bentonite Pellets		3	4		<b>DEPTH TO WATER</b>
<b>GROUT</b> Cement/Bentonite		3	4		<b>LOGGED BY/CHECKED BY</b> Gail Clark/Beth Lamb, R.G.
		5	3		<b>SAMPLING METHODS</b> Mod. Split Spoon
					<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Watertight Vault Box	GC		5YR 2/1	Asphalt (approx. 5-inch thick). GRAVEL with silty clay, fill, brownish black (5YR 2/1).	
	.5	17	2	Cement/Bentonite Grout				SILTY CLAY, brownish black (5YR 2/1), damp.	
	.5	7	3	Bentonite Pellets					
	.5	30	4	Schedule 40 PVC Blank Casing				color change light olive grey (5Y 6/1), 5-10% coarse sand in isolated pockets, stiff, plastic, damp.	
			5						
			6						
			7						
	.5	8	8	Sand Pack			5Y 6/1	mottled with moderate yellow brown (10YR 5/4), moist.	
	.5	12	9						
	.5	12	10		CL				
			11						
			12						
	.5	7	13	Schedule 40 PVC Slot Screen				wet to saturated, slight petroleum odor.	Driller notes seen on sampler.
	.5	8	14						
	.5	20	15						
			16						
			17						
			18						
	.5	15	19				10YR 5/4 and 10YR 6/2	color change pale yellow brown (10YR 6/2) and moderate yellow brown (10YR 5/4), stiff, damp, slight petroleum odor.	
	.5	25	20	Bottom of Boring at 20 feet.					
	.5	30							OVM A=55 ppm BZ=0 ppm



# Boring & Well Construction Log

<b>BORING LOCATION</b> 84th and 85th Street Properties Emeryville, CA			<b>Boring/Well Name: MW-2</b>		
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.			<b>DRILLER</b> George DeJesus		
<b>DRILLING METHOD(S)</b> Hollow Stem Auger (Limited Access Rig-FRED)			<b>DRILL BIT AND SIZE</b> 8-inch		
<b>ISOLATION CASING</b>			<b>ELEVATION AND DATUM</b>		<b>TOTAL DEPTH</b> 15.5 Feet
<b>BLANK CASING</b> 2-inch Schedule 40 PVC			FROM 0.5 TO 5.5 FT	<b>DATE STARTED</b> 3/8/95	<b>DATE COMPLETED</b> 3/8/95
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")			FROM 5.5 TO 15.5 FT	<b>DEPTH TO WATER</b>	
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/18			FROM 4 TO 15.5 FT	<b>LOGGED BY/CHECKED BY</b> Roger Lion/Beth Lamb, R.G.	
<b>SEAL</b> Bentonite Pellets			FROM 3 TO 4 FT	<b>SAMPLING METHODS</b> Mod. Split Spoon	<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.
<b>GROUT</b> Cement/Bentonite			FROM .5 TO 3 FT		

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Watertight Vault Box	CL		5YR 2/1 and 5YR 3/4	Concrete.	
	.1		2	Cement/Bentonite Grout				SILTY CLAY, brownish black (5YR 2/1) mottled with moderate brown (5YR 3/4), 10-20% subangular gravel up to 2-inch dia., soft, plastic.	
	.5		3	Bentonite Pellets	GM		5Y 5/2	SILTY GRAVEL, lt. olive grey (5Y 5/2), gravel up to 2.5-inch dia. slightly cemented.	
	.5		4	Schedule 40 PVC Blank Casing					
	.5		5					SILTY CLAY, moderate yellow brown (10YR 5/4), 5-10% well graded subangular sand.	
	.5		6				10YR 5/4		
	.5		7						
	.5		8	Sand Pack					
	.5		9						
	.5		10		CL		10YR 5/4 and 5Y 5/2	mottled with light olive gray (5Y 5/2), minor subangular sand (shell?), firm, moderate plastic, moist.	first water encountered
	.5		11	Schedule 40 PVC Slot Screen					
	.5		12						
	.5		13						
	.5		14				10Y 6/2 and 10YR 5/4	color change pale olive (10YR 5/4) and moderate yellow brown (10YR 5/4), minor subangular sand, moderate plastic, firm, moist.	
	.5		15	Bottom of Boring at 15.5 feet.					
	.5		16						
	.5		17						
	.5		18						
	.5		19						
	.5		20						



# Boring & Well Construction Log

<b>BORING LOCATION</b> 64th and 65th Street Properties Emeryville, CA		<b>Boring/Well Name: MW-3</b>	
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.		<b>DRILLER</b> Gene Nunes	
<b>DRILLING METHOD(S)</b> Hollow Stem Auger (Model B-57)		<b>DRILL BIT AND SIZE</b> 8-inch	
<b>ISOLATION CASING</b>		<b>ELEVATION AND DATUM</b> 19 Feet	
<b>BLANK CASING</b> 2-inch Schedule 40 PVC		<b>DATE STARTED</b> 3/7/95	
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")		<b>DATE COMPLETED</b> 3/7/95	
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/16		<b>DEPTH TO WATER</b>	
<b>SEAL</b> Bentonite Pellets		<b>LOGGED BY/CHECKED BY</b> Gail Clark/Beth Lamb, R.G.	
<b>GROUT</b> Cement/Bentonite		<b>SAMPLING METHODS</b> Mod. Split Spoon	
		<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.	

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Watertight Vault Box				Asphalt (approx. 5-inch thick).	
	.2	7	1		SC			CLAYEY SAND, moderate brown (5YR 4/4) with dark yellow orange mottling (10YR 6/6), clay 25%, coarse grained, minor silt, crumbly, damp, no odor.	
	.5	13	2	Cement/ Bentonite Grout					
	.5	14	2						
	.5	6	3	Bentonite Pellets				GRAVELLY SAND, with clay, moderate brown (5YR 4/4), gravel 15-20%, clay 10-15%.	
	.5	10	3						
	.5	17	4	Schedule 40 PVC Blank Casing					
			5				5YR 4/4		
			6		SP				
			7						
			8						
			9	Sand Pack					
	.5	25	10					SILT, pale yellow brown (10YR 8/2), mottled with moderate yellow brown (10YR 5/4), isolated angular gravel (up to 1/8-inch dia.), crumbly, moist, no odor.	
	.5	20	10						
	.5	20	11						
			12		ML				
			13					clay content increases.	
	.5	7	13	Schedule 40 PVC Slot Screen					
	.5	17	14					SILTY CLAY, moderate yellow brown (10YR 5/4), minor coarse sand, medium plastic, very moist, no odor.	
	.5	18	14						
			15		CL				
			16						
			17						
	.5	5	17						
	.5	7	18						
	.5	18	18		ML				
			19	Bottom of Boring at 19 feet.					
			20					CLAYEY SILT, yellow gray (5Y 8/1), clay 30-40%, slightly plastic, very moist, no odor.	

OVM  
A=0 ppm  
BZ=0 ppm

# Boring & Well Construction Log

<b>BORING LOCATION</b> 84th and 85th Street Properties Emeryville, CA		<b>Boring/Well Name: MW-4</b>	
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.		<b>DRILLER</b> Gene Nunes	
<b>DRILLING METHOD(S)</b> Hollow Stem Auger (Model B-57)		<b>DRILL BIT AND SIZE</b> 8-inch	
<b>ISOLATION CASING</b>		FROM 0 TO 5 FT	<b>ELEVATION AND DATUM</b> 20 Feet
<b>BLANK CASING</b> 2-inch Schedule 40 PVC		FROM 0.5 TO 5 FT	<b>DATE STARTED</b> 3/6/95
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")		FROM 5 TO 20 FT	<b>DATE COMPLETED</b> 3/8/95
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/16		FROM 4 TO 20 FT	<b>DEPTH TO WATER</b>
<b>SEAL</b> Bentonite Pellets		FROM 3 TO 4 FT	<b>LOGGED BY/CHECKED BY</b> Gail Clark/Beth Lamb, R.G.
<b>GROUT</b> Cement/Bentonite		FROM .5 TO 3 FT	<b>SAMPLING METHODS</b> Mod. Split Spoon
			<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Watertight Vault Box			NI	Asphalt (approx. 8-inch thick).	
	.5	4	1		CL			<u>SANDY CLAY</u> , black (N1), fine grained sand, oily luster, wet.	
	.5	5	2	Cement/Bentonite Grout				color change grayish brown (5Y 3/2).	
	.5	5	2						
			3	Bentonite Pellets			5YR 3/2		
			4		CH			<u>CLAY</u> , brownish grey (5YR 4/1), dense, med. to high plasticity, moist, no odor.	
			5	Schedule 40 PVC Blank Casing			5YR 4/1		
	.5	10	5					<u>SILTY CLAY</u> , pale yellow brown (10YR 6/2) mottled with greenish grey (5GY 6/10), damp.	
	.5	18	6					<u>SANDY CLAY</u> , pale yellow brown (10YR 6/2), well graded sand, coarse grained, subrounded, damp, no odor.	
	.5	20	6						
	.5	15	7						
	.5	14	7						
	.5	24	8						
	.5	9	8						
	.5	12	9	Sand Pack			10YR 8/2 and 5GY 8/1	<u>SILTY CLAY</u> , color mottled as above, fine grained sand lense, stiff, dense, damp to very damp.	
	.5	18	9						
	.5	9	10						
	.5	15	10						
	.5	11	11		CL			color change moderate yellow brown (10YR 5/4) and greenish grey (5GY 6/1), minor angular to subrounded gravels, stiff, damp.	
	.5	7	11						
	.5	12	12						
	.5	15	12						
	.5	10	13	Schedule 40 PVC Slot Screen					
	.5	12	13						
	.5	10	14						
	.5	12	14						
	.5	12	15						
	.5	12	15						
	.5	23	16				10YR 5/4 and 5GY 6/1	<u>GRAVELLY CLAY</u> , color as above, 5-10% medium fine grained sand, very moist.	
	.5	24	16					increase sand content, very fine grained sand.	
	.5	20	17						
	.5	30	17						
	.5	35	18					<u>CLAYEY SAND</u> , moderate yellow brown (10YR 5/4) and greenish grey (5GY 6/1), clay 20-25%, medium fine grained sand, poorly graded, soft, crumbly, saturated.	
	.5	20	18		SC				Driller notes water.
	.5	50/6	19						
			20	Bottom of Boring at 20 feet.					OVM A=0

# Boring & Well Construction Log

<b>BORING LOCATION</b> 84th and 85th Street Properties Emeryville, CA		<b>Boring/Well Name: MW-5</b>	
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.		<b>DRILLER</b> Gene Nunes	
<b>DRILLING METHOD (S)</b> Hollow Stem Auger (Model B-57)		<b>DRILL BIT AND SIZE</b> 8-inch	
<b>ISOLATION CASING</b>		<b>FROM</b>	<b>TO</b>
<b>BLANK CASING</b> 2-inch Schedule 40 PVC		0.5	5
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")		5	15
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/18		4	15
<b>SEAL</b> Bentonite Pellets		3	4
<b>GROUT</b> Cement/Bentonite		0.5	3
		<b>ELEVATION AND DATUM</b>	<b>TOTAL DEPTH</b> 15 Feet
		<b>DATE STARTED</b> 3/7/95	<b>DATE COMPLETED</b> 3/7/95
		<b>DEPTH TO WATER</b>	
		<b>LOGGED BY/CHECKED BY</b> Gail Clark/Beth Lamb, R.G.	
		<b>SAMPLING METHODS</b> Mod. Split Spoon	<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Water-tight Vault Box				Asphalt (approx. 8-inch thick), red-rock gravel base.	
	.5	17	2	Cement/Bentonite Grout			NI and 5YR 2/1	SILTY CLAY, black (N1) with brownish black (5YR 2/1), minor coarse sand, moist, petroleum odor.	
	.5	12	3	Bentonite Pellets					
	.5	14	4	Schedule 40 PVC Blank Casing					
	.5	8	5					SILTY CLAY, greenish grey (5GY 6/1), and dark greenish grey (5GY 4/1), minor coarse sand, stiff, plastic, moist, no odor.	
	.5	12	6				5GY 8/1 and 5GY 4/1		first encountered water.
	.5	20	7						
	.5	15	8						
	.5	9	9	Sand Pack	CL			SILTY CLAY, moderate yellow brown (10YR 5/4), stiff, plastic, saturated, strong petroleum odor, oily sheen on sampler.	
	.5	18	10				10YR 5/4		
	.5	28	11						
	.5	8	12						
	.5	8	13	Schedule 40 PVC Slot Screen					
	.5	14	14				5GY 8/1	SILTY CLAY, greenish grey (5GY 6/1), stiff, saturated, oily sheen on sampler, strong petroleum odor.	
	.5	14	15	Bottom of Boring at 15 feet.					OVM A=32 BZ=0
			16						
			17						
			18						
			19						
			20						

# Boring & Well Construction Log

<b>BORING LOCATION</b> 64th and 65th Street Properties Emeryville, CA		<b>Boring/Well Name: MW-6</b> <b>Project Name: Sybase</b> <b>Project Number: 940018.00</b>	
<b>DRILLING COMPANY</b> West Hazmat Drilling Corp.		<b>DRILLER</b> Gene Nunes	
<b>DRILLING METHOD(S)</b> Hollow Stem Auger (Model B-57)		<b>DRILL BIT AND SIZE</b> 8-inch	
<b>ISOLATION CASING</b>		<b>FROM</b>	<b>TO</b>
<b>BLANK CASING</b> 2-inch Schedule 40 PVC		0.5	4
<b>PERFORATED CASING</b> 2-inch Schedule 40 PVC (0.010")		4	14
<b>SIZE AND TYPE OF FILTER PACK</b> Monterey Sand #2/16		<b>FROM</b>	<b>TO</b>
<b>SEAL</b> Bentonite Pellets		2.5	3
<b>GROUT</b> Cement/Bentonite		.5	2.5
<b>ELEVATION AND DATUM</b> 14 Feet		<b>DATE STARTED</b> 3/6/95	
<b>DATE COMPLETED</b> 3/6/95		<b>DEPTH TO WATER</b>	
<b>LOGGED BY/CHECKED BY</b> Roger Lion/Beth Lamb, R.G.			
<b>SAMPLING METHODS</b> Mod. Split Spoon		<b>WELL COMPLETION</b> <input checked="" type="checkbox"/> Surface Housing <input type="checkbox"/> Stand Pipe ft.	

SAMPLES			DEPTH (feet)	WELL CONSTRUCTION	USCS LOG	LITHOLOGY	COLOR	SAMPLE DESCRIPTION	DRILLING REMARKS
Type Number	Recovery (feet)	Blows/6 in.							
			1	Traffic-rated Watertight Vault Box				Asphalt.	
⊗	.5		2	Cement/Bentonite Grout			10YR 2/2	SILTY CLAY, dusky yellow brown (10YR 2/2), 5-10% gravel, angular up to 1/2-inch dia., moist.	OVM A=10 BZ=0
			3	Bentonite Pellets					
	.5	7	4	Schedule 40 PVC Blank Casing					OVM A=12 BZ=0
	.5	10	5				5GY 4/1 and 10Y 4/2	color change dark greenish grey (5GY 4/1) mottled with greenish grey (10Y 4/2), minor sand, medium coarse, angular.	
	.5	12	6						
			8	Sand Pack	CL				
	.5	9	9					color change dark greenish grey (5G 4/1) mottled with moderate olive brown (5 Y 4/1), 5-10% angular sand, 2-5% subangular gravel, some pockets of product, firm, wet.	OVM BZ=0 driller calls odor "Bunker C".
	.5	12	10						
	.5	12	11	Schedule 40 PVC Slot Screen					
	.5	20	12						
	.5	28	13					SAND, (5YR 4/2), minor clay and silt, poorly cemented, coarse grained, mottled, friable, moist.	
	.5	28	14	Bottom of Boring at 14 feet.	SW SC		5Y 4/1	CLAYEY SAND, olive grey (5Y 4/1), fine grained sand, 10-20% clay, slightly plastic, damp.	
	.5	40	14						



**COPY**

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503838	Sampled: 03/07/95 Received: 03/07/95 Analyzed: see below Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results	Batch Number
Lab No: 9503838-01, Sample Desc: SOLID, MW5-6					
TRPH (EPA 418.1)	mg/Kg	03/17/95	15	22	IN0317954181FTA
Lab No: 9503838-02, Sample Desc: SOLID, S7A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/17/95	75	1400	IN0317954181FTA
Lab No: 9503838-03, Sample Desc: SOLID, S8B/A COMP					
TRPH (EPA 418.1)	mg/Kg	03/17/95	15	120	IN0317954181FTA
Lab No: 9503838-04, Sample Desc: SOLID, S5A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/17/95	15	89	IN0317954181FTA
Lab No: 9503838-05, Sample Desc: SOLID, MW3-4					
TRPH (EPA 418.1)	mg/Kg	03/17/95	15	N.D.	IN0317954181FTA

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503838	Sampled: Received: 03/07/95 Analyzed: see below Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results	Batch Number
Lab No: 9503838-06, Sample Desc : <b>SOLID, Method Blank</b>					
TRPH (EPA 418.1)	mg/Kg	03/17/95	15	N.D.	IN0317954181FTA

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW5-6 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-01	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/14/95 Reported: 03/22/95
Attention: Paul Hoeffey		

COC Number:

QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	71

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: MW5-6 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-01	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
--	--	--

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW5-6  
Matrix: SOLID  
Analysis Method: EPA 6010  
Lab Number: 9503838-01

Sampled: 03/07/95  
Received: 03/07/95  
Extracted: 03/15/95  
Analyzed: 03/16/95  
Reported: 03/22/95

COC Number:

QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	17
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
Eileen Manning  
Project Manager





Eriar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW5-6 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503838-01	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchlorendate	30 150	69

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S7A/B COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-02	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	81

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S7A/B COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-02	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	77

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S7A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503838-02	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoffer		

COC Number:  
QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	28
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S7A/B COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503838-02	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
---	---	--

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**

Dibutylchloroendate

**Control Limits %**

30 150

**% Recovery**

59

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S8B/A COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-03	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	81

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S8B/A COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-03	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 940018.00, Sybase Sample Descript: S8B/A COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503838-03	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
---	---	--

COC Number:

QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	28
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210



Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S8B/A COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503838-03	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoffey		

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**

Dibutylchlorendate

**Control Limits %**

30 150

**% Recovery**

55

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S5A/B COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-04	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	71

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: S5A/B COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-04	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
---	---	--

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	65

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S5A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503838-04	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
--	---	--

COC Number:  
QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	21
Lead, Pb	5.0	7.7

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: S5A/B COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503838-04	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
---	---	--

COC Number:  
QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30 150	53

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW3-4 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-05	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/16/95 Reported: 03/22/95
---	--	--

COC Number:  
QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	71

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: MW3-4 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-05	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
---	--	--

COC Number:  
QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	68

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW3-4 Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503838-05	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
---	--	--

COC Number:  
QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	33
Lead, Pb	5.0	6.7

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW3-4 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503838-05	Sampled: 03/07/95 Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	32

<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30                      150	60

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: SOLID  
Analysis Method: EPA 8080  
Lab Number: 9503838-06

Sampled:  
Received: 03/07/95  
Extracted: 03/15/95  
Analyzed: 03/16/95  
Reported: 03/22/95

Attention: Paul Hoeffy

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30      150	78

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-06	Sampled: Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/14/95 Reported: 03/22/95
---	---	---

COC Number:

QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

60 130

**% Recovery**

90

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503838-06	Sampled: Received: 03/07/95 Extracted: 03/16/95 Analyzed: 03/17/95 Reported: 03/22/95
Attention: Paul Hoeffey		

COC Number:  
QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	94

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503838-06	Sampled: Received: 03/07/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: ME0315956010MDD

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	N.D.
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503838-07	Sampled: Received: 03/07/95 Extracted: 03/13/95 Analyzed: 03/16/95 Reported: 03/22/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: GC0313958010EXB

Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	97

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: MW3-4  
Work Order #: 9503838 01-06

Reported: Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte: TRPH (EPA 418.1)

QC Batch#: IN0317954181FTA  
Analy. Method: EPA 418.1  
Prep. Method: EPA 418.1

Analyst: D. Williams  
MS/MSD #: 9503838-05-MSD  
Sample Conc.: N.D.  
Prepared Date: 03/17/95  
Analyzed Date: 03/17/95  
Instrument I.D.#: FTIR1  
Conc. Spiked: 230 mg/Kg

Result: 230  
MS % Recovery: 100

Dup. Result: 240  
MSD % Recov.: 104

RPD: 4.3  
RPD Limit: 0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD	
LCS	60-120
Control Limits	

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503838.ERL <1>





<b>Erier &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> SOLID <b>Sample Descript:</b> S7A/B COMP <b>Work Order #:</b> 9503838 01-06	<b>Reported:</b> Mar 23, 1995
--	---	-------------------------------

**QUALITY CONTROL DATA REPORT**

Analyte:	Beryllium	Cadmium	Chromium	Nickel
<b>QC Batch#:</b>	ME0315956010MDD	ME0315956010MDD	ME0315956010MDD	ME0315956010MDD
<b>Analy. Method:</b>	EPA 6010	EPA 6010	EPA 6010	EPA 6010
<b>Prep. Method:</b>	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyt:	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser
<b>MS/MSD #:</b>	9503838-02-MSD	9503838-02-MSD	9503838-02-MSD	9503838-02-MSD
<b>Sample Conc.:</b>	0.53	N.D.	28	30
<b>Prepared Date:</b>	3/15/95	3/15/95	3/15/95	3/15/95
<b>Analyzed Date:</b>	3/16/95	3/16/95	3/16/95	3/16/95
<b>Instrument I.D.#:</b>	MTJA2	MTJA2	MTJA2	MTJA2
<b>Conc. Spiked:</b>	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
<b>Result:</b>	97	96	120	130
<b>MS % Recovery:</b>	96	96	92	100
<b>Dup. Result:</b>	97	96	120	120
<b>MSD % Recov.:</b>	96	96	92	90
<b>RPD:</b>	0.0	0.0	0.0	8.0
<b>RPD Limit:</b>	0-30	0-30	0-30	0-30

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

MS/MSD	75-125	75-125	75-125	75-125
<b>LCS</b>				
<b>Control Limits</b>				

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503838.ERL <2>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: MW5-6  
Work Order #: 9503838 01-06

Reported: Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0313958010EXB	GC0313958010EXB	GC0313958010EXB
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter
MS/MSD #:	9502838-01-MSD	9502838-01-MSD	9502838-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/13/95	03/13/95	03/13/95
Analyzed Date:	03/14/95	03/14/95	03/14/95
Instrument I.D.#:	GCHP16	GCHP16	GCHP16
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg

Result:	30	20	17
MS % Recovery:	120	80	68

Dup. Result:	23	20	17
MSD % Recov.:	92	80	68

RPD:	26	0.0	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	28-167	35-146	38-150
---------------------------------	--------	--------	--------

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503838.ERL <3>







Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: MW4-8  
Work Order #: 9503838 01-06

Reported: Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0315958100EXB	GC0315958100EXB	GC0315958100EXB
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyte:	Naphthalene	Acenaphthene	Pyrene
Analyst:	L. Haar	L. Haar	L. Haar
MS/MSD #:	9503685-01-MSD	9503685-01-MSD	9503685-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/15/95	03/15/95	03/15/95
Analyzed Date:	03/16/95	03/16/95	03/16/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L
Result:	45	47	49
MS % Recovery:	90	94	98
Dup. Result:	45	47	49
MSD % Recov.:	90	94	98
RPD:	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS	DL-124	DL-124	DL-140
Control Limits			

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503838.ERL <4>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: MW4-8  
Work Order #: 9503838 01-06

Reported: Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** PCB 1260  
**QC Batch#:** GC0314950PCBEXB  
**Analy. Method:** EPA 8080  
**Prep. Method:** EPA 3550

**Analyst:** L Haar  
**MS/MSD #:** 9503685-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/14/95  
**Analyzed Date:** 03/16/95  
**Instrument I.D.#:** GCPE5  
**Conc. Spiked:** 83 µg/Kg

**Result:** 70  
**MS % Recovery:** 84

**Dup. Result:** 63  
**MSD % Recov.:** 76

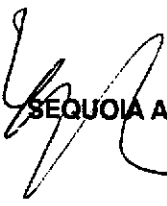
**RPD:** 11.0  
**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 30-150  
**Control Limits**

  
**SEQUOIA ANALYTICAL**

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Eileen A. Manning  
Project Manager

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD= Relative % Difference

9503838.ERL <5>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

9503838

Erlar & Kallnowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018.00

Date Sampled: March 7 1995

Project Name: Sybase

Sampled By: Gail L. Clark

Source of Samples: Soil borings

Report Results To: Paul Hefey

Location: 64 + 65th Street Properties, Emeryville

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
1A	MW5-6	soil	1- brass liner	9:00	5520, 8080, 8010, 8100, ICP METALS → SEE NOTE ←	Standard
2 A.B	S7A	soil	1- brass liner	9:55	5520, 8080, 8010, 8100, ICP METALS → COMPOSITE IN LAB	turn-
	S7B	soil	1- brass liner	10:15	/	around
3 A.B	S8B	soil	1- brass liner	10:40	5520, 8080, 8010, 8100, ICP METALS → COMPOSITE IN LAB	time
	S8A	soil	1- brass liner	11:00		↓
4 A.B	S5B	soil	1- brass liner	11:20	5520, 8080, 8010, 8100, ICP METALS → COMPOSITE IN LAB	↓
	S5A	soil	1- brass liner	12:15		↓
5 A	MW3-4	soil	1- brass liner	1:05	5520, 8080, 8010, 8100, ICP METALS	↓

Special Instructions: → NOTE: All samples analyzed for TRPH (5520 CF mod.), PCBs (8080), VOCs (8010), PNAS (8100), and ICP Metals (Arsenic, Lead, + chromium)

\* Strong petroleum odor/sheen

Relinquished By: Name / Signature	Affiliation	Date	Time	Received By: Name / Signature / Affiliation
Gail L. Clark / Gail L. Clark	EKI	3-7-95	16:50	
		3-7-95	16:50	STEPHANIE LEE / Sequoia Analytical



**COPY**

Eler & Kainowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503685	Sampled: 03/06/95 Received: 03/06/95 Analyzed: see below Reported: 03/20/95
Attention: Paul Hoeffey		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503685-01 Sample Desc: SOLID,MW4-8				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	36
Lead	mg/Kg	03/15/95	5.0	8.1
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	N.D.
Lab No: 9503685-02 Sample Desc: SOLID,S6-(A,B)				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	27
Lead	mg/Kg	03/15/95	5.0	N.D.
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	N.D.
Lab No: 9503685-03 Sample Desc: SOLID,MW1-9.5				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	26
Lead	mg/Kg	03/15/95	5.0	N.D.
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	16
Lab No: 9503685-04 Sample Desc: SOLID,MW6-2				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	36
Lead	mg/Kg	03/15/95	5.0	42
TRPH (EPA 418.1)	mg/Kg	03/14/95	300	3100

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase  Lab Proj. ID: 9503685	Sampled: 03/06/95 Received: 03/06/95 Analyzed: see below  Reported: 03/20/95
Attention: Paul HOFFEY		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503685-05 Sample Desc: SOLID,S-10				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	35
Lead	mg/Kg	03/15/95	5.0	5.9
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	N.D.

Lab No: 9503685-06 Sample Desc: SOLID,S-9				
Arsenic	mg/Kg	03/15/95	5.0	N.D.
Chromium	mg/Kg	03/15/95	0.50	18
Lead	mg/Kg	03/15/95	5.0	5.6
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503685	Sampled: Received: 03/06/95 Analyzed: see below Reported: 03/20/95
Attention: Paul Hoeffy		

## LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503685-07				
Sample Desc : ,Method Blank				
Arsenic	mg/L	03/15/95	0.10	N.D.
Chromium	mg/L	03/15/95	0.010	N.D.
Lead	mg/L	03/15/95	0.10	N.D.
TRPH (EPA 418.1)	mg/Kg	03/14/95	15	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: MW4-8 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-01	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/13/95 Analyzed: 03/14/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	65

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW4-8 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-01	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
--	--	--

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50      150	52

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

*Eileen Manning*  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffey	Client Proj. ID: 940018.00, Sybase Sample Descript: MW4-8 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-01	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/15/95 Reported: 03/20/95
--	--	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30                      150	65

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

*Eileen Manning*  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S6-(A,B)  
Matrix: SOLID  
Analysis Method: EPA 8010  
Lab Number: 9503685-02

Sampled: 03/06/95  
Received: 03/06/95  
Extracted: 03/13/95  
Analyzed: 03/14/95  
Reported: 03/20/95

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

### Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	83

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S6-(A,B) Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-02	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/16/95 Reported: 03/20/95
---	---	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchlorendate	30                      150	70

Analyses reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S6-(A,B) Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-02	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
Attention: Paul HOFFEY		

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	117

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW1-9.5 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-03	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/13/95 Analyzed: 03/15/95 Reported: 03/20/95
--	--	--

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	60 130	84

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW1-9.5 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-03	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
Attention: Paul HOFFEY		

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	78

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW1-9.5 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-03	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/16/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30                      150	69

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: MW6-2 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-04	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/13/95 Analyzed: 03/15/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	20	N.D.
Bromoform	20	N.D.
Bromomethane	40	N.D.
Carbon Tetrachloride	20	N.D.
Chlorobenzene	20	N.D.
Chloroethane	40	N.D.
2-Chloroethylvinyl ether	40	N.D.
Chloroform	20	N.D.
Chloromethane	40	N.D.
Dibromochloromethane	20	N.D.
1,2-Dichlorobenzene	20	N.D.
1,3-Dichlorobenzene	20	N.D.
1,4-Dichlorobenzene	20	N.D.
1,1-Dichloroethane	20	N.D.
1,2-Dichloroethane	20	N.D.
1,1-Dichloroethene	20	N.D.
cis-1,2-Dichloroethene	20	N.D.
trans-1,2-Dichloroethene	20	N.D.
1,2-Dichloropropane	20	N.D.
cis-1,3-Dichloropropene	20	N.D.
trans-1,3-Dichloropropene	20	N.D.
Methylene chloride	200	N.D.
1,1,2,2-Tetrachloroethane	20	N.D.
Tetrachloroethene	20	N.D.
1,1,1-Trichloroethane	20	N.D.
1,1,2-Trichloroethane	20	N.D.
Trichloroethene	20	N.D.
Trichlorofluoromethane	20	N.D.
Vinyl chloride	40	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	98

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW6-2 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-04	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	5000	N.D.
Acenaphthylene	5000	N.D.
Anthracene	5000	N.D.
Benzo(a)anthracene	5000	N.D.
Benzo(a)pyrene	5000	N.D.
Benzo(b)fluoranthene	5000	N.D.
Benzo(g,h,i)perylene	5000	N.D.
Benzo(k)fluoranthene	5000	N.D.
Chrysene	5000	N.D.
Dibenzo(a,h)anthracene	5000	N.D.
Fluoranthene	5000	N.D.
Fluorene	5000	N.D.
Indeno(1,2,3-cd)pyrene	5000	N.D.
Naphthalene	5000	N.D.
Phenanthrene	5000	N.D.
Pyrene	5000	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	55

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW6-2 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-04	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/16/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchlorendate	30                      150	35

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S-10 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-05	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/13/95 Analyzed: 03/15/95 Reported: 03/20/95
---	---	--

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>		
1-Chloro-2-fluorobenzene	Control Limits % 60                      130	% Recovery 87

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S-10 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-05	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
Attention: Paul Hoffey		

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	85

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S-10 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-05	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/16/95 Reported: 03/20/95
---	---	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30                      150	50

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S-9 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-06	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/13/95 Analyzed: 03/15/95 Reported: 03/20/95
Attention: Paul Hoffey		

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	20	N.D.
Bromoform	20	N.D.
Bromomethane	40	N.D.
Carbon Tetrachloride	20	N.D.
Chlorobenzene	20	N.D.
Chloroethane	40	N.D.
2-Chloroethylvinyl ether	40	N.D.
Chloroform	20	N.D.
Chloromethane	40	N.D.
Dibromochloromethane	20	N.D.
1,2-Dichlorobenzene	20	N.D.
1,3-Dichlorobenzene	20	N.D.
1,4-Dichlorobenzene	20	N.D.
1,1-Dichloroethane	20	24
1,2-Dichloroethane	20	N.D.
1,1-Dichloroethene	20	N.D.
cis-1,2-Dichloroethene	20	N.D.
trans-1,2-Dichloroethene	20	N.D.
1,2-Dichloropropane	20	N.D.
cis-1,3-Dichloropropene	20	N.D.
trans-1,3-Dichloropropene	20	N.D.
Methylene chloride	200	N.D.
1,1,2,2-Tetrachloroethane	20	N.D.
Tetrachloroethene	20	810
1,1,1-Trichloroethane	20	970
1,1,2-Trichloroethane	20	N.D.
Trichloroethene	20	N.D.
Trichlorofluoromethane	20	N.D.
Vinyl chloride	40	N.D.
<b>Surrogates</b>		
1-Chloro-2-fluorobenzene	Control Limits % 60 130	% Recovery 92

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S-9 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503685-06	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
Attention: Paul Hoffer		

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	81

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erfer & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: S-9 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503685-06	Sampled: 03/06/95 Received: 03/06/95 Extracted: 03/14/95 Analyzed: 03/16/95 Reported: 03/20/95
---	--	--

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30 150	57

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix:  
Analysis Method: EPA 8080  
Lab Number: 9503685-07

Sampled:  
Received: 03/06/95  
Extracted: 03/14/95  
Analyzed: 03/15/95  
Reported: 03/20/95

Attention: Paul HOFFEY

QC Batch Number: GC0314950PCBEXB  
Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30      150	84

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: Analysis Method: EPA 8100 Lab Number: 9503685-07	Sampled: Received: 03/06/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/20/95
Attention: Paul HOFFEY		

QC Batch Number: GC0315958100EXA  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	54

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503685-08	Sampled: Received: 03/06/95 Analyzed: 03/15/95 Reported: 03/20/95
Attention: Paul Hoeffy		

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	85

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: Analysis Method: EPA 8010 Lab Number: 9503685-07	Sampled: Received: 03/06/95  Analyzed: 03/14/95 Reported: 03/20/95
Attention: Paul Hoeffy		

QC Batch Number: GC0313958010EXA  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	84

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Proj. ID: 940018.00, Sybase

Lab Proj. ID: 9503685

Received: 03/06/95

Reported: 03/20/95

## LABORATORY NARRATIVE

**EPA 8010 and 8100 Analysis:**

Detection limits for sample MW6-2 have been raised. Matrix effects necessitated sample dilution.

SEQUOIA ANALYTICAL

Eileen Manning  
Project Manager





Eler & Kainowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descrip: MW4-8  
Work Order #: 9503685 01-06

Reported: Mar 20, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0314956010MDD	ME0314956010MDD	ME0314956010MDD	ME0314956010MDD
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	9503685-01-MSD	9503685-01-MSD	9503685-01-MSD	9503685-01-MSD
Sample Conc.:	N.D.	1.0	36	71
Prepared Date:	03/14/95	03/14/95	03/14/95	03/14/95
Analyzed Date:	03/15/95	03/15/95	03/15/95	03/15/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	97	100	140	150
MS % Recovery:	97	99	104	79
Dup. Result:	97	99	130	130
MSD % Recov.:	97	98	94	59
RPD:	0.0	1.0	7.4	14
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	LCS031495-LCS	LCS031495-LCS	LCS031495-LCS	LCS031495-LCS
Prepared Date:	03/14/95	03/14/95	03/14/95	03/14/95
Analyzed Date:	03/15/95	03/15/95	03/15/95	03/15/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	99	100	100	100
LCS % Recov.:	99	100	100	100

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125
---------------------------------	--------	--------	--------	--------

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503685.ERL <1>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descrip: MW4-8  
Work Order #: 9503685 01-06

Reported: Mar 20, 1995

## QUALITY CONTROL DATA REPORT

**Analyte:** Oil & Grease

**QC Batch#:** IN0314954181FTA  
**Analy. Method:** EPA 418.1  
**Prep. Method:** EPA 418.1

**Analyst:** D. Williams  
**MS/MSD #:** 9503685-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/14/95  
**Analyzed Date:** 03/14/95  
**Instrument I.D.#:** FTIR1  
**Conc. Spiked:** 230 mg/Kg

**Result:** 220  
**MS % Recovery:** 96

**Dup. Result:** 210  
**MSD % Recov.:** 91

**RPD:** 4.7  
**RPD Limit:** 0-30

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 60-140  
**Control Limits**

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503685.ERL <2>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descrip: MW4-8  
Work Order #: 9503685 01-06

Reported: Mar 20, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0313958010EXA	GC0313958010EXA	GC0313958010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter
MS/MSD #:	9502685-01-MSD	9502685-01-MSD	9502685-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/13/95	03/13/95	03/13/95
Analyzed Date:	03/14/95	03/14/95	03/14/95
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
Result:	23	26	22
MS % Recovery:	92	104	88
Dup. Result:	25	28	25
MSD % Recov.:	100	112	100
RPD:	8.3	7.4	13
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	28-167	35-146	38-150
---------------------------------	--------	--------	--------

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descrip: MW4-8  
Work Order #: 9503685 01-06

Reported: Mar 20, 1995

### QUALITY CONTROL DATA REPORT

**Analyte:** PCB 1250

**QC Batch#:** GC0314950PCBEXB  
**Analy. Method:** EPA 8080  
**Prep. Method:** EPA 3550

**Analyst:** L. Haar  
**MS/MSD #:** 9503685-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/14/95  
**Analyzed Date:** 03/16/95  
**Instrument I.D.#:** GCHP5  
**Conc. Spiked:** 83 µg/Kg

**Result:** 70  
**MS % Recovery:** 84

**Dup. Result:** 63  
**MSD % Recov.:** 76

**RPD:** 11  
**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD  
LCS  
Control Limits** 30-150

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503685.ERL <4>





**Eriar & Kalinowski, Inc.**  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

**Client Project ID:** 940018.00, Sybase  
**Matrix:** SOLID  
**Sample Descrip:** MW4-8  
**Work Order #:** 9503685 01-06

**Reported:** Mar 20, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Naphthalene	Acenaphthene	Pyrene
<b>QC Batch#:</b>	GC0315958100EXA	GC0315958100EXA	GC0315958100EXA
<b>Analy. Method:</b>	EPA 8100	EPA 8100	EPA 8100
<b>Prep. Method:</b>	EPA 3550	EPA 3550	EPA 3550

Analyst:	L. Haar	L. Haar	L. Haar
<b>MS/MSD #:</b>	9503685-01-MSD	9503685-01-MSD	9503685-01-MSD
<b>Sample Conc.:</b>	N.D.	N.D.	N.D.
<b>Prepared Date:</b>	03/15/95	03/15/95	03/15/95
<b>Analyzed Date:</b>	03/16/95	03/16/95	03/16/95
<b>Instrument I.D.#:</b>	GCHP11	GCHP11	GCHP11
<b>Conc. Spiked:</b>	50 mg/L	50 mg/L	50 mg/L
<b>Result:</b>	45	47	49
<b>MS % Recovery:</b>	90	94	98
<b>Dup. Result:</b>	45	47	49
<b>MSD % Recov.:</b>	90	94	98
<b>RPD:</b>	0.0	0.0	0.0
<b>RPD Limit:</b>	0-50	0-50	0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

MS/MSD LCS Control Limits	DL-124	DL-124	DL-140

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503685.ERL <5>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kallnowski, Inc.

Analytical Laboratory: Sequoia Analyti.

Project Number: 940018.00

Date Sampled: March 6, 1995

Project Name: SYBASE

Sampled By: Gail L. Clark

Source of Samples: Soil borings

Report Results To: Paul Hoffer

Location: 64th & 65th Street Properties, Emeryville

Phone Number: 415) 578-1172

9503685

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)	
	MW4-8	soil	1 - brass liner	10:13	SEE NOTE composite/ at lab	standard	
	S6-A	soil	" "	11:20		turn-	
	S6-B	soil	" "	3:10		around	
						time	
*	MW1-9.5	soil	" "	1:10			
*	MW6-2	soil	" "	2:30			
	S10	soil	" "	11:50			
	S9	soil	" "	12:05			

Special Instructions: Analyze each for: TRPH (5520 CF mod), PCBs (8080), VOCs (8010), PNAS (8100), and ICP Metals (Arsenic, lead, + chromium) 13°C

(\*these samples had sheen/odor)

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
Gail L. Clark / Gail Clark	3-6-95	17:05		3/6/95	17:05





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

**COPY**

Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503865	Sampled: 03/08/95 Received: 03/08/95 Analyzed: see below Reported: 04/17/95
Attention: Paul Hoffey		
COC Number:		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results	Batch Number
Lab No: 9503865-01, Sample Desc: <b>SOLID, S11</b>					
TRPH (EPA 418.1)	mg/Kg	03/24/95	15	15	IN0324954181FTA
Lab No: 9503865-02, Sample Desc: <b>SOLID, S12</b>					
TRPH (EPA 418.1)	mg/Kg	03/24/95	15	N.D.	IN0324954181FTA
Lab No: 9503865-03, Sample Desc: <b>SOLID, MW2-6</b>					
TRPH (EPA 418.1)	mg/Kg	03/24/95	15	N.D.	IN0324954181FTA
Lab No: 9503865-04, Sample Desc: <b>SOLID, S13</b>					
TRPH (EPA 418.1)	mg/Kg	03/24/95	15	N.D.	IN0324954181FTA
Lab No: 9503865-05, Sample Desc: <b>SOLID, Method Blank</b>					
TRPH (EPA 418.1)	mg/Kg	03/24/95	15	N.D.	IN0324954181FTA

Analyses reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S11 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503865-01	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/14/95 Analyzed: 03/17/95 Reported: 04/17/95
---	--	--

COC Number:  
QC Batch Number: GC0314958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	68

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S11 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503865-01	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/17/95 Reported: 04/17/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	100

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: S11 Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503865-01	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/18/95 Reported: 04/17/95
---	--	--

COC Number:  
QC Batch Number: ME0317956010MDC

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	45
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S11 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503865-01	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 04/17/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30                      150	65

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S12 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503865-02	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/14/95 Analyzed: 03/17/95 Reported: 04/17/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: GC0314958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	70

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
  
Attention: Paul HOFFEY

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S12  
Matrix: SOLID  
Analysis Method: EPA 8100  
Lab Number: 9503865-02

Sampled: 03/08/95  
Received: 03/08/95  
Extracted: 03/17/95  
Analyzed: 03/17/95  
Reported: 04/17/95

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S12 Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503865-02	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/19/95 Reported: 04/17/95
--	--	--

COC Number:  
QC Batch Number: ME0317956010MDC

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	34
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S12 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503865-02	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 04/17/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

## Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Dibutylchloroendate	30                      150	54

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW2-6 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503865-03	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/14/95 Analyzed: 03/17/95 Reported: 04/17/95
---	--	--

COC Number:  
QC Batch Number: GC0314958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	76

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

*[Signature]*  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW2-6 Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503865-03	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/17/95 Reported: 04/17/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>		
2-Fluorobiphenyl	Control Limits % 50                      150	% Recovery 75

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW2-6 Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503865-03	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/19/95 Reported: 04/17/95
Attention: Paul Hoffey		

COC Number:  
QC Batch Number: ME0317956010MDC

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	26
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: MW2-6 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503865-03	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 04/17/95
---	--	--

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**

Dibutylchloroendate

**Control Limits %**

30                      150

**% Recovery**

64

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S13 Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503865-04	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/14/95 Analyzed: 03/17/95 Reported: 04/17/95
---	--	--

COC Number:  
QC Batch Number: GC0314958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	71

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eder & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S13  
Matrix: SOLID  
Analysis Method: EPA 8100  
Lab Number: 9503865-04

Sampled: 03/08/95  
Received: 03/08/95  
Extracted: 03/17/95  
Analyzed: 03/17/95  
Reported: 04/17/95

COC Number:

QC Batch Number: GC0315958100EXB

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50      150	74

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S13 Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503865-04	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/19/95 Reported: 04/17/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: ME0317956010MDC

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	39
Lead, Pb	5.0	5.1

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager

Page:

16







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S13 Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503865-04	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 04/17/95
Attention: Paul Hoffey		

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**  
Dibutylchloroendate

**Control Limits %**  
30                      150

**% Recovery**  
75

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503865-05	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 04/17/95
---	---	--

COC Number:  
QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %		% Recovery
Dibutylchloroendate	30	150	78

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503865-05	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/14/95 Analyzed: 03/17/95 Reported: 04/17/95
---	---	--

COC Number:

QC Batch Number: GC0314958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	97

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kallnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrx: SOLID Analysis Method: EPA 8100 Lab Number: 9503865-05	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/17/95 Reported: 04/17/95
---	--	--

COC Number: \_\_\_\_\_ Instrument ID: GCHP11  
 QC Batch Number: GC0315958100EXB

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50      150	74

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kallinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503865-05	Sampled: 03/08/95 Received: 03/08/95 Extracted: 03/17/95 Analyzed: 03/18/95 Reported: 04/17/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: ME0317956010MDC

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	N.D.
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





<b>Erler &amp; Kallnowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> SOLID <b>Sample Descript:</b> S11 <b>Work Order #:</b> 9503865 01-05	<b>Reported:</b> Apr 18, 1995
--	--	-------------------------------

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b> TRPH
<b>QC Batch#:</b> IN0324954181FTA
<b>Analy. Method:</b> EPA 418.1
<b>Prep. Method:</b> EPA 418.1

**Analyst:** D. Williams  
**MS/MSD #:** 9503865-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/24/95  
**Analyzed Date:** 03/24/95  
**Instrument I.D.#:** FTIR1  
**Conc. Spiked:** 230 mg/Kg

**Result:** 200  
**MS % Recovery:** 87

**Dup. Result:** 170  
**MSD % Recov.:** 74

**RPD:** 16.0  
**RPD Limit:** 0-30

**LCS #:**  
**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**  
**LCS Result:**  
**LCS % Recov.:**

<b>MS/MSD</b>	60-140
<b>LCS</b>	
<b>Control Limits</b>	

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503865.ERL <1>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: S11  
Work Order #: 9503865 01-05

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0317956010MDC	ME0317956010MDC	ME0317956010MDC	ME0317956010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	9503865-01-MSD	9503865-01-MSD	9503865-01-MSD	9503865-01-MSD
Sample Conc.:	0.72	N.D.	45	59
Prepared Date:	03/17/95	03/17/95	03/17/95	03/17/95
Analyzed Date:	03/18/95	03/18/95	03/18/95	03/18/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	98	98	140	150
MS % Recovery:	97	98	95	91
Dup. Result:	96	97	140	160
MSD % Recov.:	95	97	95	101
RPD:	2.1	1.0	0.0	6.5
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125
---------------------------------	--------	--------	--------	--------

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503865.ERL <2>





Erler & Kallnowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffey	Client Project ID: 940018.00, Sybase Matrix: SOLID Sample Descript: S11 Work Order #: 9503865 01-05	Reported: Apr 18, 1995
--	--	------------------------

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0314958010EXA	GC0314958010EXA	GC0314958010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter
MS/MSD #:	9503865-01-MSD	9503865-01-MSD	503865-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/14/95	03/14/95	03/14/95
Analyzed Date:	03/17/95	03/17/95	03/17/95
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg

Result:	18	23	19
MS % Recovery:	72	92	76

Dup. Result:	21	24	21
MSD % Recov.:	84	96	84

RPD:	15	4.3	10
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	28-167	35-146	38-150
---------------------------------	--------	--------	--------

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: MW4-8  
Work Order #: 9503865 01-05

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0315958100EXB	GC0315958100EXB	GC0315958100EXB
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Haar	L. Haar	L. Haar
MS/MSD #:	9503685-01-MSD	9503685-01-MSD	9503685-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/15/95	03/15/95	03/15/95
Analyzed Date:	03/16/95	03/16/95	03/16/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L
Result:	45	47	49
MS % Recovery:	90	94	98
Dup. Result:	45	47	49
MSD % Recov.:	90	94	98
RPD:	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD	DL-124	DL-124	DL-140
LCS			
Control Limits			

SEQUIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503865.ERL <4>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

<b>Erler &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul HOFFEY	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> SOLID <b>Sample Descript:</b> MW4-8 <b>Work Order #:</b> 9503865 01-05	<b>Reported:</b> Apr 18, 1995
--	--	-------------------------------

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b> PCB 1260
<b>QC Batch#:</b> GC0314950PCBEXB
<b>Analy. Method:</b> EPA 8080
<b>Prep. Method:</b> EPA 3550

**Analyst:** L. Haar  
**MS/MSD #:** 9503685-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/14/95  
**Analyzed Date:** 03/16/95  
**Instrument I.D.#:** GCPE5  
**Conc. Spiked:** 83 µg/Kg

**Result:** 70  
**MS % Recovery:** 84

**Dup. Result:** 63  
**MSD % Recov.:** 76

**RPD:** 11  
**RPD Limit:** 0-50

**LCS #:**  
**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**  
**LCS Result:**  
**LCS % Recov.:**

<b>MS/MSD LCS Control Limits</b>	30-150
--	--------

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503865.ERL <5>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018.00

Date Sampled: 8 March 1995

Project Name: SYBASE

Sampled By: G.L. Clark

Source of Samples: soil borings using FRED

Report Results To: Paul Haffey

Location: Ryersson Blvd, 64th + 65th Street Prop., Emeryville

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
01	S11	soil	1- brass liner	12:15	5520, 8080, 8010, 8100, ICP Metals	Standard
02	S12	soil	1- brass liner	12:40	SEE NOTE ↓ ↓ ↓	turn-
03	MW2-6	soil	1- brass liner	2:05		around
04	S13	soil	1- brass liner	1:15		time
					9503865	
						8°C

Special Instructions: **NOTE:** All samples analyzed for TRPH (5520 CF mod), PCBs (8080), VOCs (8010), PNAs (8100), and ICP Metals (arsenic, lead + chromium)

Relinquished By: Name / Signature / Affiliation	Date	Time	Received By: Name / Signature / Affiliation
Gail C. Clark / <u>Gail C. Clark</u>	1/28/95	17:18	<u>[Signature]</u>
			David Lawrence / <u>[Signature]</u> / Sequoia



**COPY**

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503922	Sampled: 03/09/95 Received: 03/09/95 Analyzed: see below Reported: 03/23/95
Attention: Paul Hoeffy		

COC Number:

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results	Batch Number
Lab No: 9503922-01, Sample Desc: SOLID, S1A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/21/95	15	17	IN0321954181FTB
Lab No: 9503922-02, Sample Desc: SOLID, S2A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/21/95	15	87	IN0321954181FTB
Lab No: 9503922-03, Sample Desc: SOLID, S4A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/21/95	150	490	IN0321954181FTB
Lab No: 9503922-04, Sample Desc: SOLID, S3A/B COMP					
TRPH (EPA 418.1)	mg/Kg	03/21/95	300	3400	IN0321954181FTB

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503922	Sampled: Received: 03/09/95 Analyzed: see below Reported: 03/23/95
Attention: Paul Hoffey		

COC Number:

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results	Batch Number
Lab No: 9503922-05, Sample Desc : SOLID, Method Blank					
TRPH (EPA 418.1)	mg/Kg	03/21/95	15	N.D.	IN0321954181FTB

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S1A/B COMP  
Matrix: SOLID  
Analysis Method: EPA 8010  
Lab Number: 9503922-01

Sampled: 03/09/95  
Received: 03/09/95  
Extracted: 03/17/95  
Analyzed: 03/19/95  
Reported: 03/23/95

Attention: Paul Hoeffy

COC Number:

QC Batch Number: GC0317958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

60 130

**% Recovery**

72

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S1A/B COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503922-01	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/20/95 Analyzed: 03/21/95 Reported: 03/23/95
Attention: Paul Hoffey		

COC Number:

QC Batch Number: GC0320958100EXA

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	1300	N.D.
Acenaphthylene	1300	N.D.
Anthracene	1300	N.D.
Benzo(a)anthracene	1300	N.D.
Benzo(a)pyrene	1300	N.D.
Benzo(b)fluoranthene	1300	N.D.
Benzo(g,h,i)perylene	1300	N.D.
Benzo(k)fluoranthene	1300	N.D.
Chrysene	1300	N.D.
Dibenzo(a,h)anthracene	1300	N.D.
Fluoranthene	1300	N.D.
Fluorene	1300	N.D.
Indeno(1,2,3-cd)pyrene	1300	N.D.
Naphthalene	1300	N.D.
Phenanthrene	1300	N.D.
Pyrene	1300	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	65

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffey	Client Proj. ID: 940018.00, Sybase Sample Descript: S1A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503922-01	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/21/95 Analyzed: 03/21/95 Reported: 03/23/95
--	---	--

COC Number:

QC Batch Number: ME0321956010MDE

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	19
Lead, Pb	5.0	55

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 940018.00, Sybase Sample Descript: S1A/B COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503922-01	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/23/95
---	---	--

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30      150	64

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S2A/B COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503922-02	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/17/95 Analyzed: 03/20/95 Reported: 03/23/95
---	---	--

COC Number:  
QC Batch Number: GC0317958010EXA

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	91

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S2A/B COMP  
Matrix: SOLID  
Analysis Method: EPA 8100  
Lab Number: 9503922-02

Sampled: 03/09/95  
Received: 03/09/95  
Extracted: 03/20/95  
Analyzed: 03/21/95  
Reported: 03/23/95

Attention: Paul Hoffey

COC Number:

QC Batch Number: GC0320958100EXA

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	1300	N.D.
Acenaphthylene	1300	N.D.
Anthracene	1300	N.D.
Benzo(a)anthracene	1300	N.D.
Benzo(a)pyrene	1300	N.D.
Benzo(b)fluoranthene	1300	N.D.
Benzo(g,h,i)perylene	1300	N.D.
Benzo(k)fluoranthene	1300	N.D.
Chrysene	1300	N.D.
Dibenzo(a,h)anthracene	1300	N.D.
Fluoranthene	1300	N.D.
Fluorene	1300	N.D.
Indeno(1,2,3-cd)pyrene	1300	N.D.
Naphthalene	1300	N.D.
Phenanthrene	1300	N.D.
Pyrene	1300	N.D.

**Surrogates**  
2-Fluorobiphenyl

**Control Limits %**  
50                      150

**% Recovery**  
63

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S2A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503922-02	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/21/95 Analyzed: 03/21/95 Reported: 03/23/95
Attention: Paul HOFFEY		

COC Number:  
QC Batch Number: ME0321956010MDE

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	19
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S2A/B COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503922-02	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/15/95 Analyzed: 03/16/95 Reported: 03/23/95
Attention: Paul Hoffey		

COC Number:  
QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30                      150	57

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S4A/B COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503922-03	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/17/95 Analyzed: 03/20/95 Reported: 03/23/95
---	---	--

COC Number:  
 QC Batch Number: GC0317958010EXA Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	84

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S4A/B COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503922-03	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/20/95 Analyzed: 03/21/95 Reported: 03/23/95
Attention: Paul HOFFEY		

COC Number:

QC Batch Number: GC0320958100EXA

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	1300	N.D.
Acenaphthylene	1300	N.D.
Anthracene	1300	N.D.
Benzo(a)anthracene	1300	N.D.
Benzo(a)pyrene	1300	N.D.
Benzo(b)fluoranthene	1300	N.D.
Benzo(g,h,i)perylene	1300	N.D.
Benzo(k)fluoranthene	1300	N.D.
Chrysene	1300	N.D.
Dibenzo(a,h)anthracene	1300	N.D.
Fluoranthene	1300	N.D.
Fluorene	1300	N.D.
Indeno(1,2,3-cd)pyrene	1300	N.D.
Naphthalene	1300	N.D.
Phenanthrene	1300	N.D.
Pyrene	1300	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50 150	73

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 940018.00, Sybase Sample Descript: S4A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503922-03	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/21/95 Analyzed: 03/21/95 Reported: 03/23/95
---	---	--

COC Number:

QC Batch Number: ME0321956010MDE

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D
Chromium, Cr	0.50	23
Lead, Pb	5.0	29

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: S4A/B COMP Matrix: SOLID Analysis Method: EPA 8080 Lab Number: 9503922-03	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/15/95 Analyzed: 03/21/95 Reported: 03/23/95
---	---	--

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCHP12

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**  
Dibutylchloroendate

**Control Limits %**  
30                      150

**% Recovery**  
62

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: S3A/B COMP Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503922-04	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/17/95 Analyzed: 03/20/95 Reported: 03/23/95
---	---	--

COC Number:

QC Batch Number: GC0317958010EXA

Instrument ID: GCHP9

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	87

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S3A/B COMP Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503922-04	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/20/95 Analyzed: 03/21/95 Reported: 03/23/95
Attention: Paul Hoeffy		

COC Number:

QC Batch Number: GC0320958100EXA

Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	1300	N.D.
Acenaphthylene	1300	N.D.
Anthracene	1300	N.D.
Benzo(a)anthracene	1300	N.D.
Benzo(a)pyrene	1300	N.D.
Benzo(b)fluoranthene	1300	N.D.
Benzo(g,h,i)perylene	1300	N.D.
Benzo(k)fluoranthene	1300	N.D.
Chrysene	1300	N.D.
Dibenzo(a,h)anthracene	1300	N.D.
Fluoranthene	1300	N.D.
Fluorene	1300	N.D.
Indeno(1,2,3-cd)pyrene	1300	N.D.
Naphthalene	1300	N.D.
Phenanthrene	1300	N.D.
Pyrene	1300	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	88

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: S3A/B COMP Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503922-04	Sampled: 03/09/95 Received: 03/09/95 Extracted: 03/21/95 Analyzed: 03/21/95 Reported: 04/19/95
Attention: Paul Hoeffy		

COC Number:  
QC Batch Number: ME0321956010MDE

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	50	N.D.
Chromium, Cr	5.0	22
Lead, Pb	50	12

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: S3A/B COMP  
Matrix: SOLID  
Analysis Method: EPA 8080  
Lab Number: 9503922-04

Sampled: 03/09/95  
Received: 03/09/95  
Extracted: 03/15/95  
Analyzed: 03/21/95  
Reported: 03/23/95

COC Number:

QC Batch Number: GC0314950PCBEXB

Instrument ID: GCHP12

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

**Surrogates**  
Dibutylchloroendate

**Control Limits %**  
30                      150

**% Recovery**  
57

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoeffy

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: SOLID  
Analysis Method: EPA 8080  
Lab Number: 9503922-05

Sampled:  
Received: 03/09/95  
Extracted: 03/15/95  
Analyzed: 03/16/95  
Reported: 03/23/95

COC Number:  
QC Batch Number: GC0314950PCBEXB

Instrument ID: GCPE5

**Polychlorinated Biphenyls (EPA 8080)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	30      150	78

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503922-05	Sampled: Received: 03/09/95 Extracted: 03/17/95 Analyzed: 03/19/95 Reported: 03/23/95
---	---	---

COC Number:

QC Batch Number: GC031795801008A

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

60 130

**% Recovery**

90

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8100 Lab Number: 9503922-05	Sampled: Received: 03/09/95 Extracted: 03/20/95 Analyzed: 03/21/95 Reported: 03/23/95
---	---	---

COC Number: QC Batch Number: GC0320958100EXA Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Naphthalene	250	N.D.
Phenanthrene	250	N.D.
Pyrene	250	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	72

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 6010 Lab Number: 9503922-05	Sampled: Received: 03/09/95 Extracted: 03/21/95 Analyzed: 03/21/95 Reported: 03/23/95
---	---	---

COC Number:  
QC Batch Number: ME0321956010MDE

Instrument ID: MTJA2

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Arsenic, As	5.0	N.D.
Chromium, Cr	0.50	N.D.
Lead, Pb	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8010 Lab Number: 9503922-06	Sampled: Received: 03/09/95 Extracted: 03/17/95 Analyzed: 03/20/95 Reported: 03/23/95
---	---	---

COC Number:

QC Batch Number: GC031795801008A

Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	60 130	97

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: S1A/B COMP.  
Work Order #: 9503922 01-05

Reported: Mar 23, 1995

### QUALITY CONTROL DATA REPORT

**Analyte:** TRPH (EPA 418.1)

**QC Batch#:** IN0321954181FTB  
**Analy. Method:** EPA 418.1  
**Prep. Method:** EPA 418.1

**Analyst:** D. Williams  
**MS/MSD #:** 9503922-01-MSD  
**Sample Conc.:** 17  
**Prepared Date:** 3/21/95  
**Analyzed Date:** 3/21/95  
**Instrument I.D.#:** FTIR1  
**Conc. Spiked:** 230 mg/Kg

**Result:** 220  
**MS % Recovery:** 88

**Dup. Result:** 240  
**MSD % Recov.:** 97

**RPD:** 8.6  
**RPD Limit:** 0-30

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 60-140  
**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503922.ERL < 1 >





<b>Erler &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffey	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> SOLID <b>Sample Descript:</b> S1A-B COMP. <b>Work Order #:</b> 9503922 01-05	<b>Reported:</b> Mar 23, 1995
---	--	-------------------------------

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
<b>QC Batch#:</b>	GC0317958010EXA	GC0317958010EXA	GC0317958010EXA
<b>Analy. Method:</b>	EPA 8010	EPA 8010	EPA 8010
<b>Prep. Method:</b>	EPA 5030	EPA 5030	EPA 5030

<b>Analyst:</b>	J. Miller	J. Miller	J. Miller
<b>MS/MSD #:</b>	9503922-01-MSD	9503922-01-MSD	9503922-01-MSD
<b>Sample Conc.:</b>	N.D.	N.D.	N.D.
<b>Prepared Date:</b>	3/17/95	3/17/95	3/17/95
<b>Analyzed Date:</b>	3/19/95	3/19/95	3/19/95
<b>Instrument I.D.#:</b>	GCHP8	GCHP8	GCHP8
<b>Conc. Spiked:</b>	25 µg/Kg	25 µg/Kg	25 µg/Kg

<b>Result:</b>	N.D.	11	14
<b>MS % Recovery:</b>	0.0	44	56

<b>Dup. Result:</b>	22	14	19
<b>MSD % Recov.:</b>	88	56	76

<b>RPD:</b>	200	24	30
<b>RPD Limit:</b>	0-50	0-50	0-50

LCS #:	LCS031795-LCS	LCS031795-LCS	CS031795-LCS
<b>Prepared Date:</b>	3/17/95	3/17/95	3/17/95
<b>Analyzed Date:</b>	3/18/95	3/18/95	3/18/95
<b>Instrument I.D.#:</b>	GCHP8	GCHP8	GCHP8
<b>Conc. Spiked:</b>	25 ug/Kg	25 ug/Kg	25 ug/Kg
<b>LCS Result:</b>	23	24	19
<b>LCS % Recov.:</b>	92	96	76

<b>MS/MSD</b>			
<b>LCS</b>	28-167	35-146	38-150
<b>Control Limits</b>			

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul HOFFEY

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: S1A-B COMP.  
Work Order #: 9503922 01-05

Reported: Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0320958100EXA	GC0320958100EXA	GC0320958100EXA
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	L. Haar	L. Haar	L. Haar
MS/MSD #:	9503922-01-MSD	9503685-01-MSD	9503685-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	3/20/95	03/15/95	03/15/95
Analyzed Date:	3/21/95	03/16/95	03/16/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L
Result:	52	53	56
MS % Recovery:	104	106	112
Dup. Result:	46	48	49
MSD % Recov.:	92	96	98
RPD:	12	9.9	13
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	DL-124	DL-124	DL-140

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503922.ERL <3>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erier & Kainowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul HOFFEY

Client Project ID: 940018.00, Sybase  
Matrix: SOLID  
Sample Descript: S1A/B COMP.  
Work Order #: 9503922 01-05

Reported: Mar 23, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0320956010MDE	ME0320956010MDE	ME0320956010MDE	ME0320956010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	S.O'Donnell	S.O'Donnell	S.O'Donnell	S.O'Donnell
MS/MSD #:	9503922-01-MSD	9503922-01-MSD	9503922-01-MSD	9503922-01-MSD
Sample Conc.:	N.D.	N.D.	19	20
Prepared Date:	3/20/95	3/20/95	3/20/95	3/20/95
Analyzed Date:	3/21/95	3/21/95	3/21/95	3/21/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	100	99	130	130
MS % Recovery:	100	96	111	110
Dup. Result:	100	98	130	120
MSD % Recov.:	100	98	111	100
RPD:	0.0	1.0	0.0	8.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD	75-125	75-125	75-125	75-125
LCS				
Control Limits				

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503922.ERL <4>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

<b>Eler &amp; Kalinowski, Inc.</b>	<b>Client Project ID:</b> 940018.00, Sybase	
1730 So. Amphlett Blvd., Suite 320	<b>Matrix:</b> SOLID	
San Mateo, CA 94402	<b>Sample Descript:</b> MW4-8	
Attention: Paul HOFFEY	<b>Work Order #:</b> 9503922 01-05	<b>Reported:</b> Mar 23, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** PCB 1260

**QC Batch#:** GC0314950PCBEXB  
**Analy. Method:** EPA 8080  
**Prep. Method:** EPA 3550

**Analyst:** L. Haar  
**MS/MSD #:** 9503685-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 03/14/95  
**Analyzed Date:** 03/16/95  
**Instrument I.D.#:** GCPE5  
**Conc. Spiked:** 83 µg/Kg

**Result:** 70  
**MS % Recovery:** 84

**Dup. Result:** 63  
**MSD % Recov.:** 76

**RPD:** 11  
**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 30-150  
**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503922.ERL <5>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

9503922

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018.00

Date Sampled: 9 March 1995

Project Name: SYBASE

Sampled By: G. L. Clark

Source of Samples: soil boring using FRED

Report Results To: Paul HOFFEY

Location: former Boveners warehouse, Emeryville

Phone Number: 415) 578-1172

Lab Sample ID	Field Sample ID	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
1 AB	S1B	soil	1- brass liner	10:00	composite in lab 5520, 8080, 8010, 8100, ICP Metals → SEE NOTE ←	Standard /
	S1A	soil	1- brass liner	10:25		turn-
2 *	S2A	soil	1- brass liner	10:45	composite in lab 5520, 8080, 8010, 8100, ICP Metals	around-
	S2B	soil	1- brass liner	11:00		time
3 *	S4A	soil	1- brass liner	11:50	composite in lab 5520, 8080, 8010, 8100, ICP Metals	↓
	S4B	soil	1- brass liner	11:25		
4 AB *	S3B	soil	1- brass liner	12:05	composite in Lab 5520, 8080, 8010, 8100, ICP Metals	↓
	S3A	soil	1- brass liner	12:30		

Special Instructions: → NOTE: Analyze all composite samples for TRPH (5520 CP mod.), PCBs (8080), VOCs (8010), PNAs (8100), and ICP Metals (arsenic, Lead, + chromium)

\* Samples have odor/sheen

Relinquished By:			Received By:	
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date / Time
Gail L. Clark / Gail L. Clark / EKI	3-9-95	15:27	[Signature]	3/9/95 15:27





**COPY**

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase  Lab Proj. ID: 9503176	Sampled: 03/23/95 Received: 03/23/95 Analyzed: see below  Reported: 04/06/95
Attention: Paul Hoeffy		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503176-01 Sample Desc: LIQUID,MW-4				
Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	03/31/95	0.0050	N.D.
Lab No: 9503176-02 Sample Desc: LIQUID,MW-3				
Arsenic	mg/L	03/31/95	0.0050	0.013
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	03/31/95	0.0050	N.D.
Lab No: 9503176-03 Sample Desc: LIQUID,MW-2				
Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	03/31/95	0.0050	N.D.
Lab No: 9503176-04 Sample Desc: LIQUID,MW-1				
Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	03/31/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503176	Sampled: Received: 03/23/95 Analyzed: see below Reported: 04/06/95
Attention: Paul HOFFEY		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503176-05				
Sample Desc : LIQUID, Method Blank				
Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	03/31/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-01	Sampled: 03/23/95 Received: 03/23/95  Analyzed: 04/04/95 Reported: 04/06/95
--	--	---

QC Batch Number: GC040495801016A  
Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
1,2-Dichloroethane	1.2	N.D.
1,1-Dichloroethene	1.2	N.D.
<b>cis-1,2-Dichloroethene</b>	<b>1.2</b>	<b>28</b>
<b>trans-1,2-Dichloroethene</b>	<b>1.2</b>	<b>16</b>
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
<b>Trichloroethene</b>	<b>1.2</b>	<b>54</b>
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.
Freon 113	2.5	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503176-01	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/06/95
--	--	--

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50 150	78

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW-4  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503176-01

Sampled: 03/23/95  
Received: 03/23/95  
Extracted: 03/29/95  
Analyzed: 04/01/95  
Reported: 04/06/95

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern: Unidentified HC	50	190 C9-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	115

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-01	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/04/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040495ISHSHSA  
Instrument ID: GCV1

Industrial Solvents

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoeffy

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW-4  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503176-01

Sampled: 03/23/95  
Received: 03/23/95  
Analyzed: 04/03/95  
Reported: 04/06/95

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	126

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-02	Sampled: 03/23/95 Received: 03/23/95  Analyzed: 04/01/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	72

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503176-02	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/06/95
---	--	--

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-02	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 04/01/95 Reported: 04/06/95
Attention: Paul Hoeffy		

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	50	150
Chromatogram Pattern:		
Unidentified HC		C9-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50 150	98

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-02	Sampled: 03/23/95 Received: 03/23/95  Analyzed: 04/04/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040495ISHSHSA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503176-02	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/03/95 Reported: 04/06/95
Attention: Paul Hoffey		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	121

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-03	Sampled: 03/23/95 Received: 03/23/95  Analyzed: 04/04/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040495801016A  
Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
1,2-Dichloroethane	1.2	N.D.
1,1-Dichloroethene	1.2	N.D.
<b>cis-1,2-Dichloroethene</b>	<b>1.2</b>	<b>60</b>
<b>trans-1,2-Dichloroethene</b>	<b>1.2</b>	<b>46</b>
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
<b>Trichloroethene</b>	<b>1.2</b>	<b>2.5</b>
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.
Freon 113	2.5	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	76

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503176-03	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/06/95
Attention: Paul Hoeffy		

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50 150	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-03	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 04/01/95 Reported: 04/06/95
Attention: Paul Hoffey		

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	50	260
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	114

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-03	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/04/95 Reported: 04/06/95
Attention: Paul Hoeffy		

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erier & Kallnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503176-03	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/03/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	71
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		< C8
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	126

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erlar & Kainowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-04	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/03/95 Reported: 04/06/95
--	--	---

QC Batch Number: GC040495801016A  
 Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon Tetrachloride	2.5	N.D.
Chlorobenzene	2.5	N.D.
Chloroethane	5.0	N.D.
2-Chloroethylvinyl ether	5.0	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	2.5	N.D.
1,3-Dichlorobenzene	2.5	N.D.
1,4-Dichlorobenzene	2.5	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	2.5	39
trans-1,2-Dichloroethene	2.5	9.9
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	25	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	2.5	N.D.
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	170
Trichlorofluoromethane	2.5	N.D.
Vinyl chloride	5.0	N.D.
Freon 113	5.0	9.0

<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	70 130	98

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503176-04	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/06/95
---	--	--

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	134

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





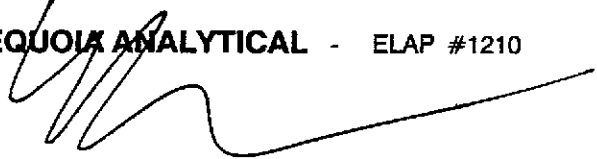
Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-04	Sampled: 03/23/95 Received: 03/23/95 Extracted: 03/29/95 Analyzed: 04/04/95 Reported: 04/06/95
---	--	--

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5B

### Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	500	5500 Diesel
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	115

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210  


Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-04	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/04/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503176-04	Sampled: 03/23/95 Received: 03/23/95 Analyzed: 04/03/95 Reported: 04/06/95
---	--	---

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	170
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		C7-C12

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	124

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul HOFFEY

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: LIQUID  
Analysis Method: EPA 8100  
Lab Number: 9503176-05

Sampled:  
Received: 03/23/95  
Extracted: 03/29/95  
Analyzed: 03/30/95  
Reported: 04/06/95

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	50

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503I76-05	Sampled: Received: 03/23/95 Extracted: 03/29/95 Analyzed: 03/30/95 Reported: 04/06/95
Attention: Paul Hoeffy		

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP4B

### Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	88

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503176-05	Sampled: Received: 03/23/95  Analyzed: 04/03/95 Reported: 04/06/95
Attention: Paul Hoeffy		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                      130	111

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**



Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-05	Sampled: Received: 03/23/95 Analyzed: 04/01/95 Reported: 04/06/95
Attention: Paul Hoeffey		

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**  
1-Chloro-2-fluorobenzene

**Control Limits %**  
70                      130

**% Recovery**  
80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503176-05	Sampled: Received: 03/23/95  Analyzed: 04/04/95 Reported: 04/06/95
---	--	--

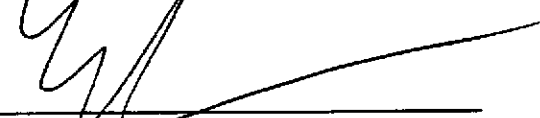
QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-06	Sampled: Received: 03/23/95  Analyzed: 04/03/95 Reported: 04/06/95
---	--	--

QC Batch Number: GC040495801016A  
Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	82

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503176-07	Sampled: Received: 03/23/95  Analyzed: 04/04/95 Reported: 04/06/95
---	--	--

QC Batch Number: GC040495801016A  
Instrument ID: GCHP16

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	70 130	83

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kallnowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Proj. ID: 940018.00, Sybase

Lab Proj. ID: 9503I76

Received: 03/23/95

Reported: 04/06/95

## LABORATORY NARRATIVE

### Please Note:

Samples 9503I76-01, -02 and -03 were quantitated against a diesel standard (the default standard) since no fuel pattern was discernible in the Fuel Fingerprint analysis. These samples were quantitated in the C9 to C24 (diesel) range; however, the chromatogram patterns for all of the aforementioned samples extend to at least C36.

SEQUOIA ANALYTICAL

Eileen Manning  
Project Manager

Page: 1





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA, 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

<b>Erler &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> LIQUID <b>Sample Descrip:</b> MW-4 <b>Work Order #:</b> 9503176 -01-05	<b>Reported:</b> Apr 11, 1995
--	--	-------------------------------

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b>	Arsenic	Lead
<b>QC Batch#:</b>	ME0330957000MDA	ME0330957000MDA
<b>Analy. Method:</b>	EPA 206.2	EPA 239.2
<b>Prep. Method:</b>	EPA 3020	EPA 3020

<b>Analyst:</b>	L. Zhu	J. Martinez
<b>MS/MSD #:</b>	9503176-01-MSD	9503176-01-MSD
<b>Sample Conc.:</b>	N.D.	N.D.
<b>Prepared Date:</b>	3/30/95	3/30/95
<b>Analyzed Date:</b>	3/31/95	3/31/95
<b>Instrument I.D.#:</b>	MTJA3	MTJA1
<b>Conc. Spiked:</b>	0.050 mg/L	0.050 mg/L

<b>Result:</b>	0.054	0.044
<b>MS % Recovery:</b>	108	88

<b>Dup. Result:</b>	0.055	0.041
<b>MSD % Recov.:</b>	110	82

<b>RPD:</b>	1.8	7.1
<b>RPD Limit:</b>	0-30	0-30

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

<b>MS/MSD</b>		
<b>LCS</b>	75-125	75-125
<b>Control Limits</b>		

**SEQUOIA ANALYTICAL**



Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503176.ERL <1>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503176 -01-05

Reported: Apr 11, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0330956010MDA	ME0330956010MDA	ME0330956010MDA	ME0330956010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9503176-01-MSD	9503176-01-MSD	9503176-01-MSD	9503176-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	0.094
Prepared Date:	03/30/95	03/30/95	03/30/95	03/30/95
Analyzed Date:	03/31/95	03/31/95	03/31/95	03/31/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	0.98	0.98	0.96	1.0
MS % Recovery:	98	98	96	91
Dup. Result:	0.99	0.98	0.96	1.0
MSD % Recov.:	99	98	96	91
RPD:	1.0	0.0	0.0	0.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD				
LCS	75-125	75-125	75-125	75-125
Control Limits				

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <2>







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-3  
Work Order #: 9503176-02, 05

Reported: Apr 11, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC040195801008A	GC040195801008A	GC040195801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Miller	J. Miller	J. Miller
MS/MSD #:	9503176-02-MSD	9503176-02-MSD	9503176-02-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	04/01/95	04/01/95	04/01/95
Analyzed Date:	04/01/95	04/01/95	04/01/95
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L

Result:	26	25	25
MS % Recovery:	104	100	100

Dup. Result:	27	27	26
MSD % Recov.:	108	108	104

RPD:	3.8	7.7	3.9
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD	28-167	35-146	38-150
LCS			
Control Limits			

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <3>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

**Erter & Kalinowski, Inc.**  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

**Client Project ID:** 940018.00, Sybase  
**Matrix:** LIQUID  
**Sample Descrip:** XSD  
**Work Order #:** 9503176- 01, 03, 04, 06, 07

**Reported:** Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b>	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
<b>QC Batch#:</b>	GC040495801016A	GC040495801016A	GC040495801016A
<b>Analy. Method:</b>	EPA 8010	EPA 8010	EPA 8010
<b>Prep. Method:</b>	EPA 5030	EPA 5030	EPA 5030

<b>Analyst:</b>	T. Costello	T. Costello	T. Costello
<b>MS/MSD #:</b>	9503K67-01-XSD	9503K67-01-XSD	9503K67-01-XSD
<b>Sample Conc.:</b>	N.D.	N.D.	N.D.
<b>Prepared Date:</b>	04/03/95	04/03/95	04/03/95
<b>Analyzed Date:</b>	04/04/95	04/04/95	04/04/95
<b>Instrument I.D.#:</b>	GCHP16	GCHP16	GCHP16
<b>Conc. Spiked:</b>	25 µg/L	25 µg/L	25 µg/L

<b>Result:</b>	25	24	25
<b>MS % Recovery:</b>	100	96	100

<b>Dup. Result:</b>	19	19	22
<b>MSD % Recov.:</b>	76	76	88

<b>RPD:</b>	27	23	13
<b>RPD Limit:</b>	0-50	0-50	0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

<b>MS/MSD LCS Control Limits</b>	28-167	35-146	38-150
--	--------	--------	--------

**SEQUOIA ANALYTICAL**

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Eileen A. Manning  
Project Manager

9503176.ERL <4>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: BLK  
Work Order #: 9503176-01-05

Reported: Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0329958100EXZ	GC0329958100EXZ	GC0329958100EXZ
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3520	EPA 3520	EPA 3520

Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman
MS/MSD #:	BLK032995-BLK	BLK032995-BLK	BLK032995-BLK
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/29/95	03/29/95	03/29/95
Analyzed Date:	03/31/95	03/31/95	03/31/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L

Result:	43	42	46
MS % Recovery:	86	84	92

Dup. Result:	42	41	46
MSD % Recov.:	84	82	92

RPD:	2.4	2.4	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS	DL-122	DL-124	DL-140
Control Limits			

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <5>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503176-01-05

Reported: Apr 11, 1995

### QUALITY CONTROL DATA REPORT

**Analyte:** Diesel

**QC Batch#:** GC0329950HBPEXZ

**Analy. Method:** EPA 8015M

**Prep. Method:** EPA 3520

**Analyst:** B. Ali

**MS/MSD #:** 9503176-01-MSD

**Sample Conc.:** 190

**Prepared Date:** 03/29/95

**Analyzed Date:** 04/01/95

**Instrument I.D.#:** GCHP5A

**Conc. Spiked:** 600 µg/L

**Result:** 620

**MS % Recovery:** 72

**Dup. Result:** 550

**MSD % Recov.:** 60

**RPD:** 12

**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**

**Analyzed Date:**

**Instrument I.D.#:**

**Conc. Spiked:**

**LCS Result:**

**LCS % Recov.:**

**MS/MSD**

**LCS** 38-122

**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <6>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Project ID: 940018.00, Sybase Matrix: LIQUID Sample Descrip: MW-4 Work Order #: 9503176-01-05	Reported: Apr 11, 1995
---	---	------------------------

## QUALITY CONTROL DATA REPORT

Analyte:	Acetone	MIBK	Tetra Hydrofuran	1,1,1-TCA	TCE
QC Batch#:	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA
Analy. Method:	EPA 8015 MOD	EPA 8015 MOD	PA 8015 MOD	EPA 8015 MOD	EPA 8015 MOD
Prep. Method:	HS	HS	HS	HS	HS

Analyst:	T. Tran	T. Tran	T. Tran	T. Tran	T. Tran
MS/MSD #:	9503176-01-MSD	9503176-01-MSD	9503176-01-MSD	9503176-01-MSD	9503176-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	GCV1	GCV1	GCV1	GCV1	GCV1
Conc. Spiked:	4.0 mg/L	1.0 mg/L	2.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	3.7	0.82	1.9	0.86	0.87
MS % Recovery:	93	82	95	86	87
Dup. Result:	3.9	0.90	2.0	0.98	0.99
MSD % Recov.:	98	90	100	98	99
RPD:	5.3	9.3	5.1	13	13
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150	50-150
---------------------------------	--------	--------	--------	--------	--------

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <7>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

**Erler & Kalinowski, Inc.**  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

**Client Project ID:** 940018.00, Sybase  
**Matrix:** LIQUID  
**Sample Descrip:** MW-4  
**Work Order #:** 9503176-01-05

**Reported:** Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** p-Xylene  
  
**QC Batch#:** GC040495ISHSHA  
**Analy. Method:** EPA 8015 MOD  
**Prep. Method:** HS

**Analyst:** T. Tran  
**MS/MSD #:** 9503176-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/04/95  
**Instrument I.D.#:** GCV1  
**Conc. Spiked:** 0.20 mg/L

**Result:** 0.16  
**MS % Recovery:** 80

**Dup. Result:** 0.18  
**MSD % Recov.:** 90

**RPD:** 12  
**RPD Limit:** 0-50

**LCS #:**  
  
**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 50-150  
**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503176.ERL <8>





<b>Erler &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> LIQUID <b>Sample Descrip:</b> MW-4 <b>Work Order #:</b> 9503176-01-05	<b>Reported:</b> Apr 11, 1995
--	---	-------------------------------

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>QC Batch#:</b>	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A
<b>Analy. Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020
<b>Prep. Method:</b>	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Analyst:</b>	R. Vincent	R. Vincent	R. Vincent	R. Vincent
<b>MS/MSD #:</b>	G9503176-01-MSD	G9503176-01-MSD	9503176-01-MSD	G9503176-01-MSD
<b>Sample Conc.:</b>	N.D.	N.D.	N.D.	N.D.
<b>Prepared Date:</b>	04/03/95	04/03/95	04/03/95	04/03/95
<b>Analyzed Date:</b>	04/03/95	04/03/95	04/03/95	04/03/95
<b>Instrument I.D.#:</b>	GCHP17	GCHP17	GCHP17	GCHP17
<b>Conc. Spiked:</b>	10 µg/L	10 µg/L	10 µg/L	30 µg/L
<b>Result:</b>	11	11	11	32
<b>MS % Recovery:</b>	110	110	110	107
<b>Dup. Result:</b>	11	11	10	30
<b>MSD % Recov.:</b>	110	110	100	100
<b>RPD:</b>	0.0	0.0	9.5	6.5
<b>RPD Limit:</b>	0-50	0-50	0-50	0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503176.ERL <9>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.  
 Project Number: 940018.00  
 Project Name: Sybase  
 Source of Samples: monitoring wells  
 Location: 64<sup>th</sup> + 65<sup>th</sup> Street Prop., Emeryville

Analytical Laboratory: Sequoia Analytical  
 Date Sampled: 23 March 1995  
 Sampled By: R.D. Lion / G.L. Clark  
 Report Results To: Paul Hoffer  
 Phone Number: 415) 578-1172

9503176

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
01	MW-4	water	3-amber liters	11:15	PNA - EPA Method 8100, and TEPH - fuel fingerprint (8015)	STANDARD
↓	MW-4	water	2 voas w/ HCl	11:15	TPPH w/ BTEX (8015/8020 mod.)	
↓	MW-4	water	4 voas	11:15	VOCs - 8010, and Industrial Solvent Scan (8015 mod.)	
↓	MW-4	water	1 plastic liter	11:15	ICP Metals (As, Pb, Cr)	
02	MW-3	water	3-amber liters	12:55	PNA - 8100, and TEPH - fuel fingerprint (8015)	
↓	MW-3	water	2 voas w/ HCl	12:55	TPPH w/ BTEX (8015/8020 mod.)	
↓	MW-3	water	4 voas	12:55	VOCs - 8010, and Industrial Solvent Scan (8015 mod.)	
↓	MW-3	water	1 plastic liter	12:55	ICP Metals (As, Pb, Cr)	
03	MW-2	water	3-amber liters	2:15	PNA - 8100, and TEPH - fuel fingerprint (8015)	
↓	MW-2	water	2 voas w/ HCL	2:15	TPPH w/ BTEX (8015/8020 mod.)	

Special Instructions:

Relinquished By: Name / Signature / Affiliation	Date	Time	Received By: Name / Signature / Affiliation
Rex Lion / Report Team / EKI	3/23/95	16:42	
			P. Hoffer 3/23/95 1642



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kallinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018.00

date sampled: 23 March 1995

Project Name: Sybase

sampled By: G.L. Clark / R.D. Lion

Source of Samples: Monitoring wells

Report Results To: Paul Holfey

Location: 64<sup>th</sup> + 65<sup>th</sup> Street Prop., Emeryville

Phone Number: 415) 578-1172

9503176

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
03	MW-2	water	4 voas	2:15	VOCs-8010, and Industrial Solvent Scan (8015 mod)	STANDARD
↓	MW-2	water	1 plastic liter	3:00	ICP Metals (As, Pb, Cr)	
04	MW-1	water	3 -amber liters	2:50	PNA's - 8100, and TEPH - fuel fingerprint (8015)	
	MW-1	water	2 voas w/ HCl	2:50	TPPH w/ BTEX (8015/8020 mod)	
	MW-1	water	4 voas	2:50	VOCs-8010, and Industrial Solvent Scan (8015 mod)	
↓	MW-1	water	1 plastic liter	2:50	ICP Metals (As, Pb, Cr)	

Special Instructions:

Relinquished By:

Received By:

Name / Signature / Affiliation

Date

Time

Name / Signature / Affiliation

Rover Lion / Kallinowski / EKI

EKI

3/23/95

16:42

[Signature]

3-23-95 11:47



**COPY**

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503177	Sampled: 03/24/95 Received: 03/24/95 Analyzed: see below Reported: 04/07/95
Attention: Paul Hoeffy		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
---------	-------	---------------	-----------------	----------------

Lab No: 9503177-01  
Sample Desc : LIQUID, RMW-1

Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	04/04/95	0.0050	N.D.

Lab No: 9503177-03  
Sample Desc : LIQUID, RMW-2

Arsenic	mg/L	03/31/95	0.0050	0.0076
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	04/04/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase

Lab Proj. ID: 9503177

Sampled:  
Received: 03/24/95  
Analyzed: see below

Attention: Paul Hoeffy

Reported: 04/07/95

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503177-04				
Sample Desc : LIQUID,Method Blank				
Arsenic	mg/L	03/31/95	0.0050	N.D.
Chromium	mg/L	03/31/95	0.010	N.D.
Lead	mg/L	04/04/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-1 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503177-01	Sampled: 03/24/95 Received: 03/24/95 Analyzed: 04/05/95 Reported: 04/10/95
---	---	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
<b>1,2-Dichloroethane</b>	<b>1.2</b>	<b>1.4</b>
1,1-Dichloroethene	1.2	N.D.
<b>cis-1,2-Dichloroethene</b>	<b>1.2</b>	<b>16</b>
<b>trans-1,2-Dichloroethene</b>	<b>1.2</b>	<b>10</b>
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
<b>Trichloroethene</b>	<b>1.2</b>	<b>53</b>
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.
Freon 113	2.5	N.D.

<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	70 130	91

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eter & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: RMW-1  
Matrix: LIQUID  
Analysis Method: EPA 8100  
Lab Number: 9503177-01

Sampled: 03/24/95  
Received: 03/24/95  
Extracted: 03/29/95  
Analyzed: 03/31/95  
Reported: 04/07/95

Attention: Paul Hoffey

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	73

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503177-01	Sampled: 03/24/95 Received: 03/24/95 Extracted: 03/29/95 Analyzed: 04/04/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC032995OHBPEXA  
Instrument ID: GCHP4B

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	50	210
Chromatogram Pattern: Unidentified HC		C13-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50 150	130

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: RMW-1  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503I77-01

Sampled: 03/24/95  
Received: 03/24/95  
Analyzed: 04/04/95  
Reported: 04/07/95

Attention: Paul Hoeffey

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503177-01	Sampled: 03/24/95 Received: 03/24/95 Analyzed: 04/03/95 Reported: 04/07/95
Attention: Paul Hoeffy		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	112

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: R-1Dup Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503I77-02	Sampled: 03/24/95 Received: 03/24/95  Analyzed: 04/05/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
<b>1,2-Dichloroethane</b>	<b>1.2</b>	<b>1.3</b>
1,1-Dichloroethene	1.2	N.D.
<b>cis-1,2-Dichloroethene</b>	<b>1.2</b>	<b>15</b>
<b>trans-1,2-Dichloroethene</b>	<b>1.2</b>	<b>9.7</b>
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
<b>Trichloroethene</b>	<b>1.2</b>	<b>51</b>
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.
Freon 113	2.5	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70                      130	88

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: R-1Dup Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503177-02	Sampled: 03/24/95 Received: 03/24/95 Extracted: 03/29/95 Analyzed: 04/01/95 Reported: 04/07/95
Attention: Paul HOFFEY		

QC Batch Number: GC0329950HBPEXA  
Instrument ID: GCHP5B

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern: Unidentified HC	50	97 C10-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50                      150	% Recovery 105

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: R-1Dup Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503177-02	Sampled: 03/24/95 Received: 03/24/95 Analyzed: 04/03/95 Reported: 04/07/95
---	--	---

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-2 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503177-03	Sampled: 03/24/95 Received: 03/24/95 Analyzed: 04/05/95 Reported: 04/10/95
---	---	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	0.96
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	12
trans-1,2-Dichloroethene	0.50	8.4
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	26
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	90

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: RMW-2  
Matrix: LIQUID  
Analysis Method: EPA 8100  
Lab Number: 9503177-03

Sampled: 03/24/95  
Received: 03/24/95  
Extracted: 03/29/95  
Analyzed: 03/31/95  
Reported: 04/07/95

Attention: Paul Hoffey

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	81

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503177-03	Sampled: 03/24/95 Received: 03/24/95 Extracted: 03/29/95 Analyzed: 04/01/95 Reported: 04/07/95
Attention: Paul HOFFEY		

QC Batch Number: GC0329950HBPEXA  
Instrument ID: GCHP5B

### Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern: Unidentified HC	50	150 C10-C24
<b>Surrogates</b> n-Pentacosane (C25)	<b>Control Limits %</b> 50                      150	<b>% Recovery</b> 108

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503177-03	Sampled: 03/24/95 Received: 03/24/95  Analyzed: 04/04/95 Reported: 04/07/95
---	---	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503177-03	Sampled: 03/24/95 Received: 03/24/95 Analyzed: 04/03/95 Reported: 04/07/95
---	---	---

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	117

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503177-04	Sampled: Received: 03/24/95 Extracted: 03/29/95 Analyzed: 03/30/95 Reported: 04/07/95
---	--	---

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50 150	50

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

*[Signature]*  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503177-04

Sampled:  
Received: 03/24/95  
Extracted: 03/29/95  
Analyzed: 03/29/95  
Reported: 04/07/95

Attention: Paul HOFFEY

QC Batch Number: GC0329950HBPEXA  
Instrument ID: GCHP5A

### Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	107

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503177-04	Sampled: Received: 03/24/95  Analyzed: 04/03/95 Reported: 04/07/95
Attention: Paul Hoeffy		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70      130	111

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erier & Kallnowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9503177-04

Sampled:  
Received: 03/24/95  
Analyzed: 04/05/95  
Reported: 04/10/95

Attention: Paul Hoffey

QC Batch Number: GC040195801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

70 130

**% Recovery**

71

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: Method Blank  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503177-04

Sampled:  
Received: 03/24/95  
  
Analyzed: 04/04/95  
Reported: 04/07/95

Attention: Paul Hoeffey

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
Attention: Paul HOFFEY

Client Proj. ID: 940018.00, Sybase

Lab Proj. ID: 9503177

Received: 03/24/95

Reported: 04/10/95

## LABORATORY NARRATIVE

**Please Note:**

Samples 9503I77-01, -02 and -03 were quantitated against a diesel standard (the default standard) since no fuel pattern was discernible in the Fuel Fingerprint Analysis. These samples were quantitated in the carbon range listed on the report; however, the chromatogram patterns for all of the aforementioned samples extended at least to C36.

**SEQUOIA ANALYTICAL**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. Client Project ID: 940018.00, Sybase  
1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID  
San Mateo, CA 94402 Sample Descrip: RMW-1  
Attention: Paul Hoeffy Work Order #: 9503177 -01, 03, 04 Reported: Apr 10, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Arsenic	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0330957000MDC	ME0330956010MDB	ME0330956010MDB	ME0330956010MDB	ME0330956010MDB
Analy. Method:	EPA 206.2	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3020	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	L. Zhu	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9503177-01-MSD	9503177-01-MSD	503177-01-MSD	9503177-01-MSD	9503177-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	03/30/95	03/30/95	03/30/95	03/30/95	03/30/95
Analyzed Date:	03/31/95	03/31/95	03/31/95	03/31/95	03/31/95
Instrument I.D.#:	MTJA3	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	0.050 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	0.056	0.98	0.94	0.96	0.98
MS % Recovery:	112	98	94	96	98
Dup. Result:	0.058	0.99	0.95	0.97	0.99
MSD % Recov.:	118	99	95	97	99
RPD:	3.5	1.0	1.1	1.0	1.0
RPD Limit:	0-30	0-30	0-30	0-30	0-30

**LCS #:**

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD					
LCS	75-125	75-125	75-125	75-125	75-125
Control Limits					

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503177.ERL <1>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erfer & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: RMW-1  
Work Order #: 9503177 -01, 03, 04

Reported: Apr 10, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** Lead  
**QC Batch#:** ME0404957000MDB  
**Analy. Method:** EPA 239.2  
**Prep. Method:** EPA 3020

**Analyst:** W. Thant  
**MS/MSD #:** 9503177-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/04/95  
**Instrument I.D.#:** MTJA1  
**Conc. Spiked:** 0.050 mg/L

**Result:** 0.052  
**MS % Recovery:** 104

**Dup. Result:** 0.057  
**MSD % Recov.:** 114

**RPD:** 9.2  
**RPD Limit:** 0-30

**LCS #:**  
**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**  
**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 75-125  
**Control Limits**

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503177.ERL <2>







**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-3  
Work Order #: 9503177 -01-04

Reported: Apr 10, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC040195801008A	GC040195801008A	GC040195801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Miller	J. Miller	J. Miller
MS/MSD #:	9503177-01-MSD	9503177-01-MSD	9503177-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	04/01/95	04/01/95	04/01/95
Analyzed Date:	04/01/95	04/01/95	04/01/95
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Result:	26	25	25
MS % Recovery:	104	100	100
Dup. Result:	27	27	26
MSD % Recov.:	108	108	104
RPD:	3.8	7.7	3.9
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	28-167	35-146	38-150
---------------------------------	--------	--------	--------

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503177.ERL <3>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Project ID: 940018.00, Sybase Matrix: LIQUID Sample Descrip: BLK Work Order #: 9503177	Reported: Apr 10, 1995
---	--	------------------------

## QUALITY CONTROL DATA REPORT

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0329958100EXZ	GC0329958100EXZ	GC0329958100EXZ
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3520	EPA 3520	EPA 3520

Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman
MS/MSD #:	BLK032995-BLK	BLK032995-BLK	BLK032995-BLK
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/29/95	03/29/95	03/29/95
Analyzed Date:	03/31/95	03/31/95	03/31/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L

Result:	43	42	46
MS % Recovery:	86	84	92

Dup. Result:	42	41	46
MSD % Recov.:	84	82	92

RPD:	2.4	2.4	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	DL-122	DL-124	DL-140

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503177.ERL <4>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: RMW-1  
Work Order #: 9503177-01-04

Reported: Apr 10, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** Diesel

**QC Batch#:** GC0329950HBPEXA  
**Analy. Method:** EPA 8015M  
**Prep. Method:** EPA 3520

**Analyst:** T. Olive  
**MS/MSD #:** 9503177-01-MSD  
**Sample Conc.:** 210  
**Prepared Date:** 03/29/95  
**Analyzed Date:** 04/04/95  
**Instrument I.D.#:** GCHP4B  
**Conc. Spiked:** 600 µg/L

**Result:** 670  
**MS % Recovery:** 77

**Dup. Result:** 640  
**MSD % Recov.:** 72

**RPD:** 4.6  
**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 38-122  
**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503177.ERL <5>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503177-01, 03, 04

Reported: Apr 10, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Acetone	MIBK	Tetra Hydrofuran	1,1,1-TCA	TCE
QC Batch#:	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA
Analy. Method:	ISHS	ISHS	ISHS	ISHS	ISHS
Prep. Method:	HS	HS	HS	HS	HS

	T. Tran	T. Tran	T. Tran	T. Tran	T. Tran
MS/MSD #:	9503177-01-MSD	9503177-01-MSD	9503177-01-MSD	9503177-01-MSD	9503177-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	GCV1	GCV1	GCV1	GCV1	GCV1
Conc. Spiked:	4.0 mg/L	1.0 mg/L	2.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	3.7	0.82	1.9	0.86	0.87
MS % Recovery:	93	82	95	86	87
Dup. Result:	3.9	0.90	2.0	0.98	0.99
MSD % Recov.:	98	90	100	98	99
RPD:	5.3	9.3	5.1	13	13
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150	50-150

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503177.ERL <6>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503177-01, 03, 04

Reported: Apr 10, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** p-Xylene  
**QC Batch#:** GC040495ISHSHA  
**Analy. Method:** ISHS  
**Prep. Method:** HS

**Analyst:** T. Tran  
**MS/MSD #:** 9503177-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/04/95  
**Instrument I.D.#:** GCV1  
**Conc. Spiked:** 0.20 mg/L

**Result:** 0.16  
**MS % Recovery:** 80

**Dup. Result:** 0.18  
**MSD % Recov.:** 90

**RPD:** 12  
**RPD Limit:** 0-50

**LCS #:**  
**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**  
**LCS Result:**  
**LCS % Recov.:**

**MS/MSD  
LCS** 50-150  
**Control Limits**

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503177.ERL <7>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503I77

Reported: Apr 10, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	G9503I76-01-MSD	G9503I76-01-MSD	9503I76-01-MSD	G9503I76-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/03/95	04/03/95	04/03/95	04/03/95
Analyzed Date:	04/03/95	04/03/95	04/03/95	04/03/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L

Result:	11	11	11	32
MS % Recovery:	110	110	110	107
Dup. Result:	11	11	10	30
MSD % Recov.:	110	110	100	100
RPD:	0.0	0.0	9.5	6.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD	71-133	72-128	72-130	71-120
LCS				
Control Limits				

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503I77.ERL <8>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018-00

Date Sampled: 24 March 1995

Project Name: Sylbase

Sampled By: Gail L. Clark

Source of Samples: monitoring wells

Report Results To: Paul Hoffer

Location: 64<sup>th</sup> and 65<sup>th</sup> Street Prop., Emeryville

Phone Number: 415) 578-1172

9503177

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
01	RMW-1	water	3-amber liters	1:50	PNA's - 8100, and TEPH-fuel fingerprint (8015)	Standard
	RMW-1	water	2 voas w/ HCl	1:50	TPPH w/ BTEX (8015/8020 mod.)	turn-
	RMW-1	water	4 voas	1:50	VOCs - 8010, and Industrial Solvent Scan (8015 mod.)	around
	RMW-1	water	1 plastic liter	1:50	ICP Metals (As, Pb, Cr)	tonic
02	R-1 Dup	water	1 amber liter	1:50	TEPH-fuel fingerprint (8015)	↓
	R-1 Dup	water	2 Voas w/ HCl	1:50	TPPH w/ BTEX (8015/8020 mod.)	
	R-1 Dup	water	2 Voas	1:50	VOCs - 8010	
03	RMW-2	water	3 amber liters	3:25	PNA's - 8100, and TEPH-fuel fingerprint (8015)	
	RMW-2	water	2 voas w/ HCl	3:25	TPPH w/ BTEX (8015-8020 mod.)	
	RMW-2	water	4 voas	3:25	VOCs - 8010, and Industrial Solvent Scan (8015 mod.)	

Special Instructions:

Relinquished By:

Received By:

Name / Signature / Affiliation

Date

Time

Name / Signature / Affiliation

Gail L. Clark / *Gail Clark* / EKI

3-24-95

5:05

*[Signature]* / Sequoia

3-24-95

1705

Charles Clark / Sequoia

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erlar & Kalinowski, Inc.  
 Project Number: 940018.00  
 Project Name: Sybase  
 Source of Samples: monitoring wells  
 Location: 64th + 65th Street, Prop., Emeryville

Analytical Laboratory: Sequoia Analytical  
 Date Sampled: 24 March 1995  
 Sampled By: Gail L. Clark  
 Report Results To: Paul Woffey  
 Phone Number: 415) 578-1172

9503177

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
03	RMW-2	water	1 plastic liter	3:25	Icp Metals (As, Pb, Cr)	Standard turn around

Special Instructions:

Relinquished By:				Received By:		
Name / Signature	Affiliation	Date	Time	Name / Signature	Affiliation	
Gail L. Clark	Gail L. Clark	3-24-95	5:05			



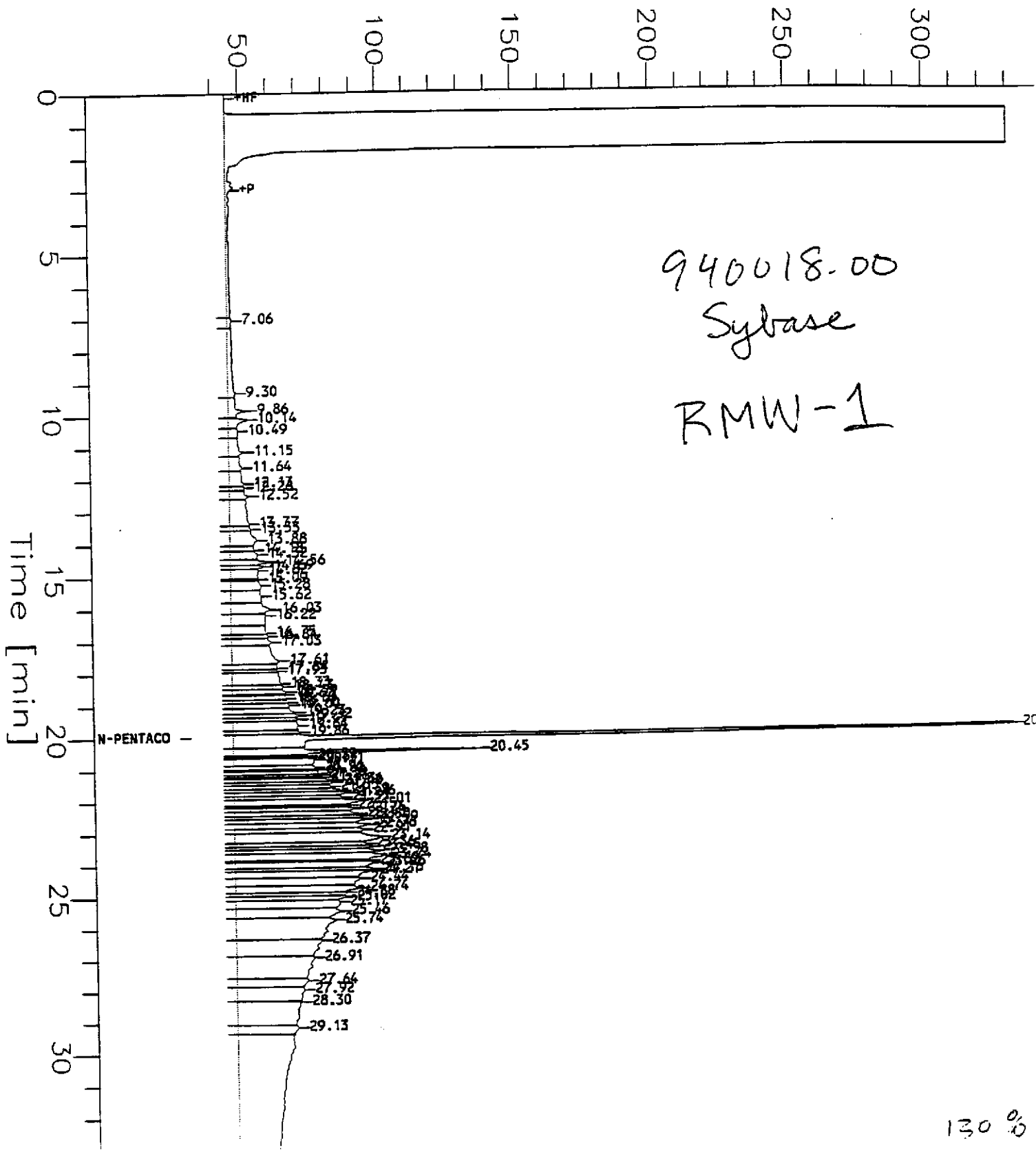
Chromatogram

Sample Name : D9503177-1 (500:1) RESHOT  
FileName : s:\ghp\_04\0409\4048018.raw  
Method : ETPH048.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 30 mV

Sample #: RMW-1  
Date : 4/4/95 21:50  
Time of Injection: 4/4/95 21:16  
Low Point : 30.23 mV  
High Point : 330.23 mV  
Plot Scale: 300.0 mV

Response [mV]



```

=====
Software Version: 3.3 <4B11>
Sample Name   : D9503I77-1 (500:1) RESHOTTime       : 4/4/95  21:50
Sample Number: RMW-1                               Study        : EKI
Operator      : BA
  
```

```

Instrument    : GCHP_04                               Channel : B       A/D mV Range : 1024
AutoSampler   : HP7673A
Rack/Vial     : 1/68
  
```

```

Interface Serial # :      Data Acquisition Time: 4/4/95  21:16
Delay Time        : 0.00   min.
End Time          : 33.67  min.
Sampling Rate     : 1.2500 pts/sec
  
```

```

Raw Data File   : S:\GHP_04\0409\404B018.RAW
Result File     : S:\GHP_04\0409\404B018.RST
Instrument File  : S:\GHP_04\MET_SEQ\ETPH04B.ins
Process File    : S:\GHP_04\MET_SEQ\ETPH04B
Sample File     : S:\GHP_04\MET_SEQ\ETPH04B
Sequence File   : S:\GHP_04\MET_SEQ\H040404.SEQ
  
```

```

Inj. Volume    : 3 ul                               Area Reject    : 0.000000
Sample Amount   : 1.0000                           Dilution Factor : 1.00
  
```

Extractable TPH GCHP\_04B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	5.735	n-C9 to n-C13 P.Thn.	27122	0.04		0.0005	0.0181
	8.250	n-C9 to n-C17 Jet	1307084	2.04		0.0218	0.871
	11.250	n-C9 to n-C24 TPH-D	6273189	9.77		5.1544	206.174
	16.250	n-C9 to n-C36 Total	28805445	44.85		0.4801	19.2036
	21.100	n-C16 to n-C36	27807141	43.30		0.4635	18.538
			64219981	100.00			

Report Stored in ASCII File: S:\GHP\_04\0409\404B018.TX0

Extractable TPH GCHP\_04B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	7.058		27122.36	0.09	*B	0.0005	0.018
2	9.303		218061.75	0.76	*V	0.0036	0.145
3	9.855		118954.50	0.41	*V	0.0020	0.0793
4	10.141		78205.92	0.27	*V	0.0013	0.052
5	10.494		58181.27	0.20	*V	0.0010	0.038
6	11.152		125491.70	0.44	*V	0.0021	0.0837
7	11.643		108058.12	0.38	*V	0.0018	0.0720
8	12.134		129983.01	0.45	*V	0.0022	0.086
9	12.260		41611.85	0.14	*V	0.0007	0.0277
10	12.518		92633.05	0.32	*V	0.0015	0.0618
11	13.373		308780.66	1.07	*V	0.0051	0.205
12	13.532		63245.59	0.22	*V	0.0011	0.042

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
13	13.879		236621.69	0.82	*V	0.0039	0.1577
14	14.175		81559.78	0.28	*V	0.0014	0.0544
15	14.321		152160.68	0.53	*V	0.0025	0.1014
16	14.555		121382.09	0.42	*V	0.0020	0.0809
17	14.692		77662.51	0.27	*V	0.0013	0.0518
18	14.817		181367.43	0.63	*V	0.0030	0.1209
19	15.094		31513.82	0.11	*V	0.0005	0.0210
20	15.281		185296.84	0.64	*V	0.0031	0.1235
21	15.616		251014.64	0.87	*V	0.0042	0.1673
22	16.032		260018.95	0.90	*V	0.0043	0.1733
23	16.216		256506.58	0.89	*V	0.0043	0.1710
24	16.749		208715.14	0.72	*V	0.0035	0.1391
25	16.838		94766.16	0.33	*V	0.0016	0.0632
26	17.034		175528.86	0.61	*V	0.0029	0.1170
27	17.611		539465.33	1.87	*V	0.0090	0.3596
28	17.836		156592.18	0.54	*V	0.0026	0.1044
29	17.933		91442.02	0.32	*V	0.0015	0.0610
30	18.333		410833.91	1.43	*V	0.0068	0.2739
31	18.426		145697.71	0.51	*V	0.0024	0.0971
32	18.591		165999.50	0.58	*V	0.0028	0.1107
33	18.668		45385.41	0.16	*V	0.0008	0.0303
34	18.792		169715.28	0.59	*V	0.0028	0.1131
35	18.915		127153.45	0.44	*V	0.0021	0.0848
36	19.003		178987.54	0.62	*V	0.0030	0.1193
37	19.225		222283.59	0.77	*V	0.0037	0.1482
38	19.323		187490.78	0.65	*V	0.0031	0.1250
39	19.446		147697.16	0.51	*V	0.0025	0.0985
40	19.637		390735.28	1.36	*V	0.0065	0.2605
41	19.862		171308.42	0.59	*V	0.0029	0.1142
42	20.023	n-Pentacosane	2950288.32	10.24	*V	2.6119	104.4755
43	20.453		566733.97	1.97	*V	0.0094	0.3778
44	20.588		85664.92	0.30	*V	0.0014	0.0571
45	20.640		65020.71	0.23	*V	0.0011	0.0433
46	20.709		367556.48	1.28	*V	0.0061	0.2450
47	20.957		209304.59	0.73	*V	0.0035	0.1395
48	21.023		118452.28	0.41	*V	0.0020	0.0790
49	21.145		194012.29	0.67	*V	0.0032	0.1293
50	21.205		124378.98	0.43	*V	0.0021	0.0829
51	21.263		100998.17	0.35	*V	0.0017	0.0673
52	21.362		218077.94	0.76	*V	0.0036	0.1454
53	21.417		196385.16	0.68	*V	0.0033	0.1309
54	21.548		249340.01	0.87	*V	0.0042	0.1662
55	21.692		241162.87	0.84	*V	0.0040	0.1608
56	21.759		283036.55	0.98	*V	0.0047	0.1887
57	21.905		247948.25	0.86	*V	0.0041	0.1653
58	22.007		485555.26	1.69	*V	0.0081	0.3237
59	22.150		198097.92	0.69	*V	0.0033	0.1321
60	22.260		309671.99	1.08	*V	0.0052	0.2064
61	22.426		346454.68	1.20	*V	0.0058	0.2310
62	22.503		255888.04	0.89	*V	0.0043	0.1706
63	22.593		370479.15	1.29	*V	0.0062	0.2470
64	22.764		481069.55	1.67	*V	0.0080	0.3207
65	22.914		368872.62	1.28	*V	0.0061	0.2459
66	23.143		908902.92	3.16	*V	0.0151	0.6059
67	23.364		342796.03	1.19	*V	0.0057	0.2285
68	23.454		273737.63	0.95	*V	0.0046	0.1825
69	23.580		364846.92	1.27	*V	0.0061	0.2432
70	23.741		657335.29	2.28	*V	0.0110	0.4382

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
71	23.886		196561.54	0.68	*V	0.0033	0.1310
72	23.956		553242.29	1.92	*V	0.0092	0.3688
73	24.157		278518.32	0.97	*V	0.0046	0.1857
74	24.210		555017.93	1.93	*V	0.0093	0.3700
75	24.443		670174.89	2.33	*V	0.0112	0.4468
76	24.735		545478.75	1.89	*V	0.0091	0.3637
77	24.879		287633.84	1.00	*V	0.0048	0.1918
78	25.023		310825.65	1.08	*V	0.0052	0.2072
79	25.173		537082.89	1.86	*V	0.0090	0.3581
80	25.464		662927.85	2.30	*V	0.0110	0.4420
81	25.736		1342791.27	4.66	*V	0.0224	0.8952
82	26.371		909993.83	3.16	*V	0.0152	0.6067
83	26.911		1106299.28	3.84	*V	0.0184	0.7375
84	27.635		420256.14	1.46	*V	0.0070	0.2802
85	27.924		626633.10	2.18	*V	0.0104	0.4178
86	28.298		1026217.73	3.56	*V	0.0171	0.6841
87	29.125		358487.38	1.24	*V	0.0060	0.2390
			28805444.65	100.00			

Report Stored in ASCII File: S:\GHP\_04\0409\404B018.TX1

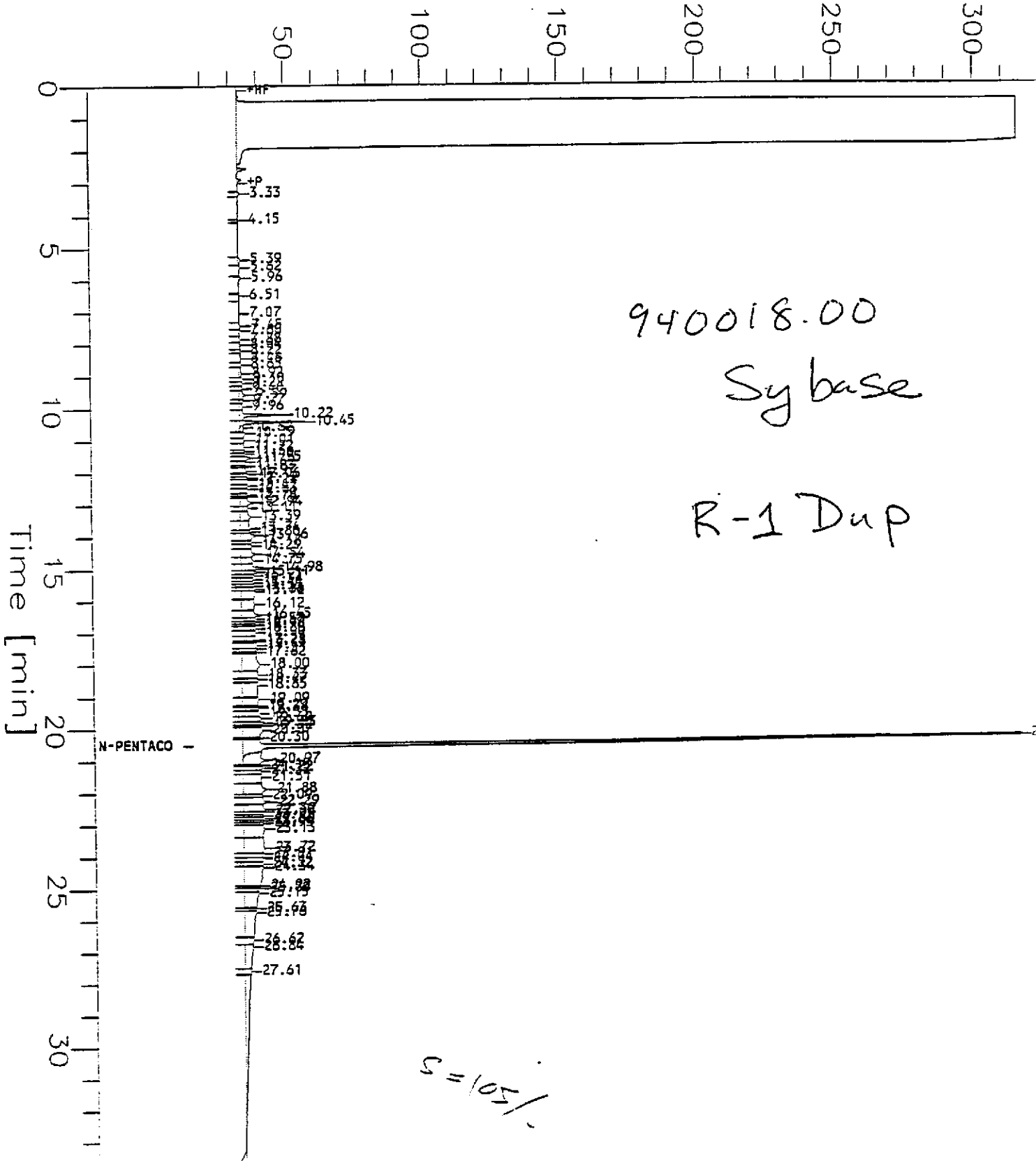
Chromatogram

Sample Name : D9503177-2 (500:1)  
FileName : s:\ghp\_05\0402\3318037.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.67 min  
Plot Offset: 15 mV

Sample #: R-1 DUP  
Date : 4/1/95 10:25  
Time of Injection: 4/1/95 09:51  
Low Point : 15.44 mV  
High Point : 315.44 mV  
Plot Scale: 300.0 mV

Response [mV]



=====  
 Software Version: 3.3 <4B11>  
 Sample Name : D9503I77-2 (500:1)  
 Sample Number: R-1 DUP  
 Operator : TO

Time : 4/1/95 10:25  
 Study : EKI

Instrument : GCHP\_05  
 AutoSampler : HP7673A  
 Rack/Vial : 1/87

Channel : B A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 4/1/95 09:51  
 Delay Time : 0.00 min.  
 End Time : 33.67 min.  
 Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0402\331B037.RAW  
 Result File : S:\GHP\_05\0402\331B037.RST  
 Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins  
 Process File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sample File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sequence File : S:\GHP\_05\MET\_SEQ\H050331.seq

Inj. Volume : 3 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

=====  
 Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	698726.38	4.14		0.0116	0.4658
	11.250	n-C9 to n-C24 TPH-D	2428587.52	14.39		2.4334	97.3358
	16.750	n-C9 to n-C40 Total	7141152.83	42.32		0.1190	4.7608
	19.875	n-C16 to n-C36 M/Oil	6606844.41	39.15		0.1101	4.4006
			16875311.14	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331B037.TX0

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.330		3473.35	0.05	*B	5.7889e-05	0.0023
2	4.152		868.50	0.01	*V	1.4475e-05	0.0006
3	5.390		7018.63	0.10	*V	0.0001	0.0007
4	5.621		7458.87	0.10	*V	0.0001	0.0050
5	5.963		7387.45	0.10	*V	0.0001	0.0049
6	6.506		2524.38	0.04	*V	4.2073e-05	0.0017
7	7.065		7676.44	0.11	*V	0.0001	0.0051
8	7.446		5274.75	0.07	*V	8.7912e-05	0.0035
9	7.599		4699.45	0.07	*V	7.8324e-05	0.0031
10	7.876		3534.18	0.05	*V	5.8903e-05	0.0024
11	8.038		5587.08	0.08	*V	9.3118e-05	0.0037
12	8.218		2853.54	0.04	*V	4.7559e-05	0.0019
13	8.460		8446.10	0.12	*V	0.0001	0.0056

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	8.645		5143.01	0.07	*V	8.5717e-05	0.0034
15	8.922		12640.39	0.18	*V	0.0002	0.0084
16	9.100		8705.12	0.12	*V	0.0001	0.0058
17	9.222		9452.21	0.13	*V	0.0002	0.0063
18	9.401		8112.99	0.11	*V	0.0001	0.0054
19	9.586		22787.78	0.32	*V	0.0004	0.0152
20	9.773		9352.86	0.13	*V	0.0002	0.0062
21	9.960		12131.03	0.17	*V	0.0002	0.0081
22	10.217		66281.88	0.93	*V	0.0011	0.0442
23	10.445		79781.08	1.12	*V	0.0013	0.0532
24	10.616		14381.47	0.20	*E	0.0002	0.0096
25	10.787		18347.10	0.26	*V	0.0003	0.0122
26	11.013		15145.26	0.21	*V	0.0003	0.0101
27	11.216		17644.90	0.25	*V	0.0003	0.0118
28	11.356		8909.68	0.12	*V	0.0001	0.0059
29	11.428		9442.13	0.13	*V	0.0002	0.0063
30	11.554		25560.47	0.36	*V	0.0004	0.0170
31	11.685		14982.02	0.21	*V	0.0002	0.0100
32	11.814		7616.12	0.11	*V	0.0001	0.0051
33	11.973		21407.37	0.30	*V	0.0004	0.0143
34	12.061		19967.01	0.28	*V	0.0003	0.0133
35	12.185		12143.53	0.17	*V	0.0002	0.0081
36	12.242		22936.99	0.32	*V	0.0004	0.0153
37	12.410		18268.79	0.26	*V	0.0003	0.0122
38	12.530		25755.59	0.36	*V	0.0004	0.0172
39	12.697		12052.98	0.17	*V	0.0002	0.0080
40	12.760		8237.20	0.12	*V	0.0001	0.0055
41	12.942		46149.46	0.65	*V	0.0008	0.0308
42	13.109		24911.96	0.35	*V	0.0004	0.0166
43	13.387		53675.28	0.75	*V	0.0009	0.0358
44	13.744		55131.45	0.77	*V	0.0009	0.0368
45	13.856		19402.30	0.27	*V	0.0003	0.0129
46	13.964		58432.38	0.82	*V	0.0010	0.0390
47	14.171		24262.31	0.34	*V	0.0004	0.0162
48	14.293		36582.09	0.51	*V	0.0006	0.0244
49	14.542		63838.48	0.89	*V	0.0011	0.0426
50	14.747		49158.72	0.69	*V	0.0008	0.0328
51	14.983		72596.40	1.02	*V	0.0012	0.0484
52	15.105		37039.29	0.52	*V	0.0006	0.0247
53	15.210		28426.51	0.40	*V	0.0005	0.0190
54	15.336		26837.20	0.38	*V	0.0004	0.0179
55	15.444		26854.16	0.38	*V	0.0004	0.0179
56	15.547		24253.77	0.34	*V	0.0004	0.0162
57	15.656		29703.62	0.42	*V	0.0005	0.0198
58	15.715		74108.05	1.04	*V	0.0012	0.0494
59	16.121		95643.46	1.34	*V	0.0016	0.0638
60	16.453		70153.64	0.98	*V	0.0012	0.0468
61	16.583		35040.60	0.49	*V	0.0006	0.0234
62	16.669		23326.86	0.33	*V	0.0004	0.0156
63	16.758		19590.92	0.27	*V	0.0003	0.0131
64	16.878		39563.29	0.55	*V	0.0007	0.0264
65	17.003		50870.08	0.71	*V	0.0008	0.0339
66	17.229		47413.18	0.66	*V	0.0008	0.0316
67	17.282		16411.53	0.23	*V	0.0003	0.0109
68	17.408		54745.79	0.77	*V	0.0009	0.0365
69	17.512		33169.83	0.46	*V	0.0006	0.0221
70	17.618		16527.84	0.23	*V	0.0003	0.0110
71	18.002		183310.39	2.57	*V	0.0031	0.1222

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	18.333		79510.07	1.11	*V	0.0013	0.0530
73	18.468		39223.93	0.55	*V	0.0007	0.026
74	18.651		152306.70	2.13	*V	0.0025	0.101
75	19.086		87112.42	1.22	*V	0.0015	0.0581
76	19.294		17940.90	0.25	*V	0.0003	0.0120
77	19.356		41372.98	0.58	*V	0.0007	0.027
78	19.530		60515.37	0.85	*V	0.0010	0.040
79	19.687		61729.73	0.86	*V	0.0010	0.0412
80	19.828		46130.84	0.65	*V	0.0008	0.030
81	19.917		32738.26	0.46	*V	0.0005	0.021
82	20.071		120279.44	1.68	*V	0.0020	0.0802
83	20.299		19117.26	0.27	*V	0.0003	0.0127
84	20.537	n-Pentacosane	2072486.02	29.02	*V	2.1063	84.252
85	20.972		139026.09	1.95	*E	0.0023	0.0927
86	21.147		19971.99	0.28	*V	0.0003	0.0133
87	21.221		48280.02	0.68	*V	0.0008	0.032
88	21.318		45678.35	0.64	*V	0.0008	0.030
89	21.512		112778.61	1.58	*V	0.0019	0.0752
90	21.881		141099.39	1.98	*V	0.0024	0.0941
91	22.094		37721.98	0.53	*V	0.0006	0.025
92	22.285		101207.32	1.42	*V	0.0017	0.067
93	22.522		99294.46	1.39	*V	0.0017	0.0662
94	22.599		40863.87	0.57	*V	0.0007	0.027
95	22.708		33674.22	0.47	*V	0.0006	0.022
96	22.799		40968.70	0.57	*V	0.0007	0.0273
97	22.863		28398.45	0.40	*V	0.0005	0.0189
98	22.948		33774.33	0.47	*V	0.0006	0.022
99	23.125		171034.48	2.40	*V	0.0029	0.114
100	23.724		210340.16	2.95	*V	0.0035	0.1402
101	23.907		54368.55	0.76	*V	0.0009	0.036
102	24.044		53408.49	0.75	*V	0.0009	0.035
103	24.224		53620.32	0.75	*V	0.0009	0.0357
104	24.335		234394.97	3.28	*V	0.0039	0.1563
105	24.917		22721.46	0.32	*V	0.0004	0.015
106	25.001		43164.30	0.60	*V	0.0007	0.0258
107	25.146		141554.43	1.98	*V	0.0024	0.0944
108	25.628		23938.51	0.34	*V	0.0004	0.015
109	25.763		180985.34	2.53	*V	0.0030	0.12
110	26.623		44958.69	0.63	*V	0.0007	0.0300
111	26.838		117707.62	1.65	*V	0.0020	0.0785
112	27.613		24633.30	0.34	*V	0.0004	0.01
			7141152.83	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331B037.TX1

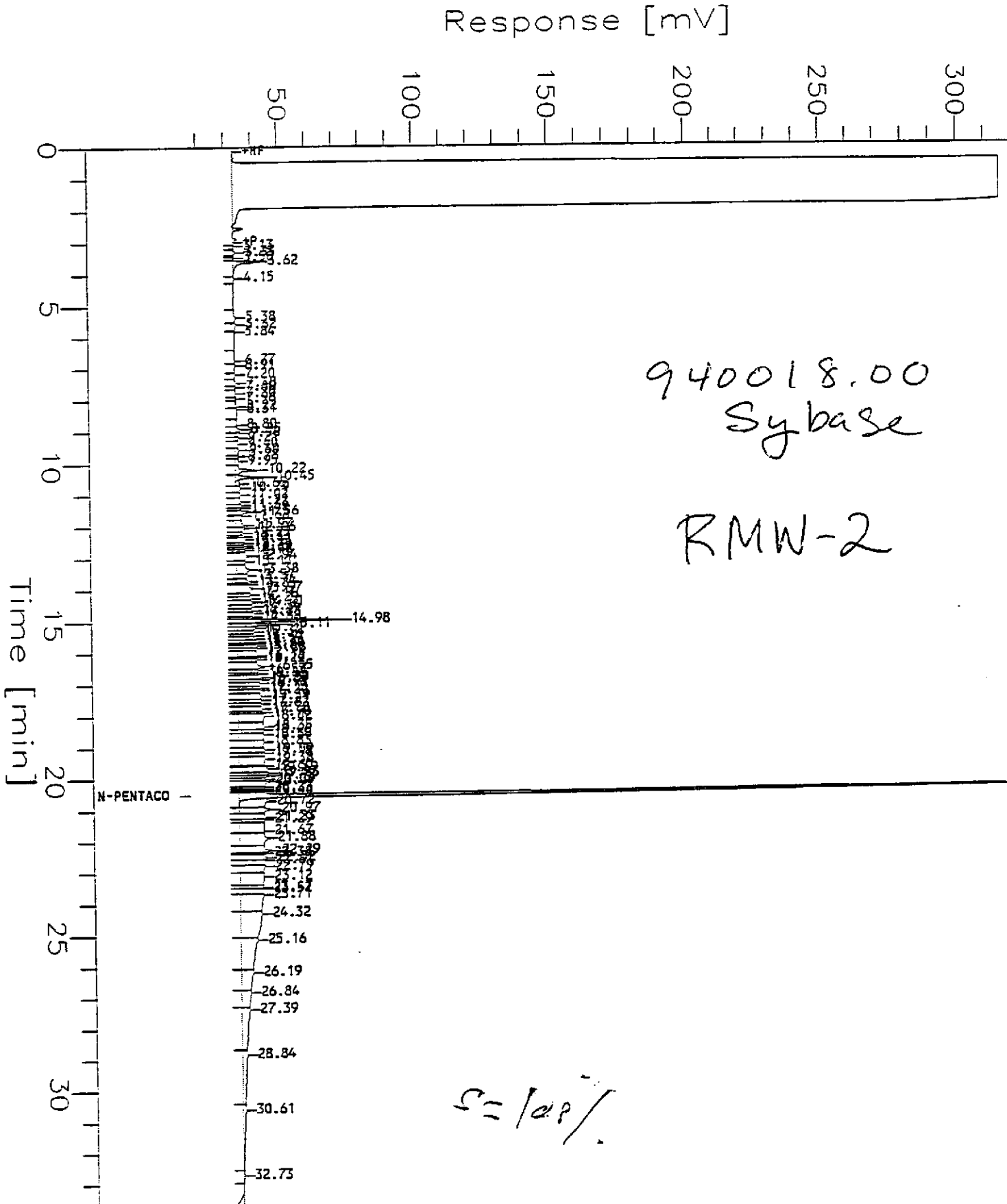


Chromatogram

Sample Name : D9503177-3 (500:1)  
FileName : s:\ghp\_05\0402\3318038.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.67 min  
Plot Offset: 16 mV

Sample #: RMW-2  
Date : 4/1/95 11:06  
Time of Injection: 4/1/95 10:32  
Low Point : 15.69 mV  
High Point : 315.69 mV  
Plot Scale: 300.0 mV



Software Version: 3.3 <4B11>  
 Sample Name : D9503I77-3 (500:1)  
 Sample Number: RMW-2  
 Operator : TO

Time : 4/1/95 11:06  
 Study : EKI

Instrument : GCHP\_05 Channel : B A/D mV Range : 1024  
 AutoSampler : HP7673A  
 Rack/Vial : 1/88

Interface Serial # : Data Acquisition Time: 4/1/95 10:32  
 Delay Time : 0.00 min.  
 End Time : 33.67 min.  
 Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0402\331B038.RAW  
 Result File : S:\GHP\_05\0402\331B038.RST  
 Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins  
 Process File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sample File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sequence File : S:\GHP\_05\MET\_SEQ\H050331.seq

Inj. Volume : 3 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	809987.48	3.51		0.0135	0.5400
	11.250	n-C9 to n-C24 TPH-D	3685238.43	15.99		3.6925	147.7014
	16.750	n-C9 to n-C40 Total	9637769.81	41.81		0.1606	6.425
	19.875	n-C16 to n-C36 M/Oil	8920471.11	38.69		0.1487	5.947
			23053466.83	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331B038.TX0

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.134		919.13	9e-03	*B	1.5319e-05	0.0006
2	3.333		4436.22	0.05	*V	7.3937e-05	0.0030
3	3.498		813.66	8e-03	*V	1.3561e-05	0.0005
4	3.620		51097.08	0.52	*V	0.0009	0.0311
5	4.147		2536.88	0.03	*V	4.2281e-05	0.0017
6	5.379		8876.78	0.09	*V	0.0001	0.0009
7	5.616		9178.01	0.09	*V	0.0002	0.0004
8	5.843		7441.78	0.08	*V	0.0001	0.0050
9	6.767		6329.32	0.06	*V	0.0001	0.0042
10	6.914		5244.14	0.05	*V	8.7402e-05	0.0005
11	7.199		2607.28	0.03	*V	4.3455e-05	0.0007
12	7.480		5542.06	0.06	*V	9.2368e-05	0.0037
13	7.604		2842.57	0.03	*V	4.7376e-05	0.0009

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	7.796		5643.57	0.06	*V	9.4060e-05	0.0038
15	7.960		2746.29	0.03	*V	4.5771e-05	0.0018
16	8.216		7929.59	0.08	*V	0.0001	0.0053
17	8.307		15123.20	0.16	*V	0.0003	0.0101
18	8.803		9988.74	0.10	*V	0.0002	0.0067
19	8.949		18123.40	0.19	*V	0.0003	0.0121
20	9.055		12505.21	0.13	*V	0.0002	0.0083
21	9.213		9146.00	0.09	*V	0.0002	0.0061
22	9.402		13397.04	0.14	*V	0.0002	0.0089
23	9.596		17187.95	0.18	*V	0.0003	0.0115
24	9.778		8336.55	0.09	*V	0.0001	0.0056
25	9.948		13377.15	0.14	*V	0.0002	0.0089
26	10.218		45665.34	0.47	*V	0.0008	0.0304
27	10.448		47853.55	0.49	*V	0.0008	0.0319
28	10.653		13716.51	0.14	*E	0.0002	0.0091
29	10.787		20358.92	0.21	*V	0.0003	0.0136
30	11.015		18436.62	0.19	*V	0.0003	0.0123
31	11.224		20723.54	0.21	*V	0.0003	0.0138
32	11.340		12682.10	0.13	*V	0.0002	0.0085
33	11.424		9522.86	0.10	*V	0.0002	0.0063
34	11.555		33209.74	0.34	*V	0.0006	0.0221
35	11.680		18856.84	0.19	*V	0.0003	0.0126
36	11.974		31971.28	0.33	*V	0.0005	0.0213
37	12.062		29783.07	0.31	*V	0.0005	0.0199
38	12.229		16206.33	0.17	*V	0.0003	0.0108
39	12.332		10632.90	0.11	*V	0.0002	0.0071
40	12.412		28843.67	0.30	*V	0.0005	0.0192
41	12.536		11897.13	0.12	*V	0.0002	0.0079
42	12.536		14436.95	0.15	*V	0.0002	0.0096
43	12.623		12649.70	0.13	*V	0.0002	0.0084
44	12.686		17605.62	0.18	*V	0.0003	0.0117
45	12.757		55938.09	0.57	*V	0.0009	0.0373
46	12.943		26686.83	0.27	*V	0.0004	0.0178
47	13.109		70940.26	0.73	*V	0.0012	0.0473
48	13.380		34422.20	0.35	*V	0.0006	0.0229
49	13.569		35939.32	0.37	*V	0.0006	0.0240
50	13.737		14406.08	0.15	*V	0.0002	0.0096
51	13.830		82051.80	0.84	*V	0.0014	0.0547
52	13.970		31275.71	0.32	*V	0.0005	0.0209
53	14.160		37190.16	0.38	*V	0.0006	0.0248
54	14.288		52096.30	0.53	*V	0.0009	0.0347
55	14.414		41429.86	0.43	*V	0.0007	0.0276
56	14.542		30990.17	0.32	*V	0.0005	0.0207
57	14.667		52594.83	0.54	*V	0.0009	0.0351
58	14.747		28598.04	0.29	*V	0.0005	0.0191
59	14.879		138621.56	1.42	*V	0.0023	0.0924
60	14.983		68703.22	0.71	*V	0.0011	0.0458
61	15.105		47764.66	0.49	*V	0.0008	0.0318
62	15.212		39721.30	0.41	*V	0.0007	0.0265
63	15.340		35874.28	0.37	*V	0.0006	0.0239
64	15.458		43017.00	0.44	*V	0.0007	0.0287
65	15.566		45005.11	0.46	*V	0.0008	0.0300
66	15.661		22582.58	0.23	*V	0.0004	0.0151
67	15.718		40463.67	0.42	*V	0.0007	0.0270
68	15.796		40787.60	0.42	*V	0.0007	0.0272
69	15.877		87015.88	0.89	*V	0.0015	0.0580
70	16.102		23378.51	0.24	*V	0.0004	0.0156
71	16.157		45952.55	0.47	*V	0.0008	0.0306
	16.221						

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	16.453		108692.21	1.12	*V	0.0018	0.0725
73	16.569		55457.42	0.57	*V	0.0009	0.037
74	16.683		30982.52	0.32	*V	0.0005	0.020
75	16.803		65556.35	0.67	*V	0.0011	0.0437
76	16.872		45996.93	0.47	*V	0.0008	0.0307
77	16.977		58321.30	0.60	*V	0.0010	0.038
78	17.133		51635.65	0.53	*V	0.0009	0.034
79	17.203		59455.83	0.61	*V	0.0010	0.0396
80	17.387		95963.31	0.98	*V	0.0016	0.064
81	17.508		56061.80	0.58	*V	0.0009	0.037
82	17.615		61536.27	0.63	*V	0.0010	0.0410
83	17.782		84170.88	0.86	*V	0.0014	0.0561
84	17.895		36636.80	0.38	*V	0.0006	0.024
85	18.018		151871.56	1.56	*V	0.0025	0.1012
86	18.349		137083.26	1.41	*V	0.0023	0.0914
87	18.458		67448.93	0.69	*V	0.0011	0.044
88	18.602		120604.52	1.24	*V	0.0020	0.080
89	18.831		134535.16	1.38	*V	0.0022	0.0897
90	19.088		93223.02	0.96	*V	0.0016	0.0621
91	19.184		69814.02	0.72	*V	0.0012	0.048
92	19.384		170320.81	1.75	*V	0.0028	0.111
93	19.600		23409.37	0.24	*V	0.0004	0.0156
94	19.685		109106.18	1.12	*V	0.0018	0.071
95	19.831		62442.26	0.64	*V	0.0010	0.041
96	19.916		58151.04	0.60	*V	0.0010	0.0388
97	20.026		48273.13	0.50	*V	0.0008	0.0322
98	20.090		111607.48	1.15	*V	0.0019	0.074
99	20.266		38375.71	0.39	*V	0.0006	0.023
100	20.333		30505.67	0.31	*V	0.0005	0.0203
101	20.398		31059.54	0.32	*V	0.0005	0.0207
102	20.538	n-Pentacosane	2133747.32	21.90	*V	2.1686	86.74
103	20.721		145553.21	1.49	*E	0.0024	0.0970
104	20.974		122237.45	1.25	*V	0.0020	0.0815
105	21.225		101079.66	1.04	*V	0.0017	0.064
106	21.293		59789.20	0.61	*V	0.0010	0.039
107	21.667		185969.06	1.91	*V	0.0031	0.1240
108	21.884		229759.55	2.36	*V	0.0038	0.152
109	22.288		142080.88	1.46	*V	0.0024	0.097
110	22.375		29230.34	0.30	*V	0.0005	0.0195
111	22.521		99588.17	1.02	*V	0.0017	0.0664
112	22.609		96110.10	0.99	*V	0.0016	0.061
113	22.794		130444.68	1.34	*V	0.0022	0.0870
114	23.122		212181.73	2.18	*V	0.0035	0.1415
115	23.468		55643.24	0.57	*V	0.0009	0.031
116	23.523		90885.60	0.93	*V	0.0015	0.0616
117	23.711		278254.58	2.86	*V	0.0046	0.1855
118	24.321		378552.98	3.88	*V	0.0063	0.2524
119	25.161		318299.57	3.27	*V	0.0053	0.2112
120	26.192		166115.42	1.70	*V	0.0028	0.1107
121	26.843		110186.25	1.13	*V	0.0018	0.0735
122	27.390		196949.62	2.02	*V	0.0033	0.1313
123	28.839		156942.38	1.61	*V	0.0026	0.1016
124	30.611		96944.16	0.99	*V	0.0016	0.0646
125	32.729		9886.07	0.10	*V	0.0002	0.0066



Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503J63	Sampled: 03/27/95 Received: 03/27/95 Analyzed: see below Reported: 04/10/95
Attention: Paul Hoeffy		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503J63-01 Sample Desc : LIQUID,RMW-3				
Arsenic	mg/L	04/04/95	0.0050	N.D.
Chromium	mg/L	04/03/95	0.010	N.D.
Lead	mg/L	04/03/95	0.0050	N.D.
Lab No: 9503J63-02 Sample Desc : LIQUID,MW-6				
Arsenic	mg/L	04/04/95	0.0050	0.016
Chromium	mg/L	04/03/95	0.010	N.D.
Lead	mg/L	04/03/95	0.0050	N.D.
Lab No: 9503J63-04 Sample Desc : LIQUID,MW-5				
Arsenic	mg/L	04/04/95	0.0050	0.068
Chromium	mg/L	04/03/95	0.010	N.D.
Lead	mg/L	04/03/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Eileen Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eriar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503J63	Sampled: Received: 03/27/95 Analyzed: see below Reported: 04/10/95
Attention: Paul Hoeffy		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503J63-09				
Sample Desc : LIQUID,Method Blank				
Arsenic	mg/L	04/04/95	0.0050	N.D.
Chromium	mg/L	04/06/95	0.010	N.D.
Lead	mg/L	04/03/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-3 Matrx: LIQUID Analysis Method: EPA 8010 Lab Number: 9503J63-01	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/05/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP08

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	11
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	1.4
cis-1,2-Dichloroethene	0.50	25
trans-1,2-Dichloroethene	0.50	22
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	36
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	3.7
Freon 113	1.0	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	87

Analyses reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Eriar & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: RMW-3  
Matrix: LIQUID  
Analysis Method: EPA 8100  
Lab Number: 9503J63-01

Sampled: 03/27/95  
Received: 03/27/95  
Extracted: 03/29/95  
Analyzed: 03/31/95  
Reported: 04/10/95

Attention: Paul Hoffey

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
2-Fluorobiphenyl	50                      150	58

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: RMW-3  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503J63-01

Sampled: 03/27/95  
Received: 03/27/95  
Extracted: 03/29/95  
Analyzed: 04/06/95  
Reported: 04/10/95

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	10000	97000
Chromatogram Pattern:		
Unidentified HC		C9-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50 150	0 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-01	Sampled: 03/27/95 Received: 03/27/95  Analyzed: 04/06/95 Reported: 04/10/95
---	---	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	2.0	N.D.
Acetonitrile	5.0	N.D.
Benzene	0.10	N.D.
iso-Butanol	5.0	N.D.
n-Butanol	5.0	N.D.
sec-Butanol	5.0	N.D.
t-Butanol	2.5	N.D.
Carbon tetrachloride	1.0	N.D.
Chloroform	1.0	N.D.
Cyclohexane	0.20	N.D.
1,2-Dichloroethane	1.0	N.D.
t-1,2-Dichloroethene	0.50	N.D.
Ethanol	5.0	N.D.
Ethyl acetate	1.0	N.D.
Ethyl benzene	0.10	N.D.
Ethyl ether	0.10	N.D.
Freon 113	1.0	N.D.
Hexane	0.50	N.D.
Methanol	5.0	N.D.
Methyl ethyl ketone	1.0	N.D.
Methyl isobutyl ketone	1.0	N.D.
Methylene chloride	1.0	N.D.
iso-Octane	0.10	N.D.
iso-Propanol	5.0	N.D.
n-Propanol	5.0	N.D.
n-Propyl benzene	0.10	N.D.
Tetrachloroethylene	0.50	N.D.
Tetrahydrofuran	2.0	N.D.
1,1,1-Trichloroethane	0.50	N.D.
Trichloroethylene	0.50	N.D.
Toluene	0.10	N.D.
m-Xylene	0.10	N.D.
o-Xylene	0.10	N.D.
p-Xylene	0.10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: RMW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503J63-01	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/06/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	11000
Benzene	10	N.D.
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern: Unidentified HC		>C8
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	100

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Attention: Paul Hoffey

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW-6  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9503J63-02

Sampled: 03/27/95  
Received: 03/27/95

Analyzed: 04/06/95  
Reported: 04/10/95

QC Batch Number: GC040195801008A  
Instrument ID: GCHP08

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**  
1-Chloro-2-fluorobenzene

**Control Limits %**  
70 130

**% Recovery**  
77

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-6 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503J63-02	Sampled: 03/27/95 Received: 03/27/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/10/95
Attention: Paul Hoeffy		

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>		
2-Fluorobiphenyl	Control Limits % 50                      150	% Recovery 97

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-02	Sampled: 03/27/95 Received: 03/27/95 Extracted: 03/29/95 Analyzed: 04/06/95 Reported: 04/10/95
---	--	--

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	500	13000
Chromatogram Pattern: Unidentified HC		C9-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	0 Q

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-02	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/05/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503J63-02	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/06/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	74
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		> C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: M-6 DUP Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-03	Sampled: 03/27/95 Received: 03/27/95 Extracted: 03/29/95 Analyzed: 04/06/95 Reported: 04/10/95
---	---	--

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern: Unidentified HC	500	5600 C9-C24
<b>Surrogates</b> n-Pentacosane (C25)	<b>Control Limits %</b> 50                      150	<b>% Recovery</b> 0 Q

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: M-6 DUP Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503J63-03	Sampled: 03/27/95 Received: 03/27/95  Analyzed: 04/06/95 Reported: 04/10/95
---	---	---

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	250
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		> C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	93

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: M-6 DUP Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503J63-03	Sampled: 03/27/95 Received: 03/27/95  Analyzed: 04/06/95 Reported: 04/10/95
---	---	---

QC Batch Number: GC040195801008A  
Instrument ID: GCHP08

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

70 130

**% Recovery**

74

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9503J63-04

Sampled: 03/27/95  
Received: 03/27/95  
Analyzed: 04/05/95  
Reported: 04/10/95

Attention: Paul Hoffer

QC Batch Number: GC040195801008A  
Instrument ID: GCHP08

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
<b>Chloroethane</b>	<b>1.0</b>	<b>18</b>
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
<b>1,1-Dichloroethane</b>	<b>0.50</b>	<b>5.8</b>
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
<b>cis-1,2-Dichloroethene</b>	<b>0.50</b>	<b>8.5</b>
<b>trans-1,2-Dichloroethene</b>	<b>0.50</b>	<b>9.6</b>
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
<b>Vinyl chloride</b>	<b>1.0</b>	<b>10</b>
Freon 113	1.0	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

Control Limits %  
70 130

% Recovery  
76

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-5 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503J63-04	Sampled: 03/27/95 Received: 03/27/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.
<b>Surrogates</b>		
2-Fluorobiphenyl	Control Limits % 50                      150	% Recovery 130

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320.  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9503J63-04

Sampled: 03/27/95  
Received: 03/27/95  
Extracted: 03/29/95  
Analyzed: 04/06/95  
Reported: 04/10/95

Attention: Paul Hoffey

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP5A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	2500	29000
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	0 Q

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-04	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/06/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

## Industrial Solvents

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
<b>Carbon tetrachloride</b>	<b>0.20</b>	<b>0.26</b>
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
<b>1,2-Dichloroethane</b>	<b>0.20</b>	<b>0.38</b>
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
<b>Ethyl acetate</b>	<b>0.20</b>	<b>0.83</b>
<b>Ethyl benzene</b>	<b>0.020</b>	<b>0.10</b>
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
<b>Tetrachloroethylene</b>	<b>0.10</b>	<b>0.20</b>
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
<b>Toluene</b>	<b>0.020</b>	<b>0.022</b>
m-Xylene	0.020	N.D.
<b>o-Xylene</b>	<b>0.020</b>	<b>0.22</b>
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503J63-04	Sampled: 03/27/95 Received: 03/27/95 Analyzed: 04/06/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	600
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		> C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager







Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: TB  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503J63-05

Sampled: 03/27/95  
Received: 03/27/95  
Analyzed: 04/06/95  
Reported: 04/10/95

Attention: Paul HOFFEY

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	98

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503J63-06	Sampled: Received: 03/27/95 Extracted: 03/29/95 Analyzed: 03/30/95 Reported: 04/10/95
Attention: Paul HOFFEY		

QC Batch Number: GC0329958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorobiphenyl	50	150	50

Analyses reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503J63-07	Sampled: Received: 03/27/95  Analyzed: 04/05/95 Reported: 04/10/95
---	--	--

QC Batch Number: GC040195801008A  
Instrument ID: GCHP08

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

70 130

**% Recovery**

87

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-08	Sampled: Received: 03/27/95 Extracted: 03/29/95 Analyzed: 03/30/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC0329950HBPEXZ  
Instrument ID: GCHP4B

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.
<b>Surrogates</b> n-Pentacosane (C25)	<b>Control Limits %</b> 50                      150	<b>% Recovery</b> 88

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503J63-10	Sampled: Received: 03/27/95  Analyzed: 04/06/95 Reported: 04/10/95
---	--	--

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503J63-11	Sampled: Received: 03/27/95 Analyzed: 04/06/95 Reported: 04/10/95
--	--	--

QC Batch Number: GC040695BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

COPY

Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402  
Attention: Paul HOFFEY

Client Proj. ID: 940018.00, Sybase

Received: 03/27/95

Lab Proj. ID: 9503J63

Reported: 04/10/95

### LABORATORY NARRATIVE

Please Note:

0 Q - Surrogate recovery was lost due to sample dilution.

Differences in recoveries of carbon tetrachloride, 1,2-dichloroethane, and tetrachloroethylene between the Halogenated Volatile Organics (EPA 8010) and Industrial Solvents (EPA 8015 Mod) in sample 9503J63-04 can be attributed to the possibility of a false positive recovery of these compounds in the Industrial Solvents analysis. In the case of sample 9503J63-04, the Industrial Solvents analysis recovered several peaks that were not seen by the Halogenated Volatile Organics analysis. (The Halogenated Volatile Organics analysis utilizes Purge and Trap extraction and ECD/PID detectors; the Industrial Solvents analysis use Headspace extraction and an FID detector). It is possible that the large number of peaks could have resulted in the false positive recovery of these compounds despite a second column confirmation.

There was also a lack of correlation between the recoveries of ethylbenzene, toluene, and o-xylene in the TPPH with BTEX (EPA 8015 Mod/8020) and the Industrial Solvents analyses of sample 9503J63-04. As with the Halogenated Volatile Organics, the Industrial Solvent scan recovered more peaks than the TPPH with BTEX analysis (the TPPH with BTEX utilizes Purge and Trap extraction and PID/FID detectors). As was mentioned above it is possible that the Industrial Solvent analysis produced some false positive results.

Samples 9503J63-01 through -04 were quantitated against a diesel standard (the default standard) since no fuel pattern was discernible in the Fuel Fingerprint analysis. These samples were quantitated in the C9 to C24 (diesel) range; however, the chromatogram patterns for all of the aforementioned samples extend past C36.

SEQUOIA ANALYTICAL

Eileen Manning  
Project Manager





COPY

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: RMW-3  
Work Order #: 9503J63 -01, 02, 04, 09

Reported: Apr 11, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Arsenic	Lead
QC Batch#:	ME0330957000MDA	ME0330957000MDA
Analy. Method:	EPA 206.2	EPA 239.2
Prep. Method:	EPA 3020	EPA 3020

Analyst:	W. Thant	S. B.
MS/MSD #:	9503J63-01-MSD	9503J63-01-MSD
Sample Conc.:	N.D.	N.D.
Prepared Date:	03/30/95	03/30/95
Analyzed Date:	04/04/95	04/04/95
Instrument I.D.#:	MTJA3	MTJA1
Conc. Spiked:	0.050 mg/L	0.050 mg/L
Result:	0.054	0.051
MS % Recovery:	108	102
Dup. Result:	0.055	0.048
MSD % Recov.:	110	96
RPD:	1.8	6.1
RPD Limit:	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD		
LCS	75-125	75-125
Control Limits		

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503J63.ERL <1>







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: RMW-3  
Work Order #: 9503J63 -01, 02, 04, 09

Reported: Apr 11, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0403956010MDA	ME0403956010MDA	ME0403956010MDA	ME0403956010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9503J63-01-MSD	9503J63-01-MSD	9503J63-01-MSD	9503J63-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/03/95	04/03/95	04/03/95	04/03/95
Analyzed Date:	04/03/95	04/03/95	04/03/95	04/03/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	1.0	0.97	1.0	1.0
MS % Recovery:	100	97	100	100
Dup. Result:	1.0	0.95	0.98	1.0
MSD % Recov.:	100	95	98	100
RPD:	0.0	2.1	2.0	0.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD				
LCS	75-125	75-125	75-125	75-125
Control Limits				

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503J63.ERL <2>





<b>Erler &amp; Kalinowski, Inc.</b>	<b>Client Project ID:</b> 940018.00, Sybase	
1730 So. Amphlett Blvd., Suite 320	<b>Matrix:</b> LIQUID	
San Mateo, CA 94402	<b>Sample Descrip:</b> MW-3	
<b>Attention:</b> Paul Hoeffey	<b>Work Order #:</b> 9503J63-01-04, 07	<b>Reported:</b> Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
<b>QC Batch#:</b>	GC040195801008A	GC040195801008A	GC040195801008A
<b>Analy. Method:</b>	EPA 8010	EPA 8010	EPA 8010
<b>Prep. Method:</b>	EPA 5030	EPA 5030	EPA 5030

<b>Analyst:</b>	J. Miller	J. Miller	J. Miller
<b>MS/MSD #:</b>	9503176-02-MSD	9503176-02-MSD	9503176-02-MSD
<b>Sample Conc.:</b>	N.D.	N.D.	N.D.
<b>Prepared Date:</b>	04/01/95	04/01/95	04/01/95
<b>Analyzed Date:</b>	04/01/95	04/01/95	04/01/95
<b>Instrument I.D.#:</b>	GCHP8	GCHP8	GCHP8
<b>Conc. Spiked:</b>	25 µg/L	25 µg/L	25 µg/L
<b>Result:</b>	26	25	25
<b>MS % Recovery:</b>	104	100	100
<b>Dup. Result:</b>	27	27	26
<b>MSD % Recov.:</b>	108	108	104
<b>RPD:</b>	3.8	7.7	3.9
<b>RPD Limit:</b>	0-50	0-50	0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

MS/MSD			
<b>LCS</b>	28-167	35-146	38-150
<b>Control Limits</b>			

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eler & Kainowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Project ID: 940018.00, Sybase Matrix: LIQUID Sample Descrip: BLK Work Order #: 9503J63-01-02, 04, 06	Reported: Apr 11, 1995
---	--	------------------------

## QUALITY CONTROL DATA REPORT

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0329958100EXZ	GC0329958100EXZ	GC0329958100EXZ
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3520	EPA 3520	EPA 3520

Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman
MS/MSD #:	BLK032995-BLK	BLK032995-BLK	BLK032995-BLK
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/29/95	03/29/95	03/29/95
Analyzed Date:	03/31/95	03/31/95	03/31/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L

Result:	43	42	46
MS % Recovery:	86	84	92
Dup. Result:	42	41	46
MSD % Recov.:	84	82	92
RPD:	2.4	2.4	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	DL-122	DL-124	DL-140

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503J63.ERL <4>





Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Project ID: 940018.00, Sybase Matrix: LIQUID Sample Descrip: MW-4 Work Order #: 9503J63-01-04, 08	Reported: Apr 11, 1995
---	---	------------------------

### QUALITY CONTROL DATA REPORT

<b>Analyte:</b> Diesel
<b>QC Batch#:</b> GC0329950HBPEXZ
<b>Analy. Method:</b> EPA 8015M
<b>Prep. Method:</b> EPA 3520

<b>Analyst:</b> B. Ali
<b>MS/MSD #:</b> 9503176-01-MSD
<b>Sample Conc.:</b> 190
<b>Prepared Date:</b> 03/29/95
<b>Analyzed Date:</b> 04/01/95
<b>Instrument I.D.#:</b> GCHP5A
<b>Conc. Spiked:</b> 600 µg/L

<b>Result:</b> 620
<b>MS % Recovery:</b> 72

<b>Dup. Result:</b> 550
<b>MSD % Recov.:</b> 60

<b>RPD:</b> 12
<b>RPD Limit:</b> 0-50

**LCS #:**

<b>Prepared Date:</b>
<b>Analyzed Date:</b>
<b>Instrument I.D.#:</b>
<b>Conc. Spiked:</b>

<b>LCS Result:</b>
<b>LCS % Recov.:</b>

<b>MS/MSD</b>	
<b>LCS</b>	38-122
<b>Control Limits</b>	

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503J63.ERL <5>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503J63-01, 02, 04, 10

Reported: Apr 11, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Acetone	MIBK	Tetra Hydrofuran	1,1,1-TCA	TCE
QC Batch#:	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA
Analy. Method:	ISHS	ISHS	ISHS	ISHS	ISHS
Prep. Method:	HS	HS	HS	HS	HS

Analyst:	T. Tran	T. Tran	T. Tran	T. Tran	T. Tran
MS/MSD #:	9503176-01	9503176-01	9503176-01	9503176-01	9503176-01
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	GCV1	GCV1	GCV1	GCV1	GCV1
Conc. Spiked:	4.0 mg/L	1.0 mg/L	2.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	3.7	0.82	1.9	0.86	0.87
MS % Recovery:	93	82	95	86	87
Dup. Result:	3.9	0.90	2.0	0.98	0.99
MSD % Recov.:	98	90	100	98	99
RPD:	5.3	9.3	5.1	13	13
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150	50-150
---------------------------------	--------	--------	--------	--------	--------

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

Please Note:  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD= MS Duplicate, RPD= Relative % Difference

9503J63.ERL <6>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503J63-01, 02, 04, 10

Reported: Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** p-Xylene  
**QC Batch#:** GC040495ISHSHSA  
**Analy. Method:** ISHS  
**Prep. Method:** HS

**Analyst:** T. Tran  
**MS/MSD #:** 9503176-01-MSD  
**Sample Conc.:** N.D.  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/04/95  
**Instrument I.D.#:** GCV1  
**Conc. Spiked:** 0.20 mg/L

**Result:** 0.16  
**MS % Recovery:** 80

**Dup. Result:** 0.18  
**MSD % Recov.:** 90

**RPD:** 12  
**RPD Limit:** 0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

**MS/MSD**  
**LCS** 50-150  
**Control Limits**

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, Interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503J63.ERL <7>





Erler & Kalinowski, Inc. Client Project ID: 940018.00, Sybase  
1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID  
San Mateo, CA 94402 Sample Descrip: XSD  
Attention: Paul HOFFEY Work Order #: 9503J63-01-05, 11 Reported: Apr 11, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC040695BTEX17A	GC040695BTEX17A	GC040695BTEX17A	GC040695BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	G9503N55-10-XSD	G9503N55-10-XSD	9503N55-10-XSD	G9503N55-10-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/06/95	04/06/95	04/06/95	04/06/95
Analyzed Date:	04/06/95	04/06/95	04/06/95	04/06/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	34
MS % Recovery:	110	110	110	113
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	9.5	9.5	9.5	13
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\*MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503J63.ERL <8>



9503563

page 1/2

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erlar & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 940018.00

Date Sampled: 27 March 1995

Project Name: Sybase

Sampled By: Gail Clark

Source of Samples: monitoring well

Report Results To: Paul Haffey

Location: 64<sup>th</sup> + 65<sup>th</sup> Property, Emeryville

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
1	RMW-3	water	3- amber liters	11:25	PNA - 8100, and TEPH - fuel fingerprint (8015)	Standard
↓	RMW-3	water	2 voas w/ HCl	11:25	TPPH w/ BTEX (8015-8020 mod)	turn-
↓	RMW-3	water	4 voas	11:25	VOCs - 8010, and Industrial Solvent Scan (8015 mod)	around
↓	RMW-3	water	1 plastic liter	11:25	ICP metal (As, Pb, Cr)	time
2	MW-6	water	3- amber liters	2:10	PNA - 8100, and TEPH - fuel fingerprint (8015)	
↓	MW-6	water	2 voas w/ HCl	2:10	TPPH w/ BTEX (8015-8020 mod)	
↓	MW-6	water	4 voas	2:10	VOCs - 8010, and Industrial Solvent Scan (8015 mod)	
↓	MW-6	water	1 plastic liter	2:10	ICP Metals, (As, Pb, Cr)	
3	M-6DUP	water	1 amber liter	2:10	TEPH - fuel fingerprint (8015)	
↓	M-6DUP	water	2 voas w/ HCl		TPPH w/ BTEX (8015-8020 mod)	↓

Special Instructions:

→ Please note that all samples had some visible product/and/or odor.

IPC

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
Gail L. Clark / Gail Clark / EKI	3-27-95	17:30			
	3/27	17:30	Blissen / [Signature]	3/27/95	17:30



9903563

page 2/2

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: *Sequoia Analytical*

Project Number: 940018.00

Date Sampled: 27 March 1995

Project Name: Sybase

Sampled By: G.L. Clark

Source of Samples: wells

Report Results To: Paul Hoffer

Location: 64<sup>th</sup> + 65<sup>th</sup> Street Property, Emeryville

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
3	M-6DUP	water	2 Voas plain	2:10	VOCs - 8010	Standard
4	MW-5		3 - amber liters	3:35	PNA - 8100, and TEPH, fuel fingerprint (8015)	turn- around
	MW-5		2 Voas w/ Hel	3:35	TPPH w/ BTEX (8015-8020 mod)	time
	MW-5		4 Voas plain	3:35	VOCs - 8010, and Industrial Solvent Scan (8015 mod)	↓ ↓
	MW-5		1 plastic liter	3:35	ICP Metals (As, Pb, Cr)	↓ ↓
5	TR#1	water	2 - 40ml Voas	-	VOC - 8010, TPPH w/ BTEX, and Industrial Solvent Scan (8015 mod.)	↓ ↓

Special Instructions:

→ Please note that all samples had some visible product and/or odor.

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
Gail L. Clark / Gail L. Clark / EKI	3-27-95	17:30	<i>[Signature]</i>	3/27	1730
			<i>[Signature]</i>	3/27	1730



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

**COPY**

Erler & Kallnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase  Lab Proj. ID: 9503L73	Sampled: 03/28/95 Received: 03/28/95 Analyzed: see below  Reported: 04/10/95
Attention: Paul Hoeffy		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503L73-01 Sample Desc : LIQUID, TMW-1				
Arsenic	mg/L	04/04/95	0.0050	N.D.
Chromium	mg/L	04/04/95	0.010	N.D.
Lead	mg/L	04/04/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503L73	Sampled: Received: 03/28/95 Analyzed: see below Reported: 04/10/95
Attention: Paul Hoeffy		

## LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503L73-02				
Sample Desc : LIQUID,Method Blank				
Arsenic	mg/L	04/07/95	0.0050	N.D.
Chromium	mg/L	04/04/95	0.010	N.D.
Lead	mg/L	04/07/95	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: TMW-1 Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503L73-01	Sampled: 03/28/95 Received: 03/28/95 Extracted: 04/03/95 Analyzed: 04/04/95 Reported: 04/10/95
---	---	--

QC Batch Number: GC0403958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50      150	84

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: TMW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503L73-01	Sampled: 03/28/95 Received: 03/28/95 Extracted: 04/04/95 Analyzed: 04/08/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC0404950HBPEXY  
Instrument ID: GCHP5A

### Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons	50	330
Chromatogram Pattern:		
Unidentified HC		C9-C24
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: TMW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503L73-01	Sampled: 03/28/95 Received: 03/28/95 Analyzed: 04/03/95 Reported: 04/10/95
Attention: Paul Hoeffey		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	100
Benzene	0.50	4.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.8
Xylenes (Total)	0.50	3.2
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	129

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc.  
1730 South Amphlett, Ste 320  
San Mateo, CA 94402

Client Proj. ID: 940018.00, Sybase  
Sample Descript: TMW-1  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9503L73-01

Sampled: 03/28/95  
Received: 03/28/95  
Analyzed: 04/08/95  
Reported: 04/10/95

QC Batch Number: GC040695801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
<b>Trichloroethene</b>	<b>0.50</b>	<b>2.3</b>
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

**Surrogates**

1-Chloro-2-fluorobenzene

**Control Limits %**

70 130

**% Recovery**

82

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: TMW-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503L73-01	Sampled: 03/28/95 Received: 03/28/95  Analyzed: 04/05/95 Reported: 04/10/95
--	---	---

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager







Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503L73-02	Sampled: Received: 03/28/95  Analyzed: 04/04/95 Reported: 04/10/95
Attention: Paul Hoeffey		

QC Batch Number: GC040495ISHSHA  
Instrument ID: GCV1

**Industrial Solvents**

Analyte	Detection Limit mg/L	Sample Results mg/L
Acetone	0.40	N.D.
Acetonitrile	1.0	N.D.
Benzene	0.020	N.D.
iso-Butanol	1.0	N.D.
n-Butanol	1.0	N.D.
sec-Butanol	1.0	N.D.
t-Butanol	0.50	N.D.
Carbon tetrachloride	0.20	N.D.
Chloroform	0.20	N.D.
Cyclohexane	0.040	N.D.
1,2-Dichloroethane	0.20	N.D.
t-1,2-Dichloroethene	0.10	N.D.
Ethanol	1.0	N.D.
Ethyl acetate	0.20	N.D.
Ethyl benzene	0.020	N.D.
Ethyl ether	0.020	N.D.
Freon 113	0.20	N.D.
Hexane	0.10	N.D.
Methanol	1.0	N.D.
Methyl ethyl ketone	0.20	N.D.
Methyl isobutyl ketone	0.20	N.D.
Methylene chloride	0.20	N.D.
iso-Octane	0.020	N.D.
iso-Propanol	1.0	N.D.
n-Propanol	1.0	N.D.
n-Propyl benzene	0.020	N.D.
Tetrachloroethylene	0.10	N.D.
Tetrahydrofuran	0.40	N.D.
1,1,1-Trichloroethane	0.10	N.D.
Trichloroethylene	0.10	N.D.
Toluene	0.020	N.D.
m-Xylene	0.020	N.D.
o-Xylene	0.020	N.D.
p-Xylene	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9503L73-02	Sampled: Received: 03/28/95  Analyzed: 04/07/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC040695801008A  
Instrument ID: GCHP8

**Halogenated Volatile Organics (EPA 8010)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
1-Chloro-2-fluorobenzene	70 130	80

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrx: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503L73-02	Sampled: Received: 03/28/95  Analyzed: 04/03/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC040395BTEX17A  
Instrument ID: GCHP17

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                      130	111

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Eileen Manning  
Project Manager





Erler & Kallnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503L73-02	Sampled: Received: 03/28/95 Extracted: 04/04/95 Analyzed: 04/08/95 Reported: 04/10/95
---	--	---

QC Batch Number: GC0404950HBPEXY  
Instrument ID: GCHP5A

**Fuel Fingerprint**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50                      150	95

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL - ELAP #1210**

Eileen Manning  
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 940018.00, Sybase Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8100 Lab Number: 9503L73-02	Sampled: Received: 03/28/95 Extracted: 04/03/95 Analyzed: 04/04/95 Reported: 04/10/95
Attention: Paul Hoffey		

QC Batch Number: GC0403958100EXZ  
Instrument ID: GCHP11

**Polynuclear Aromatic Hydrocarbons (EPA 8100)**

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Fluoranthene	5.0	N.D.
Fluorene	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Naphthalene	5.0	N.D.
Phenanthrene	5.0	N.D.
Pyrene	5.0	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorobiphenyl	50                      150	72

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** - ELAP #1210

Eileen Manning  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 940018.00, Sybase Lab Proj. ID: 9503L73	Received: 03/28/95 Reported: 04/10/95
---	---	--

### LABORATORY NARRATIVE

**Please Note:**

Sample 9503L73-01 was quantitated against a diesel standard (the default standard) since no fuel pattern was discernible in the Fuel Fingerprint analysis. These samples were quantitated in the C9 to C24 (diesel) range; however, the chromatogram pattern for the aforementioned sample extend past C36.

  
SEQUOIA ANALYTICAL

Eileen Manning  
Project Manager





Erler & Kallnowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul HOFFEY

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: TMW-1  
Work Order #: 9503L73 -01

Reported: Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0404956010MDA	ME0404956010MDA	ME0404956010MDA	ME0404956010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9503L73-01-MSD	9503L73-01-MSD	9503L73-01-MSD	9503L73-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	0.99	0.97	0.96	0.97
MS % Recovery:	99	97	96	97
Dup. Result:	1.0	0.98	0.99	0.98
MSD % Recov.:	100	98	99	98
RPD:	1.0	1.0	3.1	1.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125
---------------------------------	--------	--------	--------	--------

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <1>





**Sequoia Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: TMW-1  
Work Order #: 9503L73-01-02

Reported: Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Arsenic	Lead
QC Batch#:	ME0404957000MDA	ME0404957000MDA
Analy. Method:	EPA 206.2	EPA 239.2
Prep. Method:	EPA 3020	EPA 3020

Analyst:	W. Thant	L. Zhu
MS/MSD #:	9503L73-01-MSD	9503L73-01-MSD
Sample Conc.:	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95
Instrument I.D.#:	MTJA3	MTJA3
Conc. Spiked:	0.050 mg/L	0.050 mg/L
Result:	0.055	0.053
MS % Recovery:	110	106
Dup. Result:	0.058	0.049
MSD % Recov.:	116	98
RPD:	5.3	7.8
RPD Limit:	0-30	0-30

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD		
LCS	75-125	75-125
Control Limits		

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <2>







Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoffee

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: TMW-1  
Work Order #: 9503L73-01

Reported: Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Naphthalene	Acenaphthene	Pyrene
QC Batch#:	GC0403958100EXZ	GC0403958100EXZ	GC0403958100EXZ
Analy. Method:	EPA 8100	EPA 8100	EPA 8100
Prep. Method:	EPA 3520	EPA 3520	EPA 3520

Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman
MS/MSD #:	9503L73-01-MSD	9503L73-01-MSD	9503L73-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	04/03/95	04/03/95	04/03/95
Analyzed Date:	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	GCHP11	GCHP11	GCHP11
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L

Result:	51	47	34
MS % Recovery:	102	94	68
Dup. Result:	46	43	32
MSD % Recov.:	92	86	64
RPD:	10	8.9	6.1
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS	DL-122	DL-124	DL-140
Control Limits			

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503L73.ERL <3>





**Erler & Kalinowski, Inc.**  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

**Client Project ID:** 940018.00, Sybase  
**Matrix:** LIQUID  
**Sample Descrip:** TMW-1  
**Work Order #:** 9503L73-01, 02

**Reported:** Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** Diesel  
  
**QC Batch#:** GC0404950HBPEXY  
**Analy. Method:** EPA 8015M  
**Prep. Method:** EPA 3520

**Analyst:** B. Ali  
**MS/MSD #:** 9503L73-01-MSD  
**Sample Conc.:** 330  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/08/95  
**Instrument I.D.#:** GCHP5A  
**Conc. Spiked:** 600 µg/L

**Result:** 690  
**MS % Recovery:** 60

**Dup. Result:** 530  
**MSD % Recov.:** 33

**RPD:** 26  
**RPD Limit:** 0-50

**LCS #:** LCS040495-LCS  
  
**Prepared Date:** 04/04/95  
**Analyzed Date:** 04/05/95  
**Instrument I.D.#:** GCHP5A  
**Conc. Spiked:** 600 µg/L  
  
**LCS Result:** 430  
**LCS % Recov.:** 72

**MS/MSD**  
**LCS** 38-122  
**Control Limits**

**SEQUOIA ANALYTICAL**  
  
Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <4>





**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Eter & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffy

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: XSD  
Work Order #: 9503L73-01, 02

Reported: Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC040695801008A	GC040695801008A	GC040695801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter
MS/MSD #:	9504065-01-XSD	9504065-01-XSD	504065-01-XSD
Sample Conc.:	N.D.	0.90	N.D.
Prepared Date:	04/06/95	04/06/95	04/06/95
Analyzed Date:	04/06/95	04/06/95	04/06/95
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L

Result:	24	25	23
MS % Recovery:	96	96	92

Dup. Result:	24	27	25
MSD % Recov.:	96	104	100

RPD:	0.0	7.7	8.3
RPD Limit:	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD			
LCS	28-167	35-146	38-150
Control Limits			

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <5>





Erler & Kalinowski, Inc. Client Project ID: 940018.00, Sybase  
1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID  
San Mateo, CA 94402 Sample Descrip: MW-4  
Attention: Paul Hoeffy Work Order #: 9503L73 Reported: Apr 13, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A	GC040395BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	G9503176-01-MSD	G9503176-01-MSD	9503176-01-MSD	G9503176-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/03/95	04/03/95	04/03/95	04/03/95
Analyzed Date:	04/03/95	04/03/95	04/03/95	04/03/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	32
MS % Recovery:	110	110	110	107
Dup. Result:	11	11	10	30
MSD % Recov.:	110	110	100	100
RPD:	0.0	0.0	9.5	6.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL**

Eileen A. Manning  
Project Manager

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9503L73.ERL <6>





Erler & Kalinowski, Inc.  
1730 So. Amphlett Blvd., Suite 320  
San Mateo, CA 94402  
Attention: Paul Hoeffey

Client Project ID: 940018.00, Sybase  
Matrix: LIQUID  
Sample Descrip: MW-4  
Work Order #: 9503L73

Reported: Apr 13, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Acetone	MIBK	Tetra Hydrofuran	1,1,1-TCA
QC Batch#:	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA	GC040495ISHSHSA
Analy. Method:	ISHS	ISHS	ISHS	ISHS
Prep. Method:	HS	HS	HS	HS

Analyst:	T. Tran	T. Tran	T. Tran	T. Tran
MS/MSD #:	9503176-01-MSD	9503176-01-MSD	503176-01-MSD	9503176-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/04/95	04/04/95	04/04/95	04/04/95
Analyzed Date:	04/04/95	04/04/95	04/04/95	04/04/95
Instrument I.D.#:	GCV1	GCV1	GCV1	GCV1
Conc. Spiked:	4.0 mg/L	1.0 mg/L	2.0 mg/L	1.0 mg/L
Result:	3.7	0.82	1.9	0.86
MS % Recovery:	93	82	95	86
Dup. Result:	3.9	0.90	2.0	0.98
MSD % Recov.:	98	90	100	98
RPD:	5.3	9.3	5.1	13
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D.#:  
Conc. Spiked:

LCS Result:  
LCS % Recov.:

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150
---------------------------------	--------	--------	--------	--------

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Eileen A. Manning  
Project Manager

\*\* MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <7>





<b>Erler &amp; Kalinowski, Inc.</b> 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoffey	<b>Client Project ID:</b> 940018.00, Sybase <b>Matrix:</b> LIQUID <b>Sample Descrip:</b> MW-4 <b>Work Order #:</b> 9503L73	<b>Reported:</b> Apr 13, 1995
--	---	-------------------------------

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b>	TCE	p-Xylene
<b>QC Batch#:</b>	GC040495ISHSHSA	GC040495ISHSHSA
<b>Analy. Method:</b>	ISHS	ISHS
<b>Prep. Method:</b>	HS	HS

<b>Analyst:</b>	T. Tran	T. Tran
<b>MS/MSD #:</b>	9503176-01-MSD	9503176-01-MSD
<b>Sample Conc.:</b>	N.D.	N.D.
<b>Prepared Date:</b>	04/04/95	04/04/95
<b>Analyzed Date:</b>	04/04/95	04/04/95
<b>Instrument I.D.#:</b>	GCV1	GCV1
<b>Conc. Spiked:</b>	1.0 mg/L	0.20 mg/L

<b>Result:</b>	0.87	0.16
<b>MS % Recovery:</b>	87	80

<b>Dup. Result:</b>	0.99	0.18
<b>MSD % Recov.:</b>	99	90

<b>RPD:</b>	13	12
<b>RPD Limit:</b>	0-50	0-50

**LCS #:**

**Prepared Date:**  
**Analyzed Date:**  
**Instrument I.D.#:**  
**Conc. Spiked:**

**LCS Result:**  
**LCS % Recov.:**

<b>MS/MSD</b>		
<b>LCS</b>	50-150	50-150
<b>Control Limits</b>		

**SEQUOIA ANALYTICAL**  
*(Signature)*

Eileen A. Manning  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503L73.ERL <8>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequim Analytical

Project Number: 940018.00

Date Sampled: 28 March 1995

Project Name: Sybase

Sampled By: Gail Clark

Source of Samples: Monitoring well

Report Results To: Paul Hoffey

Location: 64<sup>th</sup> Street, Emeryville

Phone Number: 415) 578-1172

**9503L73**

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
	TMW-1	water	3- amber liters		PNAs- 8100, and TEPH- fuel finger print (8015)	Standard
	TMW-1	water	2 Voas - with HCL		TPPH w/ BTEX, (8015-8020 mod.)	turn-
	TMW-1	water	4 Voas		VOCs - 8010, and Industrial Solvent Scan (8015 mod.)	around
	TMW-1	water	1 plastic liter		ICP Metals (As, Pb, Cr.)	time ↓

Special Instructions:

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
GAIL L. CLARK / <u>Gail Clark</u> / EKI	3-28-95	13:10	Mona Palel	3-28-95	13:12
			Mona Palel		13:12

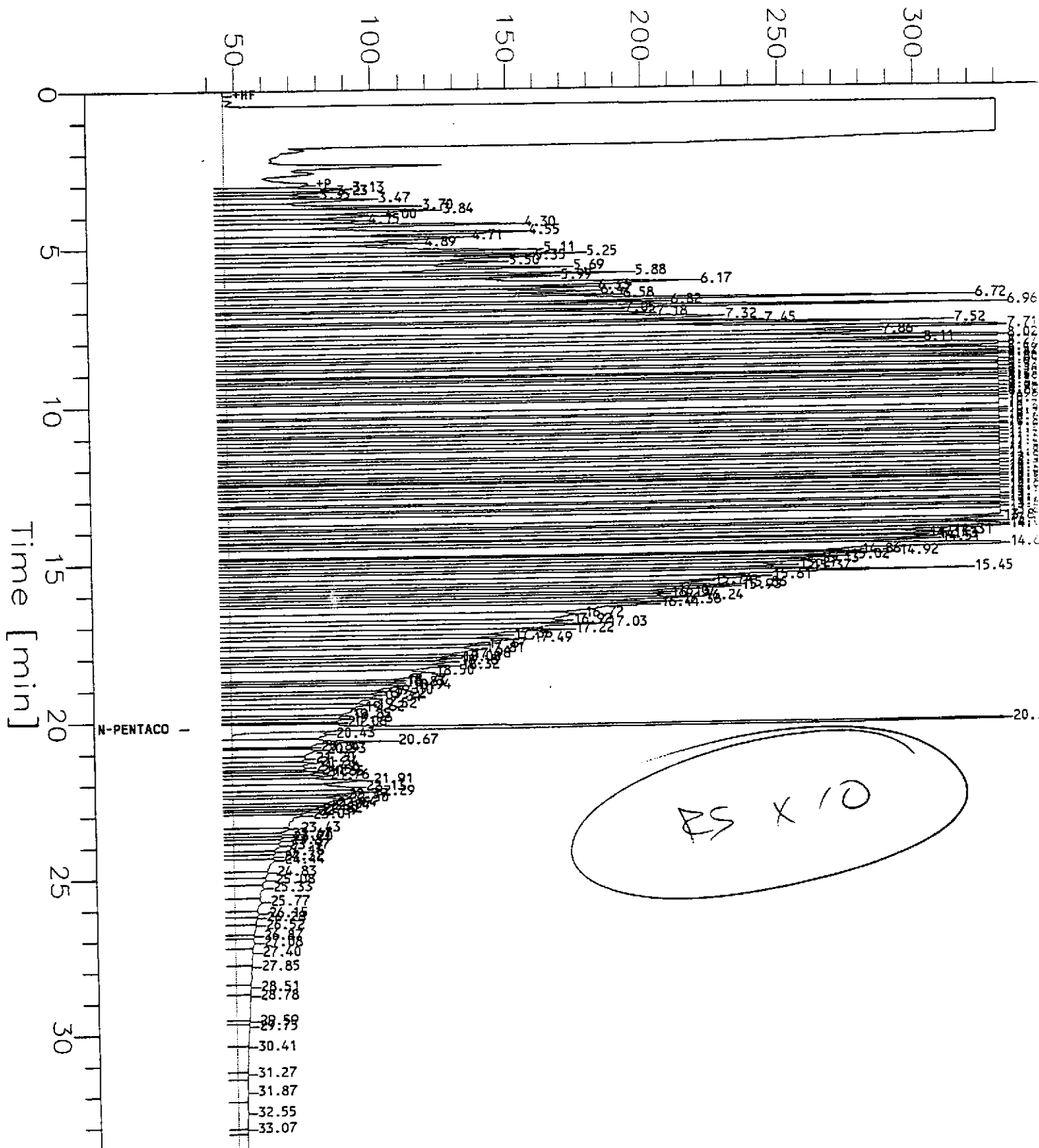
# Chromatogram

Sample Name : D9503176-4 (500:1)  
FileName : s:\ghp\_05\0402\331A037.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.67 min  
Plot Offset: 31 mV

Page 1 of 1  
Sample #: MW-1  
Date : 4/1/95 10:25  
Time of Injection: 4/1/95 09:51  
Low Point : 30.59 mV  
High Point : 330.59 mV  
Plot Scale: 300.0 mV

## Response [mV]





```

=====
Software Version: 3.3 <4B11>
Sample Name : D9503I76-4 (500:1)      Time : 4/1/95 10:25
Sample Number: MW-1                   Study : EKI
Operator : TO

```

```

Instrument : GHP_05                    Channel : A      A/D mV Range : 1024
AutoSampler : HP7673A
Rack/Vial : 1/37

```

```

Interface Serial # :      Data Acquisition Time: 4/1/95 09:51
Delay Time : 0.00 min.
End Time : 33.67 min.
Sampling Rate : 1.2500 pts/sec

```

```

Raw Data File : S:\GHP_05\0402\331A037.RAW
Result File : S:\GHP_05\0402\331A037.RST
Instrument File: S:\GHP_05\MET_SEQ\ETPH05A.ins
Process File : S:\GHP_05\MET_SEQ\ETPH05A
Sample File : S:\GHP_05\MET_SEQ\ETPH05A
Sequence File : S:\GHP_05\MET_SEQ\H050331.seq

```

```

Inj. Volume : 3 ul                    Area Reject : 0.000000
Sample Amount : 1.0000                Dilution Factor : 1.00

```

Extractable TPH GHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	1.59488e+08	22.69		2.6581	106.3252
	11.250	n-C9 to n-C24 TPH-D	2.16402e+08	30.78		160.3121	6412.4859
	16.750	n-C9 to n-C40 Total	2.30969e+08	32.86		3.8495	153.9793
	19.875	n-C16 to n-C36 M/Oil	96100724.59	13.67		1.6017	64.0671
			7.02960e+08	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331A037.TX0

Extractable TPH GHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.132		328088.20	0.14	*B	0.0055	0.2187
2	3.227		173719.04	0.08	*V	0.0029	0.1158
3	3.354		175726.53	0.08	*V	0.0029	0.117
4	3.470		381168.42	0.16	*V	0.0064	0.254
5	3.699		473605.96	0.20	*V	0.0079	0.3157
6	3.841		588699.80	0.25	*V	0.0098	0.392
7	3.998		404999.93	0.18	*V	0.0067	0.270
8	4.149		390615.01	0.17	*V	0.0065	0.2604
9	4.298		692067.78	0.30	*V	0.0115	0.4614
10	4.549		995943.02	0.43	*V	0.0166	0.664
11	4.705		823911.75	0.36	*V	0.0137	0.549
12	4.892		433492.62	0.19	*V	0.0072	0.2890
13	5.113		1035015.83	0.45	*V	0.0173	0.690

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.247		637393.40	0.28	*V	0.0106	0.4249
15	5.353		896982.70	0.39	*V	0.0149	0.5980
16	5.502		697689.54	0.30	*V	0.0116	0.4651
17	5.685		1168338.53	0.50	*V	0.0195	0.7789
18	5.881		915799.11	0.40	*V	0.0153	0.6105
19	5.985		591016.81	0.26	*V	0.0099	0.3940
20	6.172		1838503.35	0.79	*V	0.0306	1.2257
21	6.327		666832.01	0.29	*V	0.0111	0.4446
22	6.465		1038119.97	0.45	*V	0.0173	0.6921
23	6.582		724865.47	0.31	*V	0.0121	0.4832
24	6.716		1695593.38	0.73	*V	0.0283	1.1304
25	6.817		745532.89	0.32	*V	0.0124	0.4970
26	6.961		1710990.26	0.74	*V	0.0285	1.1407
27	7.048		636212.20	0.27	*V	0.0106	0.4241
28	7.183		1151438.30	0.50	*V	0.0192	0.7676
29	7.315		1701663.55	0.74	*V	0.0284	1.1344
30	7.446		713920.87	0.31	*V	0.0119	0.4759
31	7.518		1493413.27	0.65	*V	0.0249	0.9956
32	7.711		3412373.37	1.47	*V	0.0569	2.2749
33	7.858		1616456.60	0.70	*V	0.0269	1.0776
34	8.022		2763549.98	1.19	*V	0.0461	1.8424
35	8.112		1721970.57	0.74	*V	0.0287	1.1480
36	8.272		3097423.45	1.34	*V	0.0516	2.0649
37	8.443		2435107.24	1.05	*V	0.0406	1.6234
38	8.571		1846522.86	0.80	*V	0.0308	1.2310
39	8.635		1364641.56	0.59	*V	0.0227	0.9098
40	8.802		4812364.93	2.08	*V	0.0802	3.2082
41	8.893		1410957.19	0.61	*V	0.0235	0.9406
42	9.015		3517387.29	1.52	*V	0.0586	2.3449
43	9.138		1097981.86	0.47	*V	0.0183	0.7320
44	9.215		2051436.12	0.89	*V	0.0342	1.3676
45	9.291		1715223.33	0.74	*V	0.0286	1.1435
46	9.377		2230942.47	0.96	*V	0.0372	1.4873
47	9.524		3769163.42	1.63	*V	0.0628	2.5128
48	9.643		1964968.51	0.85	*V	0.0327	1.3100
49	9.764		2588988.08	1.12	*V	0.0431	1.7260
50	9.869		2514688.73	1.09	*V	0.0419	1.6765
51	9.962		1340900.35	0.58	*V	0.0223	0.8939
52	10.099		7205912.23	3.11	*V	0.1201	4.8039
53	10.355		4116278.98	1.78	*V	0.0686	2.7442
54	10.417		2213572.91	0.96	*V	0.0369	1.4757
55	10.496		3751558.06	1.62	*V	0.0625	2.5010
56	10.669		1747089.13	0.76	*V	0.0291	1.1647
57	10.809		3352596.80	1.45	*V	0.0559	2.2351
58	10.864		3480602.42	1.50	*V	0.0580	2.3204
59	11.014		1868722.20	0.81	*V	0.0311	1.2458
60	11.093		4724219.62	2.04	*V	0.0787	3.1495
61	11.221		2886134.96	1.25	*V	0.0481	1.9241
62	11.341		3457884.27	1.49	*V	0.0576	2.3053
63	11.465		2349863.56	1.02	*V	0.0392	1.5666
64	11.670		5507730.19	2.38	*V	0.0918	3.6718
65	11.759		1838160.93	0.79	*V	0.0306	1.2254
66	11.838		2080706.13	0.90	*V	0.0347	1.3871
67	12.007		3243410.66	1.40	*V	0.0541	2.1623
68	12.107		3737457.42	1.62	*V	0.0623	2.4916
69	12.240		3147784.93	1.36	*V	0.0525	2.0985
70	12.352		1676502.39	0.72	*V	0.0279	1.1177
71	12.439		1661530.95	0.72	*V	0.0277	1.1077

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	12.514		1112960.69	0.48	*V	0.0185	0.7420
73	12.626		2855493.34	1.23	*V	0.0476	1.9031
74	12.707		2224918.34	0.96	*V	0.0371	1.4833
75	12.843		2381422.65	1.03	*V	0.0397	1.5876
76	12.928		1707913.92	0.74	*V	0.0285	1.1386
77	13.102		4629933.37	2.00	*V	0.0772	3.0866
78	13.192		1491467.76	0.64	*V	0.0249	0.9943
79	13.275		2472271.01	1.07	*V	0.0412	1.6482
80	13.397		1145095.34	0.49	*V	0.0191	0.7634
81	13.493		2224266.52	0.96	*V	0.0371	1.4828
82	13.678		6243767.51	2.70	*V	0.1041	4.1625
83	13.853		1977422.58	0.85	*V	0.0330	1.3183
84	13.973		1118575.82	0.48	*V	0.0186	0.7451
85	14.067		1908363.54	0.82	*V	0.0318	1.2722
86	14.129		1749276.95	0.76	*V	0.0292	1.1662
87	14.306		2038565.91	0.88	*V	0.0340	1.3591
88	14.372		602408.66	0.26	*V	0.0100	0.4011
89	14.429		1421093.87	0.61	*V	0.0237	0.9474
90	14.505		1381354.71	0.60	*V	0.0230	0.9209
91	14.680		4562463.78	1.97	*V	0.0760	3.0411
92	14.858		907507.07	0.39	*V	0.0151	0.6056
93	14.921		1265252.22	0.55	*V	0.0211	0.8435
94	15.023		1196423.89	0.52	*V	0.0199	0.7971
95	15.132		1335535.94	0.58	*V	0.0223	0.8901
96	15.266		1431098.67	0.62	*V	0.0239	0.9541
97	15.370		984051.37	0.43	*V	0.0164	0.6560
98	15.445		2274047.98	0.98	*V	0.0379	1.5161
99	15.614		1616867.00	0.70	*V	0.0269	1.0773
100	15.739		1089398.91	0.47	*V	0.0182	0.7263
101	15.858		871333.60	0.38	*V	0.0145	0.5801
102	15.927		1357063.57	0.59	*V	0.0226	0.9041
103	16.067		760610.81	0.33	*V	0.0127	0.5071
104	16.131		886344.82	0.38	*V	0.0148	0.5909
105	16.240		1008242.78	0.44	*V	0.0168	0.6721
106	16.361		854397.27	0.37	*V	0.0142	0.5698
107	16.442		1989318.82	0.86	*V	0.0332	1.3262
108	16.718		1582590.06	0.68	*V	0.0264	1.0551
109	16.923		956516.96	0.41	*V	0.0159	0.6371
110	17.030		1239387.20	0.54	*V	0.0207	0.8263
111	17.215		1035956.12	0.45	*V	0.0173	0.6906
112	17.361		695890.70	0.30	*V	0.0116	0.4631
113	17.493		1080647.88	0.47	*V	0.0180	0.7201
114	17.667		633811.01	0.27	*V	0.0106	0.4225
115	17.809		1027824.90	0.44	*V	0.0171	0.6851
116	17.982		450918.93	0.19	*V	0.0075	0.3001
117	18.076		496914.84	0.21	*V	0.0083	0.3313
118	18.184		553231.32	0.24	*V	0.0092	0.3688
119	18.319		709994.14	0.31	*V	0.0118	0.4731
120	18.501		1168932.96	0.51	*V	0.0195	0.7793
121	18.770		336936.67	0.15	*V	0.0056	0.2246
122	18.834		284899.67	0.12	*V	0.0047	0.1891
123	18.936		600472.21	0.26	*V	0.0100	0.4001
124	19.098		344119.94	0.15	*V	0.0057	0.2294
125	19.215		335619.00	0.15	*V	0.0056	0.2237
126	19.308		548996.60	0.24	*V	0.0091	0.3661
127	19.524		379212.96	0.16	*V	0.0063	0.2528
128	19.621		553953.03	0.24	*V	0.0092	0.3693
129	19.849		254716.53	0.11	*V	0.0042	0.1691

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	19.959		284730.31	0.12	*V	0.0047	0.1898
131	20.077		124326.43	0.05	*V	0.0021	0.0829
132	20.243	n-Pentacosane	3433205.18	1.48	*V	2.6857	107.4297
133	20.434		424353.13	0.18	*E	0.0071	0.2829
134	20.666		552728.59	0.24	*V	0.0092	0.3685
135	20.839		92917.32	0.04	*V	0.0015	0.0619
136	20.932		436030.14	0.19	*V	0.0073	0.2907
137	21.204		255230.61	0.11	*V	0.0043	0.1702
138	21.337		218380.07	0.09	*V	0.0036	0.1456
139	21.488		190645.04	0.08	*V	0.0032	0.1271
140	21.593		134080.38	0.06	*V	0.0022	0.0894
141	21.653		164777.48	0.07	*V	0.0027	0.1099
142	21.762		198906.73	0.09	*V	0.0033	0.1326
143	21.909		438456.19	0.19	*V	0.0073	0.2923
144	22.129		520080.88	0.22	*V	0.0087	0.3467
145	22.287		354013.92	0.15	*V	0.0059	0.2360
146	22.385		204579.64	0.09	*V	0.0034	0.1364
147	22.502		357330.15	0.15	*V	0.0060	0.2382
148	22.644		181504.27	0.08	*V	0.0030	0.1210
149	22.738		196991.45	0.09	*V	0.0033	0.1313
150	22.822		113993.61	0.05	*V	0.0019	0.0760
151	22.893		147236.90	0.06	*V	0.0025	0.0982
152	23.009		561061.83	0.24	*V	0.0094	0.3740
153	23.430		187121.32	0.08	*V	0.0031	0.1247
154	23.609		113750.54	0.05	*V	0.0019	0.0758
155	23.700		99805.61	0.04	*V	0.0017	0.0665
156	23.814		152084.92	0.07	*V	0.0025	0.1014
157	23.972		220511.90	0.10	*V	0.0037	0.1470
158	24.161		108773.58	0.05	*V	0.0018	0.0725
159	24.322		117678.92	0.05	*V	0.0020	0.0785
160	24.436		324249.73	0.14	*V	0.0054	0.2162
161	24.826		153092.18	0.07	*V	0.0026	0.1021
162	25.077		149164.17	0.06	*V	0.0025	0.0994
163	25.328		252521.82	0.11	*V	0.0042	0.1683
164	25.769		214115.25	0.09	*V	0.0036	0.1427
165	26.148		101762.47	0.04	*V	0.0017	0.0678
166	26.284		112476.36	0.05	*V	0.0019	0.0750
167	26.524		145302.10	0.06	*V	0.0024	0.0969
168	26.865		49457.78	0.02	*V	0.0008	0.0330
169	27.081		127590.76	0.06	*V	0.0021	0.0851
170	27.397		199596.94	0.09	*V	0.0033	0.1331
171	27.854		206663.78	0.09	*V	0.0034	0.1378
172	28.508		97078.20	0.04	*V	0.0016	0.0647
173	28.778		245114.09	0.11	*V	0.0041	0.1634
174	29.585		33893.45	0.01	*V	0.0006	0.0226
175	29.753		181237.22	0.08	*V	0.0030	0.1208
176	30.406		200154.89	0.09	*V	0.0033	0.1334
177	31.272		53506.81	0.02	*V	0.0009	0.0357
178	31.874		152984.03	0.07	*V	0.0025	0.1020
179	32.546		183199.05	0.08	*V	0.0031	0.1221
180	33.069		32260.39	0.01	*V	0.0005	0.0215

-----  
2.31391e+08 100.00

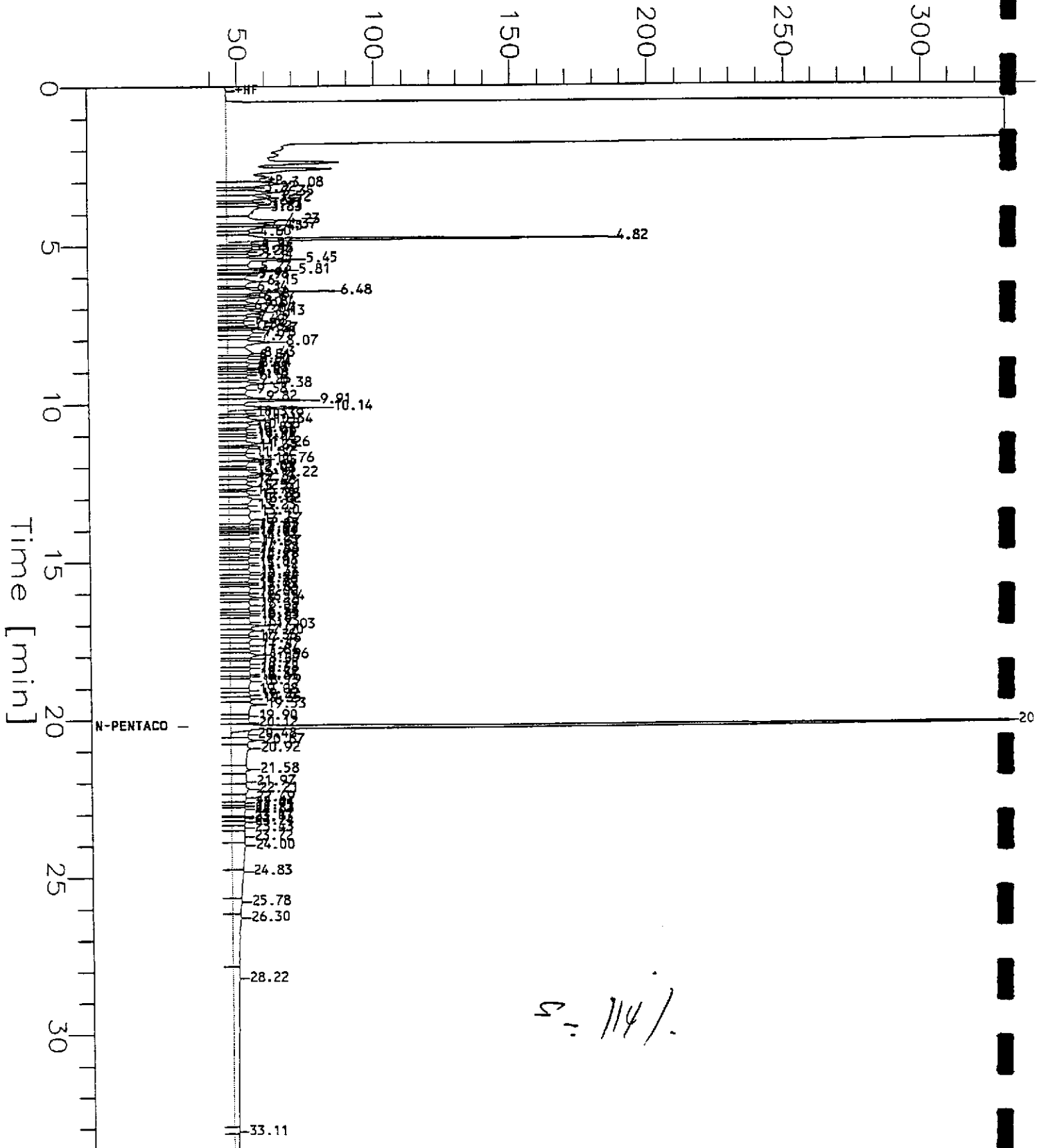
Chromatogram

Sample Name : D9503176-3 (500:1)  
FileName : s:\ghp\_05\0402\331A036.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.67 min  
Plot Offset: 31 mV

Sample #: MW-2  
Date : 4/1/95 09:44  
Time of Injection: 4/1/95 09:10  
Low Point : 30.56 mV  
Plot Scale: 300.0 mV  
Page 1 of 1  
High Point : 330.56 mV

Response [mV]



```

=====
Software Version: 3.3 <4B11>
Sample Name   : D9503I76-3 (500:1)      Time       : 4/1/95 09:44
Sample Number: MW-2                     Study      : EKI
Operator      : TO

Instrument    : GCHP_05                  Channel    : A      A/D mV Range : 1024
AutoSampler  : HP7673A
Rack/Vial    : 1/36

```

```

Interface Serial # :      Data Acquisition Time: 4/1/95 09:10
Delay Time        : 0.00 min.
End Time          : 33.67 min.
Sampling Rate     : 1.2500 pts/sec

```

```

Raw Data File   : S:\GHP_05\0402\331A036.RAW
Result File     : S:\GHP_05\0402\331A036.RST
Instrument File : S:\GHP_05\MET_SEQ\ETPH05A.ins
Process File    : S:\GHP_05\MET_SEQ\ETPH05A
Sample File     : S:\GHP_05\MET_SEQ\ETPH05A
Sequence File   : S:\GHP_05\MET_SEQ\H050331.seq

```

```

Inj. Volume     : 3 ul                    Area Reject    : 0.000000
Sample Amount   : 1.0000                 Dilution Factor : 1.00

```

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
8.250		n-C9 to n-C17 Jet	6111317.38	16.09		0.1019	4.0742
11.250		n-C9 to n-C24 TPH-D	8788269.41	23.13		6.5104	260.4161
16.750		n-C9 to n-C40 Total	14661960.40	38.59		0.2444	9.7746
19.875		n-C16 to n-C36 M/Oil	8431140.89	22.19		0.1405	5.6208
			37992688.08	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331A036.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.078		172405.20	1.17	*B	0.0029	0.1149
2	3.215		49230.52	0.34	*V	0.0008	0.0328
3	3.352		126881.93	0.86	*V	0.0021	0.0846
4	3.523		125318.25	0.85	*V	0.0021	0.0835
5	3.648		49357.41	0.34	*V	0.0008	0.0329
6	3.732		74658.86	0.51	*V	0.0012	0.0498
7	3.828		173794.93	1.18	*V	0.0029	0.1159
8	4.225		191118.06	1.30	*V	0.0032	0.1274
9	4.371		80798.41	0.55	*V	0.0013	0.0539
10	4.448		81115.20	0.55	*V	0.0014	0.0541
11	4.603		59349.46	0.40	*V	0.0010	0.0396
12	4.817		563407.28	3.84	*V	0.0094	0.3756
13	4.972		54713.53	0.37	*E	0.0009	0.0365

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.038		51930.89	0.35	*V	0.0009	0.0346
15	5.132		48885.29	0.33	*V	0.0008	0.0326
16	5.218		37245.64	0.25	*V	0.0006	0.0248
17	5.338		60014.42	0.41	*V	0.0010	0.0400
18	5.453		167106.48	1.14	*V	0.0028	0.1114
19	5.727		66181.00	0.45	*V	0.0011	0.0441
20	5.810		92474.91	0.63	*V	0.0015	0.0616
21	5.908		32213.59	0.22	*V	0.0005	0.0215
22	5.957		57490.04	0.39	*V	0.0010	0.0383
23	6.153		111880.65	0.76	*V	0.0019	0.0746
24	6.339		28999.51	0.20	*V	0.0005	0.0193
25	6.475		183936.32	1.25	*V	0.0031	0.1226
26	6.584		36064.94	0.25	*V	0.0006	0.0240
27	6.668		57422.83	0.39	*V	0.0010	0.0383
28	6.837		68589.84	0.47	*V	0.0011	0.0457
29	6.936		29814.70	0.20	*V	0.0005	0.0199
30	7.035		54792.72	0.37	*V	0.0009	0.0365
31	7.125		92280.68	0.63	*V	0.0015	0.0615
32	7.285		56139.34	0.38	*V	0.0009	0.0374
33	7.404		29105.75	0.20	*V	0.0005	0.0194
34	7.543		45088.64	0.31	*V	0.0008	0.0301
35	7.616		31577.58	0.22	*V	0.0005	0.0211
36	7.672		38463.96	0.26	*V	0.0006	0.0256
37	7.784		86504.60	0.59	*V	0.0014	0.0577
38	7.913		57673.56	0.39	*V	0.0010	0.0384
39	8.072		148623.43	1.01	*V	0.0025	0.0991
40	8.427		116474.89	0.79	*V	0.0019	0.0776
41	8.505		37158.41	0.25	*V	0.0006	0.0248
42	8.604		58099.13	0.40	*V	0.0010	0.0387
43	8.742		67993.50	0.46	*V	0.0011	0.0453
44	8.876		28632.09	0.19	*V	0.0005	0.0191
45	8.933		28561.44	0.19	*V	0.0005	0.0190
46	9.022		39533.96	0.27	*V	0.0007	0.0264
47	9.101		45289.89	0.31	*V	0.0008	0.0302
48	9.261		60709.60	0.41	*V	0.0010	0.0405
49	9.380		109469.52	0.75	*V	0.0018	0.0730
50	9.579		80210.23	0.55	*V	0.0013	0.0535
51	9.815		71221.60	0.48	*V	0.0012	0.0475
52	9.913		148445.53	1.01	*V	0.0025	0.0990
53	10.144		161084.52	1.10	*V	0.0027	0.1074
54	10.308		44139.29	0.30	*E	0.0007	0.0294
55	10.391		51889.83	0.35	*V	0.0009	0.0346
56	10.540		88151.04	0.60	*V	0.0015	0.0588
57	10.683		77773.33	0.53	*V	0.0013	0.0518
58	10.813		26033.87	0.18	*V	0.0004	0.0174
59	10.910		42754.79	0.29	*V	0.0007	0.0285
60	10.990		38406.70	0.26	*V	0.0006	0.0256
61	11.076		53426.47	0.36	*V	0.0009	0.0356
62	11.256		77908.90	0.53	*V	0.0013	0.0519
63	11.354		30368.96	0.21	*V	0.0005	0.0202
64	11.415		66373.58	0.45	*V	0.0011	0.0442
65	11.571		30363.98	0.21	*V	0.0005	0.0202
66	11.758		93602.43	0.64	*V	0.0016	0.0624
67	11.847		67664.72	0.46	*V	0.0011	0.0452
68	12.014		26084.37	0.18	*V	0.0004	0.0174
69	12.084		21534.01	0.15	*V	0.0004	0.0144
70	12.218		111194.91	0.76	*V	0.0019	0.0741
71	12.336		38968.73	0.27	*V	0.0006	0.0264

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ $\mu$ g/L]
72	12.459		64704.81	0.44	*V	0.0011	0.0431
73	12.614		76020.78	0.52	*V	0.0013	0.0507
74	12.744		26476.15	0.18	*V	0.0004	0.0177
75	12.878		69112.34	0.47	*V	0.0012	0.0461
76	13.021		107737.37	0.73	*V	0.0018	0.0718
77	13.228		56438.92	0.38	*V	0.0009	0.0376
78	13.400		98652.46	0.67	*V	0.0016	0.0658
79	13.666		131900.85	0.90	*V	0.0022	0.0879
80	13.829		42539.01	0.29	*V	0.0007	0.0284
81	13.923		30186.20	0.21	*V	0.0005	0.0201
82	13.974		30156.74	0.21	*V	0.0005	0.0201
83	14.038		23548.00	0.16	*V	0.0004	0.0157
84	14.094		29659.11	0.20	*V	0.0005	0.0198
85	14.240		66232.53	0.45	*V	0.0011	0.0442
86	14.368		118959.86	0.81	*V	0.0020	0.0793
87	14.581		43378.05	0.30	*V	0.0007	0.0289
88	14.661		42169.55	0.29	*V	0.0007	0.0281
89	14.780		53737.26	0.37	*V	0.0009	0.0358
90	14.870		45877.56	0.31	*V	0.0008	0.0306
91	15.042		57780.81	0.39	*V	0.0010	0.0385
92	15.118		69775.51	0.48	*V	0.0012	0.0465
93	15.335		71663.88	0.49	*V	0.0012	0.0478
94	15.441		53622.23	0.37	*V	0.0009	0.0357
95	15.557		57305.50	0.39	*V	0.0010	0.0382
96	15.693		28324.10	0.19	*V	0.0005	0.0189
97	15.750		29215.93	0.20	*V	0.0005	0.0195
98	15.850		83221.53	0.57	*V	0.0014	0.0555
99	16.004		40690.55	0.28	*V	0.0007	0.0271
100	16.139		58827.60	0.40	*V	0.0010	0.0392
101	16.215		40462.52	0.28	*V	0.0007	0.0270
102	16.385		93726.26	0.64	*V	0.0016	0.0625
103	16.576		52675.30	0.36	*V	0.0009	0.0351
104	16.650		36220.53	0.25	*V	0.0006	0.0241
105	16.726		40963.85	0.28	*V	0.0007	0.0273
106	16.929		82872.60	0.56	*V	0.0014	0.0552
107	17.028		94110.90	0.64	*V	0.0016	0.0627
108	17.198		81598.04	0.56	*V	0.0014	0.0544
109	17.362		34110.25	0.23	*V	0.0006	0.0227
110	17.458		72377.68	0.49	*V	0.0012	0.0483
111	17.671		87967.52	0.60	*V	0.0015	0.0586
112	17.844		52915.83	0.36	*V	0.0009	0.0353
113	17.961		90080.23	0.61	*V	0.0015	0.0601
114	18.090		36463.61	0.25	*V	0.0006	0.0243
115	18.247		93521.19	0.64	*V	0.0016	0.0623
116	18.384		46561.39	0.32	*V	0.0008	0.0310
117	18.574		70291.63	0.48	*V	0.0012	0.0469
118	18.650		34944.06	0.24	*V	0.0006	0.0233
119	18.789		133804.91	0.91	*V	0.0022	0.0892
120	19.077		56128.63	0.38	*V	0.0009	0.0374
121	19.223		57745.74	0.39	*V	0.0010	0.0385
122	19.349		78636.98	0.54	*V	0.0013	0.0524
123	19.529		171608.25	1.17	*V	0.0029	0.1144
124	19.897		58976.69	0.40	*V	0.0010	0.0393
125	20.121		64836.04	0.44	*V	0.0011	0.0432
126	20.243	n-Pentacosane	2923663.85	19.91	*V	2.2871	91.4855
127	20.483		71668.60	0.49	*E	0.0012	0.0478
128	20.668		90303.54	0.61	*V	0.0015	0.0602
129	20.924		235139.64	1.60	*V	0.0039	0.1568



Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	21.584		98886.36	0.67	*V	0.0016	0.0659
131	21.974		102427.94	0.70	*V	0.0017	0.068
132	22.205		116294.94	0.79	*V	0.0019	0.077
133	22.488		77035.81	0.52	*V	0.0013	0.0514
134	22.643		32175.84	0.22	*V	0.0005	0.021
135	22.746		24290.75	0.17	*V	0.0004	0.016
136	22.832		75519.32	0.51	*V	0.0013	0.0503
137	23.066		11565.80	0.08	*V	0.0002	0.0077
138	23.127		34768.07	0.24	*V	0.0006	0.023
139	23.241		47131.97	0.32	*V	0.0008	0.031
140	23.428		46402.23	0.32	*V	0.0008	0.0309
141	23.717		112314.26	0.76	*V	0.0019	0.074
142	24.002		235412.56	1.60	*V	0.0039	0.156
143	24.827		208427.17	1.42	*V	0.0035	0.1390
144	25.783		99020.78	0.67	*V	0.0017	0.0660
145	26.296		278206.89	1.89	*V	0.0046	0.185
146	28.218		657613.70	4.48	*V	0.0110	0.438
147	33.105		24736.48	0.17	*V	0.0004	0.0165

-----  
14686696.87 100.00

Report Stored in ASCII File: S:\GHP\_05\0402\331A036.TX1

# Chromatogram

Sample Name : D9503176-2 (500:1)  
FileName : s:\ghp\_05\0402\331A035.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

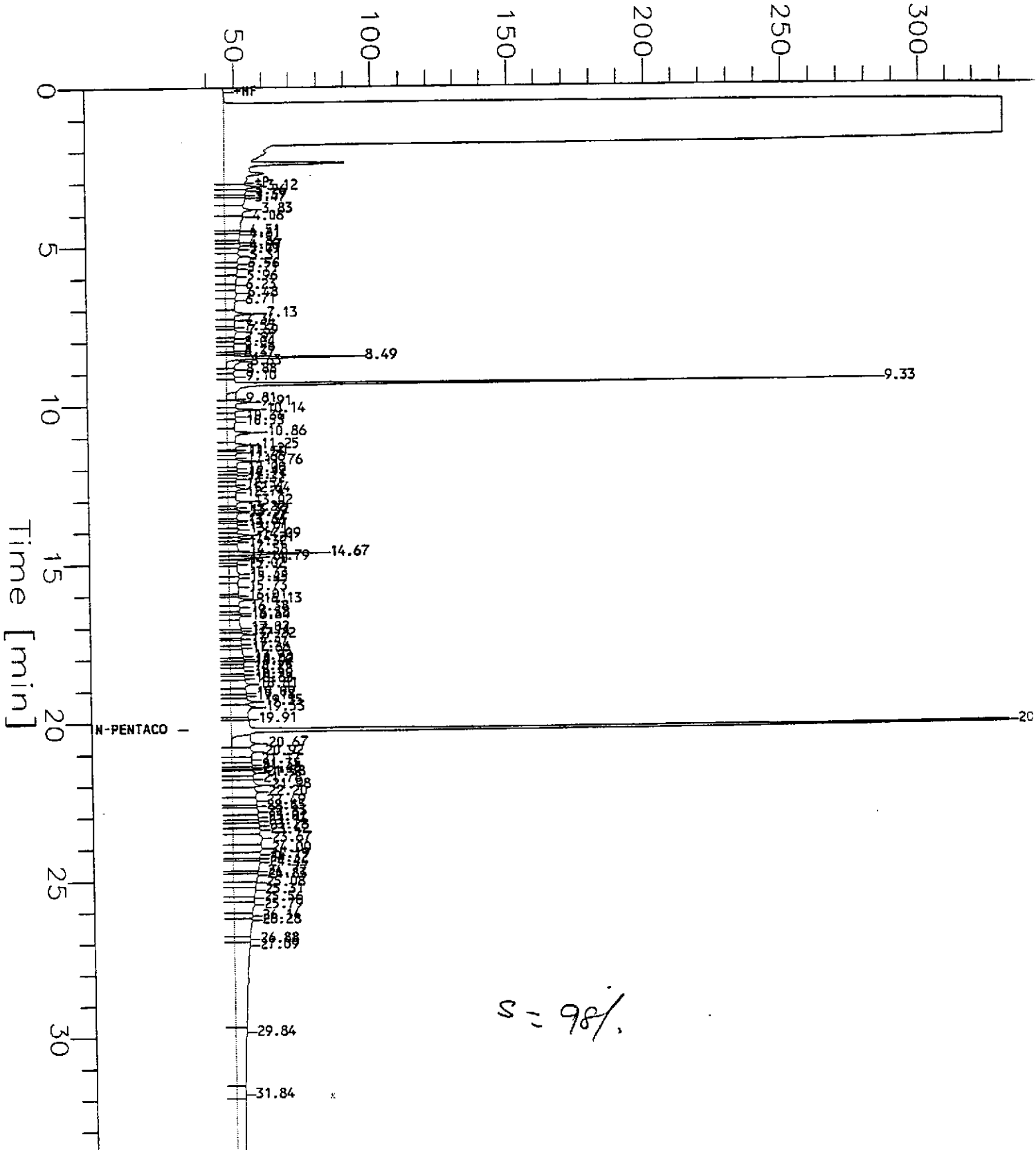
End Time : 33.67 min  
Plot Offset: 31 mV

Sample #: MW-3  
Date : 4/1/95 09:03  
Time of Injection: 4/1/95 08:29  
Low Point : 30.94 mV  
Plot Scale: 300.0 mV

Page 1 of 1

High Point : 330.94 mV

## Response [mV]



```

=====
Software Version: 3.3 <4B11>
Sample Name   : D9503I76-2 (500:1)      Time       : 4/1/95  09:03
Sample Number: MW-3                      Study      : EKI
Operator      : TO

Instrument    : GCHP_05                   Channel    : A       A/D mV Range : 1024
AutoSampler  : HP7673A
Rack/Vial    : 1/35

```

```

Interface Serial # :      Data Acquisition Time: 4/1/95  08:29
Delay Time        : 0.00   min.
End Time          : 33.67  min.
Sampling Rate     : 1.2500 pts/sec

```

```

Raw Data File   : S:\GHP_05\0402\331A035.RAW
Result File     : S:\GHP_05\0402\331A035.RST
Instrument File : S:\GHP_05\MET_SEQ\ETPH05A.ins
Process File    : S:\GHP_05\MET_SEQ\ETPH05A
Sample File     : S:\GHP_05\MET_SEQ\ETPH05A
Sequence File   : S:\GHP_05\MET_SEQ\H050331.seq

```

```

Inj. Volume     : 3 ul                    Area Reject    : 0.000000
Sample Amount   : 1.0000                  Dilution Factor : 1.00

```

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
8.250		n-C9 to n-C17 Jet	3412857.48	11.73		0.0569	2.2752
11.250		n-C9 to n-C24 TPH-D	5006646.05	17.20		3.7090	148.3581
16.750		n-C9 to n-C40 Total	12123614.88	41.66		0.2021	8.082
19.875		n-C16 to n-C36 M/Oil	8559750.88	29.41		0.1427	5.706
			29102869.30	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331A035.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.122		97053.84	0.80	*B	0.0016	0.0647
2	3.255		72852.74	0.60	*V	0.0012	0.0486
3	3.394		36020.31	0.30	*V	0.0006	0.024
4	3.472		108625.89	0.89	*V	0.0018	0.072
5	3.833		139683.91	1.14	*V	0.0023	0.0931
6	4.062		166035.59	1.36	*V	0.0028	0.110
7	4.513		30621.85	0.25	*V	0.0005	0.020
8	4.611		71382.80	0.58	*V	0.0012	0.0476
9	4.862		29621.36	0.24	*V	0.0005	0.0197
10	4.974		47129.55	0.39	*V	0.0008	0.031
11	5.094		46180.07	0.38	*V	0.0008	0.030
12	5.311		84578.47	0.69	*V	0.0014	0.0564
13	5.564		43291.45	0.35	*V	0.0007	0.028

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.712		64264.06	0.53	*V	0.0011	0.0428
15	5.963		65227.95	0.53	*V	0.0011	0.0435
16	6.229		40516.85	0.33	*V	0.0007	0.0270
17	6.478		59742.77	0.49	*V	0.0010	0.0398
18	6.712		68302.64	0.56	*V	0.0011	0.0455
19	7.130		84774.62	0.69	*V	0.0014	0.0565
20	7.336		39449.15	0.32	*V	0.0007	0.0263
21	7.547		19539.40	0.16	*V	0.0003	0.0130
22	7.685		51499.32	0.42	*V	0.0009	0.0343
23	7.911		21583.36	0.18	*V	0.0004	0.0144
24	8.041		26624.34	0.22	*V	0.0004	0.0177
25	8.290		28611.68	0.23	*V	0.0005	0.0191
26	8.372		13963.16	0.11	*V	0.0002	0.0093
27	8.487		164595.23	1.35	*V	0.0027	0.1097
28	8.625		52785.87	0.43	*E	0.0009	0.0352
29	8.880		27722.53	0.23	*V	0.0005	0.0185
30	9.103		28911.39	0.24	*V	0.0005	0.0193
31	9.334		725539.09	5.94	*V	0.0121	0.4837
32	9.805		46538.05	0.38	*E	0.0008	0.0310
33	9.909		61146.27	0.50	*V	0.0010	0.0408
34	10.141		54310.14	0.44	*V	0.0009	0.0362
35	10.364		36273.46	0.30	*V	0.0006	0.0242
36	10.527		47645.67	0.39	*V	0.0008	0.0318
37	10.864		102130.40	0.84	*V	0.0017	0.0681
38	11.252		59300.62	0.49	*V	0.0010	0.0395
39	11.415		10075.46	0.08	*V	0.0002	0.0067
40	11.504		26900.07	0.22	*V	0.0004	0.0179
41	11.656		22267.57	0.18	*V	0.0004	0.0148
42	11.756		66138.79	0.54	*V	0.0011	0.0441
43	11.999		24046.53	0.20	*V	0.0004	0.0160
44	12.120		24862.99	0.20	*V	0.0004	0.0166
45	12.213		21781.80	0.18	*V	0.0004	0.0145
46	12.324		19396.69	0.16	*V	0.0003	0.0129
47	12.508		24816.06	0.20	*V	0.0004	0.0165
48	12.636		41413.53	0.34	*V	0.0007	0.0276
49	12.741		29365.78	0.24	*V	0.0005	0.0196
50	13.023		57517.84	0.47	*V	0.0010	0.0383
51	13.219		19693.07	0.16	*V	0.0003	0.0131
52	13.324		20829.26	0.17	*V	0.0003	0.0139
53	13.386		39676.16	0.33	*V	0.0007	0.0265
54	13.610		16224.70	0.13	*V	0.0003	0.0108
55	13.663		12916.76	0.11	*V	0.0002	0.0086
56	13.772		31369.07	0.26	*V	0.0005	0.0209
57	13.914		30297.79	0.25	*V	0.0005	0.0202
58	14.088		40641.96	0.33	*V	0.0007	0.0271
59	14.206		32150.71	0.26	*V	0.0005	0.0214
60	14.315		22065.18	0.18	*V	0.0004	0.0147
61	14.581		45325.98	0.37	*V	0.0008	0.0302
62	14.672		114395.34	0.94	*V	0.0019	0.0763
63	14.794		48240.10	0.40	*V	0.0008	0.0322
64	14.895		23443.94	0.19	*V	0.0004	0.0156
65	15.018		16424.67	0.13	*V	0.0003	0.0109
66	15.329		60245.51	0.49	*V	0.0010	0.0402
67	15.445		43387.61	0.36	*V	0.0007	0.0289
68	15.731		67670.33	0.55	*V	0.0011	0.0451
69	16.006		18097.00	0.15	*V	0.0003	0.0121
70	16.132		74748.64	0.61	*V	0.0012	0.0498
71	16.383		37564.47	0.31	*V	0.0006	0.0250

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	16.575		24993.58	0.20	*V	0.0004	0.0167
73	16.640		36321.28	0.30	*V	0.0006	0.0242
74	17.019		65666.41	0.54	*V	0.0011	0.0438
75	17.109		27476.64	0.23	*V	0.0005	0.0183
76	17.220		48932.22	0.40	*V	0.0008	0.0326
77	17.370		16110.56	0.13	*V	0.0003	0.0107
78	17.543		42249.38	0.35	*V	0.0007	0.0282
79	17.664		30354.42	0.25	*V	0.0005	0.0202
80	17.916		73207.41	0.60	*V	0.0012	0.0488
81	18.020		28369.88	0.23	*V	0.0005	0.0189
82	18.087		31897.69	0.26	*V	0.0005	0.0213
83	18.251		34594.37	0.28	*V	0.0006	0.0231
84	18.381		55879.05	0.46	*V	0.0009	0.0373
85	18.501		20255.88	0.17	*V	0.0003	0.0135
86	18.630		41734.41	0.34	*V	0.0007	0.0278
87	18.805		93698.20	0.77	*V	0.0016	0.0629
88	19.090		57787.44	0.47	*V	0.0010	0.0389
89	19.182		41242.26	0.34	*V	0.0007	0.0275
90	19.349		87807.73	0.72	*V	0.0015	0.0585
91	19.529		156118.40	1.28	*V	0.0026	0.1041
92	19.906		40523.61	0.33	*V	0.0007	0.0270
93	20.241	n-Pentacosane	2515113.42	20.61	*V	1.9675	78.7014
94	20.665		156953.61	1.29	*E	0.0026	0.1046
95	20.923		135001.68	1.11	*V	0.0023	0.0900
96	21.171		74873.63	0.61	*V	0.0012	0.0499
97	21.345		59148.47	0.48	*V	0.0010	0.0394
98	21.426		30550.56	0.25	*V	0.0005	0.0204
99	21.482		24485.24	0.20	*V	0.0004	0.0163
100	21.583		84309.89	0.69	*V	0.0014	0.0562
101	21.780		56010.92	0.46	*V	0.0009	0.0371
102	21.979		118489.01	0.97	*V	0.0020	0.0796
103	22.200		173122.96	1.42	*V	0.0029	0.1154
104	22.489		127111.23	1.04	*V	0.0021	0.0847
105	22.652		42532.00	0.35	*V	0.0007	0.0284
106	22.833		132592.71	1.09	*V	0.0022	0.0884
107	23.012		89478.53	0.73	*V	0.0015	0.0597
108	23.139		52996.56	0.43	*V	0.0009	0.0351
109	23.280		101085.02	0.83	*V	0.0017	0.0671
110	23.415		110235.23	0.90	*V	0.0018	0.0735
111	23.672		207003.14	1.70	*V	0.0035	0.1380
112	24.002		147961.79	1.21	*V	0.0025	0.0981
113	24.190		109738.87	0.90	*V	0.0018	0.0732
114	24.319		38924.48	0.32	*V	0.0006	0.0259
115	24.439		188452.88	1.54	*V	0.0031	0.1251
116	24.720		42487.61	0.35	*V	0.0007	0.0281
117	24.825		138959.52	1.14	*V	0.0023	0.0926
118	25.077		84702.44	0.69	*V	0.0014	0.0561
119	25.313		136788.79	1.12	*V	0.0023	0.0911
120	25.564		77195.36	0.63	*V	0.0013	0.0515
121	25.789		152381.31	1.25	*V	0.0025	0.1016
122	26.142		74608.10	0.61	*V	0.0012	0.0491
123	26.281		212158.90	1.74	*V	0.0035	0.1411
124	26.882		60009.70	0.49	*V	0.0010	0.0400
125	27.090		761148.36	6.24	*V	0.0127	0.5071
126	29.840		403714.91	3.31	*V	0.0067	0.2691
127	31.842		82456.84	0.68	*V	0.0014	0.0550

12206071.72 100.00

# Chromatogram

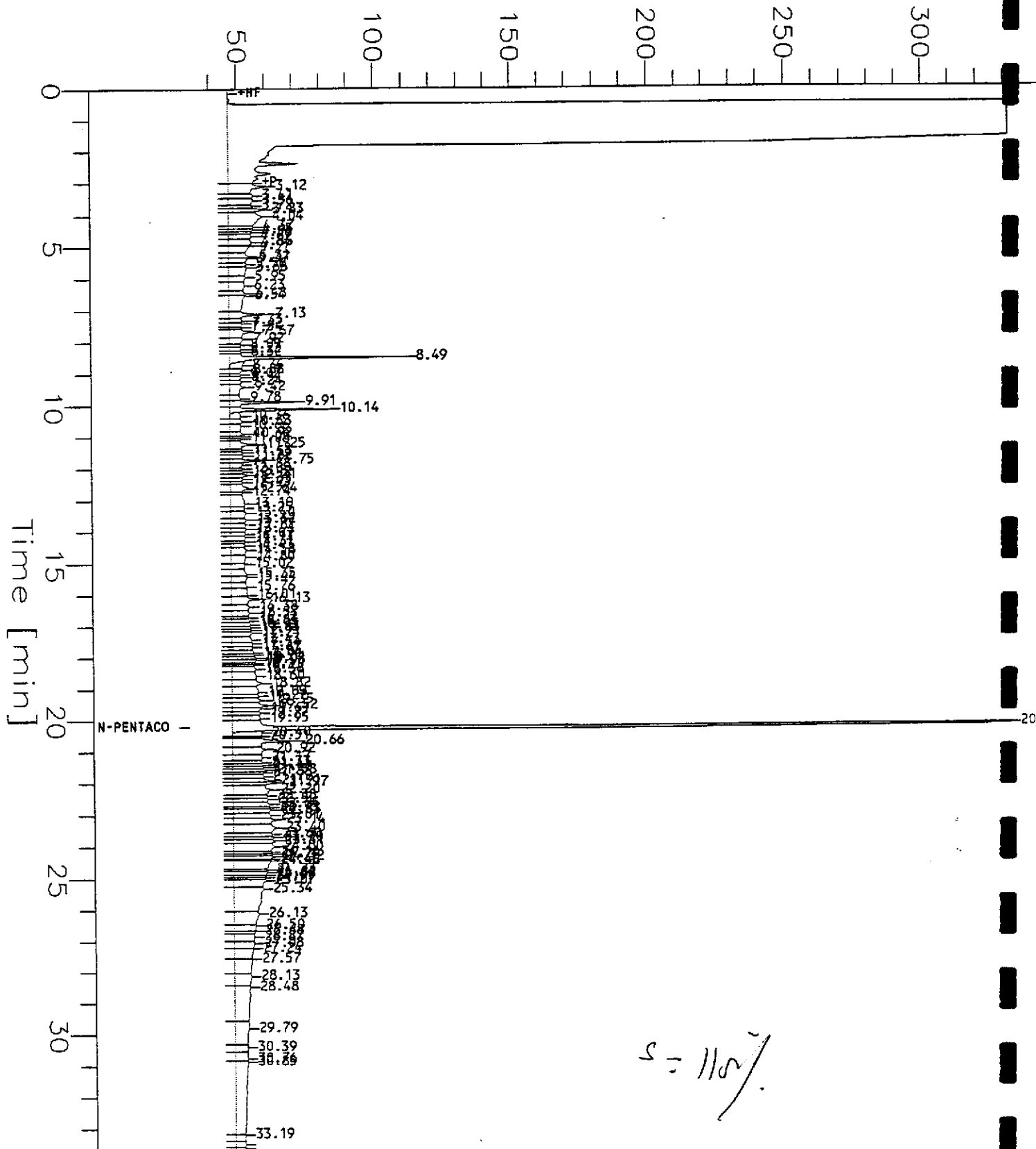
Sample Name : D9503176-1 (500:1)  
FileName : s:\ghp\_05\0402\331A032.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 32 mV

Sample #: MW-4  
Date : 4/1/95 07:00  
Time of Injection: 4/1/95 06:26  
Low Point : 31.53 mV  
Plot Scale: 300.0 mV  
High Point : 331.53 mV

Page 1 of 1

## Response [mV]



=====  
Software Version: 3.3 <4B11>

Sample Name : D9503I76-1 (500:1) Time : 4/1/95 07:00  
Sample Number: MW-4 Study : EKI  
Operator : TO

Instrument : GCHP\_05 Channel : A A/D mV Range : 1024  
AutoSampler : HP7673A  
Rack/Vial : 1/32

Interface Serial # : Data Acquisition Time: 4/1/95 06:26  
Delay Time : 0.00 min.  
End Time : 33.67 min.  
Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0402\331A032.RAW  
Result File : S:\GHP\_05\0402\331A032.RST  
Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins  
Process File : S:\GHP\_05\MET\_SEQ\ETPH05A  
Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A  
Sequence File : S:\GHP\_05\MET\_SEQ\H050331.seq

Inj. Volume : 3 ul Area Reject : 0.000000  
Sample Amount : 1.0000 Dilution Factor : 1.00

=====  
Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	3890939.71	10.68		0.0648	2.5940
	11.250	n-C9 to n-C24 TPH-D	6254925.98	17.17		4.6337	185.3475
	16.750	n-C9 to n-C40 Total	15376569.56	42.22		0.2563	10.2510
	19.875	n-C16 to n-C36 M/Oil	10900013.28	29.93		0.1817	7.2667
			36422448.53	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331A032.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.121		182798.22	1.13	*B	0.0030	0.1219
2	3.408		75263.62	0.47	*V	0.0013	0.0502
3	3.555		107861.97	0.67	*V	0.0018	0.0719
4	3.723		47526.68	0.29	*V	0.0008	0.0317
5	3.830		75602.22	0.47	*V	0.0013	0.0504
6	4.041		271793.91	1.69	*V	0.0045	0.1812
7	4.367		49057.20	0.30	*V	0.0008	0.0327
8	4.451		40844.87	0.25	*V	0.0007	0.0272
9	4.555		38827.30	0.24	*V	0.0006	0.0259
10	4.668		70046.26	0.43	*V	0.0012	0.0467
11	4.858		101623.97	0.63	*V	0.0017	0.0677
12	4.974		92607.03	0.57	*V	0.0015	0.0617
13	5.307		69376.08	0.43	*V	0.0012	0.0463

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.372		56626.64	0.35	*V	0.0009	0.0378
15	5.555		44442.05	0.28	*V	0.0007	0.0296
16	5.662		101894.21	0.63	*V	0.0017	0.0679
17	5.953		68089.78	0.42	*V	0.0011	0.0454
18	6.232		86606.62	0.54	*V	0.0014	0.0577
19	6.475		53698.88	0.33	*V	0.0009	0.0358
20	6.544		144085.44	0.89	*V	0.0024	0.0961
21	7.128		90272.80	0.56	*V	0.0015	0.0602
22	7.331		35888.18	0.22	*V	0.0006	0.0239
23	7.417		35764.48	0.22	*V	0.0006	0.0238
24	7.542		17614.80	0.11	*V	0.0003	0.0117
25	7.673		91170.63	0.57	*V	0.0015	0.0608
26	7.915		49750.47	0.31	*V	0.0008	0.0332
27	8.089		22421.63	0.14	*V	0.0004	0.0149
28	8.220		32004.82	0.20	*V	0.0005	0.0213
29	8.317		19909.50	0.12	*V	0.0003	0.0131
30	8.487		252295.58	1.56	*V	0.0042	0.1681
31	8.736		54562.66	0.34	*E	0.0009	0.0364
32	8.880		37424.95	0.23	*V	0.0006	0.0249
33	9.019		17952.51	0.11	*V	0.0003	0.0121
34	9.110		28740.87	0.18	*V	0.0005	0.0192
35	9.238		36138.15	0.22	*V	0.0006	0.0241
36	9.422		78698.71	0.49	*V	0.0013	0.0521
37	9.775		37838.92	0.23	*V	0.0006	0.0251
38	9.910		111064.83	0.69	*V	0.0019	0.0740
39	10.139		142109.71	0.88	*V	0.0024	0.0947
40	10.359		45386.68	0.28	*E	0.0008	0.0301
41	10.532		39457.44	0.24	*V	0.0007	0.0263
42	10.662		55178.77	0.34	*V	0.0009	0.0368
43	10.919		37355.57	0.23	*V	0.0006	0.0241
44	10.999		15988.12	0.10	*V	0.0003	0.0101
45	11.083		18571.42	0.12	*V	0.0003	0.0124
46	11.250		78533.68	0.49	*V	0.0013	0.0521
47	11.416		20612.33	0.13	*V	0.0003	0.0131
48	11.505		28099.00	0.17	*V	0.0005	0.0187
49	11.615		35367.34	0.22	*V	0.0006	0.0236
50	11.753		55123.16	0.34	*V	0.0009	0.0361
51	11.878		36717.15	0.23	*V	0.0006	0.0241
52	12.004		20114.95	0.12	*V	0.0003	0.0134
53	12.122		32372.37	0.20	*V	0.0005	0.0216
54	12.214		37082.78	0.23	*V	0.0006	0.0241
55	12.333		27898.52	0.17	*V	0.0005	0.0186
56	12.431		23729.23	0.15	*V	0.0004	0.0158
57	12.636		74140.06	0.46	*V	0.0012	0.0491
58	12.744		23876.27	0.15	*V	0.0004	0.0151
59	13.097		101987.82	0.63	*V	0.0017	0.0680
60	13.251		46728.20	0.29	*V	0.0008	0.0311
61	13.399		66321.67	0.41	*V	0.0011	0.0441
62	13.615		50736.29	0.31	*V	0.0008	0.0338
63	13.773		50545.12	0.31	*V	0.0008	0.0337
64	13.914		42534.04	0.26	*V	0.0007	0.0281
65	14.067		36328.81	0.23	*V	0.0006	0.0241
66	14.166		44824.39	0.28	*V	0.0007	0.0299
67	14.313		29126.02	0.18	*V	0.0005	0.0191
68	14.434		35971.59	0.22	*V	0.0006	0.0241
69	14.575		75281.22	0.47	*V	0.0013	0.0502
70	14.797		81267.73	0.50	*V	0.0014	0.0542
71	15.022		50830.67	0.32	*V	0.0008	0.0331



Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	15.347		71243.79	0.44	*V	0.0012	0.0475
73	15.436		66455.33	0.41	*V	0.0011	0.0443
74	15.756		60202.53	0.37	*V	0.0010	0.0401
75	16.011		92281.95	0.57	*V	0.0015	0.0615
76	16.132		103972.99	0.64	*V	0.0017	0.0693
77	16.375		68600.55	0.43	*V	0.0011	0.0457
78	16.571		70307.58	0.44	*V	0.0012	0.0469
79	16.717		29641.51	0.18	*V	0.0005	0.0198
80	16.830		40304.00	0.25	*V	0.0007	0.0269
81	16.933		47525.66	0.29	*V	0.0008	0.0317
82	17.031		38182.37	0.24	*V	0.0006	0.0255
83	17.111		39594.79	0.25	*V	0.0007	0.0264
84	17.205		61141.55	0.38	*V	0.0010	0.0408
85	17.431		78411.51	0.49	*V	0.0013	0.0523
86	17.536		59224.48	0.37	*V	0.0010	0.0395
87	17.666		53566.37	0.33	*V	0.0009	0.0357
88	17.842		55403.35	0.34	*V	0.0009	0.0369
89	17.911		38653.60	0.24	*V	0.0006	0.0258
90	18.011		48797.03	0.30	*V	0.0008	0.0325
91	18.078		54210.67	0.34	*V	0.0009	0.0361
92	18.173		26040.63	0.16	*V	0.0004	0.0174
93	18.233		32526.17	0.20	*V	0.0005	0.0217
94	18.377		86098.92	0.53	*V	0.0014	0.0574
95	18.596		122790.30	0.76	*V	0.0020	0.0819
96	18.819		130239.86	0.81	*V	0.0022	0.0868
97	19.093		132594.88	0.82	*V	0.0022	0.0884
98	19.223		60532.33	0.38	*V	0.0010	0.0404
99	19.350		97995.67	0.61	*V	0.0016	0.0653
100	19.523		105550.19	0.65	*V	0.0018	0.0704
101	19.612		79999.16	0.50	*V	0.0013	0.0533
102	19.769		63919.21	0.40	*V	0.0011	0.0426
103	19.947		103880.92	0.64	*V	0.0017	0.0693
104	20.236	n-Pentacosane	2946877.59	18.28	*V	2.3053	92.2119
105	20.396		88268.25	0.55	*E	0.0015	0.0588
106	20.506		41325.92	0.26	*V	0.0007	0.0276
107	20.659		217482.88	1.35	*V	0.0036	0.1450
108	20.918		165817.89	1.03	*V	0.0028	0.1105
109	21.171		109737.34	0.68	*V	0.0018	0.0732
110	21.334		67424.06	0.42	*V	0.0011	0.0449
111	21.411		51874.52	0.32	*V	0.0009	0.0346
112	21.480		53173.70	0.33	*V	0.0009	0.0354
113	21.578		75056.89	0.47	*V	0.0013	0.0500
114	21.656		44462.33	0.28	*V	0.0007	0.0296
115	21.786		88563.36	0.55	*V	0.0015	0.0590
116	21.909		81644.46	0.51	*V	0.0014	0.0544
117	21.972		89502.89	0.56	*V	0.0015	0.0597
118	22.195		231593.08	1.44	*V	0.0039	0.1544
119	22.383		79396.06	0.49	*V	0.0013	0.0529
120	22.497		80703.27	0.50	*V	0.0013	0.0538
121	22.651		114678.72	0.71	*V	0.0019	0.0765
122	22.753		64196.85	0.40	*V	0.0011	0.0428
123	22.827		107591.86	0.67	*V	0.0018	0.0717
124	23.006		118780.42	0.74	*V	0.0020	0.0792
125	23.141		160397.37	0.99	*V	0.0027	0.1069
126	23.395		255781.30	1.59	*V	0.0043	0.1705
127	23.601		90732.43	0.56	*V	0.0015	0.0605
128	23.696		81445.00	0.51	*V	0.0014	0.0543
129	23.813		117431.64	0.73	*V	0.0020	0.0783

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	23.996		205191.03	1.27	*V	0.0034	0.1368
131	24.162		65851.20	0.41	*V	0.0011	0.0439
132	24.235		55863.74	0.35	*V	0.0009	0.0377
133	24.317		91381.19	0.57	*V	0.0015	0.0609
134	24.399		43224.50	0.27	*V	0.0007	0.0288
135	24.456		206312.17	1.28	*V	0.0034	0.1377
136	24.733		48411.50	0.30	*V	0.0008	0.0323
137	24.821		86617.46	0.54	*V	0.0014	0.0577
138	24.904		47261.29	0.29	*V	0.0008	0.0319
139	24.972		55637.63	0.35	*V	0.0009	0.0377
140	25.070		149904.50	0.93	*V	0.0025	0.0999
141	25.342		460060.60	2.85	*V	0.0077	0.3067
142	26.131		216088.18	1.34	*V	0.0036	0.1444
143	26.504		86992.41	0.54	*V	0.0014	0.0580
144	26.678		47867.83	0.30	*V	0.0008	0.0319
145	26.869		98850.39	0.61	*V	0.0016	0.0657
146	27.077		97027.57	0.60	*V	0.0016	0.0644
147	27.241		131512.51	0.82	*V	0.0022	0.0877
148	27.573		176339.71	1.09	*V	0.0029	0.1176
149	28.131		140758.50	0.87	*V	0.0023	0.0931
150	28.477		357302.99	2.22	*V	0.0060	0.2382
151	29.786		213550.15	1.32	*V	0.0036	0.1424
152	30.392		62346.99	0.39	*V	0.0010	0.0411
153	30.759		79885.15	0.50	*V	0.0013	0.0531
154	30.852		563606.10	3.50	*V	0.0094	0.3757
155	33.187		45065.43	0.28	*V	0.0008	0.0300
156	33.485		42657.87	0.26	*V	0.0007	0.0288
157	33.613		17127.37	0.11	*V	0.0003	0.0114

---

16124911.48 100.00

Report Stored in ASCII File: S:\GHP\_05\0402\331A032.TX1

Chromatogram

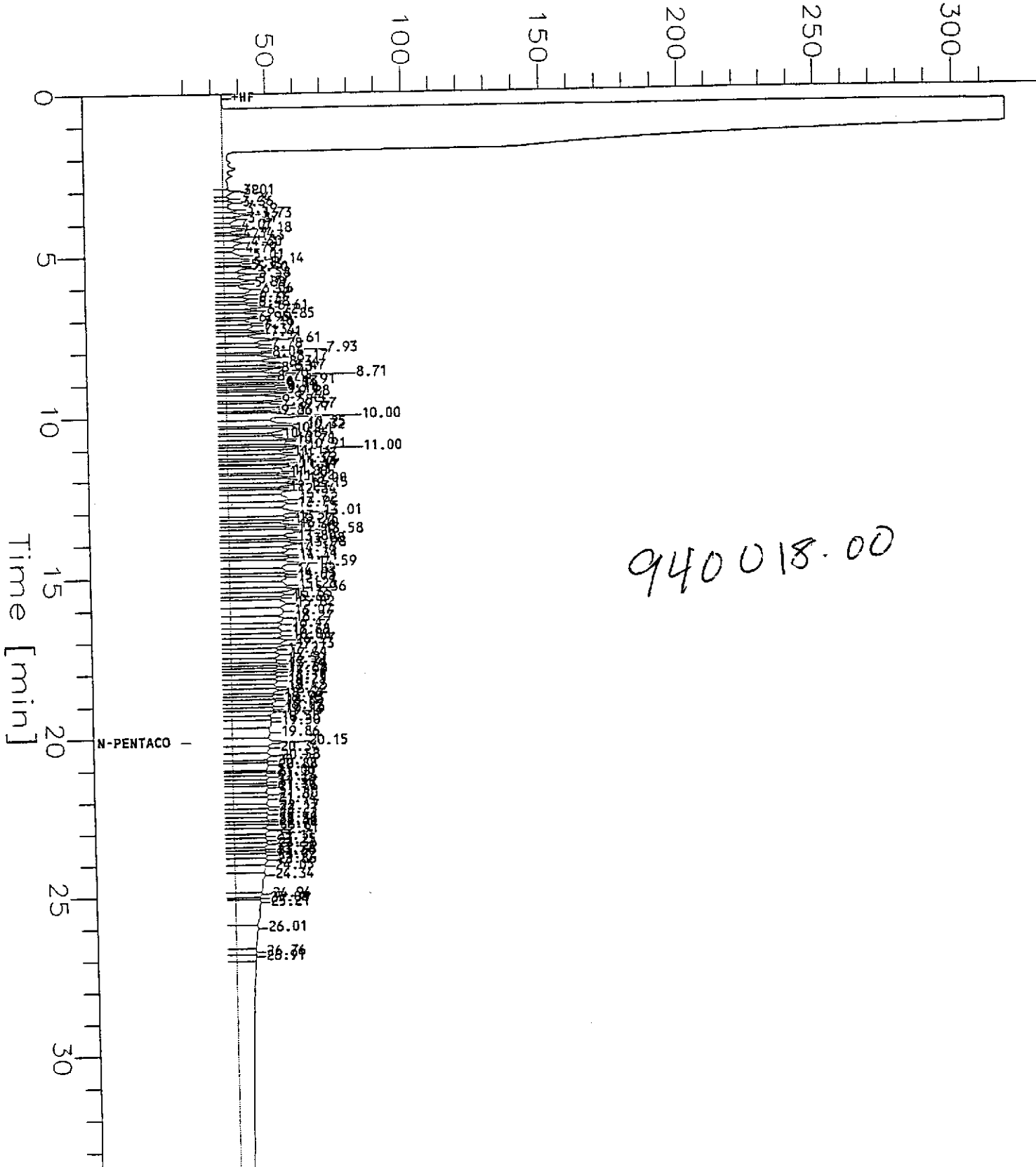
COPY

Sample Name : D9503J63-4 (500:1\*50)RE-SHOT  
 FileName : s:\ghp\_05\0409\405A044.raw  
 Method : ETPH05A.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0

Sample #: MW-5  
 Date : 4/6/95 22:48  
 Time of Injection: 4/6/95 22:14  
 Low Point : 18.98 mV  
 Plot Scale: 300.0 mV

End Time : 33.67 min  
 Plot Offset: 19 mV

Response [mV]



```

=====
Software Version: 3.3 <4B11>
Sample Name : D9503J63-4 (500:1*50)RE-SHOTTime : 4/6/95 22:48
Sample Number: MW-5 Study : EKI
Operator : NH

Instrument : GCHP_05 Channel : A A/D mV Range : 1024
AutoSampler : HP7673A
Rack/Vial : 1/44

```

```

Interface Serial # : Data Acquisition Time: 4/6/95 22:14
Delay Time : 0.00 min.
End Time : 33.67 min.
Sampling Rate : 1.2500 pts/sec

```

```

Raw Data File : S:\GHP_05\0409\405A044.RAW
Result File : S:\GHP_05\0409\405A044.RST
Instrument File: S:\GHP_05\MET_SEQ\ETPH05A.ins
Process File : S:\GHP_05\MET_SEQ\ETPH05A
Sample File : S:\GHP_05\MET_SEQ\ETPH05A
Sequence File : S:\GHP_05\MET_SEQ\H050405.seq

```

```

Inj. Volume : 3 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

```

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	8829601.58	15.20		0.1472	5.8864
	11.250	n-C9 to n-C24 TPH-D	15429041.32	26.56		14.2594	570.375
	16.750	n-C9 to n-C40 Total	20504990.25	35.30		0.3417	13.670
	19.875	n-C16 to n-C36 M/Oil	13324087.80	22.94		0.2221	8.8827
			58087720.95	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A044.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.009		34826.99	0.17	*B	0.0006	0.0232
2	3.239		13529.55	0.07	*V	0.0002	0.0000
3	3.357		24783.16	0.12	*V	0.0004	0.0105
4	3.585		27195.31	0.13	*V	0.0005	0.0181
5	3.731		59926.68	0.29	*V	0.0010	0.0400
6	3.872		39285.78	0.19	*V	0.0007	0.0202
7	4.074		20254.86	0.10	*V	0.0003	0.0135
8	4.180		56346.96	0.27	*V	0.0009	0.0376
9	4.340		15185.69	0.07	*V	0.0003	0.0101
10	4.431		47720.53	0.23	*V	0.0008	0.0308
11	4.599		55145.61	0.27	*V	0.0009	0.0368
12	4.792		31581.79	0.15	*V	0.0005	0.0211
13	5.006		55251.97	0.27	*V	0.0009	0.0308

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.141		68358.49	0.33	*V	0.0011	0.0456
15	5.244		37004.48	0.18	*V	0.0006	0.0247
16	5.328		20241.08	0.10	*V	0.0003	0.0135
17	5.397		64040.50	0.31	*V	0.0011	0.0427
18	5.576		65780.81	0.32	*V	0.0011	0.0439
19	5.766		54639.43	0.27	*V	0.0009	0.0364
20	5.879		39577.96	0.19	*V	0.0007	0.0264
21	6.064		109194.56	0.53	*V	0.0018	0.0728
22	6.216		47980.83	0.23	*V	0.0008	0.0320
23	6.352		60449.94	0.29	*V	0.0010	0.0403
24	6.477		50811.03	0.25	*V	0.0008	0.0339
25	6.606		98424.56	0.48	*V	0.0016	0.0656
26	6.718		57298.23	0.28	*V	0.0010	0.0382
27	6.854		104102.82	0.51	*V	0.0017	0.0694
28	6.950		37751.69	0.18	*V	0.0006	0.0252
29	7.105		76592.13	0.37	*V	0.0013	0.0511
30	7.188		81670.09	0.40	*V	0.0014	0.0544
31	7.340		46571.97	0.23	*V	0.0008	0.0310
32	7.413		68036.99	0.33	*V	0.0011	0.0454
33	7.606		189636.00	0.92	*V	0.0032	0.1264
34	7.777		88135.36	0.43	*V	0.0015	0.0588
35	7.926		194525.86	0.95	*V	0.0032	0.1297
36	8.039		50635.54	0.25	*V	0.0008	0.0338
37	8.166		189570.58	0.92	*V	0.0032	0.1264
38	8.343		122796.42	0.60	*V	0.0020	0.0819
39	8.466		100436.51	0.49	*V	0.0017	0.0670
40	8.528		83590.22	0.41	*V	0.0014	0.0557
41	8.705		231890.49	1.13	*V	0.0039	0.1546
42	8.793		82343.34	0.40	*V	0.0014	0.0549
43	8.908		113974.36	0.56	*V	0.0019	0.0760
44	8.971		57504.71	0.28	*V	0.0010	0.0383
45	9.038		71400.78	0.35	*V	0.0012	0.0476
46	9.121		102926.59	0.50	*V	0.0017	0.0686
47	9.192		73997.48	0.36	*V	0.0012	0.0493
48	9.280		130117.69	0.63	*V	0.0022	0.0867
49	9.436		191084.90	0.93	*V	0.0032	0.1274
50	9.547		65826.21	0.32	*V	0.0011	0.0439
51	9.666		159828.58	0.78	*V	0.0027	0.1066
52	9.765		122206.71	0.60	*V	0.0020	0.0815
53	9.864		64115.87	0.31	*V	0.0011	0.0427
54	10.001		323681.95	1.58	*V	0.0054	0.2158
55	10.254		216515.41	1.06	*V	0.0036	0.1443
56	10.319		93504.99	0.46	*V	0.0016	0.0623
57	10.406		186150.03	0.91	*V	0.0031	0.1241
58	10.579		80196.84	0.39	*V	0.0013	0.0535
59	10.707		157150.90	0.77	*V	0.0026	0.1048
60	10.775		171640.52	0.84	*V	0.0029	0.1144
61	10.911		114011.09	0.56	*V	0.0019	0.0760
62	10.997		201100.68	0.98	*V	0.0034	0.1341
63	11.137		158216.69	0.77	*V	0.0026	0.1055
64	11.233		167520.19	0.82	*V	0.0028	0.1117
65	11.364		82909.96	0.40	*V	0.0014	0.0553
66	11.459		121529.26	0.59	*V	0.0020	0.0810
67	11.514		72098.13	0.35	*V	0.0012	0.0481
68	11.571		119640.12	0.58	*V	0.0020	0.0798
69	11.732		173543.81	0.85	*V	0.0029	0.1157
70	11.798		73598.17	0.36	*V	0.0012	0.0491
71	11.915		130083.89	0.63	*V	0.0022	0.0867

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	12.003		202970.18	0.99	*V	0.0034	0.1353
73	12.149		178732.99	0.87	*V	0.0030	0.1192
74	12.251		74234.18	0.36	*V	0.0012	0.0495
75	12.343		193218.78	0.94	*V	0.0032	0.1288
76	12.619		286347.68	1.40	*V	0.0048	0.1909
77	12.739		215076.46	1.05	*V	0.0036	0.1434
78	13.006		365939.62	1.78	*V	0.0061	0.2440
79	13.172		152182.49	0.74	*V	0.0025	0.1015
80	13.266		110787.95	0.54	*V	0.0018	0.0739
81	13.395		135078.83	0.66	*V	0.0023	0.0901
82	13.483		115833.14	0.56	*V	0.0019	0.0772
83	13.583		271070.54	1.32	*V	0.0045	0.1807
84	13.797		152326.98	0.74	*V	0.0025	0.1016
85	13.880		109014.49	0.53	*V	0.0018	0.0727
86	13.984		215323.49	1.05	*V	0.0036	0.1435
87	14.156		214495.68	1.05	*V	0.0036	0.1430
88	14.337		149539.12	0.73	*V	0.0025	0.0997
89	14.411		136086.72	0.66	*V	0.0023	0.0907
90	14.587		317241.81	1.55	*V	0.0053	0.2115
91	14.822		193206.54	0.94	*V	0.0032	0.1288
92	14.928		115099.19	0.56	*V	0.0019	0.0767
93	15.016		193460.71	0.94	*V	0.0032	0.1290
94	15.256		211510.65	1.03	*V	0.0035	0.1410
95	15.360		207772.80	1.01	*V	0.0035	0.1385
96	15.545		155333.31	0.76	*V	0.0026	0.1036
97	15.654		105461.17	0.51	*V	0.0018	0.0703
98	15.824		279787.40	1.36	*V	0.0047	0.1865
99	16.068		304441.11	1.48	*V	0.0051	0.2030
100	16.271		239090.72	1.17	*V	0.0040	0.1594
101	16.467		187742.91	0.92	*V	0.0031	0.1251
102	16.681		175934.92	0.86	*V	0.0029	0.1173
103	16.826		160844.63	0.78	*V	0.0027	0.1070
104	16.967		197345.10	0.96	*V	0.0033	0.1311
105	17.132		159828.70	0.78	*V	0.0027	0.1066
106	17.268		133499.60	0.65	*V	0.0022	0.0890
107	17.413		178028.63	0.87	*V	0.0030	0.1181
108	17.588		132325.15	0.65	*V	0.0022	0.0881
109	17.709		109796.52	0.54	*V	0.0018	0.0732
110	17.786		79611.97	0.39	*V	0.0013	0.0531
111	17.879		92528.35	0.45	*V	0.0015	0.0611
112	17.973		91977.41	0.45	*V	0.0015	0.0613
113	18.103		144444.96	0.70	*V	0.0024	0.0963
114	18.229		157181.76	0.77	*V	0.0026	0.1041
115	18.423		128495.73	0.63	*V	0.0021	0.0851
116	18.521		143289.38	0.70	*V	0.0024	0.0955
117	18.655		84880.73	0.41	*V	0.0014	0.0561
118	18.779		97295.13	0.47	*V	0.0016	0.0641
119	18.853		124760.30	0.61	*V	0.0021	0.0832
120	19.024		96311.73	0.47	*V	0.0016	0.0642
121	19.121		96838.82	0.47	*V	0.0016	0.0641
122	19.190		130847.56	0.64	*V	0.0022	0.0871
123	19.384		125367.35	0.61	*V	0.0021	0.0836
124	19.504		203633.47	0.99	*V	0.0034	0.1351
125	19.856		261776.35	1.28	*V	0.0044	0.1741
126	20.151	n-Pentacosane	240579.16	1.17	*V	0.2243	8.9730
127	20.337		178880.54	0.87	*V	0.0030	0.1193
128	20.579		170135.76	0.83	*V	0.0028	0.1131
129	20.750		61013.89	0.30	*V	0.0010	0.0401

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	20.875		172903.73	0.84	*V	0.0029	0.1153
131	21.056		49466.71	0.24	*V	0.0008	0.0330
132	21.106		78884.78	0.38	*V	0.0013	0.0526
133	21.241		92088.61	0.45	*V	0.0015	0.0614
134	21.391		88836.15	0.43	*V	0.0015	0.0592
135	21.495		59620.60	0.29	*V	0.0010	0.0397
136	21.563		159554.38	0.78	*V	0.0027	0.1064
137	21.798		100792.20	0.49	*V	0.0017	0.0672
138	21.943		159182.24	0.78	*V	0.0027	0.1061
139	22.172		122278.90	0.60	*V	0.0020	0.0815
140	22.274		100570.93	0.49	*V	0.0017	0.0670
141	22.415		98489.73	0.48	*V	0.0016	0.0657
142	22.579		89158.68	0.43	*V	0.0015	0.0594
143	22.643		70902.64	0.35	*V	0.0012	0.0473
144	22.744		97183.16	0.47	*V	0.0016	0.0648
145	22.913		135861.76	0.66	*V	0.0023	0.0906
146	23.110		82928.07	0.40	*V	0.0014	0.0553
147	23.251		114165.02	0.56	*V	0.0019	0.0761
148	23.361		103992.89	0.51	*V	0.0017	0.0693
149	23.523		63387.78	0.31	*V	0.0011	0.0423
150	23.601		64570.90	0.31	*V	0.0011	0.0430
151	23.718		102671.01	0.50	*V	0.0017	0.0684
152	23.863		157114.17	0.77	*V	0.0026	0.1047
153	24.048		157475.09	0.77	*V	0.0026	0.1050
154	24.339		384632.33	1.88	*V	0.0064	0.2564
155	24.937		97880.12	0.48	*V	0.0016	0.0653
156	25.081		36031.91	0.18	*V	0.0006	0.0240
157	25.213		409196.51	2.00	*V	0.0068	0.2728
158	26.014		336164.46	1.64	*V	0.0056	0.2241
159	26.757		87409.82	0.43	*V	0.0015	0.0583
160	26.910		86534.44	0.42	*V	0.0014	0.0577

-----  
20504990.25 100.00

Report Stored in ASCII File: S:\GHP\_05\0409\405A044.TX1

Chromatogram

COPY

Page 1 of 1

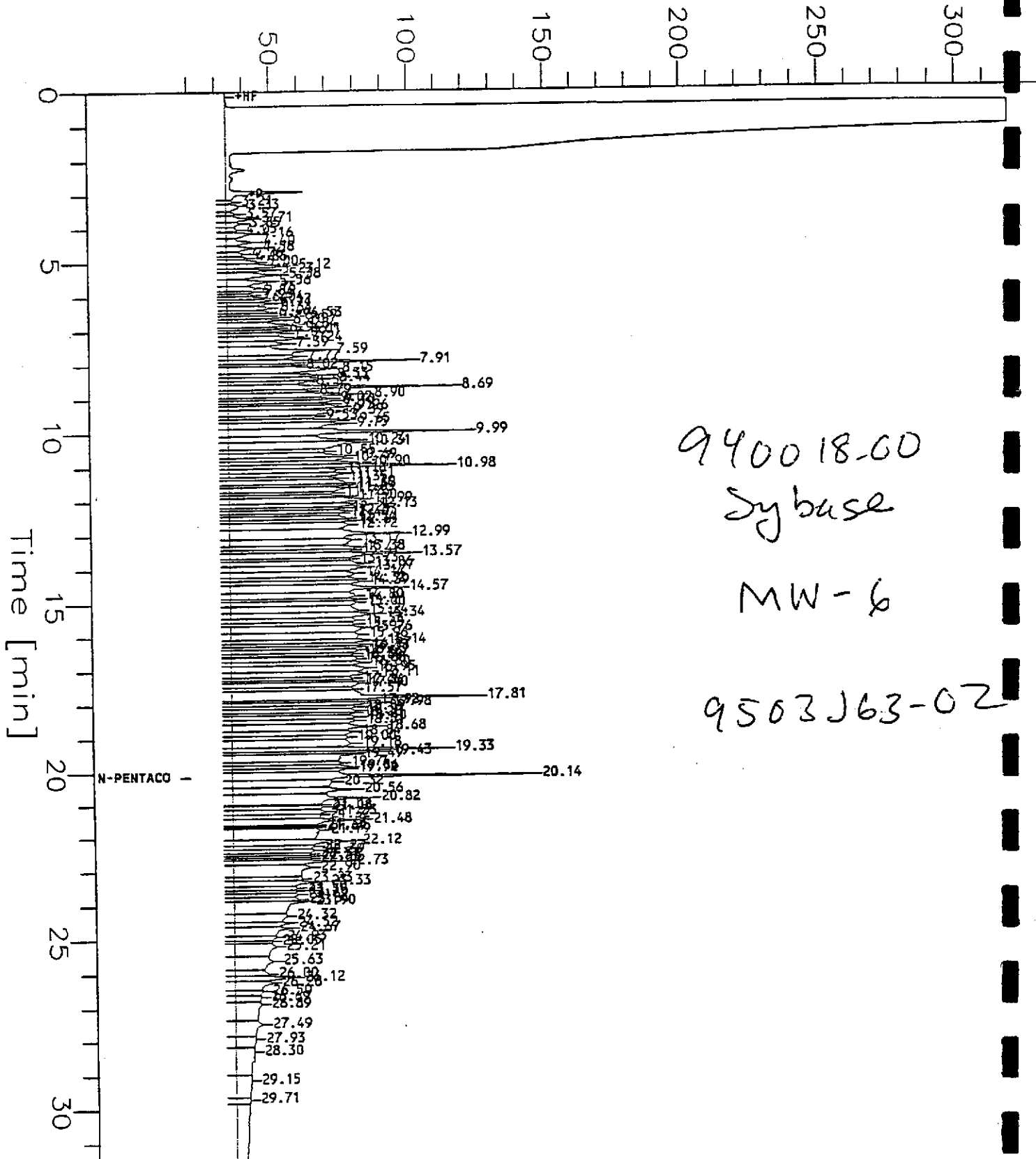
Sample Name : D9503J63-2 (500:1\*10)RE-SHOT  
FileName : s:\ghp\_05\0409\405A042.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 31.65 min  
Plot Offset: 19 mV

Sample #: MW-6  
Date : 4/6/95 20:04  
Time of Injection: 4/6/95 19:31  
Low Point : 18.81 mV  
Plot Scale: 300.0 mV

High Point : 318.81 mV

Response [mV]





```

=====
Software Version: 3.3 <4B11>
Sample Name : D9503J63-2 (500:1*10)RE-SHOTTime : 4/6/95 20:04
Sample Number: MW-6 Study : EKI
Operator :

```

```

Instrument : GCHP_05 Channel : A A/D mV Range : 1024
AutoSampler : HP7673A
Rack/Vial : 1/42

```

```

Interface Serial # : Data Acquisition Time: 4/6/95 19:31
Delay Time : 0.00 min.
End Time : 31.65 min.
Sampling Rate : 1.2500 pts/sec

```

```

Raw Data File : S:\GHP_05\0409\405A042.RAW
Result File : S:\GHP_05\0409\405A042.RST
Instrument File: S:\GHP_05\MET_SEQ\ETPH05A.ins
Process File : S:\GHP_05\MET_SEQ\ETPH05A
Sample File : S:\GHP_05\MET_SEQ\ETPH05A
Sequence File : S:\GHP_05\MET_SEQ\H050405.SEQ

```

```

Inj. Volume : 3 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

```

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	16765454.05	13.09		0.2794	11.1770
	11.250	n-C9 to n-C24 TPH-D	33819319.00	26.40		31.2555	1250.2199
	16.750	n-C9 to n-C40 Total	45905032.97	35.83		0.7651	30.6034
	19.875	n-C16 to n-C36 M/Oil	31620028.59	24.68		0.5270	21.0800
			1.28110e+08	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A042.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.210		14406.85	0.03	*B	0.0002	0.0096
2	3.333		43870.58	0.10	*V	0.0007	0.0292
3	3.569		20095.18	0.04	*V	0.0003	0.0134
4	3.711		62518.01	0.14	*V	0.0010	0.0417
5	3.854		38383.87	0.08	*V	0.0006	0.0256
6	4.050		27688.09	0.06	*V	0.0005	0.0185
7	4.163		72741.15	0.16	*V	0.0012	0.0485
8	4.401		72918.81	0.16	*V	0.0012	0.0486
9	4.581		72280.38	0.16	*V	0.0012	0.0482
10	4.757		38448.27	0.08	*V	0.0006	0.0256
11	4.864		36190.95	0.08	*V	0.0006	0.0241
12	4.996		77277.10	0.17	*V	0.0013	0.0515
13	5.118		127939.05	0.28	*V	0.0021	0.0853

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.233		76733.82	0.17	*V	0.0013	0.0512
15	5.377		140724.96	0.31	*V	0.0023	0.0938
16	5.560		136096.93	0.30	*V	0.0023	0.0907
17	5.754		75556.31	0.16	*V	0.0013	0.0504
18	5.862		42865.62	0.09	*V	0.0007	0.0288
19	5.959		42144.93	0.09	*V	0.0007	0.0281
20	6.044		65545.89	0.14	*V	0.0011	0.0437
21	6.117		65781.32	0.14	*V	0.0011	0.0439
22	6.207		88227.69	0.19	*V	0.0015	0.0588
23	6.342		110422.06	0.24	*V	0.0018	0.0736
24	6.456		67838.16	0.15	*V	0.0011	0.0452
25	6.528		110975.68	0.24	*V	0.0018	0.0740
26	6.593		112491.15	0.25	*V	0.0019	0.0750
27	6.701		96701.85	0.21	*V	0.0016	0.0645
28	6.839		167089.77	0.36	*V	0.0028	0.1114
29	6.937		85357.95	0.19	*V	0.0014	0.0569
30	7.008		105334.15	0.23	*V	0.0018	0.0702
31	7.091		108793.60	0.24	*V	0.0018	0.0725
32	7.237		191443.65	0.42	*V	0.0032	0.1278
33	7.388		175322.51	0.38	*V	0.0029	0.1169
34	7.587		382759.52	0.83	*V	0.0064	0.2552
35	7.769		169268.41	0.37	*V	0.0028	0.1128
36	7.910		309832.68	0.67	*V	0.0052	0.2066
37	8.023		114938.50	0.25	*V	0.0019	0.0766
38	8.150		357457.43	0.78	*V	0.0060	0.2383
39	8.325		215959.50	0.47	*V	0.0036	0.1440
40	8.444		230270.70	0.50	*V	0.0038	0.1535
41	8.518		151035.46	0.33	*V	0.0025	0.1007
42	8.689		429331.11	0.94	*V	0.0072	0.2862
43	8.794		158768.14	0.35	*V	0.0026	0.1058
44	8.896		302533.60	0.66	*V	0.0050	0.2017
45	9.024		170552.28	0.37	*V	0.0028	0.1131
46	9.095		202994.15	0.44	*V	0.0034	0.1351
47	9.188		147202.08	0.32	*V	0.0025	0.0981
48	9.263		233049.25	0.51	*V	0.0039	0.1554
49	9.389		398144.67	0.87	*V	0.0066	0.2652
50	9.528		151267.57	0.33	*V	0.0025	0.1000
51	9.652		241485.28	0.53	*V	0.0040	0.1610
52	9.753		409733.30	0.89	*V	0.0068	0.2731
53	9.986		606357.45	1.32	*V	0.0101	0.4041
54	10.237		399387.09	0.87	*V	0.0067	0.2663
55	10.307		518271.20	1.13	*V	0.0086	0.3455
56	10.553		223654.69	0.49	*V	0.0037	0.1491
57	10.689		312037.46	0.68	*V	0.0052	0.2081
58	10.770		260143.42	0.57	*V	0.0043	0.1734
59	10.895		277512.34	0.60	*V	0.0046	0.1851
60	10.981		361910.87	0.79	*V	0.0060	0.2411
61	11.099		306838.21	0.67	*V	0.0051	0.2046
62	11.213		285144.28	0.62	*V	0.0048	0.1901
63	11.347		186092.89	0.41	*V	0.0031	0.1241
64	11.492		364390.49	0.79	*V	0.0061	0.2429
65	11.548		196524.42	0.43	*V	0.0033	0.1310
66	11.647		350339.96	0.76	*V	0.0058	0.2331
67	11.783		180216.19	0.39	*V	0.0030	0.1201
68	11.898		226856.01	0.49	*V	0.0038	0.1512
69	11.988		427763.86	0.93	*V	0.0071	0.2852
70	12.133		323323.33	0.70	*V	0.0054	0.2151
71	12.235		190801.91	0.42	*V	0.0032	0.1271

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	12.329		232259.95	0.51	*V	0.0039	0.1548
73	12.399		192225.04	0.42	*V	0.0032	0.1282
74	12.537		267879.93	0.58	*V	0.0045	0.1786
75	12.607		239049.53	0.52	*V	0.0040	0.1594
76	12.724		469846.94	1.02	*V	0.0078	0.3132
77	12.991		777216.71	1.69	*V	0.0130	0.5181
78	13.167		515464.59	1.12	*V	0.0086	0.3436
79	13.381		282737.23	0.62	*V	0.0047	0.1885
80	13.466		244418.14	0.53	*V	0.0041	0.1629
81	13.568		537876.02	1.17	*V	0.0090	0.3586
82	13.732		173953.83	0.38	*V	0.0029	0.1160
83	13.858		403784.80	0.88	*V	0.0067	0.2692
84	13.968		479407.17	1.04	*V	0.0080	0.3196
85	14.144		423436.29	0.92	*V	0.0071	0.2823
86	14.324		288847.57	0.63	*V	0.0048	0.1926
87	14.391		295640.85	0.64	*V	0.0049	0.1971
88	14.571		694411.96	1.51	*V	0.0116	0.4629
89	14.803		461577.21	1.01	*V	0.0077	0.3077
90	14.911		217144.53	0.47	*V	0.0036	0.1448
91	14.998		395338.57	0.86	*V	0.0066	0.2636
92	15.242		507878.56	1.11	*V	0.0085	0.3386
93	15.341		499494.57	1.09	*V	0.0083	0.3330
94	15.530		322673.30	0.70	*V	0.0054	0.2151
95	15.645		285871.85	0.62	*V	0.0048	0.1906
96	15.761		556967.65	1.21	*V	0.0093	0.3713
97	15.958		588461.44	1.28	*V	0.0098	0.3923
98	16.140		312546.31	0.68	*V	0.0052	0.2084
99	16.265		261894.83	0.57	*V	0.0044	0.1746
100	16.329		257657.94	0.56	*V	0.0043	0.1718
101	16.432		326855.86	0.71	*V	0.0054	0.2179
102	16.538		176240.11	0.38	*V	0.0029	0.1175
103	16.603		107311.80	0.23	*V	0.0018	0.0715
104	16.684		363483.22	0.79	*V	0.0061	0.2423
105	16.802		331643.05	0.72	*V	0.0055	0.2211
106	16.949		492892.97	1.07	*V	0.0082	0.3286
107	17.113		447551.69	0.97	*V	0.0075	0.2984
108	17.244		210884.59	0.46	*V	0.0035	0.1406
109	17.338		179337.11	0.39	*V	0.0030	0.1196
110	17.398		400012.00	0.87	*V	0.0067	0.2667
111	17.565		247251.54	0.54	*V	0.0041	0.1648
112	17.808		957459.04	2.09	*V	0.0160	0.6383
113	17.917		160025.10	0.35	*V	0.0027	0.1067
114	17.976		317417.93	0.69	*V	0.0053	0.2116
115	18.090		249908.68	0.54	*V	0.0042	0.1666
116	18.214		320695.52	0.70	*V	0.0053	0.2138
117	18.275		173851.29	0.38	*V	0.0029	0.1159
118	18.397		353852.85	0.77	*V	0.0059	0.2359
119	18.506		350820.63	0.76	*V	0.0058	0.2339
120	18.682		545059.55	1.19	*V	0.0091	0.3634
121	18.835		374808.75	0.82	*V	0.0062	0.2499
122	18.997		267095.86	0.58	*V	0.0045	0.1781
123	19.177		576167.68	1.26	*V	0.0096	0.3841
124	19.334		407042.74	0.89	*V	0.0068	0.2714
125	19.425		238071.10	0.52	*V	0.0040	0.1587
126	19.491		513259.04	1.12	*V	0.0086	0.3422
127	19.744		251202.24	0.55	*V	0.0042	0.1675
128	19.861		264744.67	0.58	*V	0.0044	0.1765
129	19.917		258436.78	0.56	*V	0.0043	0.1723

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	20.135	n-Pentacosane	768780.68	1.67	*V	0.7168	28.6731
131	20.323		487111.54	1.06	*V	0.0081	0.3241
132	20.557		478453.09	1.04	*V	0.0080	0.3190
133	20.820		701463.36	1.53	*V	0.0117	0.4676
134	21.023		78067.55	0.17	*V	0.0013	0.0524
135	21.084		207855.57	0.45	*V	0.0035	0.1388
136	21.233		290063.08	0.63	*V	0.0048	0.1934
137	21.323		229770.39	0.50	*V	0.0038	0.1531
138	21.479		426777.65	0.93	*V	0.0071	0.2841
139	21.634		98120.01	0.21	*V	0.0016	0.0654
140	21.690		97596.87	0.21	*V	0.0016	0.0657
141	21.786		616362.26	1.34	*V	0.0103	0.4101
142	22.117		354625.06	0.77	*V	0.0059	0.2364
143	22.272		210408.13	0.46	*V	0.0035	0.1403
144	22.391		185996.86	0.41	*V	0.0031	0.1241
145	22.505		135283.14	0.29	*V	0.0023	0.0901
146	22.564		113905.23	0.25	*V	0.0019	0.0759
147	22.630		113220.26	0.25	*V	0.0019	0.0755
148	22.730		249011.10	0.54	*V	0.0042	0.1661
149	22.903		538346.36	1.17	*V	0.0090	0.3589
150	23.228		180894.54	0.39	*V	0.0030	0.1206
151	23.325		273094.87	0.59	*V	0.0046	0.1821
152	23.504		147100.57	0.32	*V	0.0025	0.0981
153	23.580		129213.48	0.28	*V	0.0022	0.0861
154	23.690		166002.05	0.36	*V	0.0028	0.1107
155	23.839		149325.12	0.33	*V	0.0025	0.0991
156	23.902		449843.20	0.98	*V	0.0075	0.2999
157	24.318		283534.69	0.62	*V	0.0047	0.1890
158	24.522		145037.09	0.32	*V	0.0024	0.0961
159	24.671		272168.98	0.59	*V	0.0045	0.1811
160	24.925		131983.49	0.29	*V	0.0022	0.0880
161	25.053		67043.38	0.15	*V	0.0011	0.0447
162	25.212		305649.73	0.67	*V	0.0051	0.2031
163	25.628		298194.43	0.65	*V	0.0050	0.1988
164	26.004		114230.95	0.25	*V	0.0019	0.0762
165	26.120		159028.82	0.35	*V	0.0027	0.1061
166	26.263		183747.57	0.40	*V	0.0031	0.1221
167	26.502		87174.14	0.19	*V	0.0015	0.0581
168	26.692		114214.50	0.25	*V	0.0019	0.0761
169	26.890		290292.77	0.63	*V	0.0048	0.1931
170	27.488		241689.33	0.53	*V	0.0040	0.1611
171	27.931		147550.12	0.32	*V	0.0025	0.0984
172	28.304		312540.32	0.68	*V	0.0052	0.2081
173	29.148		225358.14	0.49	*V	0.0038	0.1501
174	29.711		55199.81	0.12	*V	0.0009	0.0368
			45905032.97	100.00			

Chromatogram

COPY

Page 1 of 1

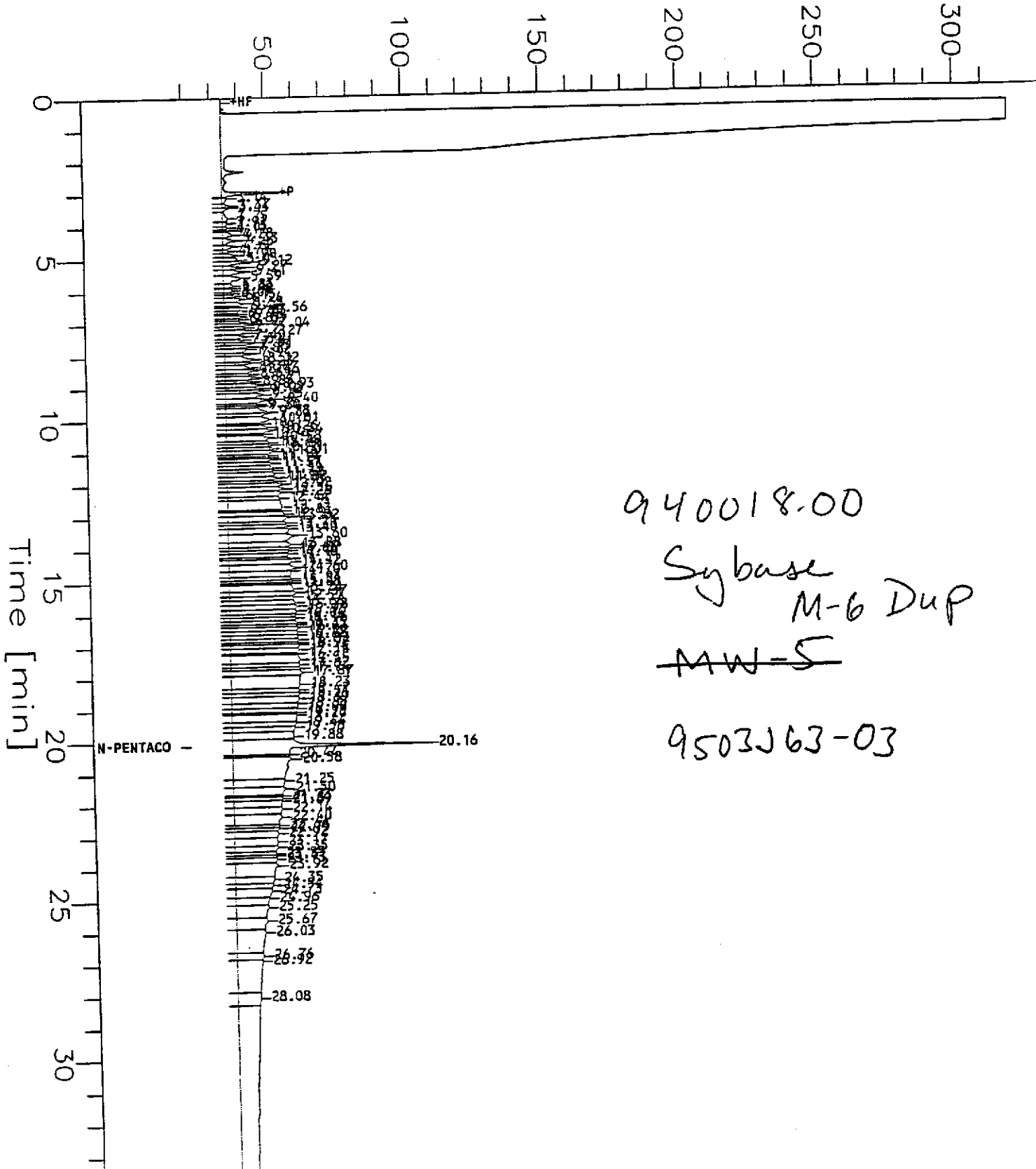
Sample Name : D9503J63-3 (500:1\*10)RE-SHOT  
FileName : s:\ghp\_05\0409\405A043.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 19 mV

Sample #: M-6 DUP  
Date : 4/6/95 22:07  
Time of Injection: 4/6/95 21:33  
Low Point : 19.27 mV  
Plot Scale: 300.0 mV

High Point : 319.27 mV

Response [mV]



940018.00  
Sybase  
M-6 Dup  
~~MW-5~~

9503J63-03

=====  
Software Version: 3.3 <4B11>

Sample Name : D9503J63-3 (500:1\*10)RE-SHOTTime : 4/6/95 22:07

Sample Number: M-6 DUP Study : EKI

Operator : NH

Instrument : GCHP\_05 Channel : A A/D mV Range : 1024

AutoSampler : HP7673A

Rack/Vial : 1/43

Interface Serial # : Data Acquisition Time: 4/6/95 21:33

Delay Time : 0.00 min.

End Time : 33.67 min.

Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0409\405A043.RAW

Result File : S:\GHP\_05\0409\405A043.RST

Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins

Process File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sequence File : S:\GHP\_05\MET\_SEQ\H050405.seq

Inj. Volume : 3 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	6497924.94	10.32		0.1083	4.3310
	11.250	n-C9 to n-C24 TPH-D	15210171.40	24.16		14.0571	562.2830
	16.750	n-C9 to n-C40 Total	23168090.20	36.80		0.3861	15.4454
	19.875	n-C16 to n-C36 M/Oil	18088043.78	28.73		0.3015	12.0587
			62964230.31	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A043.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.138		15387.19	0.07	*B	0.0003	0.0100
2	3.372		14051.29	0.06	*V	0.0002	0.0090
3	3.435		10278.36	0.04	*V	0.0002	0.0069
4	3.751		24346.74	0.11	*V	0.0004	0.0162
5	3.908		12432.52	0.05	*V	0.0002	0.0080
6	4.047		8699.00	0.04	*V	0.0001	0.0090
7	4.124		4402.04	0.02	*V	7.3367e-05	0.0029
8	4.281		29936.62	0.13	*V	0.0005	0.0200
9	4.434		32029.56	0.14	*V	0.0005	0.0210
10	4.618		22690.35	0.10	*V	0.0004	0.0151
11	4.767		14815.84	0.06	*V	0.0002	0.0099
12	4.901		25132.72	0.11	*V	0.0004	0.0110
13	5.045		34580.34	0.15	*V	0.0006	0.0210

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.115		46528.61	0.20	*V	0.0008	0.0310
15	5.269		35394.12	0.15	*V	0.0006	0.0236
16	5.411		53190.66	0.23	*V	0.0009	0.0355
17	5.592		60286.06	0.26	*V	0.0010	0.0402
18	5.828		22528.76	0.10	*V	0.0004	0.0150
19	5.898		9932.88	0.04	*V	0.0002	0.0066
20	5.981		19825.58	0.09	*V	0.0003	0.0132
21	6.066		11352.31	0.05	*V	0.0002	0.0076
22	6.148		21468.07	0.09	*V	0.0004	0.0143
23	6.244		43616.15	0.19	*V	0.0007	0.0291
24	6.382		41866.27	0.18	*V	0.0007	0.0279
25	6.490		22295.50	0.10	*V	0.0004	0.0149
26	6.556		60071.43	0.26	*V	0.0010	0.0400
27	6.629		30757.04	0.13	*V	0.0005	0.0205
28	6.704		15910.33	0.07	*V	0.0003	0.0106
29	6.784		37787.78	0.16	*V	0.0006	0.0252
30	6.867		21962.64	0.09	*V	0.0004	0.0146
31	6.974		31985.56	0.14	*V	0.0005	0.0213
32	7.037		68365.00	0.30	*V	0.0011	0.0456
33	7.150		39792.59	0.17	*V	0.0007	0.0265
34	7.269		86546.68	0.37	*V	0.0014	0.0577
35	7.399		47825.49	0.21	*V	0.0008	0.0319
36	7.520		33501.54	0.14	*V	0.0006	0.0223
37	7.610		55286.28	0.24	*V	0.0009	0.0369
38	7.726		47401.83	0.20	*V	0.0008	0.0316
39	7.799		59579.02	0.26	*V	0.0010	0.0397
40	7.935		44047.98	0.19	*V	0.0007	0.0294
41	8.119		106278.02	0.46	*V	0.0018	0.0709
42	8.225		48712.61	0.21	*V	0.0008	0.0325
43	8.378		66233.04	0.29	*V	0.0011	0.0442
44	8.460		80561.58	0.35	*V	0.0013	0.0537
45	8.590		43057.43	0.19	*V	0.0007	0.0287
46	8.712		94080.04	0.41	*V	0.0016	0.0627
47	8.712		52197.05	0.23	*V	0.0009	0.0348
48	8.834		91889.66	0.40	*V	0.0015	0.0613
49	8.931		69471.85	0.30	*V	0.0012	0.0463
50	9.049		67940.95	0.29	*V	0.0011	0.0453
51	9.115		126732.08	0.55	*V	0.0021	0.0845
52	9.247		135313.37	0.58	*V	0.0023	0.0902
53	9.401		46386.16	0.20	*V	0.0008	0.0309
54	9.549		47934.40	0.21	*V	0.0008	0.0320
55	9.600		132748.43	0.57	*V	0.0022	0.0885
56	9.776		104382.50	0.45	*V	0.0017	0.0696
57	9.826		174068.23	0.75	*V	0.0029	0.1160
58	10.009		41720.12	0.18	*V	0.0007	0.0278
59	10.151		104681.18	0.45	*V	0.0017	0.0698
60	10.256		135900.53	0.59	*V	0.0023	0.0906
61	10.343		43868.15	0.19	*V	0.0007	0.0292
62	10.466		156152.58	0.67	*V	0.0026	0.1041
63	10.583		87007.20	0.38	*V	0.0015	0.0580
64	10.736		89541.40	0.39	*V	0.0015	0.0597
65	10.807		107039.90	0.46	*V	0.0018	0.0714
66	10.908		121333.37	0.52	*V	0.0020	0.0809
67	11.006		62350.31	0.27	*V	0.0010	0.0416
68	11.123		50774.43	0.22	*V	0.0008	0.0338
69	11.186		102204.75	0.44	*V	0.0017	0.0681
70	11.241		103145.69	0.45	*V	0.0017	0.0688
71	11.366		121037.11	0.52	*V	0.0020	0.0807

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	11.581		94624.85	0.41	*V	0.0016	0.063
73	11.677		138783.53	0.60	*V	0.0023	0.092
74	11.816		127402.14	0.55	*V	0.0021	0.0849
75	11.925		84742.86	0.37	*V	0.0014	0.0565
76	12.018		139353.09	0.60	*V	0.0023	0.092
77	12.152		155687.46	0.67	*V	0.0026	0.1038
78	12.263		185878.77	0.80	*V	0.0031	0.1239
79	12.444		122255.30	0.53	*V	0.0020	0.081
80	12.710		364902.91	1.58	*V	0.0061	0.243
81	12.826		63615.56	0.27	*V	0.0011	0.0424
82	12.942		165279.83	0.71	*V	0.0028	0.1102
83	13.020		222176.84	0.96	*V	0.0037	0.148
84	13.207		136835.34	0.59	*V	0.0023	0.0912
85	13.297		136436.29	0.59	*V	0.0023	0.0910
86	13.403		227317.30	0.98	*V	0.0038	0.151
87	13.596		344623.06	1.49	*V	0.0057	0.229
88	13.880		215493.37	0.93	*V	0.0036	0.1437
89	13.986		125099.53	0.54	*V	0.0021	0.083
90	14.063		123202.87	0.53	*V	0.0021	0.082
91	14.161		157391.04	0.68	*V	0.0026	0.1049
92	14.307		107857.51	0.47	*V	0.0018	0.0719
93	14.415		201672.79	0.87	*V	0.0034	0.134
94	14.599		281929.44	1.22	*V	0.0047	0.188
95	14.695		236785.57	1.02	*V	0.0039	0.1579
96	14.944		163759.38	0.71	*V	0.0027	0.1092
97	15.013		111433.01	0.48	*V	0.0019	0.074
98	15.079		73635.79	0.32	*V	0.0012	0.0491
99	15.238		280670.31	1.21	*V	0.0047	0.1871
100	15.365		230992.53	1.00	*V	0.0038	0.154
101	15.508		169368.91	0.73	*V	0.0028	0.112
102	15.676		191186.80	0.83	*V	0.0032	0.1275
103	15.780		216754.03	0.94	*V	0.0036	0.1446
104	15.932		215286.38	0.93	*V	0.0036	0.143
105	16.039		135583.22	0.59	*V	0.0023	0.0904
106	16.144		155511.85	0.67	*V	0.0026	0.1037
107	16.292		157823.38	0.68	*V	0.0026	0.109
108	16.348		118763.08	0.51	*V	0.0020	0.079
109	16.439		180133.42	0.78	*V	0.0030	0.1201
110	16.587		198010.43	0.85	*V	0.0033	0.1322
111	16.680		179155.25	0.77	*V	0.0030	0.119
112	16.820		161359.86	0.70	*V	0.0027	0.1076
113	16.922		100413.30	0.43	*V	0.0017	0.0669
114	16.973		181808.56	0.78	*V	0.0030	0.121
115	17.142		240421.91	1.04	*V	0.0040	0.160
116	17.268		79182.82	0.34	*V	0.0013	0.0528
117	17.454		404023.15	1.74	*V	0.0067	0.2692
118	17.622		182379.27	0.79	*V	0.0030	0.121
119	17.740		163071.47	0.70	*V	0.0027	0.1087
120	17.871		269782.21	1.16	*V	0.0045	0.1799
121	18.230		607219.32	2.62	*V	0.0101	0.404
122	18.415		200121.86	0.86	*V	0.0033	0.131
123	18.511		179822.88	0.78	*V	0.0030	0.1199
124	18.691		296598.11	1.28	*V	0.0049	0.1977
125	18.851		253863.72	1.10	*V	0.0042	0.162
126	18.998		193014.98	0.83	*V	0.0032	0.1287
127	19.128		76773.10	0.33	*V	0.0013	0.0512
128	19.197		343482.79	1.48	*V	0.0057	0.22
129	19.438		206784.17	0.89	*V	0.0034	0.13



Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	19.583		220803.70	0.95	*V	0.0037	0.1472
131	19.879		327079.17	1.41	*V	0.0055	0.2181
132	20.158	n-Pentacosane	779776.16	3.37	*V	0.7271	29.0838
133	20.436		100061.95	0.43	*V	0.0017	0.0667
134	20.583		837991.47	3.62	*V	0.0140	0.5587
135	21.247		272704.24	1.18	*V	0.0045	0.1818
136	21.502		299216.22	1.29	*V	0.0050	0.1995
137	21.730		57940.87	0.25	*V	0.0010	0.0386
138	21.811		130841.05	0.56	*V	0.0022	0.0872
139	21.890		214364.45	0.93	*V	0.0036	0.1429
140	22.136		241249.09	1.04	*V	0.0040	0.1608
141	22.404		330327.93	1.43	*V	0.0055	0.2202
142	22.655		93900.60	0.41	*V	0.0016	0.0626
143	22.750		120162.49	0.52	*V	0.0020	0.0801
144	22.922		193422.58	0.83	*V	0.0032	0.1289
145	23.171		242337.19	1.05	*V	0.0040	0.1616
146	23.349		177808.25	0.77	*V	0.0030	0.1185
147	23.547		99173.30	0.43	*V	0.0017	0.0661
148	23.609		74819.30	0.32	*V	0.0012	0.0499
149	23.730		148750.07	0.64	*V	0.0025	0.0992
150	23.924		399076.80	1.72	*V	0.0067	0.2661
151	24.347		194392.84	0.84	*V	0.0032	0.1296
152	24.544		121915.17	0.53	*V	0.0020	0.0813
153	24.725		222570.15	0.96	*V	0.0037	0.1484
154	24.956		187104.36	0.81	*V	0.0031	0.1247
155	25.248		280494.69	1.21	*V	0.0047	0.1870
156	25.665		241258.40	1.04	*V	0.0040	0.1608
157	26.033		447007.51	1.93	*V	0.0075	0.2980
158	26.764		134641.40	0.58	*V	0.0022	0.0898
159	26.924		559907.78	2.42	*V	0.0093	0.3733
160	28.077		206819.62	0.89	*V	0.0034	0.1379

23168090.20 100.00

Report Stored in ASCII File: S:\GHP\_05\0409\405A043.TX1

### Chromatogram

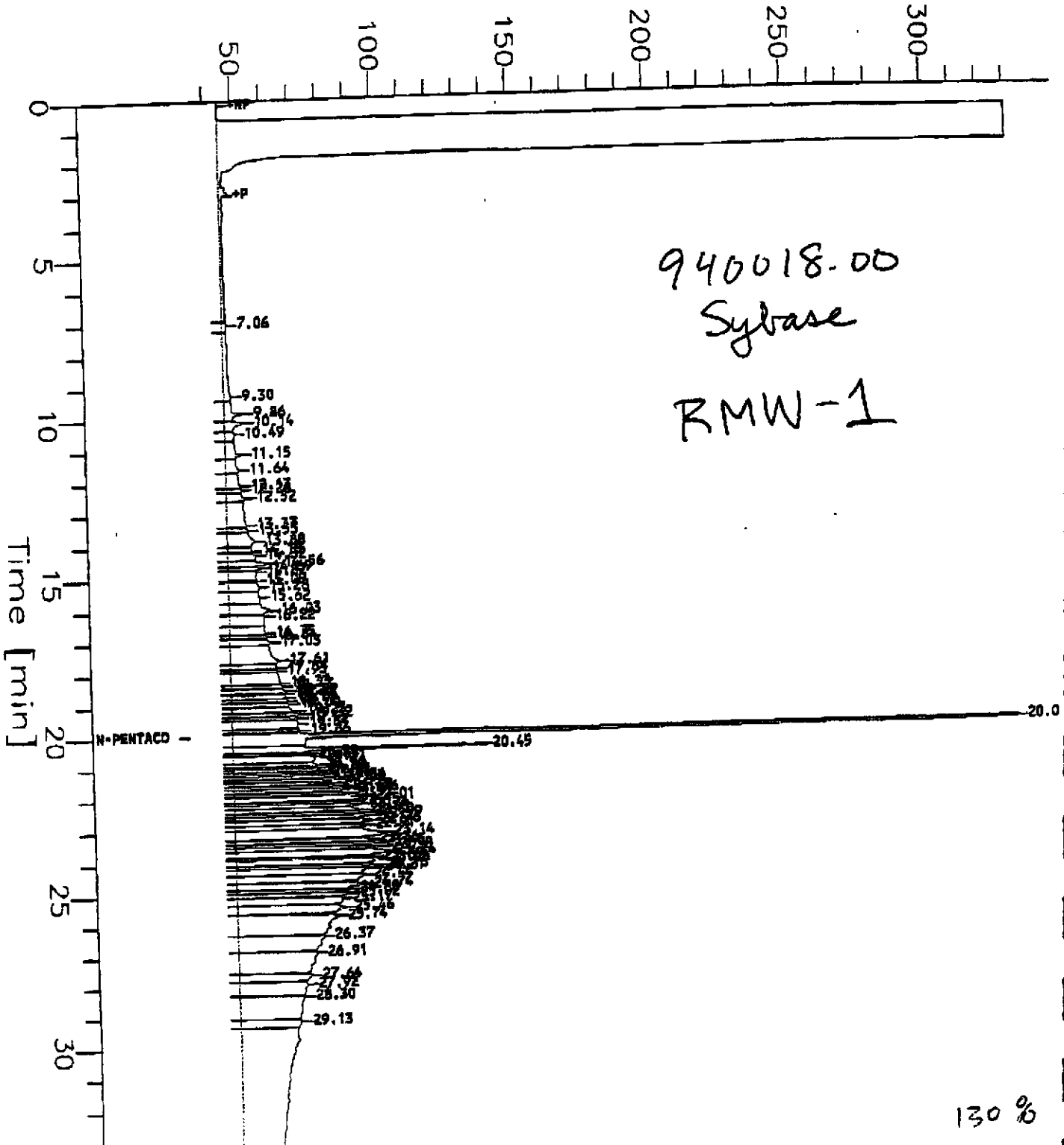
Sample Name : 09503177-1 (500:1) RESHOT  
 File Name : s:\ghp\_04\0409\4048018.raw  
 Method : ETPH048.ims  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 33.67 min  
 Plot Offset : 30 mV

Sample #: RMW-1  
 Date : 4/4/95 21:50  
 Time of Injection: 4/4/95 21:16  
 Low Point : 30.23 mV  
 Plot Scale: 300.0 mV  
 High Point : 330.23 mV

Page 1 of 1

## Response [mV]



130 %

```

=====
Software Version: 3.3 <4B11>
Sample Name : D9503I77-1 (500:1) RESHOTTime : 4/4/95 21:50
Sample Number: RMW-1 Study : EKI
Operator : BA
Instrument : GCHP_04 Channel : B A/D mV Range : 1024
AutoSampler : HP7673A
Rack/Vial : 1/68
    
```

```

Interface Serial # : Data Acquisition Time: 4/4/95 21:16
Delay Time : 0.00 min.
End Time : 33.67 min.
Sampling Rate : 1.2500 pts/sec
    
```

```

Raw Data File : S:\GHP_04\0409\404B018.RAW
Result File : S:\GHP_04\0409\404B018.RST
Instrument File: S:\GHP_04\MET_SEQ\ETPH04B.ins
Process File : S:\GHP_04\MET_SEQ\ETPH04B
Sample File : S:\GHP_04\MET_SEQ\ETPH04B
Sequence File : S:\GHP_04\MET_SEQ\H040404.SEQ
    
```

```

Inj. Volume : 3 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00
    
```

Extractable TPH GCHP\_04B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	5.735	n-C9 to n-C13 P.Thn.	27122	0.04		0.0005	0.0181
	8.250	n-C9 to n-C17 Jet	1307084	2.04		0.0218	0.8714
	11.250	n-C9 to n-C24 TPH-D	6273189	9.77		5.1544	206.1743
	16.250	n-C9 to n-C36 Total	28805445	44.85		0.4801	19.2036
	21.100	n-C16 to n-C36	27807141	43.30		0.4635	18.5381
			64219981	100.00			

Report Stored in ASCII File: S:\GHP\_04\0409\404B018.TX0

Extractable TPH GCHP\_04B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	7.058		27122.36	0.09	*B	0.0005	0.0181
2	9.303		218061.75	0.76	*V	0.0036	0.1454
3	9.855		118954.50	0.41	*V	0.0020	0.0793
4	10.141		78205.92	0.27	*V	0.0013	0.0521
5	10.494		58181.27	0.20	*V	0.0010	0.0388
6	11.152		125491.70	0.44	*V	0.0021	0.0837
7	11.643		108058.12	0.38	*V	0.0018	0.0720
8	12.134		129983.01	0.45	*V	0.0022	0.0867
9	12.260		41611.85	0.14	*V	0.0007	0.0277
10	12.518		92633.05	0.32	*V	0.0015	0.0618
11	13.373		308780.66	1.07	*V	0.0051	0.2059
12	13.532		63245.59	0.22	*V	0.0011	0.0422

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
13	13.879		236621.69	0.82	*V	0.0039	0.1577
14	14.175		81559.78	0.28	*V	0.0014	0.0544
15	14.321		152160.68	0.53	*V	0.0025	0.1014
16	14.555		121382.09	0.42	*V	0.0020	0.0809
17	14.692		77662.51	0.27	*V	0.0013	0.0518
18	14.817		181367.43	0.63	*V	0.0030	0.1209
19	15.094		31513.82	0.11	*V	0.0005	0.0210
20	15.281		185296.84	0.64	*V	0.0031	0.1235
21	15.616		251014.64	0.87	*V	0.0042	0.1673
22	16.032		260018.95	0.90	*V	0.0043	0.1733
23	16.216		256506.58	0.89	*V	0.0043	0.1710
24	16.749		208715.14	0.72	*V	0.0035	0.1391
25	16.838		94766.16	0.33	*V	0.0016	0.0632
26	17.034		175528.86	0.61	*V	0.0029	0.1170
27	17.611		539465.33	1.87	*V	0.0090	0.3596
28	17.836		156592.18	0.54	*V	0.0026	0.1044
29	17.933		91442.02	0.32	*V	0.0015	0.0610
30	18.333		410833.91	1.43	*V	0.0068	0.2739
31	18.426		145697.71	0.51	*V	0.0024	0.0971
32	18.591		165999.50	0.58	*V	0.0028	0.1107
33	18.668		45385.41	0.16	*V	0.0008	0.0303
34	18.792		169715.28	0.59	*V	0.0028	0.1131
35	18.915		127153.45	0.44	*V	0.0021	0.0848
36	19.003		178987.54	0.62	*V	0.0030	0.1193
37	19.225		222283.59	0.77	*V	0.0037	0.1482
38	19.323		187490.78	0.65	*V	0.0031	0.1250
39	19.446		147697.16	0.51	*V	0.0025	0.0985
40	19.637		390735.28	1.36	*V	0.0065	0.2605
41	19.862		171308.42	0.59	*V	0.0029	0.1142
42	20.023	n-Pentacosane	2950288.32	10.24	*V	2.6119	104.4755
43	20.453		566733.97	1.97	*V	0.0094	0.3778
44	20.588		85664.92	0.30	*V	0.0014	0.0571
45	20.640		65020.71	0.23	*V	0.0011	0.0433
46	20.709		367556.48	1.28	*V	0.0061	0.2450
47	20.957		209304.59	0.73	*V	0.0035	0.1395
48	21.023		118452.28	0.41	*V	0.0020	0.0790
49	21.145		194012.29	0.67	*V	0.0032	0.1293
50	21.205		124378.98	0.43	*V	0.0021	0.0829
51	21.263		100998.17	0.35	*V	0.0017	0.0673
52	21.362		218077.94	0.76	*V	0.0036	0.1454
53	21.417		196385.16	0.68	*V	0.0033	0.1309
54	21.548		249340.01	0.87	*V	0.0042	0.1662
55	21.692		241162.87	0.84	*V	0.0040	0.1608
56	21.759		283036.55	0.98	*V	0.0047	0.1887
57	21.905		247948.25	0.86	*V	0.0041	0.1653
58	22.007		485555.26	1.69	*V	0.0081	0.3237
59	22.150		198097.92	0.69	*V	0.0033	0.1321
60	22.260		309671.99	1.08	*V	0.0052	0.2064
61	22.426		346454.68	1.20	*V	0.0058	0.2310
62	22.503		255888.04	0.89	*V	0.0043	0.1706
63	22.593		370479.15	1.29	*V	0.0062	0.2470
64	22.764		481069.55	1.67	*V	0.0080	0.3207
65	22.914		368872.62	1.28	*V	0.0061	0.2459
66	23.143		908902.92	3.16	*V	0.0151	0.6059
67	23.364		342796.03	1.19	*V	0.0057	0.2285
68	23.454		273737.63	0.95	*V	0.0046	0.1825
69	23.580		364846.92	1.27	*V	0.0061	0.2432
70	23.741		657335.29	2.28	*V	0.0110	0.4382

Result File : 404B018.RST, Printed On 4/4/95 21:50

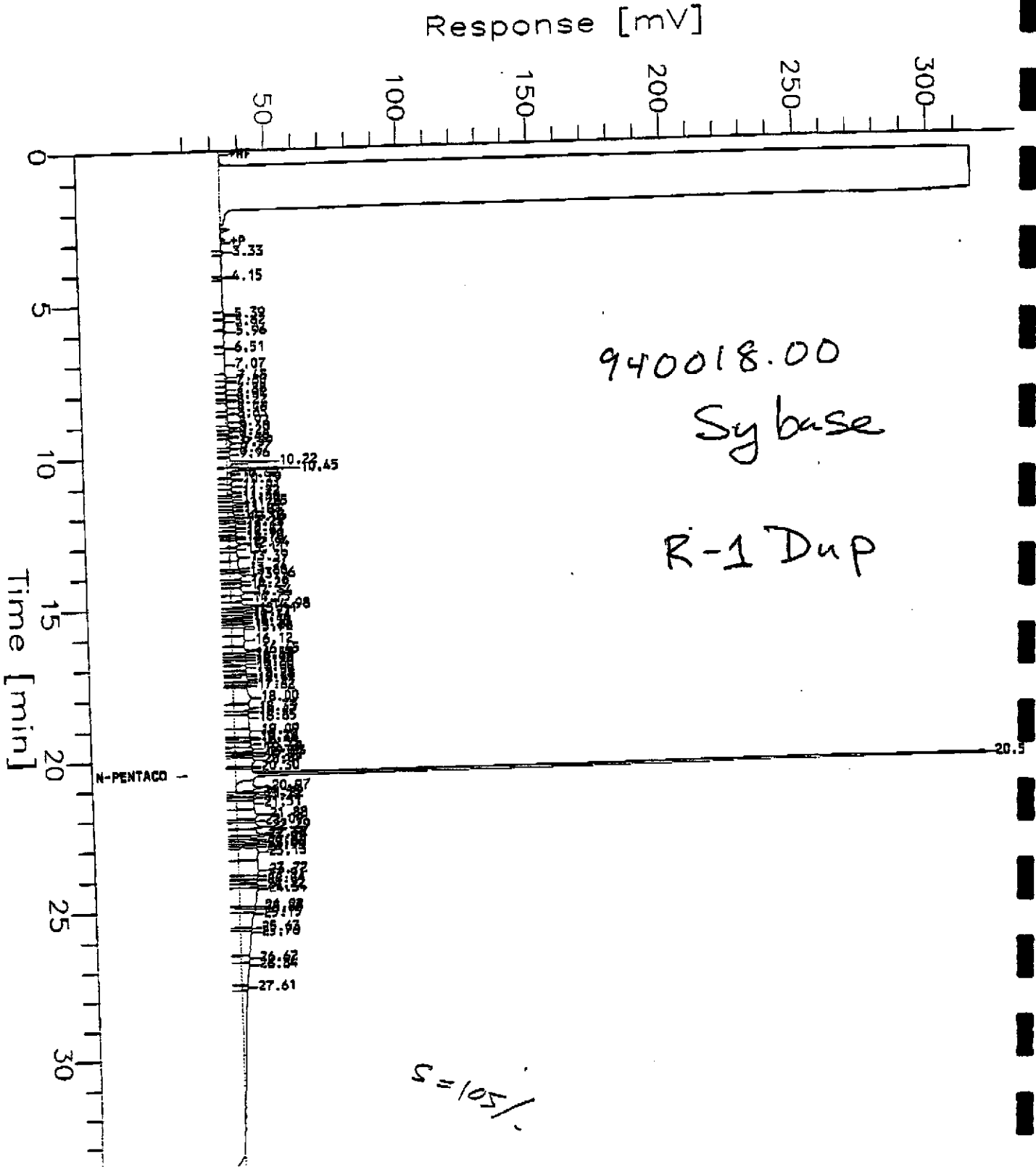
Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
71	23.886		196561.54	0.68	*V	0.0033	0.1310
72	23.956		553242.29	1.92	*V	0.0092	0.3688
73	24.157		278518.32	0.97	*V	0.0046	0.1857
74	24.210		555017.93	1.93	*V	0.0093	0.3700
75	24.443		670174.89	2.33	*V	0.0112	0.4468
76	24.735		545478.75	1.89	*V	0.0091	0.3637
77	24.879		287633.84	1.00	*V	0.0048	0.1918
78	25.023		310825.65	1.08	*V	0.0052	0.2072
79	25.173		537082.89	1.86	*V	0.0090	0.3581
80	25.464		662927.85	2.30	*V	0.0110	0.4420
81	25.736		1342791.27	4.66	*V	0.0224	0.8952
82	26.371		909993.83	3.16	*V	0.0152	0.6067
83	26.911		1106299.28	3.84	*V	0.0184	0.7375
84	27.635		420256.14	1.46	*V	0.0070	0.2802
85	27.924		626633.10	2.18	*V	0.0104	0.4178
86	28.298		1026217.73	3.56	*V	0.0171	0.6841
87	29.125		358487.38	1.24	*V	0.0060	0.2390
			28805444.65	100.00			

Report Stored in ASCII File: S:\GHP\_04\0409\404B018.TXT

Sample Name : D9503177-2 (500:1)  
FileName : si\ghp\_05\0402\3318037.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 15 mV

Sample #: R-1 DUP  
Date : 4/1/95 10:25  
Time of Injection: 4/1/95 09:51  
Low Point : 13.44 mV  
High Point : 315.44 mV  
Plot Scale: 300.0 mV



Software Version: 3.3 <4B11>  
 Sample Name : D9503I77-2 (500:1)  
 Sample Number: R-1 DUP  
 Operator : TO

Time : 4/1/95 10:25  
 Study : EXI

Instrument : GCHP\_05  
 AutoSampler : HP7673A  
 Rack/Vial : 1/87

Channel : B A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 4/1/95 09:51  
 Delay Time : 0.00 min.  
 End Time : 33.67 min.  
 Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0402\331B037.RAW  
 Result File : S:\GHP\_05\0402\331B037.RST  
 Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins  
 Process File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sample File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sequence File : S:\GHP\_05\MET\_SEQ\H050331.seq

Inj. Volume : 3 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ug/L]
	8.250	n-C9 to n-C17 Jet	698726.38	4.14		0.0116	0.4658
	11.250	n-C9 to n-C24 TPH-D	2428587.52	14.39		2.4334	97.3358
	16.750	n-C9 to n-C40 Total	7141152.83	42.32		0.1190	4.7608
	19.875	n-C16 to n-C36 M/Oil	6606844.41	39.15		0.1101	4.4046
			16875311.14	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331B037.TX0

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ug/L]
1	3.330		3473.35	0.05	*B	5.7889e-05	0.0023
2	4.152		868.50	0.01	*V	1.4475e-05	0.0006
3	5.390		7018.63	0.10	*V	0.0001	0.0047
4	5.621		7458.87	0.10	*V	0.0001	0.0050
5	5.963		7387.45	0.10	*V	0.0001	0.0049
6	6.506		2524.38	0.04	*V	4.2073e-05	0.0017
7	7.065		7676.44	0.11	*V	0.0001	0.0051
8	7.446		5274.75	0.07	*V	8.7912e-05	0.0035
9	7.599		4699.45	0.07	*V	7.8324e-05	0.0031
10	7.876		3534.18	0.05	*V	5.8903e-05	0.0024
11	8.038		5587.08	0.08	*V	9.3118e-05	0.0037
12	8.218		2853.54	0.04	*V	4.7559e-05	0.0019
13	8.460		8446.10	0.12	*V	0.0001	0.0056

Result File : 331B037.RST, Printed On 4/1/95 10:25

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	8.645		5143.01	0.07	*V	8.5717e-05	0.0034
15	8.922		12640.39	0.18	*V	0.0002	0.0084
16	9.100		8705.12	0.12	*V	0.0001	0.0058
17	9.222		9452.21	0.13	*V	0.0002	0.0063
18	9.401		8112.99	0.11	*V	0.0001	0.0054
19	9.586		22787.78	0.32	*V	0.0004	0.0152
20	9.773		9352.86	0.13	*V	0.0002	0.0062
21	9.960		12131.03	0.17	*V	0.0002	0.0081
22	10.217		66281.88	0.93	*V	0.0011	0.0442
23	10.445		79781.08	1.12	*V	0.0013	0.0532
24	10.616		14381.47	0.20	*E	0.0002	0.0096
25	10.787		18347.10	0.26	*V	0.0003	0.0122
26	11.013		15145.26	0.21	*V	0.0003	0.0101
27	11.216		17644.90	0.25	*V	0.0003	0.0118
28	11.356		8909.68	0.12	*V	0.0001	0.0059
29	11.428		9442.13	0.13	*V	0.0002	0.0063
30	11.554		25560.47	0.36	*V	0.0004	0.0170
31	11.685		14982.02	0.21	*V	0.0002	0.0100
32	11.814		7616.12	0.11	*V	0.0001	0.0051
33	11.814		21407.37	0.30	*V	0.0004	0.0143
34	11.973		19967.01	0.28	*V	0.0003	0.0133
35	12.061		12143.53	0.17	*V	0.0002	0.0081
36	12.185		22936.99	0.32	*V	0.0004	0.0153
37	12.242		18268.79	0.26	*V	0.0003	0.0122
38	12.410		25755.59	0.36	*V	0.0004	0.0172
39	12.530		12052.98	0.17	*V	0.0002	0.0080
40	12.697		8237.20	0.12	*V	0.0001	0.0055
41	12.760		46149.46	0.65	*V	0.0008	0.0308
42	12.942		24911.96	0.35	*V	0.0004	0.0166
43	13.109		53675.28	0.75	*V	0.0009	0.0358
44	13.387		55131.45	0.77	*V	0.0009	0.0368
45	13.744		19402.30	0.27	*V	0.0003	0.0129
46	13.856		58432.38	0.82	*V	0.0010	0.0390
47	13.964		24262.31	0.34	*V	0.0004	0.0162
48	14.171		36582.09	0.51	*V	0.0006	0.0244
49	14.293		63838.48	0.89	*V	0.0011	0.0426
50	14.542		49158.72	0.69	*V	0.0008	0.0328
51	14.747		72596.40	1.02	*V	0.0012	0.0484
52	14.983		37039.29	0.52	*V	0.0006	0.0247
53	15.105		28426.51	0.40	*V	0.0005	0.0190
54	15.210		26837.20	0.38	*V	0.0004	0.0179
55	15.336		26854.16	0.38	*V	0.0004	0.0179
56	15.444		24253.77	0.34	*V	0.0004	0.0162
57	15.547		29703.62	0.42	*V	0.0005	0.0198
58	15.656		74108.05	1.04	*V	0.0012	0.0494
59	15.715		95643.46	1.34	*V	0.0016	0.0638
60	16.121		70153.64	0.98	*V	0.0012	0.0468
61	16.453		35040.60	0.49	*V	0.0006	0.0234
62	16.583		23326.86	0.33	*V	0.0004	0.0156
63	16.669		19590.92	0.27	*V	0.0003	0.0131
64	16.758		39563.29	0.55	*V	0.0007	0.0264
65	16.878		50870.08	0.71	*V	0.0008	0.0339
66	17.003		47413.18	0.66	*V	0.0008	0.0316
67	17.229		16411.53	0.23	*V	0.0003	0.0109
68	17.282		54745.79	0.77	*V	0.0009	0.0365
69	17.408		33169.83	0.46	*V	0.0006	0.0221
70	17.512		16527.84	0.23	*V	0.0003	0.0110
71	17.618		183310.39	2.57	*V	0.0031	0.1222
71	18.002						



Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	18.333		79510.07	1.11	*V	0.0013	0.0530
73	18.468		39223.93	0.55	*V	0.0007	0.0261
74	18.651		152306.70	2.13	*V	0.0025	0.1015
75	19.086		87112.42	1.22	*V	0.0015	0.0581
76	19.294		17940.90	0.25	*V	0.0003	0.0120
77	19.356		41372.98	0.58	*V	0.0007	0.0276
78	19.530		60515.37	0.85	*V	0.0010	0.0403
79	19.687		61729.73	0.86	*V	0.0010	0.0412
80	19.828		46130.84	0.65	*V	0.0008	0.0308
81	19.917		32738.26	0.46	*V	0.0005	0.0218
82	20.071		120279.44	1.68	*V	0.0020	0.0802
83	20.299		19117.26	0.27	*V	0.0003	0.0127
84	20.537	n-Pentacosane	2072486.02	29.02	*V	2.1063	84.2522
85	20.972		139026.09	1.95	*E	0.0023	0.0927
86	21.147		19971.99	0.28	*V	0.0003	0.0133
87	21.221		48280.02	0.68	*V	0.0008	0.0322
88	21.318		45678.35	0.64	*V	0.0008	0.0305
89	21.512		112778.61	1.58	*V	0.0019	0.0752
90	21.881		141099.39	1.98	*V	0.0024	0.0941
91	22.094		37721.98	0.53	*V	0.0006	0.0251
92	22.285		101207.32	1.42	*V	0.0017	0.0675
93	22.522		99294.46	1.39	*V	0.0017	0.0662
94	22.599		40863.87	0.57	*V	0.0007	0.0272
95	22.708		33674.22	0.47	*V	0.0006	0.0224
96	22.799		40968.70	0.57	*V	0.0007	0.0273
97	22.863		28398.45	0.40	*V	0.0005	0.0189
98	22.948		33774.33	0.47	*V	0.0006	0.0225
99	23.125		171034.48	2.40	*V	0.0029	0.1140
100	23.724		210340.16	2.95	*V	0.0035	0.1402
101	23.907		54368.55	0.76	*V	0.0009	0.0362
102	24.044		53408.49	0.75	*V	0.0009	0.0356
103	24.224		53620.32	0.75	*V	0.0009	0.0357
104	24.335		234394.97	3.28	*V	0.0039	0.1563
105	24.917		22721.46	0.32	*V	0.0004	0.0151
106	25.001		43164.30	0.60	*V	0.0007	0.0288
107	25.146		141554.43	1.98	*V	0.0024	0.0944
108	25.628		23938.51	0.34	*V	0.0004	0.0160
109	25.763		180985.34	2.53	*V	0.0030	0.1207
110	26.623		44958.69	0.63	*V	0.0007	0.0300
111	26.838		117707.62	1.65	*V	0.0020	0.0785
112	27.613		24633.30	0.34	*V	0.0004	0.0164
			7141152.83	100.00			

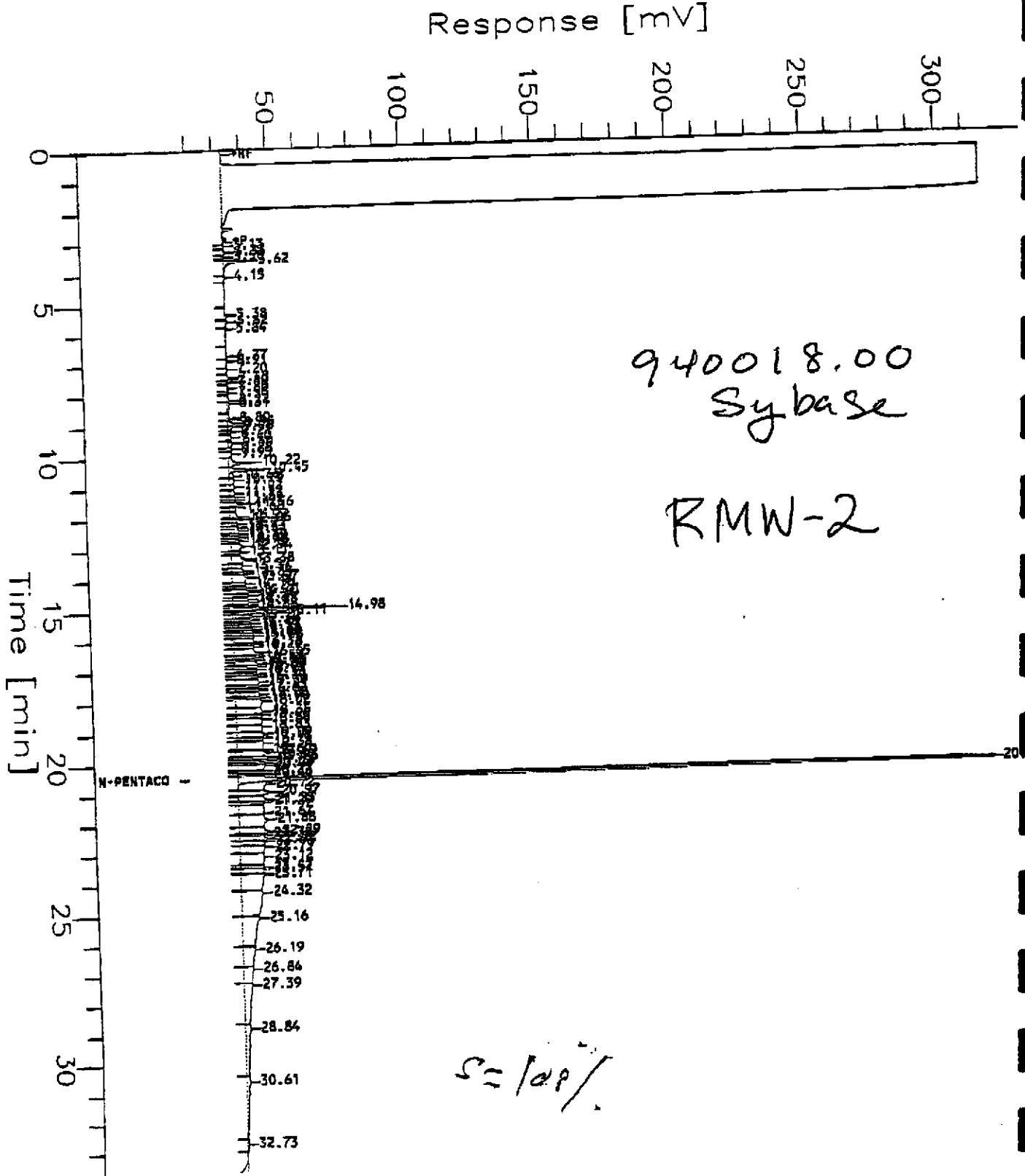
Report Stored in ASCII File: S:\GHP\_05\0402\331B037.TX1

Chromatogram

Sample Name : D9503177-3 (500:1)  
 FileName : s:\ghp\_05\0402\3318038.raw  
 Method : RTPH05A.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 33.67 min  
 Plot Offset: 16 mV

Sample #: RMW-2  
 Date : 4/1/95 11:06  
 Time of Injection: 4/1/95 10:32  
 Low Point : 15.69 mV  
 Plot Scale: 300.0 mV  
 High Point : 315.69 mV



*S = 100%*

Software Version: 3.3 <4B11>  
 Sample Name : D9503177-3 (500:1)  
 Sample Number: RMW-2  
 Operator : TO

Time : 4/1/95 11:06  
 Study : EXI

Instrument : GCHP 05  
 AutoSampler : HP7673A  
 Rack/Vial : 1/88

Channel : B A/D mV Range : 1024

Interface Serial # : Data Acquisition Time: 4/1/95 10:32  
 Delay Time : 0.00 min.  
 End Time : 33.67 min.  
 Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0402\331B038.RAW  
 Result File : S:\GHP\_05\0402\331B038.RST  
 Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins  
 Process File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sample File : S:\GHP\_05\MET\_SEQ\ETPH05B  
 Sequence File : S:\GHP\_05\MET\_SEQ\H050331.seq

Inj. Volume : 3 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	809987.48	3.51		0.0135	0.5400
	11.250	n-C9 to n-C24 TPH-D	3685238.43	15.99		3.6925	147.7014
	16.750	n-C9 to n-C40 Total	9637769.81	41.81		0.1606	6.4252
	19.875	n-C16 to n-C36 M/Oil	8920471.11	38.69		0.1487	5.9470
			23053466.83	100.00			

Report Stored in ASCII File: S:\GHP\_05\0402\331B038.TX0

Extractable TPH GCHP\_05B

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.134		919.13	9e-03	*B	1.5319e-05	0.0006
2	3.333		4436.22	0.05	*V	7.3937e-05	0.0030
3	3.498		813.66	8e-03	*V	1.3561e-05	0.0005
4	3.620		51097.08	0.52	*V	0.0009	0.0341
5	3.620		2536.88	0.03	*V	4.2281e-05	0.0017
6	4.147		8876.78	0.09	*V	0.0001	0.0059
7	5.379		9178.01	0.09	*V	0.0002	0.0061
8	5.616		7441.78	0.08	*V	0.0001	0.0050
9	5.843		6329.32	0.06	*V	0.0001	0.0042
10	6.767		5244.14	0.05	*V	8.7402e-05	0.0035
11	6.914		2607.28	0.03	*V	4.3455e-05	0.0017
12	7.199		5542.06	0.06	*V	9.2368e-05	0.0037
13	7.480		2842.57	0.03	*V	4.7376e-05	0.0019
	7.604						

Result File : 331B038.RST, Printed On 4/1/95 11:06

Peak #	Time [min]	Component Name	Area [ $\mu$ V*sec]	Area [%]	BL	Soil [mg/kg]	Water [ $\mu$ g/L]
14	7.796		5643.57	0.06	*V	9.4060e-05	0.0038
15	7.960		2746.29	0.03	*V	4.5771e-05	0.0018
16	8.216		7929.59	0.08	*V	0.0001	0.0053
17	8.307		15123.20	0.16	*V	0.0003	0.0101
18	8.803		9988.74	0.10	*V	0.0002	0.0067
19	8.949		18123.40	0.19	*V	0.0003	0.0121
20	9.055		12505.21	0.13	*V	0.0002	0.0083
21	9.213		9146.00	0.09	*V	0.0002	0.0061
22	9.402		13397.04	0.14	*V	0.0002	0.0089
23	9.596		17187.95	0.18	*V	0.0003	0.0115
24	9.778		8336.55	0.09	*V	0.0001	0.0056
25	9.948		13377.15	0.14	*V	0.0002	0.0089
26	10.218		45665.34	0.47	*V	0.0008	0.0304
27	10.448		47853.55	0.49	*V	0.0008	0.0319
28	10.653		13716.51	0.14	*E	0.0002	0.0091
29	10.787		20358.92	0.21	*V	0.0003	0.0136
30	11.015		18436.62	0.19	*V	0.0003	0.0123
31	11.224		20723.54	0.21	*V	0.0003	0.0138
32	11.340		12682.10	0.13	*V	0.0002	0.0085
33	11.424		9522.86	0.10	*V	0.0002	0.0063
34	11.555		33209.74	0.34	*V	0.0006	0.0221
35	11.680		18856.84	0.19	*V	0.0003	0.0126
36	11.974		31971.28	0.33	*V	0.0005	0.0213
37	12.062		29783.07	0.31	*V	0.0005	0.0199
38	12.229		16206.33	0.17	*V	0.0003	0.0108
39	12.332		10632.90	0.11	*V	0.0002	0.0071
40	12.412		28843.67	0.30	*V	0.0005	0.0192
41	12.536		11897.13	0.12	*V	0.0002	0.0079
42	12.623		14436.95	0.15	*V	0.0002	0.0096
43	12.686		12649.70	0.13	*V	0.0002	0.0084
44	12.757		17605.62	0.18	*V	0.0003	0.0117
45	12.943		55938.09	0.57	*V	0.0009	0.0373
46	13.109		26686.83	0.27	*V	0.0004	0.0178
47	13.380		70940.26	0.73	*V	0.0012	0.0473
48	13.569		34422.20	0.35	*V	0.0006	0.0229
49	13.737		35939.32	0.37	*V	0.0006	0.0240
50	13.830		14406.08	0.15	*V	0.0002	0.0096
51	13.970		82051.80	0.84	*V	0.0014	0.0547
52	14.160		31275.71	0.32	*V	0.0005	0.0209
53	14.288		37190.16	0.38	*V	0.0006	0.0248
54	14.414		52096.30	0.53	*V	0.0009	0.0347
55	14.542		41429.86	0.43	*V	0.0007	0.0276
56	14.667		30990.17	0.32	*V	0.0005	0.0207
57	14.747		52594.83	0.54	*V	0.0009	0.0351
58	14.879		28598.04	0.29	*V	0.0005	0.0191
59	14.983		138621.56	1.42	*V	0.0023	0.0924
60	15.105		68703.22	0.71	*V	0.0011	0.0458
61	15.212		47764.66	0.49	*V	0.0008	0.0318
62	15.340		39721.30	0.41	*V	0.0007	0.0265
63	15.458		35874.28	0.37	*V	0.0006	0.0239
64	15.566		43017.00	0.44	*V	0.0007	0.0287
65	15.661		45005.11	0.46	*V	0.0008	0.0300
66	15.718		22582.58	0.23	*V	0.0004	0.0151
67	15.796		40463.67	0.42	*V	0.0007	0.0270
68	15.877		40787.60	0.42	*V	0.0007	0.0272
69	16.102		87015.88	0.89	*V	0.0015	0.0580
70	16.157		23378.51	0.24	*V	0.0004	0.0156
71	16.221		45952.55	0.47	*V	0.0008	0.0306

Result File : 331B038.RST, Printed On 4/1/95 11:06

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
			108692.21	1.12	*V	0.0018	0.0725
72	16.453		55457.42	0.57	*V	0.0009	0.0370
73	16.569		30982.52	0.32	*V	0.0005	0.0207
74	16.683		65536.35	0.67	*V	0.0011	0.0437
75	16.803		45996.93	0.47	*V	0.0008	0.0307
76	16.872		58321.30	0.60	*V	0.0010	0.0389
77	16.977		51635.65	0.53	*V	0.0009	0.0344
78	17.133		59455.83	0.61	*V	0.0010	0.0396
79	17.203		95963.31	0.98	*V	0.0016	0.0640
80	17.387		56061.80	0.58	*V	0.0009	0.0374
81	17.508		61536.27	0.63	*V	0.0010	0.0410
82	17.615		84170.88	0.86	*V	0.0014	0.0561
83	17.782		36636.80	0.38	*V	0.0006	0.0244
84	17.895		151871.56	1.56	*V	0.0025	0.1012
85	18.018		137083.26	1.41	*V	0.0023	0.0914
86	18.349		67448.93	0.69	*V	0.0011	0.0450
87	18.458		120604.52	1.24	*V	0.0020	0.0804
88	18.602		134535.16	1.38	*V	0.0022	0.0897
89	18.831		93223.02	0.96	*V	0.0016	0.0621
90	19.088		69814.02	0.72	*V	0.0012	0.0465
91	19.184		170320.81	1.75	*V	0.0028	0.1135
92	19.384		23409.37	0.24	*V	0.0004	0.0156
93	19.600		109106.18	1.12	*V	0.0018	0.0727
94	19.685		62442.26	0.64	*V	0.0010	0.0416
95	19.831		58151.04	0.60	*V	0.0010	0.0388
96	19.916		48273.13	0.50	*V	0.0008	0.0322
97	20.026		111607.48	1.15	*V	0.0019	0.0744
98	20.090		38375.71	0.39	*V	0.0006	0.0256
99	20.266		30505.67	0.31	*V	0.0005	0.0203
100	20.333		31059.54	0.32	*V	0.0005	0.0207
101	20.398		2133747.32	21.90	*V	2.1686	86.7426
102	20.538	n-Pentacosane	145553.21	1.49	*E	0.0024	0.0970
103	20.721		122237.45	1.25	*V	0.0020	0.0815
104	20.974		101079.66	1.04	*V	0.0017	0.0674
105	21.225		59789.20	0.61	*V	0.0010	0.0399
106	21.293		185969.06	1.91	*V	0.0031	0.1240
107	21.667		229759.55	2.36	*V	0.0038	0.1532
108	21.884		142080.88	1.46	*V	0.0024	0.0947
109	22.288		29230.34	0.30	*V	0.0005	0.0195
110	22.375		99588.17	1.02	*V	0.0017	0.0664
111	22.521		96110.10	0.99	*V	0.0016	0.0641
112	22.609		130444.68	1.34	*V	0.0022	0.0870
113	22.794		212181.73	2.18	*V	0.0035	0.1415
114	23.122		55643.24	0.57	*V	0.0009	0.0371
115	23.468		90885.60	0.93	*V	0.0015	0.0606
116	23.523		278254.58	2.86	*V	0.0046	0.1855
117	23.711		378552.98	3.88	*V	0.0063	0.2524
118	24.321		318299.57	3.27	*V	0.0053	0.2122
119	25.161		166115.42	1.70	*V	0.0028	0.1107
120	26.192		110186.25	1.13	*V	0.0018	0.0735
121	26.843		196949.62	2.02	*V	0.0033	0.1313
122	27.390		156942.38	1.61	*V	0.0026	0.1046
123	28.839		96944.16	0.99	*V	0.0016	0.0646
124	30.611		9886.07	0.10	*V	0.0002	0.0066
125	32.729						
			9744600.05	100.00			

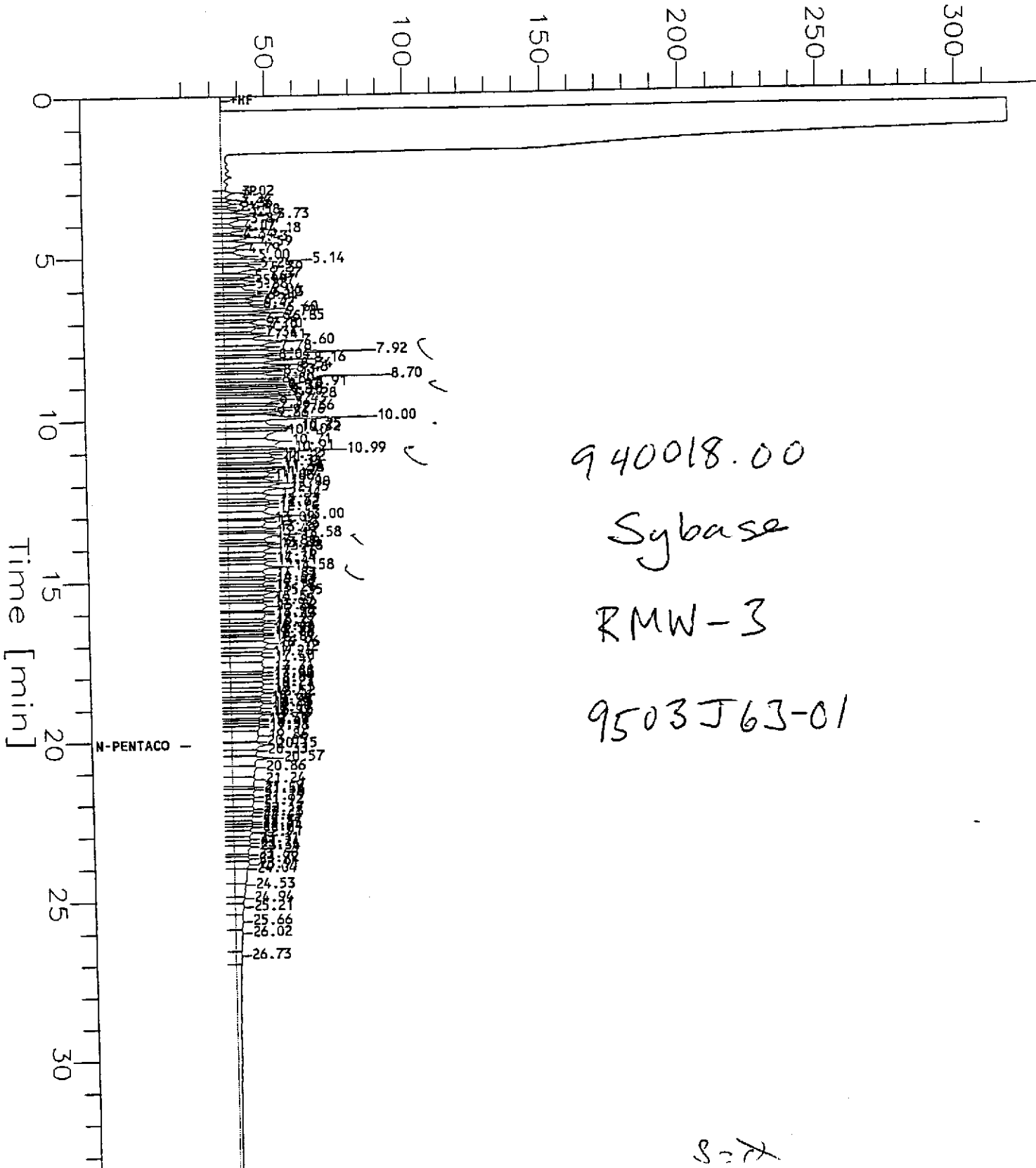
Chromatogram

COPY

Sample Name : D9503J63-1 (500:1\*200)RE-SHOT  
 FileName : s:\ghp\_05\0409\405A041.raw  
 Method : ETPH05A.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0

Sample #: RMW03  
 Date : 4/6/95 19:24  
 Time of Injection: 4/6/95 18:50  
 Low Point : 18.79 mV  
 Plot Scale: 300.0 mV  
 End Time : 33.67 min  
 Plot Offset: 19 mV  
 High Point : 318.79 mV

Response [mV]



=====  
Software Version: 3.3 <4B11>

Sample Name : D9503J63-1 (500:1\*200)RE-SHOT Time : 4/6/95 19:24

Sample Number: RMW03 Study : EKI

Operator :

Instrument : GCHP\_05

Channel : A A/D mV Range : 1024

AutoSampler : HP7673A

Rack/Vial : 1/41

Interface Serial # : Data Acquisition Time: 4/6/95 18:50

Delay Time : 0.00 min.

End Time : 33.67 min.

Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0409\405A041.RAW

Result File : S:\GHP\_05\0409\405A041.RST

Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins

Process File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sequence File : S:\GHP\_05\MET\_SEQ\H050405.SEQ

Inj. Volume : 3 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	8610493.17	18.88		0.1435	5.7403
	11.250	n-C9 to n-C24 TPH-D	13106818.16	28.74		12.1132	484.527
	16.750	n-C9 to n-C40 Total	15707252.80	34.44		0.2618	10.471
	19.875	n-C16 to n-C36 M/Oil	8177346.04	17.93		0.1363	5.4516
			45601910.17	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A041.TX0

=====  
Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.015		35087.53	0.22	*B	0.0006	0.0234
2	3.238		14715.48	0.09	*V	0.0002	0.0008
3	3.358		21092.36	0.13	*V	0.0004	0.0104
4	3.467		9177.76	0.06	*V	0.0002	0.0061
5	3.583		32022.80	0.20	*V	0.0005	0.0213
6	3.728		90665.60	0.58	*V	0.0015	0.0604
7	3.868		48031.84	0.31	*V	0.0008	0.0320
8	4.069		24887.60	0.16	*V	0.0004	0.0166
9	4.175		74255.60	0.47	*V	0.0012	0.0405
10	4.339		14737.16	0.09	*V	0.0002	0.0008
11	4.430		60890.19	0.39	*V	0.0010	0.0406
12	4.592		81629.28	0.52	*V	0.0014	0.0514
13	4.792		44933.56	0.29	*V	0.0007	0.0300

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.002		71159.88	0.45	*V	0.0012	0.0474
15	5.138		125499.48	0.80	*V	0.0021	0.0837
16	5.242		51705.54	0.33	*V	0.0009	0.0345
17	5.394		124271.98	0.79	*V	0.0021	0.0828
18	5.574		75973.98	0.48	*V	0.0013	0.0506
19	5.662		27543.98	0.18	*V	0.0005	0.0184
20	5.765		63877.89	0.41	*V	0.0011	0.0426
21	5.876		42837.95	0.27	*V	0.0007	0.0286
22	6.060		98935.07	0.63	*V	0.0016	0.0660
23	6.130		59609.89	0.38	*V	0.0010	0.0397
24	6.212		65676.99	0.42	*V	0.0011	0.0438
25	6.351		70430.90	0.45	*V	0.0012	0.0470
26	6.471		63389.82	0.40	*V	0.0011	0.0423
27	6.599		134387.10	0.86	*V	0.0022	0.0896
28	6.716		83178.68	0.53	*V	0.0014	0.0555
29	6.852		134169.91	0.85	*V	0.0022	0.0894
30	6.943		50195.68	0.32	*V	0.0008	0.0335
31	7.098		99099.97	0.63	*V	0.0017	0.0661
32	7.187		93522.08	0.60	*V	0.0016	0.0623
33	7.340		43683.74	0.28	*V	0.0007	0.0291
34	7.412		97264.65	0.62	*V	0.0016	0.0648
35	7.603		220789.54	1.41	*V	0.0037	0.1472
36	7.778		119396.02	0.76	*V	0.0020	0.0796
37	7.923		239372.19	1.52	*V	0.0040	0.1596
38	8.035		70630.23	0.45	*V	0.0012	0.0471
39	8.162		209683.49	1.33	*V	0.0035	0.1398
40	8.337		154583.03	0.98	*V	0.0026	0.1031
41	8.464		106163.37	0.68	*V	0.0018	0.0708
42	8.531		75861.75	0.48	*V	0.0013	0.0506
43	8.703		284873.14	1.81	*V	0.0047	0.1899
44	8.796		91581.42	0.58	*V	0.0015	0.0611
45	8.905		128430.18	0.82	*V	0.0021	0.0856
46	8.969		60076.53	0.38	*V	0.0010	0.0401
47	9.031		75813.54	0.48	*V	0.0013	0.0505
48	9.116		108577.05	0.69	*V	0.0018	0.0724
49	9.197		93395.18	0.59	*V	0.0016	0.0623
50	9.278		121642.13	0.77	*V	0.0020	0.0811
51	9.429		188759.98	1.20	*V	0.0031	0.1258
52	9.544		73953.48	0.47	*V	0.0012	0.0493
53	9.664		139520.28	0.89	*V	0.0023	0.0930
54	9.764		111521.78	0.71	*V	0.0019	0.0743
55	9.863		47593.13	0.30	*V	0.0008	0.0317
56	9.998		299671.26	1.91	*V	0.0050	0.1998
57	10.250		215670.51	1.37	*V	0.0036	0.1438
58	10.316		117107.96	0.75	*V	0.0020	0.0781
59	10.397		219688.55	1.40	*V	0.0037	0.1465
60	10.706		267982.09	1.71	*V	0.0045	0.1787
61	10.908		107413.19	0.68	*V	0.0018	0.0716
62	10.993		172341.82	1.10	*V	0.0029	0.1149
63	11.123		129007.39	0.82	*V	0.0022	0.0860
64	11.224		133723.16	0.85	*V	0.0022	0.0891
65	11.360		64643.85	0.41	*V	0.0011	0.0431
66	11.458		93537.00	0.60	*V	0.0016	0.0624
67	11.507		55653.95	0.35	*V	0.0009	0.0371
68	11.563		78886.31	0.50	*V	0.0013	0.0526
69	11.670		144684.59	0.92	*V	0.0024	0.0965
70	11.795		43553.79	0.28	*V	0.0007	0.0290
71	11.912		111277.55	0.71	*V	0.0019	0.0742



Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	11.998		151348.68	0.96	*V	0.0025	0.1009
73	12.148		172955.76	1.10	*V	0.0029	0.1153
74	12.343		148298.74	0.94	*V	0.0025	0.0989
75	12.526		94609.30	0.60	*V	0.0016	0.0631
76	12.615		95438.77	0.61	*V	0.0016	0.0636
77	12.735		158570.21	1.01	*V	0.0026	0.1057
78	13.002		211241.81	1.34	*V	0.0035	0.1408
79	13.090		43077.45	0.27	*V	0.0007	0.0287
80	13.182		173752.07	1.11	*V	0.0029	0.1158
81	13.387		100842.96	0.64	*V	0.0017	0.0672
82	13.488		54755.10	0.35	*V	0.0009	0.0365
83	13.580		195946.32	1.25	*V	0.0033	0.1306
84	13.808		87903.12	0.56	*V	0.0015	0.0586
85	13.876		80778.64	0.51	*V	0.0013	0.0539
86	13.980		161186.29	1.03	*V	0.0027	0.1075
87	14.158		129338.97	0.82	*V	0.0022	0.0862
88	14.335		75759.85	0.48	*V	0.0013	0.0505
89	14.410		98991.44	0.63	*V	0.0016	0.0660
90	14.583		200402.05	1.28	*V	0.0033	0.1336
91	14.825		125501.13	0.80	*V	0.0021	0.0837
92	14.929		83791.60	0.53	*V	0.0014	0.0559
93	15.025		105041.84	0.67	*V	0.0018	0.0700
94	15.176		61074.60	0.39	*V	0.0010	0.0401
95	15.259		96148.74	0.61	*V	0.0016	0.0641
96	15.353		136143.99	0.87	*V	0.0023	0.0908
97	15.540		102482.01	0.65	*V	0.0017	0.0681
98	15.649		69800.12	0.44	*V	0.0012	0.0465
99	15.817		187437.47	1.19	*V	0.0031	0.1250
100	15.975		51557.73	0.33	*V	0.0009	0.0341
101	16.066		153489.82	0.98	*V	0.0026	0.1021
102	16.268		80896.22	0.52	*V	0.0013	0.0539
103	16.352		70140.25	0.45	*V	0.0012	0.0468
104	16.462		89267.08	0.57	*V	0.0015	0.0591
105	16.548		47217.42	0.30	*V	0.0008	0.0315
106	16.655		69783.93	0.44	*V	0.0012	0.0465
107	16.702		49762.71	0.32	*V	0.0008	0.0331
108	16.806		100486.13	0.64	*V	0.0017	0.0671
109	16.959		158428.52	1.01	*V	0.0026	0.1056
110	17.123		111224.24	0.71	*V	0.0019	0.0741
111	17.258		74648.40	0.48	*V	0.0012	0.0491
112	17.404		142886.76	0.91	*V	0.0024	0.0955
113	17.713		218136.61	1.39	*V	0.0036	0.1454
114	17.878		56539.16	0.36	*V	0.0009	0.0371
115	17.977		64674.72	0.41	*V	0.0011	0.0431
116	18.093		102602.53	0.65	*V	0.0017	0.0684
117	18.228		130168.45	0.83	*V	0.0022	0.0868
118	18.413		83216.30	0.53	*V	0.0014	0.0551
119	18.518		110903.50	0.71	*V	0.0018	0.0735
120	18.655		52049.50	0.33	*V	0.0009	0.0347
121	18.763		52248.70	0.33	*V	0.0009	0.0341
122	18.849		115436.52	0.73	*V	0.0019	0.0711
123	19.004		68850.90	0.44	*V	0.0011	0.0459
124	19.110		52062.51	0.33	*V	0.0009	0.0347
125	19.190		95194.93	0.61	*V	0.0016	0.0611
126	19.346		48270.58	0.31	*V	0.0008	0.0322
127	19.400		48452.70	0.31	*V	0.0008	0.0323
128	19.505		56473.86	0.36	*V	0.0009	0.0335
129	19.576		86538.90	0.55	*V	0.0014	0.0517

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	19.858		188874.13	1.20	*V	0.0031	0.1259
131	20.054		22296.65	0.14	*V	0.0004	0.0149
132	20.148	n-Pentacosane	137281.32	0.87	*V	0.1280	5.1203
133	20.332		99267.04	0.63	*V	0.0017	0.0662
134	20.571		183718.24	1.17	*V	0.0031	0.1225
135	20.864		169533.55	1.08	*V	0.0028	0.1130
136	21.241		137923.45	0.88	*V	0.0023	0.0919
137	21.488		37251.25	0.24	*V	0.0006	0.0248
138	21.564		90747.35	0.58	*V	0.0015	0.0605
139	21.790		54384.36	0.35	*V	0.0009	0.0363
140	21.921		104843.91	0.67	*V	0.0017	0.0699
141	22.169		64860.40	0.41	*V	0.0011	0.0432
142	22.275		62100.73	0.40	*V	0.0010	0.0414
143	22.405		59733.21	0.38	*V	0.0010	0.0398
144	22.572		38031.62	0.24	*V	0.0006	0.0254
145	22.650		32772.82	0.21	*V	0.0005	0.0218
146	22.739		51867.25	0.33	*V	0.0009	0.0346
147	22.911		70143.31	0.45	*V	0.0012	0.0468
148	23.107		41476.15	0.26	*V	0.0007	0.0277
149	23.236		55858.39	0.36	*V	0.0009	0.0372
150	23.338		87921.61	0.56	*V	0.0015	0.0586
151	23.595		25216.64	0.16	*V	0.0004	0.0168
152	23.717		42170.57	0.27	*V	0.0007	0.0281
153	23.906		74017.24	0.47	*V	0.0012	0.0493
154	24.043		121759.20	0.78	*V	0.0020	0.0812
155	24.531		88449.09	0.56	*V	0.0015	0.0590
156	24.938		40664.03	0.26	*V	0.0007	0.0271
157	25.213		58209.58	0.37	*V	0.0010	0.0388
158	25.658		74272.31	0.47	*V	0.0012	0.0495
159	26.016		92455.91	0.59	*V	0.0015	0.0616
160	26.730		49320.56	0.31	*V	0.0008	0.0329

-----  
15707252.80 100.00

Report Stored in ASCII File: S:\GHP\_05\0409\405A041.TX1

Chromatogram

COPY

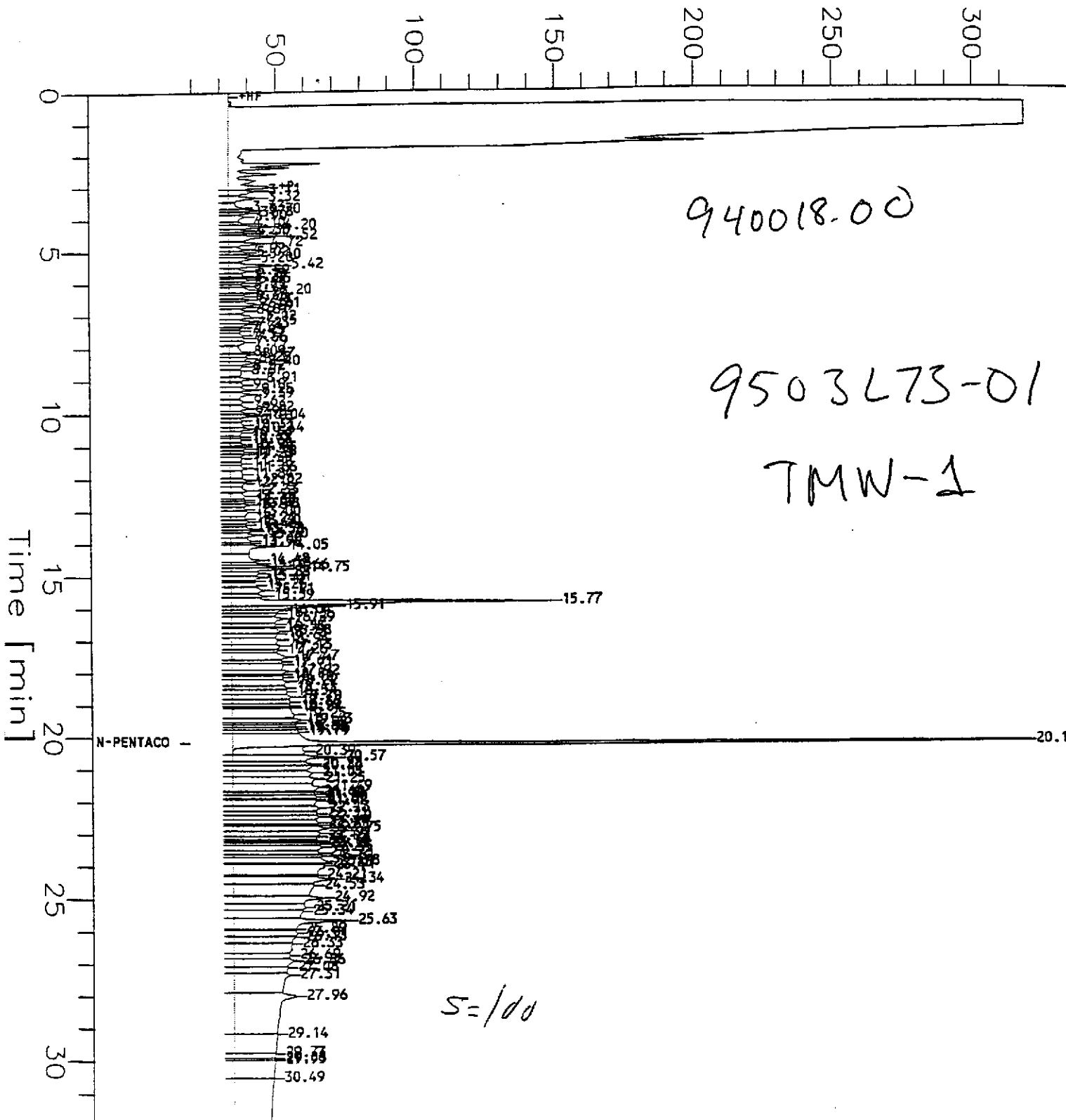
Sample Name : D9503L73-1 (500:1)  
fileName : s:\ghp\_05\0409\407A032.raw  
method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 18 mV

Sample #: TMW-1  
Date : 4/8/95 04:42  
Time of Injection: 4/8/95 04:08  
Low Point : 18.18 mV  
Plot Scale: 300.0 mV

High Point : 318.18 mV

Response [mV]



=====  
Software Version: 3.3 <4B11>

Sample Name : D9503L73-1 (500:1)

Time : 4/8/95 04:42

Sample Number: TMW-1

Study : EKI

Operator : TO

Instrument : GCHP\_05

Channel : A

A/D mV Range : 1024

AutoSampler : HP7673A

Back/Vial : 0/19

Interface Serial # : Data Acquisition Time: 4/8/95 04:08

Delay Time : 0.00 min.

Run Time : 33.67 min.

Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0409\407A032.RAW

Result File : S:\GHP\_05\0409\407A032.RST

Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins

Process File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sequence File : S:\GHP\_05\MET\_SEQ\H050407A.seq

Inj. Volume : 1 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Extractable TPH GCHP\_05A

Peak	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	3256689.99	5.36		0.1628	6.5134
	11.250	n-C9 to n-C24 TPH-D	9105199.66	14.98		8.2560	330.2394
	16.750	n-C9 to n-C40 Total	27563486.01	45.35		1.3782	55.1270
	19.875	n-C16 to n-C36 M/Oil	20850720.55	34.31		1.0425	41.7014
			60776096.20	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\407A032.TX0

Extractable TPH GCHP\_05A

Peak	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.109		73653.14	0.26	*B	0.0037	0.1473
2	3.321		66030.90	0.24	*V	0.0033	0.1321
3	3.625		37319.61	0.13	*V	0.0019	0.0746
4	3.701		41731.35	0.15	*V	0.0021	0.0835
5	3.782		32137.58	0.12	*V	0.0016	0.0643
6	3.903		50004.26	0.18	*V	0.0025	0.1000
7	4.099		25033.37	0.09	*V	0.0013	0.0501
8	4.202		83675.54	0.30	*V	0.0042	0.1674
9	4.328		30258.51	0.11	*V	0.0015	0.0605
10	4.413		24919.49	0.09	*V	0.0012	0.0498
11	4.515		105954.47	0.38	*V	0.0053	0.2119

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	5.017		30589.71	0.11	*V	0.0015	0.0612
15	5.102		42162.15	0.15	*V	0.0021	0.0843
16	5.204		49063.83	0.18	*V	0.0025	0.0981
17	5.418		99130.20	0.36	*V	0.0050	0.1983
18	5.586		43491.30	0.16	*V	0.0022	0.0870
19	5.731		31666.73	0.11	*V	0.0016	0.0633
20	5.786		17573.86	0.06	*V	0.0009	0.0351
21	5.849		41880.18	0.15	*V	0.0021	0.0838
22	5.950		21233.41	0.08	*V	0.0011	0.0425
23	6.047		22949.11	0.08	*V	0.0011	0.0459
24	6.199		84936.08	0.30	*V	0.0042	0.1699
25	6.274		21253.05	0.08	*V	0.0011	0.0425
26	6.362		32879.05	0.12	*V	0.0016	0.0658
27	6.478		32814.01	0.12	*V	0.0016	0.0656
28	6.614		60527.23	0.22	*V	0.0030	0.1211
29	6.689		33292.39	0.12	*V	0.0017	0.0666
30	6.811		42587.73	0.15	*V	0.0021	0.0852
31	7.020		69118.59	0.25	*V	0.0035	0.1382
32	7.153		46548.76	0.17	*V	0.0023	0.0931
33	7.233		33268.28	0.12	*V	0.0017	0.0665
34	7.336		18907.09	0.07	*V	0.0009	0.0378
35	7.426		21000.16	0.08	*V	0.0011	0.0420
36	7.566		33978.00	0.12	*V	0.0017	0.0680
37	7.659		33819.48	0.12	*V	0.0017	0.0676
38	7.786		38806.00	0.14	*V	0.0019	0.0776
39	8.091		55144.84	0.20	*V	0.0028	0.1103
40	8.165		45350.08	0.16	*V	0.0023	0.0907
41	8.280		42121.72	0.15	*V	0.0021	0.0842
42	8.401		49102.60	0.18	*V	0.0025	0.0982
43	8.522		32522.47	0.12	*V	0.0016	0.0650
44	8.665		53143.98	0.19	*V	0.0027	0.1063
45	8.914		52411.56	0.19	*V	0.0026	0.1048
46	9.096		39186.69	0.14	*V	0.0020	0.0784
47	9.246		48897.02	0.18	*V	0.0024	0.0978
48	9.389		63063.72	0.23	*V	0.0032	0.1261
49	9.615		40083.75	0.14	*V	0.0020	0.0802
50	9.815		62041.80	0.22	*V	0.0031	0.1241
51	9.954		26038.20	0.09	*V	0.0013	0.0521
52	10.042		41307.17	0.15	*V	0.0021	0.0826
53	10.191		28815.99	0.10	*V	0.0014	0.0576
54	10.331		42160.62	0.15	*V	0.0021	0.0843
55	10.444		41076.98	0.15	*V	0.0021	0.0822
56	10.556		33997.51	0.12	*V	0.0017	0.0680
57	10.690		14801.18	0.05	*V	0.0007	0.0296
58	10.780		30292.69	0.11	*V	0.0015	0.0606
59	10.916		23112.73	0.08	*V	0.0012	0.0462
60	10.988		17253.50	0.06	*V	0.0009	0.0345
61	11.049		27641.29	0.10	*V	0.0014	0.0553
62	11.158		27188.68	0.10	*V	0.0014	0.0544
63	11.226		23537.67	0.08	*V	0.0012	0.0471
64	11.349		34124.54	0.12	*V	0.0017	0.0682
65	11.495		25710.83	0.09	*V	0.0013	0.0514
66	11.658		45612.80	0.16	*V	0.0023	0.0912
67	11.841		56846.76	0.20	*V	0.0028	0.1137
68	12.019		44263.12	0.16	*V	0.0022	0.0885
69	12.122		35677.50	0.13	*V	0.0018	0.0714

Peak	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	12.618		23772.33	0.09	*V	0.0012	0.0475
73	12.692		23965.67	0.09	*V	0.0012	0.0479
74	12.779		34748.30	0.12	*V	0.0017	0.0695
75	12.913		31126.50	0.11	*V	0.0016	0.0623
76	13.001		58518.84	0.21	*V	0.0029	0.1170
77	13.212		36702.86	0.13	*V	0.0018	0.0734
78	13.299		41891.78	0.15	*V	0.0021	0.0838
79	13.397		25508.31	0.09	*V	0.0013	0.0510
80	13.522		41894.59	0.15	*V	0.0021	0.0838
81	13.575		33803.79	0.12	*V	0.0017	0.0676
82	13.700		65932.19	0.24	*V	0.0033	0.1319
83	13.897		56526.02	0.20	*V	0.0028	0.1131
84	13.962		27597.16	0.10	*V	0.0014	0.0552
85	14.054		133878.62	0.48	*V	0.0067	0.2678
86	14.482		115481.28	0.41	*V	0.0058	0.2310
87	14.581		45155.21	0.16	*V	0.0023	0.0903
88	14.664		71523.47	0.26	*V	0.0036	0.1430
89	14.746		96893.15	0.35	*V	0.0048	0.1938
90	14.884		82115.18	0.29	*V	0.0041	0.1642
91	15.008		73751.59	0.26	*V	0.0037	0.1475
92	15.117		27113.18	0.10	*V	0.0014	0.0542
93	15.257		76423.53	0.27	*V	0.0038	0.1528
94	15.407		129657.42	0.47	*V	0.0065	0.2593
95	15.588		74585.78	0.27	*V	0.0037	0.1492
96	15.765		686999.76	2.47	*V	0.0343	1.3740
97	15.910		197355.94	0.71	*V	0.0099	0.3947
98	16.036		94198.00	0.34	*V	0.0047	0.1884
99	16.131		100608.05	0.36	*V	0.0050	0.2012
100	16.288		197281.97	0.71	*V	0.0099	0.3946
101	16.466		99421.87	0.36	*V	0.0050	0.1988
102	16.554		49175.93	0.18	*V	0.0025	0.0984
103	16.682		157786.40	0.57	*V	0.0079	0.3156
104	16.764		126984.72	0.46	*V	0.0063	0.2540
105	16.943		191812.48	0.69	*V	0.0096	0.3836
106	17.125		160620.68	0.58	*V	0.0080	0.3212
107	17.262		90022.46	0.32	*V	0.0045	0.1800
108	17.473		241929.86	0.87	*V	0.0121	0.4839
109	17.607		112878.47	0.41	*V	0.0056	0.2258
110	17.709		229455.00	0.82	*V	0.0115	0.4589
111	17.915		135963.27	0.49	*V	0.0068	0.2719
112	18.012		57612.85	0.21	*V	0.0029	0.1152
113	18.101		115609.58	0.41	*V	0.0058	0.2312
114	18.224		224726.60	0.81	*V	0.0112	0.4495
115	18.425		137028.93	0.49	*V	0.0069	0.2741
116	18.538		170317.88	0.61	*V	0.0085	0.3406
117	18.699		178238.80	0.64	*V	0.0089	0.3565
118	18.858		178935.76	0.64	*V	0.0089	0.3579
119	18.987		114789.67	0.41	*V	0.0057	0.2296
120	19.036		67051.41	0.24	*V	0.0034	0.1341
121	19.251		376864.19	1.35	*V	0.0188	0.7537
122	19.427		202506.98	0.73	*V	0.0101	0.4050
123	19.517		90362.71	0.32	*V	0.0045	0.1807
124	19.626		108405.26	0.39	*V	0.0054	0.2168
125	19.695		110239.69	0.40	*V	0.0055	0.2205
126	19.788		149607.86	0.54	*V	0.0075	0.2992
127	20.148	n-Pentacosane	2182989.70	7.83	*V	1.9955	79.8216

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	20.779		194471.91	0.70	*V	0.0097	0.3889
131	20.842		261889.86	0.94	*V	0.0131	0.5238
132	21.053		328995.47	1.18	*V	0.0164	0.6580
133	21.245		341042.45	1.22	*V	0.0171	0.6821
134	21.493		420854.27	1.51	*V	0.0210	0.8417
135	21.643		68540.87	0.25	*V	0.0034	0.1371
136	21.704		138833.52	0.50	*V	0.0069	0.2777
137	21.803		188493.06	0.68	*V	0.0094	0.3770
138	21.867		70450.92	0.25	*V	0.0035	0.1409
139	21.919		304314.98	1.09	*V	0.0152	0.6086
140	22.133		311400.69	1.12	*V	0.0156	0.6228
141	22.307		213908.39	0.77	*V	0.0107	0.4278
142	22.404		240336.08	0.86	*V	0.0120	0.4807
143	22.573		239166.22	0.86	*V	0.0120	0.4783
144	22.654		97110.46	0.35	*V	0.0049	0.1942
145	22.746		330308.93	1.19	*V	0.0165	0.6606
146	22.907		291003.89	1.04	*V	0.0146	0.5820
147	23.015		166612.54	0.60	*V	0.0083	0.3332
148	23.130		95233.18	0.34	*V	0.0048	0.1905
149	23.190		97471.13	0.35	*V	0.0049	0.1949
150	23.244		123221.11	0.44	*V	0.0062	0.2464
151	23.346		319814.02	1.15	*V	0.0160	0.6396
152	23.515		217790.99	0.78	*V	0.0109	0.4356
153	23.612		175890.54	0.63	*V	0.0088	0.3518
154	23.783		333911.34	1.20	*V	0.0167	0.6678
155	23.848		75548.66	0.27	*V	0.0038	0.1511
156	23.910		592530.62	2.13	*V	0.0296	1.1851
157	24.214		94510.46	0.34	*V	0.0047	0.1890
158	24.342		442959.62	1.59	*V	0.0221	0.8859
159	24.532		596044.91	2.14	*V	0.0298	1.1921
160	24.918		417025.49	1.50	*V	0.0209	0.8341
161	25.214		280079.70	1.01	*V	0.0140	0.5602
162	25.339		343998.41	1.23	*V	0.0172	0.6880
163	25.625		551482.60	1.98	*V	0.0276	1.1030
164	25.889		52638.32	0.19	*V	0.0026	0.1053
165	26.010		230370.30	0.83	*V	0.0115	0.4607
166	26.132		270976.94	0.97	*V	0.0135	0.5420
167	26.330		372634.19	1.34	*V	0.0186	0.7453
168	26.687		204113.25	0.73	*V	0.0102	0.4082
169	26.856		303458.85	1.09	*V	0.0152	0.6069
170	27.080		224232.79	0.80	*V	0.0112	0.4485
171	27.308		655139.57	2.35	*V	0.0328	1.3103
172	27.962		1249299.67	4.48	*V	0.0625	2.4986
173	29.137		532480.88	1.91	*V	0.0266	1.0650
174	29.731		125735.54	0.45	*V	0.0063	0.2515
175	29.880		57204.24	0.21	*V	0.0029	0.1144
176	29.945		461367.68	1.66	*V	0.0231	0.9227
177	30.493		1407909.67	5.05	*V	0.0704	2.8158
178	32.332		152365.37	0.55	*V	0.0076	0.3047
179	32.524		152736.10	0.55	*V	0.0076	0.3055

27868587.48 100.00

## Chromatogram

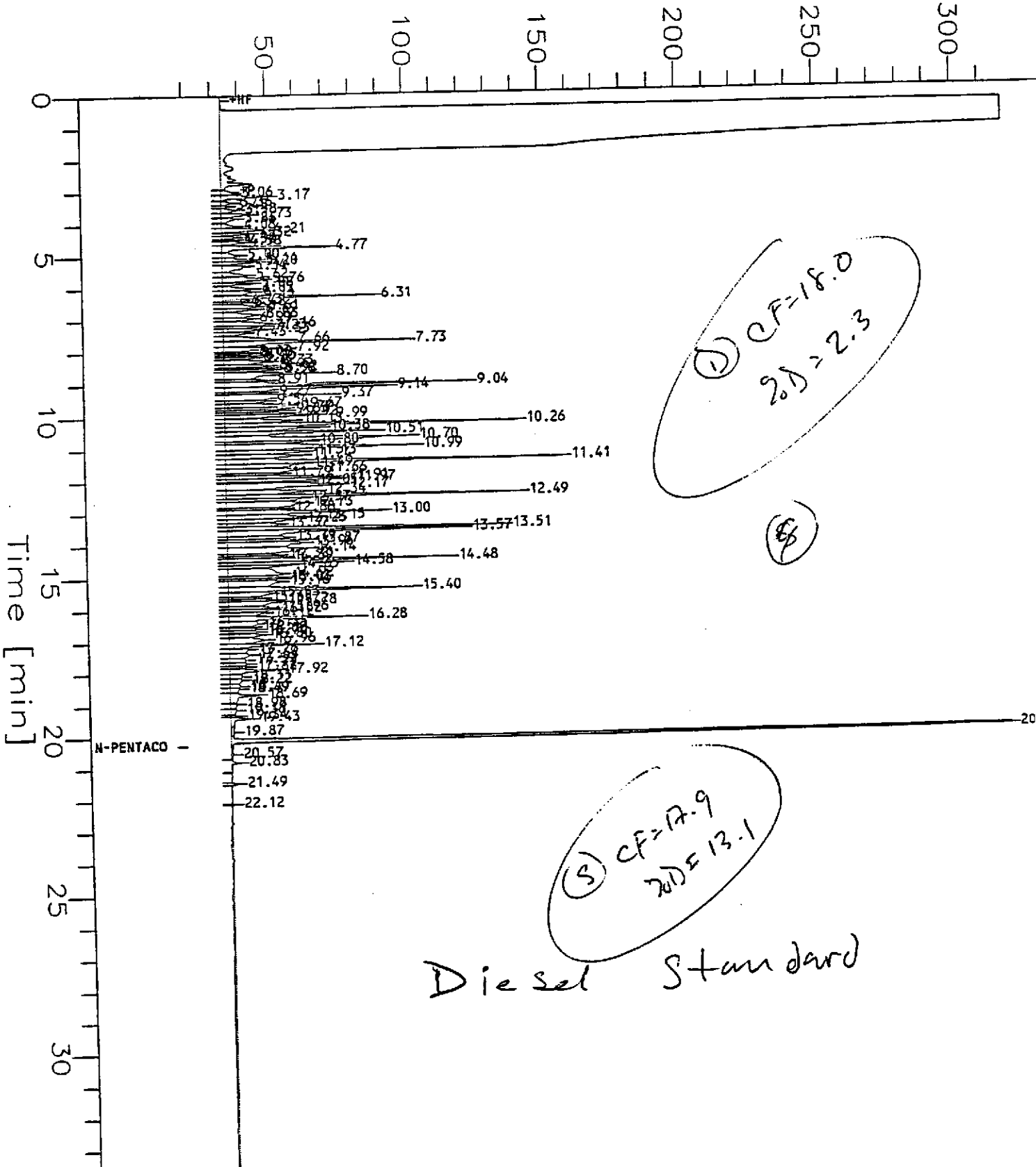
Sample Name : DSTD040595 (DIESEL+C25)  
FileName : s:\ghp\_05\0409\405A002.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 33.67 min  
Plot Offset: 18 mV

Sample #: DSTD032395  
Date : 4/5/95 15:14  
Time of Injection: 4/5/95 14:40  
Low Point : 18.23 mV  
Plot Scale: 300.0 mV

High Point : 318.23 mV

### Response [mV]





=====  
Software Version: 3.3 <4B11>

Sample Name : DSTD040595 (DIESEL+C25) Time : 4/5/95 15:14

Sample Number: DSTD032395 Study : SAL (ICV)

Operator : TO

Instrument : GCHP\_05

Channel : A A/D mV Range : 1024

AutoSampler : HP7673A

Rack/Vial : 1/2

Interface Serial # : Data Acquisition Time: 4/5/95 14:40

Delay Time : 0.00 min.

End Time : 33.67 min.

Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0409\405A002.RAW

Result File : S:\GHP\_05\0409\405A002.RST

Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A.ins

Process File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A

Sequence File : S:\GHP\_05\MET\_SEQ\H050405.SEQ

Inj. Volume : 3 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

=====  
Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
	8.250	n-C9 to n-C17 Jet	11036376.49	20.07		0.1839	7.3576
	11.250	n-C9 to n-C24 TPH-D	16230418.44	29.52		11.4626	458.503
	16.750	n-C9 to n-C40 Total	18419788.08	33.50		0.3070	12.2799
	19.875	n-C16 to n-C36 M/Oil	9301165.62	16.91		0.1550	6.2008
			54987748.63	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A002.TX0

Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
1	3.056		30074.87	0.16	*B	0.0005	0.0200
2	3.172		84240.13	0.46	*V	0.0014	0.056
3	3.358		20427.15	0.11	*V	0.0003	0.013
4	3.454		7894.65	0.04	*V	0.0001	0.0053
5	3.581		29042.36	0.16	*V	0.0005	0.019
6	3.727		58288.27	0.32	*V	0.0010	0.038
7	3.859		29636.28	0.16	*V	0.0005	0.0198
8	4.080		27825.32	0.15	*V	0.0005	0.0186
9	4.208		93360.11	0.51	*V	0.0016	0.062
10	4.323		37629.39	0.20	*V	0.0006	0.025
11	4.424		25856.21	0.14	*V	0.0004	0.0172
12	4.515		14472.02	0.08	*V	0.0002	0.009
13	4.584		40146.24	0.22	*V	0.0007	0.026

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
14	4.768		191262.94	1.04	*V	0.0032	0.1275
15	5.002		37549.55	0.20	*V	0.0006	0.0250
16	5.136		58188.02	0.32	*V	0.0010	0.0388
17	5.204		49775.46	0.27	*V	0.0008	0.0332
18	5.339		76123.19	0.41	*V	0.0013	0.0507
19	5.618		55405.01	0.30	*V	0.0009	0.0369
20	5.755		106427.74	0.58	*V	0.0018	0.0710
21	5.875		44959.32	0.24	*V	0.0007	0.0300
22	6.049		59138.02	0.32	*V	0.0010	0.0394
23	6.143		75423.55	0.41	*V	0.0013	0.0503
24	6.306		190765.56	1.04	*V	0.0032	0.1272
25	6.427		24794.38	0.13	*E	0.0004	0.0165
26	6.478		33420.81	0.18	*V	0.0006	0.0223
27	6.609		75642.52	0.41	*V	0.0013	0.0504
28	6.693		50497.68	0.27	*V	0.0008	0.0337
29	6.856		89159.06	0.48	*V	0.0015	0.0594
30	6.986		60109.18	0.33	*V	0.0010	0.0401
31	7.158		116174.17	0.63	*V	0.0019	0.0774
32	7.226		56223.00	0.31	*V	0.0009	0.0375
33	7.327		71690.41	0.39	*V	0.0012	0.0478
34	7.434		45225.99	0.25	*V	0.0008	0.0302
35	7.657		147991.00	0.80	*V	0.0025	0.0987
36	7.726		290754.31	1.58	*V	0.0048	0.1938
37	7.920		118043.54	0.64	*V	0.0020	0.0787
38	8.029		28682.21	0.16	*V	0.0005	0.0191
39	8.078		29785.88	0.16	*V	0.0005	0.0199
40	8.150		43049.39	0.23	*V	0.0007	0.0287
41	8.195		45409.13	0.25	*V	0.0008	0.0303
42	8.328		110394.26	0.60	*V	0.0018	0.0736
43	8.454		78007.36	0.42	*V	0.0013	0.0520
44	8.522		54238.60	0.29	*V	0.0009	0.0362
45	8.576		68478.76	0.37	*V	0.0011	0.0457
46	8.698		252932.73	1.37	*V	0.0042	0.1686
47	8.908		64479.34	0.35	*V	0.0011	0.0430
48	9.041		357911.57	1.94	*V	0.0060	0.2386
49	9.140		266723.09	1.45	*V	0.0044	0.1778
50	9.271		67235.70	0.37	*V	0.0011	0.0448
51	9.372		244292.14	1.33	*V	0.0041	0.1629
52	9.536		74244.00	0.40	*V	0.0012	0.0495
53	9.666		145149.45	0.79	*V	0.0024	0.0968
54	9.767		99097.93	0.54	*V	0.0017	0.0661
55	9.830		87345.17	0.47	*V	0.0015	0.0582
56	9.923		88576.24	0.48	*V	0.0015	0.0591
57	9.994		166241.81	0.90	*V	0.0028	0.1108
58	10.148		149764.72	0.81	*V	0.0025	0.0998
59	10.264		389750.73	2.12	*V	0.0065	0.2598
60	10.376		224254.60	1.22	*V	0.0037	0.1495
61	10.512		240862.02	1.31	*V	0.0040	0.1606
62	10.696		397605.84	2.16	*V	0.0066	0.2651
63	10.801		126572.15	0.69	*V	0.0021	0.0844
64	10.989		451650.46	2.45	*V	0.0075	0.3011
65	11.125		173859.97	0.94	*V	0.0029	0.1159
66	11.237		170515.17	0.93	*V	0.0028	0.1137
67	11.410		487922.64	2.65	*V	0.0081	0.3253
68	11.491		208384.19	1.13	*V	0.0035	0.1389
69	11.663		212933.66	1.16	*V	0.0035	0.1420
70	11.790		74682.33	0.41	*V	0.0012	0.0498
71	11.910		191361.27	1.04	*V	0.0032	0.1276

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
72	11.970		189139.14	1.03	*V	0.0032	0.1261
73	12.053		90341.54	0.49	*V	0.0015	0.0602
74	12.166		343109.89	1.86	*V	0.0057	0.2287
75	12.339		217511.83	1.18	*V	0.0036	0.1450
76	12.488		405694.21	2.20	*V	0.0068	0.2705
77	12.568		160956.73	0.87	*V	0.0027	0.1073
78	12.731		266607.80	1.45	*V	0.0044	0.1777
79	12.880		79060.78	0.43	*V	0.0013	0.0527
80	12.997		306828.65	1.67	*V	0.0051	0.2046
81	13.145		202220.79	1.10	*V	0.0034	0.1348
82	13.226		164136.24	0.89	*V	0.0027	0.1094
83	13.371		114737.00	0.62	*V	0.0019	0.0765
84	13.508		397033.09	2.16	*V	0.0066	0.2647
85	13.574		392708.33	2.13	*V	0.0065	0.2618
86	13.785		128343.33	0.70	*V	0.0021	0.0856
87	13.870		118193.77	0.64	*V	0.0020	0.0788
88	13.963		229510.09	1.25	*V	0.0038	0.1530
89	14.140		270644.08	1.47	*V	0.0045	0.1804
90	14.324		84156.34	0.46	*V	0.0014	0.0561
91	14.388		78571.82	0.43	*V	0.0013	0.0524
92	14.477		311913.88	1.69	*V	0.0052	0.2079
93	14.580		176585.98	0.96	*V	0.0029	0.1177
94	14.649		100675.89	0.55	*V	0.0017	0.0671
95	14.919		250856.50	1.36	*V	0.0042	0.1672
96	15.012		87732.74	0.48	*V	0.0015	0.0585
97	15.064		71829.29	0.39	*V	0.0012	0.0479
98	15.161		185042.66	1.00	*V	0.0031	0.1234
99	15.399		322865.49	1.75	*V	0.0054	0.2152
100	15.525		120788.30	0.66	*V	0.0020	0.0805
101	15.650		48239.97	0.26	*V	0.0008	0.0322
102	15.722		64365.07	0.35	*V	0.0011	0.0429
103	15.780		140251.56	0.76	*V	0.0023	0.0935
104	15.963		95684.52	0.52	*V	0.0016	0.0631
105	16.024		80873.40	0.44	*V	0.0013	0.0531
106	16.115		72814.23	0.40	*V	0.0012	0.0485
107	16.277		203215.68	1.10	*V	0.0034	0.1355
108	16.450		95076.32	0.52	*V	0.0016	0.0631
109	16.548		27572.80	0.15	*V	0.0005	0.0184
110	16.620		46478.75	0.25	*V	0.0008	0.0310
111	16.704		53645.82	0.29	*V	0.0009	0.0351
112	16.801		74305.34	0.40	*V	0.0012	0.0491
113	16.956		114930.34	0.62	*V	0.0019	0.0766
114	17.118		136887.50	0.74	*V	0.0023	0.0912
115	17.256		56190.35	0.31	*V	0.0009	0.0371
116	17.435		60988.51	0.33	*V	0.0010	0.0407
117	17.587		44683.47	0.24	*V	0.0007	0.0298
118	17.719		42553.17	0.23	*V	0.0007	0.0281
119	17.815		27503.68	0.15	*V	0.0005	0.0181
120	17.921		87156.55	0.47	*V	0.0015	0.0581
121	18.111		33329.37	0.18	*V	0.0006	0.0222
122	18.217		40465.20	0.22	*V	0.0007	0.0271
123	18.409		25395.95	0.14	*V	0.0004	0.0169
124	18.490		26408.05	0.14	*V	0.0004	0.0176
125	18.691		73475.10	0.40	*V	0.0012	0.0491
126	18.979		21682.07	0.12	*V	0.0004	0.0141
127	19.159		20303.70	0.11	*V	0.0003	0.0135
128	19.342		10136.29	0.06	*V	0.0002	0.0068
129	19.431		41977.61	0.23	*V	0.0007	0.0281

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
130	19.866		18367.88	0.10	*E	0.0003	0.0122
131	20.145	n-Pentacosane	2144906.68	11.64	*V	1.5973	63.8912
132	20.567		8391.77	0.05	*E	0.0001	0.0056
133	20.827		10206.69	0.06	*V	0.0002	0.0068
134	21.487		5762.82	0.03	*V	9.6047e-05	0.0038
135	22.122		1733.81	9e-03	*V	2.8897e-05	0.0012
			18419788.08	100.00			

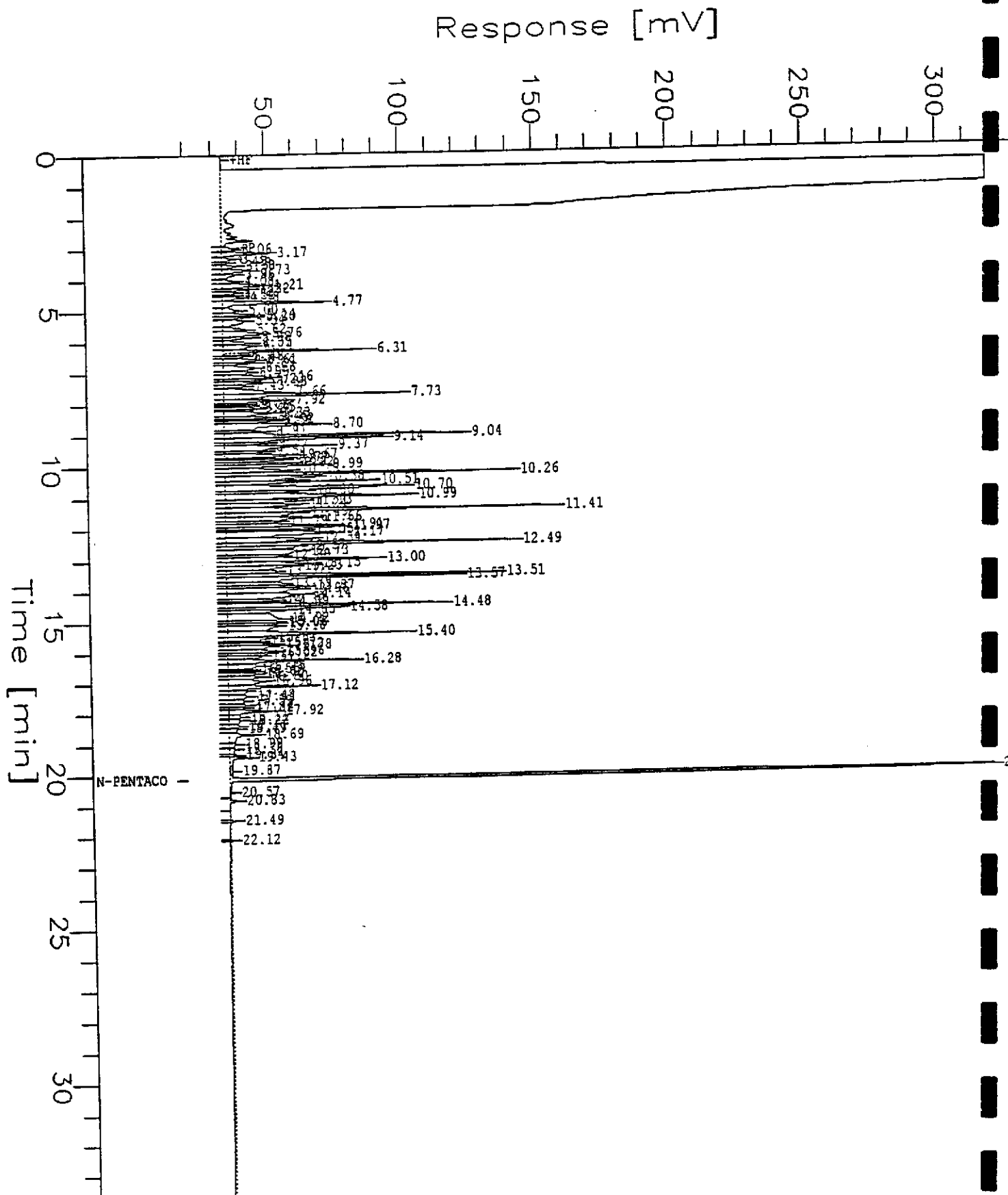
Report Stored in ASCII File: S:\GHP\_05\0409\405A002.TX1

# Chromatogram

Sample Name : DSTD040595 (DIESEL+C25)  
FileName : s:\ghp\_05\0409\405A002.raw  
Method : ETPH05A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.67 min  
Plot Offset: 18 mV

Sample #: DSTD032395  
Date : 4/5/95 15:22  
Time of Injection: 4/5/95 14:40  
Low Point : 18.23 mV  
Plot Scale: 300.0 mV  
High Point : 318.23 mV



Software Version: 3.3 <4B11>

Sample Name : DSTD040595 (DIESEL+C25) Time : 4/5/95 15:22

Sample Number: DSTD032395 Study : SAL (ICV)

Operator : TO

Instrument : GCHP 05

Channel : A A/D mV Range : 1024

AutoSampler : HP7673A

Rack/Vial : 1/2

Interface Serial # : Data Acquisition Time: 4/5/95 14:40

Delay Time : 0.00 min.

End Time : 33.67 min.

Sampling Rate : 1.2500 pts/sec

Raw Data File : S:\GHP\_05\0409\405A002.RAW

Result File : S:\GHP\_05\0409\405A002A.RST

Instrument File: S:\GHP\_05\MET\_SEQ\ETPH05A

Process File : S:\GHP\_05\MET\_SEQ\ETPH05A.prc

Sample File : S:\GHP\_05\MET\_SEQ\ETPH05A.smp

Sequence File : s:\ghp\_05\met\_seq\h050405.seq

Inj. Volume : 3 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

### Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ug/L]
	8.250	n-C9 to n-C17 Jet	11036376.49	20.07		0.1839	7.3576
	11.250	n-C9 to n-C24 TPH-D	16230418.44	29.52		15.0000	600.0000
	16.750	n-C9 to n-C40 Total	18419788.08	33.50		0.3070	12.2799
	19.875	n-C16 to n-C36 M/Oil	9301165.62	16.91		0.1550	6.2008
			54987748.63	100.00			

Report Stored in ASCII File: S:\GHP\_05\0409\405A002A.TX0

### Extractable TPH GCHP\_05A

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ug/L]
1	3.056		30074.87	0.16	*B	0.0005	0.0200
2	3.172		84240.13	0.46	*V	0.0014	0.0562
3	3.358		20427.15	0.11	*V	0.0003	0.0136
4	3.454		7894.65	0.04	*V	0.0001	0.0053
5	3.581		29042.36	0.16	*V	0.0005	0.0194
6	3.727		58288.27	0.32	*V	0.0010	0.0389
7	3.859		29636.28	0.16	*V	0.0005	0.0198
8	4.080		27825.32	0.15	*V	0.0005	0.0186
9	4.208		93360.11	0.51	*V	0.0016	0.0622
10	4.323		37629.39	0.20	*V	0.0006	0.0251
11	4.424		25856.21	0.14	*V	0.0004	0.0172
12	4.515		14472.02	0.08	*V	0.0002	0.0096
13	4.584		40146.24	0.22	*V	0.0007	0.0268
14	4.768		191262.94	1.04	*V	0.0032	0.1275
15	5.002		37549.55	0.20	*V	0.0006	0.0250
16	5.136		58188.02	0.32	*V	0.0010	0.0388

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [µg/L]
17	5.204		49775.46	0.27	*V	0.0008	0.0332
18	5.339		76123.19	0.41	*V	0.0013	0.0507
19	5.618		55405.01	0.30	*V	0.0009	0.0369
20	5.755		106427.74	0.58	*V	0.0018	0.0710
21	5.875		44959.32	0.24	*V	0.0007	0.0300
22	6.049		59138.02	0.32	*V	0.0010	0.0394
23	6.143		75423.55	0.41	*V	0.0013	0.0503
24	6.306		190765.56	1.04	*V	0.0032	0.1272
25	6.427		24794.38	0.13	*E	0.0004	0.0165
26	6.478		33420.81	0.18	*V	0.0006	0.0223
27	6.609		75642.52	0.41	*V	0.0013	0.0504
28	6.693		50497.68	0.27	*V	0.0008	0.0337
29	6.856		89159.06	0.48	*V	0.0015	0.0594
30	6.986		60109.18	0.33	*V	0.0010	0.0401
31	7.158		116174.17	0.63	*V	0.0019	0.0774
32	7.226		56223.00	0.31	*V	0.0009	0.0375
33	7.327		71690.41	0.39	*V	0.0012	0.0478
34	7.434		45225.99	0.25	*V	0.0008	0.0302
35	7.657		147991.00	0.80	*V	0.0025	0.0987
36	7.726		290754.31	1.58	*V	0.0048	0.1938
37	7.920		118043.54	0.64	*V	0.0020	0.0787
38	8.029		28682.21	0.16	*V	0.0005	0.0199
39	8.078		29785.88	0.16	*V	0.0005	0.0199
40	8.150		43049.39	0.23	*V	0.0007	0.0287
41	8.195		45409.13	0.25	*V	0.0008	0.0303
42	8.328		110394.26	0.60	*V	0.0018	0.0736
43	8.454		78007.36	0.42	*V	0.0013	0.0520
44	8.522		54238.60	0.29	*V	0.0009	0.0366
45	8.576		68478.76	0.37	*V	0.0011	0.0455
46	8.698		252932.73	1.37	*V	0.0042	0.1686
47	8.908		64479.34	0.35	*V	0.0011	0.0430
48	9.041		357911.57	1.94	*V	0.0060	0.2387
49	9.140		266723.09	1.45	*V	0.0044	0.1777
50	9.271		67235.70	0.37	*V	0.0011	0.0448
51	9.372		244292.14	1.33	*V	0.0041	0.1628
52	9.536		74244.00	0.40	*V	0.0012	0.0497
53	9.666		145149.45	0.79	*V	0.0024	0.0966
54	9.767		99097.93	0.54	*V	0.0017	0.0661
55	9.830		87345.17	0.47	*V	0.0015	0.0587
56	9.923		88576.24	0.48	*V	0.0015	0.0597
57	9.994		166241.81	0.90	*V	0.0028	0.1108
58	10.148		149764.72	0.81	*V	0.0025	0.0998
59	10.264		389750.73	2.12	*V	0.0065	0.2597
60	10.376		224254.60	1.22	*V	0.0037	0.1497
61	10.512		240862.02	1.31	*V	0.0040	0.1606
62	10.696		397605.84	2.16	*V	0.0066	0.2651
63	10.801		126572.15	0.69	*V	0.0021	0.0847
64	10.989		451650.46	2.45	*V	0.0075	0.3017
65	11.125		173859.97	0.94	*V	0.0029	0.1159
66	11.237		170515.17	0.93	*V	0.0028	0.1137
67	11.410		487922.64	2.65	*V	0.0081	0.3257
68	11.491		208384.19	1.13	*V	0.0035	0.1387
69	11.663		212933.66	1.16	*V	0.0035	0.1420
70	11.790		74682.33	0.41	*V	0.0012	0.0497
71	11.910		191361.27	1.04	*V	0.0032	0.1277
72	11.970		189139.14	1.03	*V	0.0032	0.1277
73	12.053		90341.54	0.49	*V	0.0015	0.0602
74	12.166		343109.89	1.86	*V	0.0057	0.2287
75	12.339		217511.83	1.18	*V	0.0036	0.1457
76	12.488		405694.21	2.20	*V	0.0068	0.2705
77	12.568		160956.73	0.87	*V	0.0027	0.1073
78	12.731		266607.80	1.45	*V	0.0044	0.1777

Peak #	Time [min]	Component Name	Area [uV*sec]	Area [%]	BL	Soil [mg/kg]	Water [ug/L]
79	12.880		79060.78	0.43	*V	0.0013	0.0527
80	12.997		306828.65	1.67	*V	0.0051	0.2046
81	13.145		202220.79	1.10	*V	0.0034	0.1348
82	13.226		164136.24	0.89	*V	0.0027	0.1094
83	13.371		114737.00	0.62	*V	0.0019	0.0765
84	13.508		397033.09	2.16	*V	0.0066	0.2647
85	13.574		392708.33	2.13	*V	0.0065	0.2618
86	13.785		128343.33	0.70	*V	0.0021	0.0856
87	13.870		118193.77	0.64	*V	0.0020	0.0788
88	13.963		229510.09	1.25	*V	0.0038	0.1530
89	14.140		270644.08	1.47	*V	0.0045	0.1804
90	14.324		84156.34	0.46	*V	0.0014	0.0561
91	14.388		78571.82	0.43	*V	0.0013	0.0524
92	14.477		311913.88	1.69	*V	0.0052	0.2079
93	14.580		176585.98	0.96	*V	0.0029	0.1177
94	14.649		100675.89	0.55	*V	0.0017	0.0671
95	14.919		250856.50	1.36	*V	0.0042	0.1672
96	15.012		87732.74	0.48	*V	0.0015	0.0585
97	15.064		71829.29	0.39	*V	0.0012	0.0479
98	15.161		185042.66	1.00	*V	0.0031	0.1234
99	15.399		322865.49	1.75	*V	0.0054	0.2152
100	15.525		120788.30	0.66	*V	0.0020	0.0805
101	15.650		48239.97	0.26	*V	0.0008	0.0322
102	15.722		64365.07	0.35	*V	0.0011	0.0429
103	15.780		140251.56	0.76	*V	0.0023	0.0935
104	15.963		95684.52	0.52	*V	0.0016	0.0638
105	16.024		80873.40	0.44	*V	0.0013	0.0539
106	16.115		72814.23	0.40	*V	0.0012	0.0485
107	16.277		203215.68	1.10	*V	0.0034	0.1355
108	16.450		95076.32	0.52	*V	0.0016	0.0634
109	16.548		27572.80	0.15	*V	0.0005	0.0184
110	16.620		46478.75	0.25	*V	0.0008	0.0310
111	16.620		53645.82	0.29	*V	0.0009	0.0358
112	16.704		74305.34	0.40	*V	0.0012	0.0495
113	16.801		114930.34	0.62	*V	0.0019	0.0766
114	16.956		136887.50	0.74	*V	0.0023	0.0913
115	17.118		56190.35	0.31	*V	0.0009	0.0375
116	17.256		60988.51	0.33	*V	0.0010	0.0407
117	17.435		44683.47	0.24	*V	0.0007	0.0298
118	17.587		42553.17	0.23	*V	0.0007	0.0284
119	17.719		27503.68	0.15	*V	0.0005	0.0183
120	17.815		87156.55	0.47	*V	0.0015	0.0581
121	17.921		33329.37	0.18	*V	0.0006	0.0222
122	18.111		40465.20	0.22	*V	0.0007	0.0270
123	18.217		25395.95	0.14	*V	0.0004	0.0169
124	18.409		26408.05	0.14	*V	0.0004	0.0176
125	18.490		73475.10	0.40	*V	0.0012	0.0490
126	18.691		21682.07	0.12	*V	0.0004	0.0145
127	18.979		20303.70	0.11	*V	0.0003	0.0135
128	19.159		10136.29	0.06	*V	0.0002	0.0068
129	19.342		41977.61	0.23	*V	0.0007	0.0280
130	19.431		18367.88	0.10	*E	0.0003	0.0122
131	19.866		2144906.68	11.64	*V	2.0000	80.0000
132	20.145	n-Pentacosane	8391.77	0.05	*E	0.0001	0.0056
133	20.567		10206.69	0.06	*V	0.0002	0.0068
134	20.827		5762.82	0.03	*V	9.6047e-05	0.0038
135	21.487		1733.81	9e-03	*V	2.8897e-05	0.0012
135	22.122						

18419788.08 100.00