

6/98

**RESULTS OF SOIL AND GROUNDWATER
INVESTIGATIONS AND
SCREENING HUMAN HEALTH RISK ASSESSMENT
FOR PROPERTIES LOCATED AT
HACIENDA DRIVE AND DUBLIN BOULEVARD
IN DUBLIN, CALIFORNIA**

Parcel 15/16 and Option Parcel

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

1730 So. Amphlett Blvd., Suite 320
San Mateo, California 94402
(650) 578-1172
Fax (650) 578-9131

LETTER OF TRANSMITTAL

TO: Mr. Scott Seery
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

DATE: 22 June 1998

PROJ. NO. 980003.00

SUBJECT: PeopleSoft, Inc.
Dublin, CA

WE ARE SENDING YOU THE FOLLOWING:

As we discussed during our meeting on 21 May 1998, enclosed is one copy of the report Entitled *Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment for Properties Located at Hacienda Drive and Dublin Boulevard in Dublin, California*, dated 19 June 1998.

COPY TO:

PeopleSoft, Inc.
C/o Mr. Nicholas L. Sica
Nicholas L. Sica, Inc.
330 Town & Country Village
Palo Alto, California 94301

Mr. Rod Freitag, P.E.
Alameda County GSA
1401 Lakeside Drive
Oakland, California 94612

Mr. Brian Griggs
3470 Mt. Diablo Boulevard
Suite A205
Lafayette, CA 94549

98 JUN 23 AM 9:53
ENVIRONMENTAL
PROTECTION

Very truly yours,
ERLER & KALINOWSKI, INC.


Paul B. Hoffer
Project Manager

If enclosures are not as noted, please advise us at once at (650) 578-1172.

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

1730 So. Amphlett Blvd., Suite 320
San Mateo, California 94402
(650) 578-1172
Fax (650) 578-9131

19 June 1998

Mr. Scott Seery
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Results of Soil and Groundwater Investigations and
Screening Human Health Risk Assessment for Properties Located at
Hacienda Drive and Dublin Boulevard in Dublin, CA
(EKI 980003.00)

Dear Mr. Seery:

On behalf of our client, PeopleSoft, Inc., Erler & Kalinowski, Inc. ("EKI") is pleased to submit to the Alameda County Health Agency the attached report entitled *Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment for Properties Located at Hacienda Drive and Dublin Boulevard in Dublin, California*, dated 19 June 1998.

As discussed during our meeting on 21 May 1998, PeopleSoft, Inc. intends to acquire Parcel 16 and the property to the adjacent west referred to as the Option Area Parcel. Thus, PeopleSoft, Inc. is interested in obtaining concurrence from Alameda County that residual concentrations of PCE and TCE detected in groundwater on the subject properties would not pose a significant health risk to future indoor or outdoor workers on Parcel 16 or the Option Area Parcel. Also, PeopleSoft, Inc. is interested in receiving official closure of the former underground fuel oil depot storage area on Parcel 16. The results of Phase II soil and groundwater sampling and results of the screening human health risk assessment are presented in the attached report.


Mr. Scott Seery
Alameda County Health Agency
Department of Environmental Health
19 June 1998
Page 2

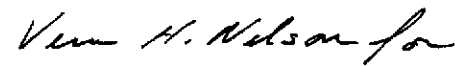
**Erler &
Kalinowski, Inc.**

If you have any questions, please do not hesitate to contact us.

Very truly yours,

ERLER & KALINOWSKI, INC.


Paul B. Hoffey
Project Manager


Michelle Kriegman-King, Ph.D.
Project Scientist

attachment

cc: Mr. Nicholas L. Sica (Nicholas L. Sica, Inc.)
Mr. Brian Griggs (Griggs Resources Group)
Mr. Rod Freitag (Alameda County GSA)

**RESULTS OF SOIL AND GROUNDWATER
INVESTIGATIONS AND RISK ASSESSMENT
FOR PROPERTIES LOCATED AT
HACIENDA DRIVE AND DUBLIN BOULEVARD
IN DUBLIN, CALIFORNIA**

**Erler &
Kalinowski, Inc.**

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**RESULTS OF SOIL AND GROUNDWATER
INVESTIGATIONS AND RISK ASSESSMENT
FOR PROPERTIES LOCATED AT
HACIENDA DRIVE AND DUBLIN BOULEVARD
IN DUBLIN, CALIFORNIA**

EXECUTIVE SUMMARY

Erler & Kalinowski, Inc. ("EKI") was retained by PeopleSoft, Inc. to perform an environmental assessment and subsequent human health risk assessment for two properties located near the intersection of Hacienda Drive and Dublin Boulevard in Dublin, California ("subject properties"). The two subject properties are referred to as "Parcel 16" which comprises approximately 47 acres, and "Option Area Parcel", to the adjacent west, which comprises approximately 10 acres (see Figure 1). PeopleSoft, Inc. intends to acquire the subject properties and develop the properties into an office complex with parking facilities. The assessment consisted of a preliminary review of historical and current uses of the subject property, and subsequent subsurface investigations (i.e., soil and groundwater sampling, and trenching) to augment the results of the preliminary assessment. EKI also conducted a screening human health risk assessment to evaluate potential human health risks associated with groundwater on the subject property containing chlorinated hydrocarbons. The results of the investigations and the screening human health risk assessment are summarized below.

Results of Preliminary Environmental Assessment

Parcel 16 and the Option Area Parcel were formerly part of Camp Shoemaker, a military base. Areas of potential environmental concern on Parcel 16 included a former guard house boiler room with a possible underground fuel storage tank, and former underground fuel oil storage depot (see Figure 2). Areas of potential environmental concern on the Option Area Parcel included a former salvage yard and several unidentified former buildings. These areas were investigated further; the results of which are presented below.

A number of areas of potential environmental concern were identified for Parcel 15, located immediately upgradient of Parcel 16. These included two former gasoline service stations, a former paint storeroom and paint shop, a former inflammable storage building, a former transportation and public works shop, and a former laundry and boiler room. Parcel 15 was investigated further by the Alameda County General Services Agency ("GSA"), the current property owner; the results of which are presented below.

A geophysical survey was conducted in two areas of Parcel 16 where underground fuel storage tanks were suspected; 1) the former guard house boiler room, and 2) the former underground fuel oil depot area. The geophysical survey identified buried objects at both locations. Subsequent trenching coordinated by EKI revealed the presence of buried concrete debris at the guard house boiler room area. Trenching in the fuel depot area revealed the presence of buried debris including concrete slabs, wood debris, and approximately 100 linear feet of 6-inch diameter steel pipe. Tanks were not encountered.

at either trenching location. At the request of PeopleSoft, Inc., the buried debris in the fuel depot area was removed from the ground and stockpiled on-site.

Results of Subsurface Investigations

EKI conducted soil and groundwater investigations on Parcel 16 and the Option Area Parcel, the results of which are summarized below.

Former Railroad Spur

EKI collected shallow soil samples along the former railroad spur. Based on the analytical results for the soil samples, elevated concentrations of chlorinated herbicides, selected heavy metals, and total extractable petroleum hydrocarbons were not detected (see Figure 3).

Former Fuel Depot Area

Significant releases of petroleum hydrocarbons to soil in the excavation area were not identified during the excavation and removal of debris from the former fuel depot area. Total extractable petroleum hydrocarbons quantified by the analytical laboratory as "weathered diesel" were detected at a concentration of 120,000 micrograms per liter ("ug/l") in groundwater sample P-7, located on the inferred downgradient side of the former fuel depot area (see Figure 6). Based on the results of additional characterization of groundwater quality in areas upgradient and downgradient of the former fuel depot area, the weathered diesel in groundwater does not appear to have migrated more than 55 feet from the former fuel depot area. Benzene, toluene, ethyl benzene and total xylenes ("BTEX") were not detected above the laboratory reporting limits.

VOCs in Groundwater

Volatile organic compounds have been detected in groundwater along the northern boundary of Parcel 16, on the Option Area Parcel, and on Parcel 15. See below.

Parcel 16

Tetrachloroethylene ("PCE") and trichloroethylene ("TCE") were detected in groundwater samples collected from two borings located along the northern, and presumed upgradient, boundary of Parcel 16 at concentrations up to 100 ug/l and 4.2 ug/l, respectively. Concentrations of PCE and TCE were not detected in groundwater samples collected from borings placed in downgradient areas on Parcel 16 (see Figure 4, borings P-8 through P-10). The source for the PCE and TCE is presumed to be Parcel 15.

Option Area Parcel

PCE and TCE were detected in one grab groundwater sample from the southeast corner of the Option Area Parcel at concentrations of 29 ug/l and 5 ug/l, respectively. PCE and TCE have historically been detected in groundwater from former off-site well P-3A at concentrations ranging from 3.4 ug/l to 15 ug/l and <1 ug/l to 1.6 ug/l, respectively. Well P-3A was formerly located approximately 500 feet south of Option Area Parcel, across Interstate 580 (see Figure 4). The source for the PCE and TCE in groundwater on the Option Area Parcel is not known. The source may be an historic release from an abandoned sanitary sewer line that may cross or is located near the Option Area Parcel (see Figure 4).

Parcel 15

Alameda County GSA retained Versar, Inc. which performed a groundwater investigation on Parcel 15. According to the analytical results provided by Versar, PCE and TCE were detected in groundwater samples from Parcel 15 at concentrations up to 280 ug/l and 2.5 ug/l, respectively. Carbon tetrachloride was also detected in groundwater samples from Parcel 15 at concentrations up to 17 ug/l.

Results of Screening Human Health Risk Assessment

A screening risk assessment was performed to evaluate potential human health risks due to exposure to volatile organic compounds ("VOCs") volatilizing from groundwater at Parcel 16 and the Option Area Parcel through the vadose zone to indoor and outdoor air. Total estimated lifetime incremental cancer risks incurred through exposure to chemicals of concern in groundwater were estimated at 6×10^{-7} for indoor workers, and 3×10^{-7} for outdoor workers. These hypothetical risks are lower than both the U.S. EPA range of acceptable risks (i.e., 10^{-4} to 10^{-6}), and the Proposition 65 notification level of 10^{-5} . Total non-carcinogenic hazard indices calculated herein are 0.01 for indoor workers, and 0.006 for outdoor workers. These values are significantly below the threshold value of 1.0. Based on these screening risk assessment calculations, it is concluded that current levels of the primary chemicals of concern detected in groundwater at or adjacent to Parcel 16 and the Option Area Parcel do not pose a significant human health risk.

1.0 BACKGROUND AND SCOPE OF WORK

EKI was retained by PeopleSoft, Inc. to perform an environmental assessment and subsequent screening human health risk assessment for two properties located near the intersection of Hacienda Drive and Dublin Boulevard in Dublin, California ("subject properties"). The two subject properties are referred to as "Parcel 16" which comprises approximately 47 acres, and "Option Area Parcel", to the adjacent west, which comprises approximately 10 acres (see Figure 1). PeopleSoft, Inc. intends to acquire the subject properties and develop the properties into an office complex with parking facilities. The assessment consisted of a preliminary review of historical and current uses of the subject property, and subsequent subsurface investigations (i.e., soil and groundwater sampling, and trenching) to augment the results of the preliminary assessment. EKI also conducted a screening human health risk assessment to evaluate potential human health risks associated with groundwater on the subject property containing chlorinated hydrocarbons.

EKI initially performed a preliminary assessment to identify potential environmental concerns associated with the subject property. The preliminary assessment comprised the following tasks:

- Review of environmental documents for surrounding properties provided by the current property owner;
- review of a computer database search of surrounding release sites and review of available file information at the regulatory agencies;
- review of historical land use information;
- performance of a site walk-through; and
- geophysical survey of two suspect underground fuel tank areas.

Based on the preliminary results of the environmental assessment, EKI implemented subsurface investigations that consisted of the following:

- Backhoe trenching in the suspect underground fuel tank areas;
- collection of soil samples along a former railroad spur on the subject property; and
- collection of groundwater samples at upgradient and downgradient locations on the subject property.

Following completion of the above activities, EKI performed a screening human health risk assessment to evaluate the potential human health risks associated with groundwater on the subject property containing chlorinated hydrocarbons.

The conclusions and recommendations presented herein are our professional opinion and are not a warranty or guaranty as to the presence, absence, or extent of contamination at the subject property or of releases from or near the subject properties. The facts presented herein are based on available information obtained by EKI and represent existing conditions at the subject property at the time of this report. This report is for the sole use of PeopleSoft, Inc.. Unless specifically authorized by EKI, use of or reliance on this report by any other entity is not permitted or authorized. The results of the environmental assessment by EKI are presented in the following Sections.

2.0 LOCATION OF SUBJECT PROPERTIES AND CURRENT USES

The subject properties, referred to as Parcel 16 and Option Area Parcel, are located southwest of the intersection of Hacienda Drive and Dublin Boulevard in Dublin, California (see Figure 1). Parcel 16 comprises approximately 47 acres. The Option Area Parcel comprises approximately 15 acres.

Parcel 16

Parcel 16 is currently vacant and unpaved with the exception of several concrete building foundations. A **drainage swale** forms the southern boundary of Parcel 16. **Several large vegetated soil mounds** are located in the eastern portion of the subject property. These soil mounds were likely created from the excavation of the southern drainage swale.

Option Area Parcel

The Option Area Parcel is currently vacant. At the time of this report, the entire site was covered with tall grasses. A **north-south trending vegetated soil mound** approximately 50 feet in width by several hundred feet in length and approximately 8 feet in height is located in the western portion of the property. According to information obtained from prior studies (discussed further below), the soil mound was placed on the Option Area Parcel around 1989. The origin of the mound is not known.

3.0 SITE LAND USE HISTORY

Information on historical land uses for the subject properties and upgradient areas was obtained from the following sources:

- Files maintained by Alameda County General Services Agency ("GSA");
- A review of historical aerial photographs dated 1940 through 1996;
- A review of historical USGS topographic maps; and
- A report for the Option Area Parcel entitled *40-Acre Surplus Parcel Preliminary Assessment Screening, Parks Reserve Forces Training Area, Dublin, California*, prepared by Woodward-Clyde Federal Services, dated 3 February 1994 (Woodward-Clyde 1994 report).

A discussion of historical land uses of the subject properties and upgradient areas is presented below. Figure 2 provides depicts known former land uses on the subject properties and upgradient areas.

Subject Properties

Based on historical aerial photographs reviewed by EKI at Pacific Aerial Surveys and photographs obtained from National Aerial Resources, Parcel 16 and Option Area Parcel

were in agricultural use until approximately the early 1940s. In the 1940s, during World War II, the subject properties were part of the Shoemaker military base. The specific land uses during this time period are discussed below. In the late 1940s and early 1950s, many structures were demolished.

Parcel 16

According to an historical map reviewed at Alameda County GSA, in the 1940s, land uses on Parcel 16 consisted of the following:

- Guard house and boiler room
- Salvage warehouse
- Incinerator
- Refrigerated storehouse
- Transfer shed
- Athletic field house
- Guest reception lounge
- Gatehouse
- Storage warehouses along railroad spur
- Underground fuel oil storage depot

With the exception of the refrigerated storehouse and the storage warehouses along the rail spur, the structures on Parcel 16 were demolished in the late 1950s or early 1960s. The refrigerated storehouse, warehouses, and rail spur were demolished and removed from Parcel 16 by Alameda County around 1995 or 1996.

Option Area Parcel

According to the Woodward-Clyde 1994 report, the western portion of the Option Area Parcel was formerly used as a "salvage yard" (see Figure 2). Materials reportedly stored in this yard included assembled wood trusses. The southeast corner of the Option Area Parcel was formerly occupied by a "labor camp", according to the Woodward-Clyde report. Specific uses of the "labor camp" were not discussed in the Woodward-Clyde report. Several additional buildings were located in the eastern portion of the Option Area Parcel. The southernmost building may have been a barracks. The uses of the two northern buildings are not identified in any of the historical materials reviewed by EKI. All buildings on the Option Area Parcel were demolished by 1957.

Upgradient Areas

According to an historical map reviewed at Alameda County GSA, reported former land uses on Parcel 15 included the following (see Figure 2):

- Two gasoline service stations

- Paint storeroom and paint shop
- Inflammable storage building
- Transportation shop
- Public works shop
- Laundry and boiler room

The structures on Parcel 15 were demolished in the late 1950s or early 1960s.

4.0 RESULTS OF DATABASE SEARCH OF AGENCY LISTS

EKI contracted with E-Data Resources, Inc. ("EDR") which provided a report of listed chemical use and release sites located in the vicinity of the subject properties. The EDR report, dated 4 November 1997, is included as Appendix A. According to the EDR report, there are no reported chemical use or release sites located upgradient and within one mile from the subject property.

5.0 PRIOR ENVIRONMENTAL INVESTIGATIONS

Prior environmental investigations have been performed on the subject properties and on adjacent properties. EKI reviewed various environmental reports at Alameda County GSA. The findings of these investigations are discussed below.

5.1 Subject Properties

Parcel 16

In 1994, on behalf of Alameda County, Versar conducted a Phase I assessment for property referred to as the "Santa Rita Property". The report is entitled, *Phase I Environmental Site Assessment, County of Alameda, Santa Rita Property*, prepared by Versar, Inc., dated 11 January 1994. Parcel 16 comprised the southwest corner of the Santa Rita Property. According to the Versar report, no potential environmental concerns were noted for Parcel 16.

Option Area Parcel

In 1994, Woodward-Clyde Federal Services performed an environmental investigation of the Option Area Parcel, as well as the property to the immediate north ("Woodward-Clyde 1994 report"). The Woodward-Clyde 1994 report concludes that "there is no indication that hazardous substances were used and/or stored at the subject property", which includes the Option Area Parcel.

5.2 Off-site Areas

EKI reviewed the following additional environmental reports for off-site properties:

- *47-Acre Surplus Property Parcel at Parks Reserve Forces Training Area, Dublin, California, Preliminary Screening Assessment*, prepared by Environmental Science Associates, Inc. ("ESA"), dated September 1991 (current BART parking lot site west of Option Area Parcel).
- *Phase I Environmental Site Assessment and Preliminary Wetlands/Endangered Species Information Review Report, Creekside Business Park III, Dublin, California*, prepared by Kleinfelder, Inc., dated 22 September 1997 (Parcel north of Parcel 15).

Based on a review of the above reports for off-site properties, no potential environmental impacts to the subject properties were noted. In the 1994 Versar report, no potential environmental concerns related to former or current uses of Parcel 15 were indicated. As discussed below, **Parcel 15 may be the source for chlorinated solvents detected in groundwater on Parcel 15 and the Option Area Parcel** (discussed further below).

6.0 RESULTS OF GEOPHYSICAL SURVEY

Based on the results of the historical land use survey (discussed in Section 3, above), **EKI identified two suspected underground fuel storage tank areas on Parcel 16**. These were:

- The underground fuel oil storage depot (southeast corner of Parcel 16); and
- The guard house with boiler room (north-central portion of Parcel 16) (refer to Figure 2).

EKI contracted with J.R. Associates which conducted a geophysical investigation of the two suspect areas. A copy of the findings report by J.R. Associates, dated 24 February 1998, is presented as Appendix B.

According to the J.R. Associates report, several magnetic anomalies were noted in the former underground fuel storage depot area. Several smaller magnetic anomalies were noted in the guard house boiler room area. The J.R. Associates report recommended potholing in these areas to search for the presence of buried tanks. **EKI coordinated backhoe trenching in both areas, the results of which are presented in Section 7, below.**

7.0 RESULTS OF SUBSURFACE INVESTIGATIONS

EKI performed the following subsurface investigations at the subject properties:

- Initial soil and groundwater investigation – Parcel 16 25-26 February 1998
- Initial trenching at geophysical survey areas – Parcel 16 27 February 1998
- Excavation and debris removal at fuel oil Depot Area – Parcel 16 15 April 1998
- Additional groundwater sampling - Parcel 16 13-14 April 1998

- Initial groundwater sampling – Option Area Parcel

15 April 1998

In April 1998, Alameda County GSA retained Versar, Inc. which conducted groundwater sampling on Parcel 15. EKI did not receive a written report of findings from Versar, but did receive tables and figures showing analytical results and sample locations.

The results of the EKI and Versar investigations are presented below.

7.1 Initial Soil and Groundwater Investigations – Parcel 16

On 25 and 26 February 1998, EKI collected five soil samples and seven shallow groundwater samples on Parcel 16. The soil samples were collected from the former railroad spur on the subject property (see Figure 3). The groundwater samples were collected from four soil borings drilled along the northern, and presumed upgradient, boundary of Parcel 16, and from three borings drilled in the presumed downgradient portion of the subject property (see Figure 4). The results of these investigations are presented below.

Results of Soil Investigations Along Former Railroad Spur

Drilling Procedures. On 26 February 1998, Spectrum Drilling Corporation of Stockton, California (“Spectrum”) drilled five shallow soil borings along the former railroad spur (RR-1 through RR-5). The boring locations were selected by EKI at random and were spaced along the entire length of the rail spur across the subject property (see Figure 3). Each boring was drilled to a depth ranging from approximately 6 feet to 9 feet bgs. Approximately 3 to 5 feet of gravel fill (possibly railroad ballast) was encountered in each boring. One soil sample for laboratory analysis was collected at the interface between the gravel fill and first soil encountered (approximately 3.5 feet to 5.5 feet bgs).

Soil Sampling Procedures. The soil samples were collected in pre-cleaned brass sample tubes, the ends of which were covered with Teflon tape and capped with plastic end caps. The samples were labeled and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Copies of EKI field observation logs and soil boring logs are included in Appendix C.

Each of the soil samples was analyzed by Sequoia Analytical Laboratory for the following chemical constituents:

- Heavy metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc);
- Chlorinated herbicides using EPA Method 8150; and
- Total extractable petroleum hydrocarbons (“TEPH”) using EPA Method 8015m with silica gel cleanup.

Analytical Results. The analytical results for the soil samples are shown on Figure 3

and are included in Appendix D. The results are discussed below.

Heavy Metals

According to the analytical results, low concentrations of selected heavy metals were detected in the soil samples. The metals concentrations detected in the soil samples are within or below typical East-San Francisco Bay Area soils (Lawrence Berkeley National Laboratory, 1995).

Chlorinated Herbicides

One chlorinated herbicide, 4-(2,4-Dichlorophenoxy) butyric acid ("2,4-DB"), was detected in soil sample RR-1 at a concentration of 0.051 mg/kg. The remaining soil samples were reported not to contain concentrations of chlorinated herbicides above the analytical detection limits. The U.S. EPA Region IX Preliminary Remediation Goal ("PRG") for 2,4-DB in soil at industrial sites is 8,600 mg/kg (U.S. EPA Region IX, 1998). The concentration of 2,4-DB in soil sample RR-1 is well below its U.S. EPA PRG.

1995 PRG = $5.5E+03$ (industrial)

Total Extractable Petroleum Hydrocarbons

Total extractable petroleum hydrocarbons were detected in soil samples RR-4 and RR-5 at concentrations of 2.9 mg/kg and 6.6 mg/kg, respectively. These concentrations do not indicate significant impacts are likely to have occurred.

Results of Groundwater Investigations

Drilling Procedures. EKI contracted with Spectrum to drill seven soil borings on Parcel 16. Four borings (P-1 through P-4) were drilled along the northern, upgradient boundary of Parcel 16. These four soil borings were drilled on a paved roadway located approximately 70 feet north of the northern boundary of Parcel 16 (see Figure 4). Three additional borings were drilled in the southern, or downgradient, portion of the subject property. Two of these borings (P-5 and P-6) were drilled on an unimproved roadway. One boring (P-7) was drilled immediately downgradient of the former buried fuel oil storage depot.

7 borings
P1-P7

All seven soil borings were drilled using 8-inch diameter hollow-stem augers. Each of the soil borings, with the exception of P-7, were drilled to a total depth of approximately 20 feet below ground surface ("bgs"). Depth to groundwater at the time of drilling was approximately 15 feet bgs. Soil boring P-7 was drilled to a depth of approximately 10 feet bgs. In boring P-7, groundwater was encountered at approximately 5 feet bgs.

During drilling, an organic vapor meter was used to screen for the presence of VOCs in soil extracted from the boring. No VOCs were detected with the OVM in any of the

seven soil borings.

Grab Groundwater Sampling Procedures. Upon reaching total depth in each boring, grab groundwater samples were collected by EKI by lowering a pre-cleaned bailer through the augers to the water table. Upon retrieval of the bailer, the contents were transferred to laboratory-supplied sample containers appropriate for the methods of analyses. The samples were placed in a cooler with ice for temporary storage and transport to Sequoia Analytical Laboratory under chain-of-custody. Copies of EKI field observation logs and soil boring logs are included in Appendix C.

Following completion of the grab groundwater sampling, each borehole was filled in with a cement/grout mixture to the original ground surface.

Grab Groundwater Sample Analyses. The seven grab groundwater samples were each analyzed by Sequoia Analytical Laboratory for the following chemical constituents:

- Volatile organic compounds ("VOCs"), including benzene, toluene, ethyl benzene, and total xylenes ("BTEX") using EPA Method 8260; and
- Total extractable petroleum hydrocarbons ("TEPH") with silica gel clean-up using EPA Method 8015m.

Grab Groundwater Sample Analytical Results. The analytical results for the grab groundwater samples are shown on Figures 4 and 5 and are included in Appendix D.

Volatile Organic Compounds

According to the analytical results, upgradient grab groundwater samples P-3 and P-4 were reported to contain PCE at concentrations of 83 ug/l and 100 ug/l, respectively. Grab groundwater sample P-4 was also reported to contain TCE at a concentration of 4.2 ug/l. Grab groundwater sample P-3 did not contain TCE above the laboratory detection limit of 1 ug/l. The remaining grab groundwater samples (P-1 and P-2, and P-5 through P-7) were reported not to contain concentrations of VOCs above the analytical detection limits.

BTEX

None of the grab groundwater samples, with the exception of P-6, were reported to contain concentrations of BTEX above the analytical detection limit. Sample P-6 was reported to contain total xylenes at a concentration of 6.6 ug/l. The California Maximum Contaminant Level ("MCL") for total xylenes in drinking water is 1,750 ug/l (US EPA Region IX, November 1996).

Total Extractable Petroleum Hydrocarbons

According to the analytical results, none of the grab groundwater samples, with the exception of P-7, contained concentrations of TEPH above the analytical detection limit. Grab groundwater sample P-7, collected from a boring placed immediately downgradient of the fuel depot area, was reported to contain TEPH at a concentration of 120,000 ug/l (see Figure 5). The analytical laboratory reported "weathered diesel" in the sample. The groundwater in the vicinity of the fuel depot area was further characterized for TEPH by EKI; the results of which are presented in Section 7.4.

7.2 Initial Trenching At Geophysical Survey Areas

The geophysical survey by J.R. Associates (discussed above) identified the presence of buried debris, possibly underground tanks, at two areas on Parcel 16; the former guard house boiler room and former underground fuel oil depot storage area (refer to Figure 2).

On 27 February 1998, EKI contracted with HSR, Inc. which performed limited backhoe trenching to identify the nature of materials detected by the geophysical survey. In the former guard house boiler room area, debris consisting of concrete slabs with rebar was encountered. No indications of underground tanks were noted during trenching in the former guard house boiler room area. The concrete was placed back into the trenches following the investigation.

In the former fuel oil depot storage area, the trenching revealed the presence of buried metal pipe, and concrete and wood debris. No underground tanks were encountered during the trenching operations. This material was left in place. In April 1998, the buried debris in the fuel depot area was excavated and removed from the ground (see Section 7.3, below).

7.3 Excavation and Removal of Buried Debris in Fuel Depot Area

On 15 April 1998, at the request of PeopleSoft, Inc., EKI contracted with HSR, Inc. to excavate and remove the buried debris in the fuel depot area. The approximate excavation area is shown on Figure 6. The excavation and backfill work was performed using an excavator. The excavation area measured approximately 3,000 square feet with an average depth of approximately seven feet. Groundwater was encountered in the excavation at approximately 8 feet below the existing ground surface. The excavation did not extend below the water table.

The debris removed from the ground in the excavation area consisted of approximately 100 linear feet of 6-inch diameter steel pipe, concrete debris with rebar, and wood debris. The debris was segregated by type and was stockpiled near the excavation area.

Approximately seven to eight individual trenches (approximately 10 to 30 feet in length

by 5 feet in width) were dug inside the excavation area. After the debris was removed from each trench and prior to commencing with the next trench, the trench was backfilled by pushing the soil that had been stockpiled adjacent to the trench back into the excavation. Following the completion of trenching and backfilling, the excavation area was "track-walked" with the excavator. This method of backfill was approved by Mr. Freitag with the Alameda County GSA during a telephone call with Mr. Hoffey on 10 April 1998.

Since the material placed in the trenches was not compacted, there is a potential for differential settlement to occur. Therefore, it is recommended that this area be specifically evaluated by the site geotechnical engineer prior to development of the site.

7.4 Results of Additional Groundwater Investigations – Parcel 16

To further characterize the extent of VOCs on Parcel 16, and to further characterize the extent of TEPH in groundwater at the fuel depot area, EKI performed additional groundwater investigations on Parcel 16. The results of these additional investigations are presented below.

Results Additional Characterization of VOCs in Groundwater

Between 13 and 15 April 1998, EKI coordinated the collection of additional grab groundwater samples in the northwestern portion of Parcel 16 to further define the lateral extent of VOCs in groundwater on Parcel 16.

EKI contracted with Precision Sampling, Inc. of San Rafael, California, which completed three push probes to groundwater in the northwest portion of Parcel 16 (see P-8, P-9, and P-10 on Figure 4). Each probe was pushed to a total depth of approximately 20 feet bgs. Upon removal of the push probes from the borings, unused slotted PVC casing was inserted into each borehole. Grab groundwater samples were collected in the manner described above using pre-cleaned bailers. The samples were transported to Sequoia Analytical Laboratory. Copies of EKI field observation logs are included in Appendix E.

3 probes
P8-P10

Each of the three grab groundwater samples was analyzed for VOCs using EPA Method 8260. The analytical results are presented on Figures 4 and 5, and are included in Appendix F. According to the analytical results, grab groundwater samples P-8, P-9, and P-10 did not contain concentrations of VOCs (including PCE, TCE and BTEX) above the analytical detection limits.

Additional Characterization of TEPH in Groundwater at Fuel Depot Area

Between 13 and 15 April 1998, EKI coordinated the collection of additional grab groundwater samples in the vicinity of the former fuel oil depot area. As discussed in Section 7.1, above, the grab groundwater sample from boring P-7, placed immediately

downgradient of the presumed location of the former underground tanks, was reported to contain TEPH at a concentration of 120,000 ug/l. The purpose for the additional sampling was to characterize the lateral extent of TEPH in shallow groundwater.

Precision Sampling, Inc. completed a total of eight push probe borings in the vicinity of the former fuel depot area (see Figure 6). Three probes (FD-1, FD-2, and FD-3) were placed approximately 150 feet in the general downgradient direction from boring P-7. Two probes (FD-7 and FD-8) were placed approximately 55 feet in the general downgradient direction from boring P-7. Three probes (FD-4, FD-5, and FD-6) were placed approximately 50 feet in the upgradient direction from the former fuel depot area.

*6 probes
FD-1 - FD-6*

Each of the probes extended to a total depth of approximately 25 feet below ground surface. Upon removal of the push probes from the borings, unused slotted PVC casing was inserted into each borehole. Grab groundwater samples were collected in the manner described above using pre-cleaned bailers. Samples FD-1, FD-2 and FD-3 were transported to Clayton Analytical Laboratory in Pleasanton, California, and placed on accelerated turnaround. The remaining groundwater samples were transported to Sequoia Analytical Laboratory. Copies of EKI field observation logs are included in Appendix E.

The analytical results of the grab groundwater samples collected in the fuel depot area are shown on Figure 6 and are included in Appendix F. Each of the eight grab groundwater samples was analyzed for TEPH using EPA Method 8015m with silica gel clean-up and BTEX using EPA Method 8020. According to the analytical results, none of the eight grab groundwater samples contained detectable concentrations of TEPH. Based on these results, the weathered diesel fuel in shallow groundwater appears to be limited to the immediate vicinity around the former underground fuel oil storage depot.

7.5 Results of Groundwater Investigations - Parcel 15

In April 1998, the Alameda County GSA contracted with Versar, Inc. which performed groundwater sampling on Parcel 15, located immediately north and in the presumed upgradient direction from Parcel 16. Based on the results of groundwater sampling on Parcel 16 by EKI, Parcel 15 was considered a possible source for the VOCs in groundwater. As mentioned above in Section 3, the preliminary assessment by EKI identified a number of past uses on Parcel 15 which may have contributed to VOCs in groundwater (i.e., painting facilities, vehicle maintenance facilities, a laundry, and gasoline service stations).

Versar drilled a total of nine soil borings on Parcel 15 (BH-1 through BH-9). Grab groundwater samples were collected from each boring from the first encountered groundwater (approximately 15 feet bgs). Alameda County GSA provided EKI with a table and figure presenting the analytical results and approximate locations of samples.

The analytical results for the groundwater samples collected by Versar are shown on

Figure 4. According to the analytical results, PCE was detected in groundwater samples at concentrations up to 280 ug/l. TCE was detected at concentrations up to 2.5 ug/l. Carbon tetrachloride was detected at concentrations up to 17 ug/l. Chloroform was detected at concentrations up to 21 ug/l. BTEX was not detected in any of the groundwater samples collected on Parcel 15 by Versar.

7.6 Initial Groundwater Investigations – Option Area Parcel

Between 13 and 15 April 1998, EKI coordinated the collection of grab groundwater samples from borings placed on the Option Area Parcel. EKI contracted with Precision Sampling, Inc. which completed seven push probes to groundwater (see Figures 4 and 5). Four probes (OA-1 through OA-4) were placed along the northern, and presumed upgradient, Parcel boundary. Three probes (OA-5, OA-6, and OA-7) were placed along the southern, and presumed downgradient, Parcel boundary. Each probe was pushed to a total depth of approximately 20 feet bgs. Upon removal of the push probes from the borings, unused slotted PVC casing was inserted into each borehole. Grab groundwater samples were collected in the manner described above using pre-cleaned bailers. The samples were transported to Sequoia Analytical Laboratory. Copies of EKI daily observation logs are included in Appendix E.

7 probes
OA-1 - OA-7

Each of the seven grab groundwater samples from Option Area Parcel was analyzed for VOCs using EPA Method 8260 and TEPH using EPA Method 8015m with silica gel clean-up. The analytical results of the grab groundwater samples are shown on Figures 4 and 5, and are included in Appendix F. According to the analytical results, none of the grab groundwater samples contained detectable concentrations of VOCs, BTEX, or TEPH, with the exception of grab groundwater sample OA-5. Grab groundwater sample OA-5, located in the southeastern corner of Option Area Parcel, contained PCE and TCE at concentrations of 29 ug/l and 5 ug/l, respectively.

VOCs in Off-site Groundwater

EKI reviewed the report entitled *Summary of Environmental Activities, Hacienda, Pleasanton, California*, prepared by ENVIRON, dated 9 December 1997 ("ENVIRON report"). According to the ENVIRON report, a groundwater monitoring well (labeled P-3A) formerly existed approximately 600 feet south of Option Area Parcel, across Highway 580 (see Figure 4). This well reportedly was installed to a depth of 31.5 feet bgs, and was screened from 19.5 feet bgs to 29.5 feet bgs. The well was sampled on a semi-annual basis from approximately October 1987 through March 1995.

According to the analytical results for groundwater samples collected from well P-3A, PCE was detected in groundwater samples from well P3-A at concentrations ranging from 3.4 ug/l to 15 ug/l. TCE was detected in groundwater samples from well P-3A at concentrations ranging from non-detectable levels (<1 ug/l) to 1.6 ug/l. According to the ENVIRON report, the source for these VOCs in groundwater was not identified.

8.0 RESULTS OF SCREENING HUMAN HEALTH RISK ASSESSMENT

A screening risk assessment was performed to evaluate potential human health risks due to exposure to VOCs volatilizing from impacted groundwater at Parcel 16 and the Option Area Parcel into indoor and outdoor air. Calculations, assumptions, parameters and conclusions are included in Appendix G.

Risk assessment calculations were performed using guidelines published by the California Environmental Protection Agency ("Cal-EPA"), the United States Environmental Protection Agency ("USEPA"), and the American Society for Testing and Materials ("ASTM"). VOC data from groundwater samples collected onsite and at adjoining properties to the north and south were used to calculate representative concentrations. For the purpose of risk assessment, the only pathway considered to be appropriate for exposure of future onsite workers to chemicals of concern ("COCs") was the inhalation of COCs volatilized from groundwater. Hypothetical future onsite workers were assumed to be either: (A) commercial or industrial building occupants who work indoors, or (B) maintenance workers who work outdoors. Potential risks were evaluated separately for indoor and outdoor air, corresponding to the two hypothetical future populations at the Site. COCs found in groundwater samples from the site can have both carcinogenic and non-carcinogenic adverse health effects in humans. Toxicological data were used to calculate potential carcinogenic risks and non-carcinogenic effects.

Characterization of cancer risk entailed estimating the incremental risk of future workers developing cancer over a lifetime of 70 years due to a 25-year exposure to estimated chronic daily intake doses of COCs. Cancer risk is expressed as a probability, and when summed for all COCs likely to be encountered by a future population, should be no greater than 10^{-6} to 10^{-4} , according to USEPA guidelines. California Proposition 65 notification is based on a lifetime incremental cancer rate of 10^{-5} . Non-carcinogenic risk characterization involved calculation of the ratio of the estimated daily intake doses to the maximum "safe" doses of each COC. This ratio is called the hazard index ("HI"). Hazard indices for all COCs present should sum to a value of one or less. If the total HI exceeds one, adverse health effects may occur in the exposed populations.

Total lifetime incremental cancer risks due to exposure to COCs in groundwater were estimated at 6×10^{-7} for indoor workers, and 3×10^{-7} for outdoor workers. These risk values are lower than both the USEPA range of acceptable risks (i.e., 10^{-4} to 10^{-6}), and the Proposition 65 notification level of 10^{-5} . Total non-carcinogenic hazard indices calculated herein are 0.01 for indoor workers, and 0.006 for outdoor workers. These values are significantly below the threshold value of 1.0. Based on these screening risk assessment calculations, it is concluded that the primary COCs detected in groundwater at or adjacent to the Parcel 16 and the Option Area Parcel do not pose a significant human health risk at current levels.

9.0 CONCLUSIONS

Based on the information presented above, the following conclusions are made:

Results of Preliminary Environmental Assessment

- Parcel 16 and the Option Area Parcel were formerly part of Camp Shoemaker, a military base. Areas of potential environmental concern on Parcel 16 included a former guard house boiler room with a possible underground fuel storage tank, and former underground fuel oil storage depot (see Figure 2). Areas of potential environmental concern on the Option Area Parcel included a former salvage yard and several unidentified former buildings. These areas were investigated further; the results of which are presented below.
- A number of areas of potential environmental concern were identified for Parcel 15, located immediately upgradient of Parcel 16. These included two former gasoline service stations, a former paint storeroom and paint shop, a former inflammable storage building, a former transportation and public works shop, and a former laundry and boiler room. Parcel 15 was investigated further by Alameda County GSA; the results of which are presented below.
- A geophysical survey was conducted in two areas on Parcel 16 where underground fuel storage tanks were suspected; 1) the former guard house boiler room, and 2) the former underground fuel oil depot area. The geophysical survey identified buried objects at both locations. Subsequent trenching coordinated by EKI revealed the presence of buried concrete debris at the guard house boiler room area. Trenching in the fuel depot area revealed the presence of buried debris including concrete slabs, wood debris, and approximately 100 linear feet of 6-inch diameter steel pipe. Tanks were not encountered at either trenching location. At the request of PeopleSoft, Inc., the buried debris in the fuel depot area was removed from the ground and stockpiled on-site.

Results of Subsurface Investigations

EKI conducted soil and groundwater investigations on Parcel 16 and the Option Area Parcel, the results of which are summarized below.

Former Railroad Spur

- EKI collected shallow soil samples along the former railroad spur. Based on the analytical results for the soil samples, elevated concentrations of chlorinated herbicides, selected heavy metals, and total extractable petroleum hydrocarbons were not detected (see Figure 3).

Former Fuel Depot Area

- Significant releases of petroleum hydrocarbons to soil in the excavation area were not identified during the excavation and removal of debris from the former fuel depot area, based on visual observation of sidewalls and excavation floor. TEPH quantified by the analytical laboratory as "weathered diesel" were detected at a concentration of 120,000 micrograms per liter ("ug/l") in groundwater sample P-7, located on the inferred downgradient side of the former fuel depot area (see Figure 6). Based on the results of additional characterization of groundwater quality in areas upgradient and downgradient of the former fuel depot area, **the weathered diesel in groundwater does not appear to have migrated more than 55 feet from the former fuel depot area.** BTEX was not detected in any groundwater samples above the laboratory reporting limits.

VOCs in Groundwater

Volatile organic compounds have been detected in groundwater along the northern boundary of Parcel 16, on the Option Area Parcel, and on Parcel 15. See below.

Parcel 16

- PCE and TCE were detected in groundwater samples collected from two borings located along the northern, and presumed upgradient, boundary of Parcel 16 at concentrations up to 100 ug/l and 4.2 ug/l, respectively. Concentrations of PCE and TCE were not detected in groundwater samples collected from borings placed in downgradient areas on Parcel 16 (see Figure 4, borings P-8 through P-10). The source for the PCE and TCE is presumed to be Parcel 15.

Option Area Parcel

- PCE and TCE were detected in one grab groundwater sample from the southeast corner of the Option Area Parcel at concentrations of 29 ug/l and 5 ug/l, respectively. PCE and TCE have historically been detected in groundwater samples from former off-site well P-3A at concentrations ranging from 3.4 ug/l to 15 ug/l and <1 ug/l to 1.6 ug/l, respectively. Well P-3A was formerly located approximately 500 feet south of Option Area Parcel, across Interstate 580 (see Figure 4). The source for the PCE and TCE in groundwater on the Option Area Parcel is not known. The source may be an historic release from an abandoned sanitary sewer line that may cross or is located near the Option Area Parcel (see Figure 4).

Parcel 15

- Alameda County GSA retained Versar, Inc. which performed a groundwater investigation on Parcel 15. According to the analytical results provided by Versar, PCE and TCE were detected in groundwater samples from Parcel 15 at concentrations up to 280 ug/l and 2.5 ug/l, respectively. Carbon tetrachloride was also detected in groundwater samples from Parcel 15 at concentrations up to 17 ug/l.

Results of Screening Human Health Risk Assessment

- A screening risk assessment was performed to evaluate potential human health risks due to exposure to VOCs volatilizing from groundwater at Parcel 16 and the Option Area Parcel through the vadose zone to indoor and outdoor air. **Total estimated lifetime incremental cancer risks incurred through exposure to chemicals of concern in groundwater were estimated at 6×10^{-7} for indoor workers, and 3×10^{-7} for outdoor workers.** These hypothetical risks are lower than both the U.S. EPA range of acceptable risks (i.e., 10^{-4} to 10^{-6}), and the Proposition 65 notification level of 10^{-5} . Total non-carcinogenic hazard indices calculated herein are 0.01 for indoor workers, and 0.006 for outdoor workers. These values are significantly below the threshold value of 1.0. Based on these screening risk assessment calculations, it is concluded that current levels of the primary chemicals of concern detected in groundwater at or adjacent to Parcel 16 and the Option Area Parcel do not pose a significant human health risk.

10.0 LIST OF REFERENCES

Environmental Science Associates, Inc., *47-Acre Surplus Property Parcel at Parks Reserve Forces Training Area, Dublin, California, Preliminary Screening Assessment*, dated September 1991.

Kleinfelder, Inc., *Phase I Environmental Site Assessment and Preliminary Wetlands/Endangered Species Information Review Report, Creekside Business Park III, Dublin, California*, dated 22 September 1997.

Lawrence Berkeley National Laboratory, University of California, Environmental Restoration Program, *Protocol for Determining Background Concentrations of Metals in Soil at Lawrence Berkeley National Laboratory (LBNL)*, dated August 1995.

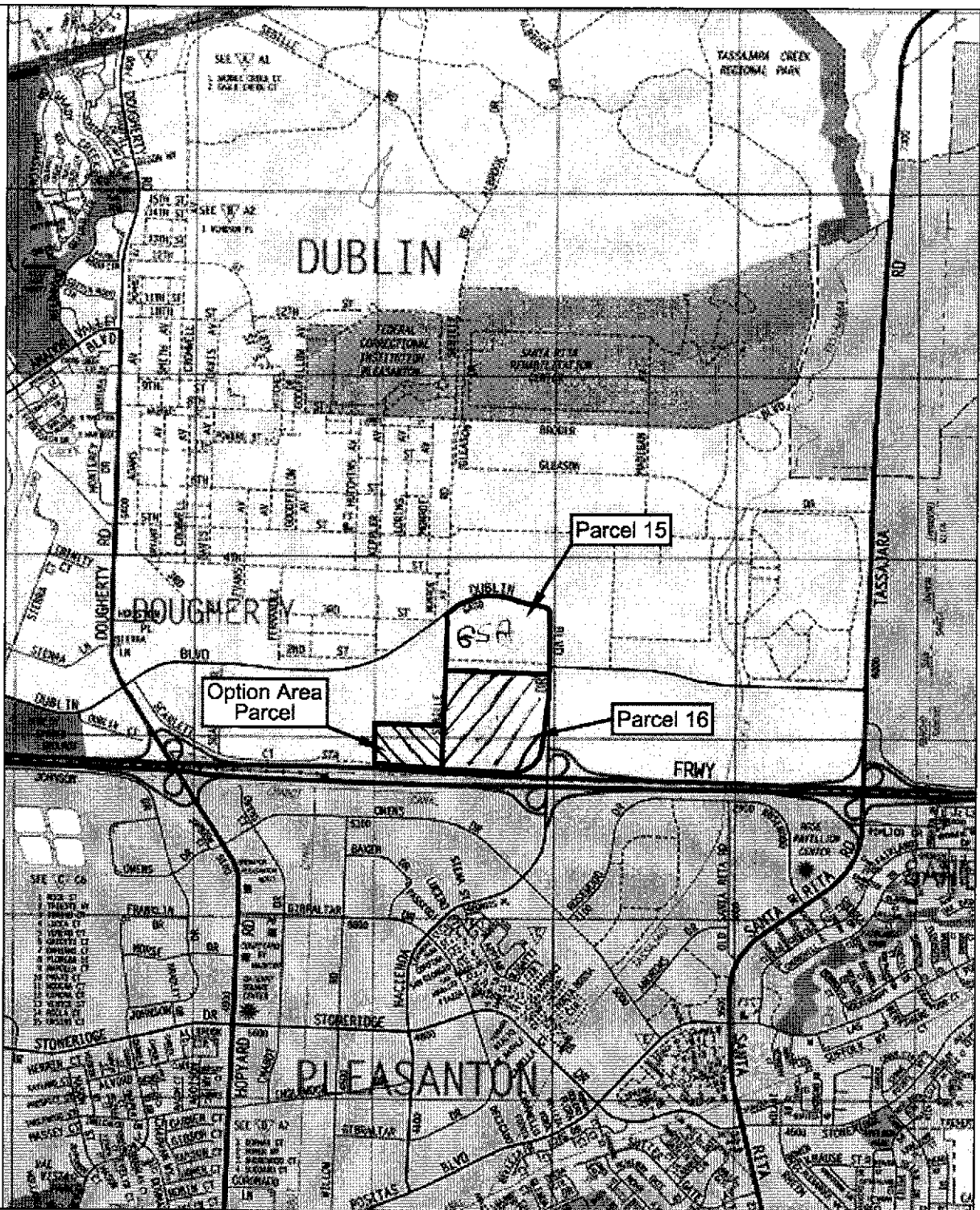
Treadwell & Rollo, *Geotechnical Investigation, PeopleSoft Dublin Campus Master Plan, Dublin, California*, dated 23 April 1998.

US Environmental Protection Agency, Region IX, *Drinking Water Standards and Health Advisories Table*, November 1996.

U.S. Environmental Protection Agency, Region IX, *Region 9 Preliminary Remediation Goals ("PRGs") 1998*.

Versar, Inc., *Phase I Environmental Site Assessment, County of Alameda, Santa Rita Property*, dated 11 January 1994.

Woodward-Clyde Federal Services, *40-Acre Surplus Parcel Preliminary Assessment Screening, Parks Reserve Forces Training Area, Dublin, California*, dated 3 February 1994.



Basemap from: The Thomas Guide dated 1997.



0 2300 4600

(Approximate Scale in Feet)

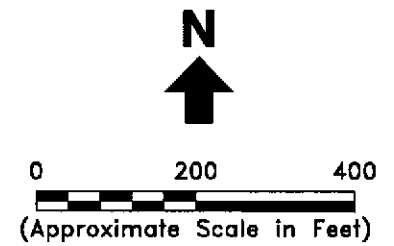
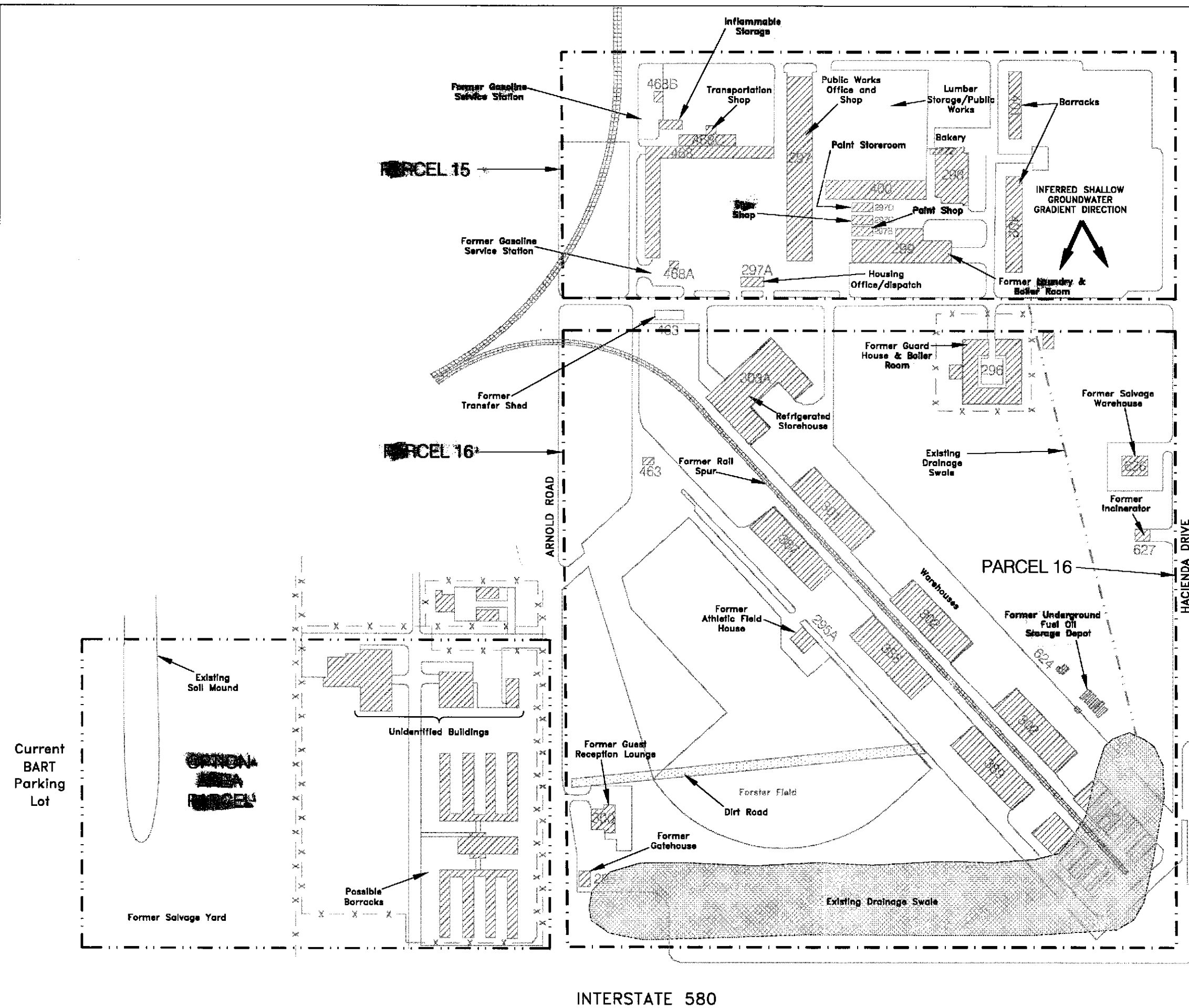
Erler & Kalinowski, Inc.

Approximate Location of
Subject Properties

Hacienda Dr. and Dublin Blvd.
Dublin, CA

June 1998
EKI 980003.00

Figure 1



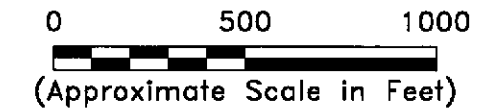
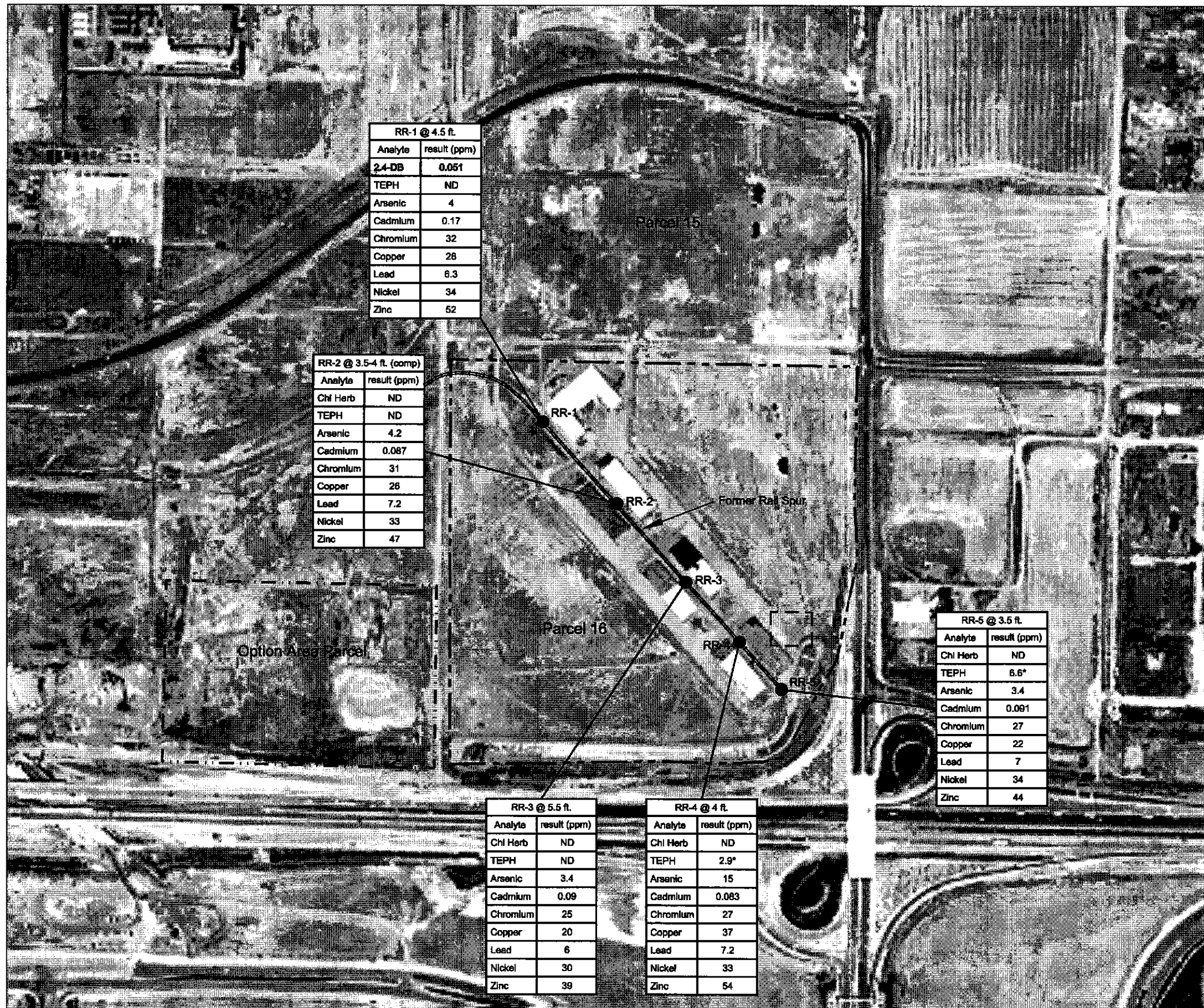
LEGEND
 - - - - - Approximate Parcel Boundary
 ▨ Former Buildings

- Notes:**
1. All locations are approximate.
 2. Historical features based on World War II era map provided by Alameda County General Services Agency.

Erler & Kalinowski, Inc.

Historical Features of
 Subject Properties and
 Parcel 15
 Hacienda Dr. & Dublin Blvd.
 Dublin, CA
 June 1998
 EKI 980003.00
 Figure 2

INTERSTATE 580



LEGEND

- Approximate Boundary of Parcel 16
- - - - - Approximate Boundary of Option Area Parcel
- [] Approximate Location of Former Underground Fuel Oil Storage Depot
- Approximate Location of Soil Sample by EKI, February 1998
- TEPH Total Extractable Petroleum Hydrocarbons using EPA Method 8015m with Silica Gel Clean up.
- Chl Herb Chlorinated Herbicides using EPA Method 8150
- * Laboratory reported unidentified hydrocarbons (c9-c24) in the sample not reflective of diesel fuel.

Notes:

1. All locations are approximate.
2. Basemap from: Pacific Aerial Surveys photograph dated 5 July 1994.
3. Metals by ICP/MS.
4. All results in parts per million (ppm).

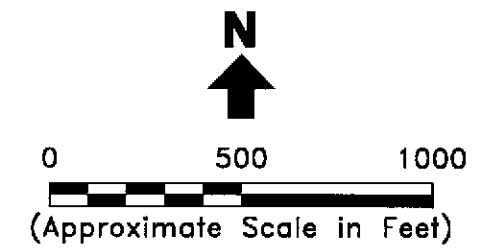
Erler & Kalinowski, Inc.

Soil Sample Analytical Results
Former Rail Spur

Hacienda Dr. and Dublin Blvd.
Dublin, California

June 1998
EKI 980003.00

Figure 3



LEGEND

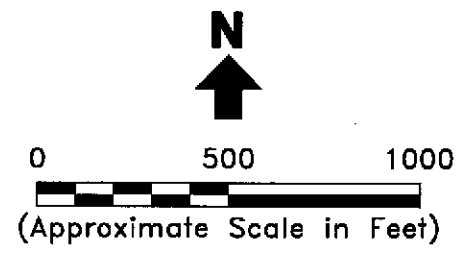
- Approximate Boundary of Parcel 16
 - - - - - Approximate Boundary of Option Area Parcel
 - ss --- Approximate Sanitary Sewer Line Alignment
 - [] Approximate Location of Former Underground Fuel Oil Storage Depot
 - Approximate Location of Soil Boring and Grab Groundwater Sample by EKI (Collected February & April 1998)
 - △ Approximate Location of Soil Boring and Grab Groundwater Sample by Versar, Inc. (Collected April 1998) Data Provided by Alameda County General Services Agency
 - ⊙ Source for Data: "Summary of Environmental Activities, Hacienda, Pleasanton, California," Environ, 9 Dec. 1997
- VOCs Volatile Organic Compounds using EPA Method 8260
- PCE Tetrachloroethylene
- TCE Trichloroethylene
- CTET Carbon Tetrachloride
- Chloro Chloroform

Notes:

1. All locations are approximate.
2. Basemap from: Pacific Aerial Surveys photograph dated 5 July 1994.

Erler & Kalinowski, Inc.

Grab Groundwater Sample Analytical Results for VOCs for Parcel 15, Parcel 16 and Option Area Parcel
Hacienda Dr. and Dublin Blvd.
Dublin, California
June 1998
EKI 980003.00
Figure 4

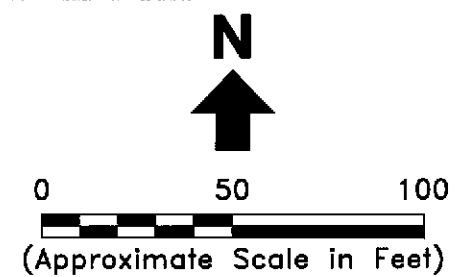
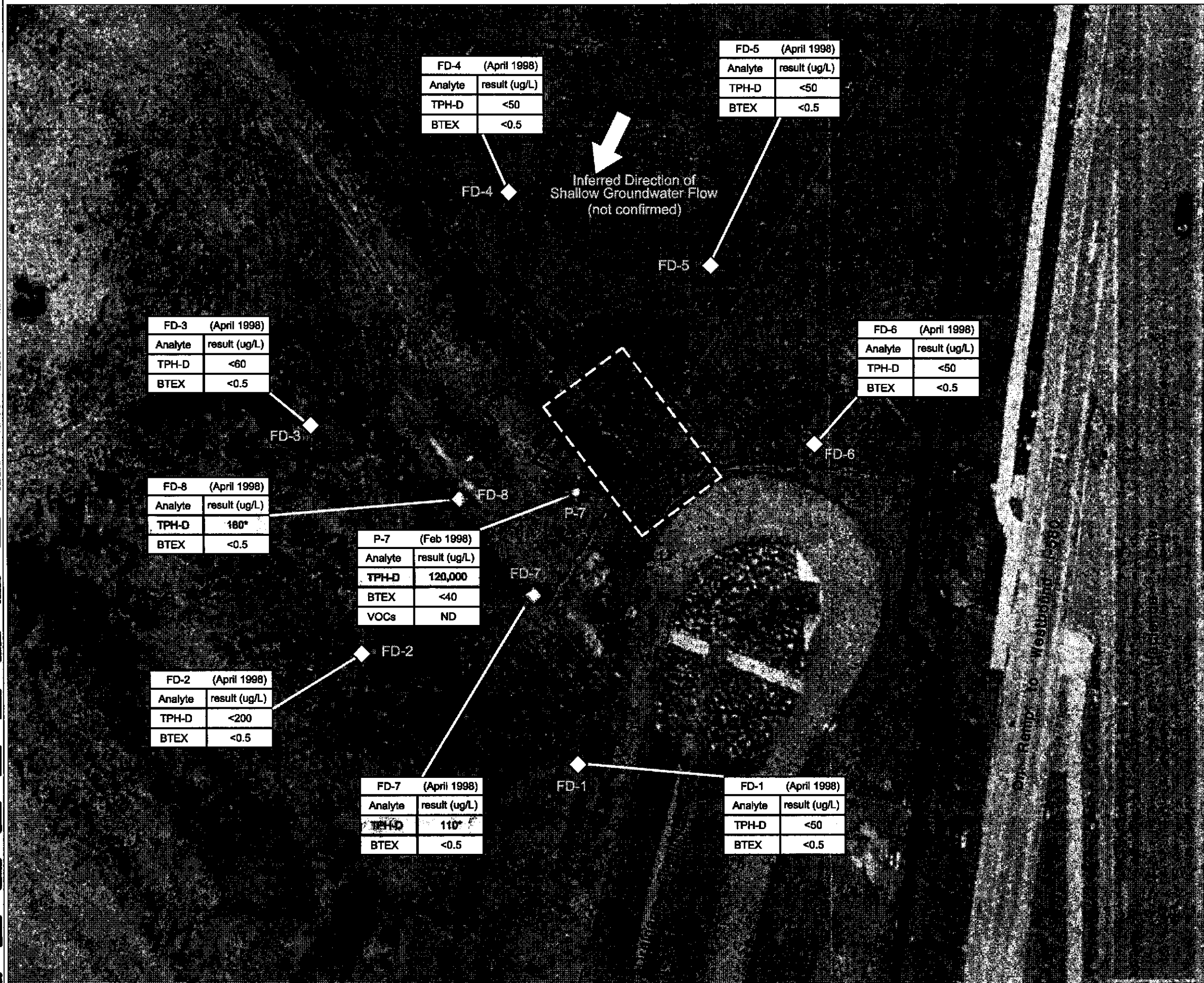


- LEGEND**
- Approximate Boundary of Parcel 16
 - Approximate Boundary of Option Area Parcel
 - ← SS --- Approximate Sanitary Sewer Line Alignment
 - [- -] Approximate Location of Former Underground Fuel Oil Storage Depot
 - Approximate Location of Soil Boring and Grab Groundwater Sample (Collected February & April 1998)
 - TPH-D Total Petroleum Hydrocarbons as Diesel using EPA Method 8015m with Silica Gel Clean up.
 - BTEX Benzene, Toluene, Ethylbenzene and Total Xylenes, using EPA Method 8020
 - * Laboratory reported unidentified hydrocarbons (c9-c24) in the sample not reflective of diesel fuel.


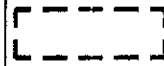
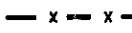
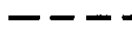


- Notes:**
1. All locations are approximate.
 2. Basemap from: Pacific Aerial Surveys photograph dated 5 July 1994.

Erler & Kalinowski, Inc.

Grab Groundwater Sample Analytical Results for TPH & BTEX for Parcel 15, Parcel 16 and Option Area Parcel
 Hacienda Dr. and Dublin Blvd.
 Dublin, California
 June 1998
 EKI 980003.00
 Figure 5



LEGEND

-  Approximate Area of Buried Debris Removal (April 1998)
-  Approximate Location of Former Underground Fuel Oil Storage Depot
-  Fence
-  Drainage Swale
-  Approximate Location of Grab Groundwater Sample (Collected February 1998)
-  Approximate Location of Grab Groundwater Sample (Collected April 1998)
- TPH-D Total Petroleum Hydrocarbons as Diesel using EPA Method 8015m with Silica Gel Clean up.
- BTEX Benzene, Toluene, Ethylbenzene and Total Xylenes, using EPA Method 8020
- VOCs Volatile Organic Compounds using EPA Method 8260
- * Laboratory reported unidentified hydrocarbons (c9-c24) in the sample not reflective of diesel fuel.

Notes:

1. All locations are approximate.
2. Basemap from: Kier & Wright Civil Engineers & Surveyors, Inc. (1998)

Erler & Kalinowski, Inc.

Analytical Results for
Grab Groundwater Samples for
Former Fuel Oil Depot Area
Hacienda Dr. and Dublin Blvd.
Dublin, California
June 1998
EKI 980003.00
Figure 6

APPENDIX A

**COPY OF E-DATA RESOURCES, INC.
RADIUS MAP FOR PARCEL 16
DATED 6 JANUARY 1998**



e data resources, inc.

The EDR-Radius Map with GeoCheck™

**Parcel 16
Dublin Blvd + Hacienda Dr
Dublin, CA 94568**

Inquiry Number: 0221075.4r

January 06, 1998

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-97. Search distances are per ASTM standard or custom distances requested by the user.

The address of the subject property for which the search was intended is:

DUBLIN BLVD + HACIENDA DR
DUBLIN, CA 94568

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-97 search radius around the subject property for the following Databases:

NPL:..... National Priority List
Delisted NPL:..... NPL Deletions
RCRIS-TSD:..... Resource Conservation and Recovery Information System
AWP:..... AWP
Cal-Sites:..... Cal-Sites
Toxic Pits:..... Toxic Pits
CERCLIS:..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP:..... Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS:..... Corrective Action Report
Ca. FID:..... CA FID
AST:..... Aboveground Petroleum Storage Tank Facilities
RAATS:..... RCRA Administrative Action Tracking System
WMUDS:..... WMUDS/SWAT
HAZNET:..... HAZNET
RCRIS-SQG:..... Resource Conservation and Recovery Information System
RCRIS-LQG:..... Resource Conservation and Recovery Information System
HMIRS:..... Hazardous Materials Information Reporting System
PADS:..... PCB Activity Database System
ERNS:..... Emergency Response Notification System
FINDS:..... Facility Index System
TRIS:..... Toxic Chemical Release Inventory System
TSCA:..... Toxic Substances Control Act
MLTS:..... Material Licensing Tracking System
NPL Lien:..... NPL Liens
CA SLIC:..... CA SLIC regions.
Ca. BEP:..... CA Bond Exp. Plan
ROD:..... ROD
CONSENT:..... Superfund (CERCLA) Consent Decrees
Ca. WDS:..... CA WDS
S Bay Reg. 2:..... South Bay Region 2
Coal Gas:..... Former Manufactured gas (Coal Gas) Sites.

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was not listed in any of the databases searched by EDR.

EXECUTIVE SUMMARY

Surrounding Properties:

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the subject property includes a tolerance of -10 feet. Sites with an elevation equal to or higher than the subject property have been differentiated below from sites with an elevation lower than the subject property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data comes from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, has revealed that there is 1 Notify 65 site within approximately 1 Mile of the subject property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON STATION #9-0917	5280 HOPYARD ROAD	1/2 - 1 W	A9	13

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/1994 has revealed that there are 4 CHMIRS sites within approximately 1 Mile of the subject property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
Not reported	SANTA RITA JAIL	1/4 - 1/2 ENE	1	9
Not reported	3675 OLD SANTA RITA ROA	1/2 - 1 SE	4	12
Not reported	I-580 W/B @ SANTA RITA	1/2 - 1 E	6	12
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
Not reported	5934 GIBRALTAR DRIVE	1/2 - 1 SW	2	9

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there are 5 Cortese sites within approximately 1 Mile of the subject property.

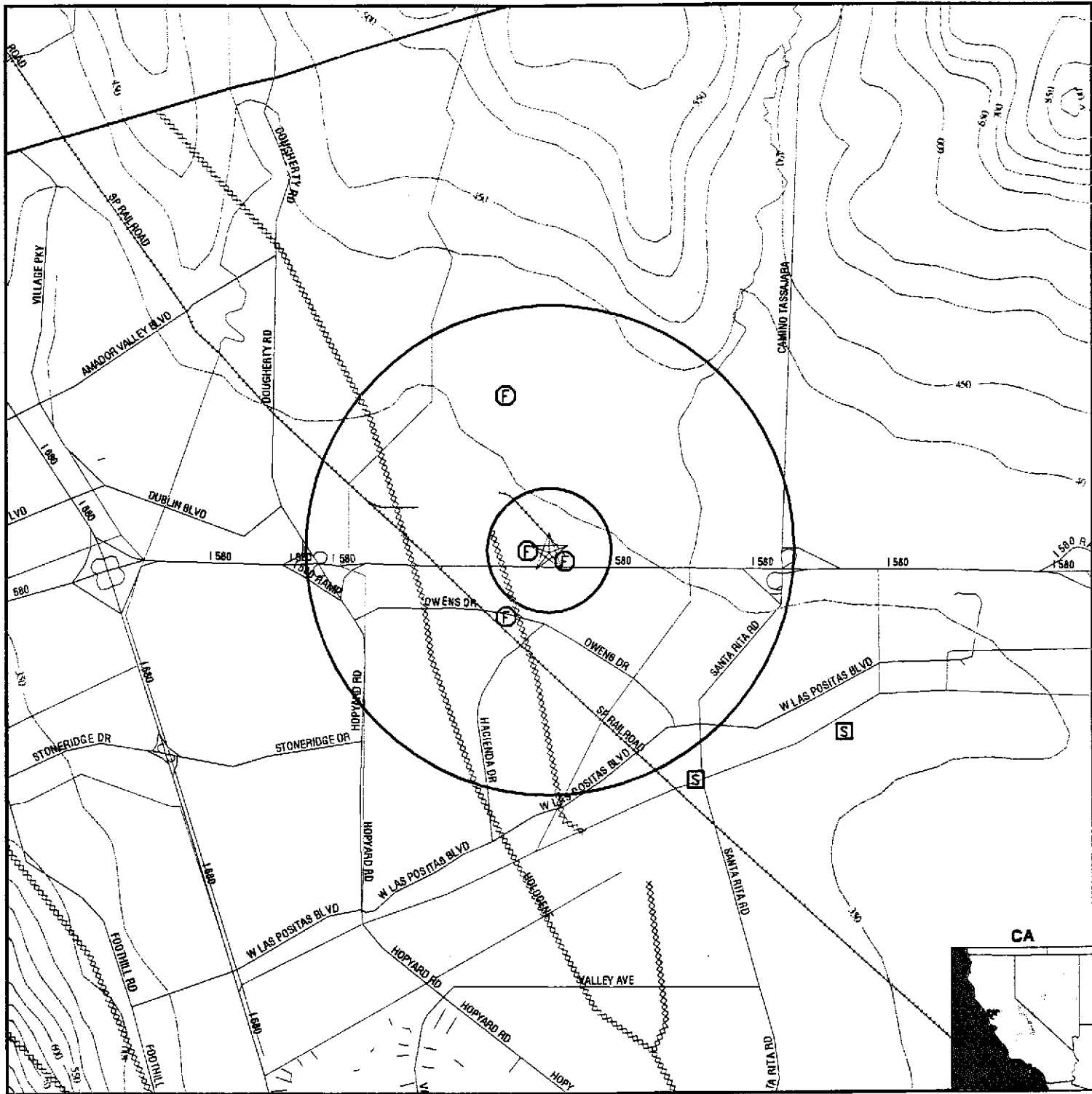
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>EAST BAY BMW</i>	<i>OLD SANTA RITA RD (3830)</i>	<i>1/2 - 1 ESE</i>	<i>3</i>	<i>9</i>
SHELL	HOPYARD RD (5251)	1/2 - 1 W	A7	12
CHEVRON	HOPYARD RD (5280)	1/2 - 1 W	A8	13
LEMOANE PROPERTY	SCARLETT CT (6085)	1/2 - 1 W	10	13
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC BELL	WILLOW RD (4658)	1/2 - 1 SW	5	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

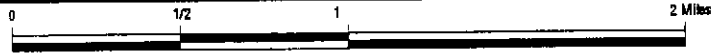
<u>Site Name</u>	<u>Database(s)</u>
AT & T ROOSEVELT MICROWAVE RELAY	Toxic Pits
LAWRENCE LIVERMORE NATL LAB-CAMP PARKS	RCRIS-LQG,CERC-NFRAP
CHEVRON	S Bay Reg. 2,LUST
VENEL J. TUMA	UST
10001 DUBLIN CANYON RD	UST
1X CSX INTERMODEAL	HAZNET
TRI VALLEY VETERINARY EMERGENC	HAZNET
STALKER CHIROPRACTIC	HAZNET
PARK AVENUE CLEANERS	RCRIS-SQG,FINDS

TOPOGRAPHIC MAP - 0221075.4r - Erler & Kalinowski, Inc.

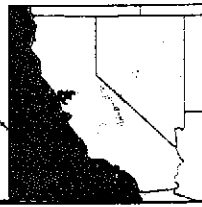


- ↘ Major Roads
- ⋈ Contour Lines
- ⋈ Waterways
- ⋈ Earthquake Fault Lines
- ⊙ Earthquake epicenter, Richter 5 or greater
- Ⓢ Closest Federal Well in quadrant
- Ⓢ Closest State Well in quadrant
- Ⓢ Closest Public Water Supply Well

(HD) Closest Hydrogeological Data



CA



TARGET PROPERTY: Parcel 16
 ADDRESS: Dublin Blvd + Hacienda Dr
 CITY/STATE/ZIP: Dublin CA 94568
 LAT/LONG: 37.7026 / 121.8887

CUSTOMER: Erler & Kalinowski, Inc.
 CONTACT: Mr. Paul B. Hoffey
 INQUIRY #: 0221075.4r
 DATE: January 06, 1998 6:33 pm

GEOCHECK VERSION 2.1 SUMMARY

TARGET PROPERTY COORDINATES

Latitude (North): 37.702560 - 37° 42' 9.2"
Longitude (West): 121.888672 - 121° 53' 19.2"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 597968.6
UTM Y (Meters): 4173190.5

GEOLOGIC AGE IDENTIFICATION†

Geologic Code: Tpc
Era: Cenozoic
System: Tertiary
Series: Pliocene

ROCK STRATIGRAPHIC UNIT†

Category: Continental Deposits

GROUNDWATER FLOW INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, including well data collected on nearby properties, regional groundwater flow information (from deep aquifers), or surface topography.‡

General Topographic Gradient: General SSW
General Hydrogeologic Gradient: No hydrogeologic data available.
Site-Specific Hydrogeological Data*:
Search Radius: 2.0 miles
Status: Not found

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2437121-F8 DUBLIN, CA

FEDERAL DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>	<u>LITHOLOGY</u>	<u>DEPTH TO WATER TABLE</u>
Northern	1/2 - 1 Mile	Not Reported	Not Reported
Eastern	0 - 1/8 Mile	Not Reported	Not Reported
Southern	1/4 - 1/2 Mile	Not Reported	Not Reported
Western	0 - 1/8 Mile	Not Reported	Not Reported

STATE DATABASE WELL INFORMATION

<u>WELL QUADRANT</u>	<u>DISTANCE FROM TP</u>
Northern	>2 Miles
Eastern	1 - 2 Miles
Southern	1 - 2 Miles
Western	>2 Miles

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. Jung and H.M. Beikman Map, USGS Digital Data Series DDS-11 (1994)
‡ U.S. EPA Ground Water Handbook, Vol. 1, Ground Water and Contamination, Office of Research and development EPA/625/5-90/016a, Chapter 4, page 78, September 1990

GEOCHECK VERSION 2.1 SUMMARY

PUBLIC WATER SUPPLY SYSTEM INFORMATION

Searched by Nearest PWS.

NOTE: PWS System location is not always the same as well location.

PWS Name: DUBLIN-SAN RAMON SERVICES DIST
 7051 DUBLIN BLVD
 DUBLIN, CA 94568
 Location Relative to TP: >2 Miles West
 PWS currently has or has had major violation(s): No

AREA RADON INFORMATION

EPA Radon Zone for ALAMEDA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L

Zip Code: 94568

Number of sites tested: 1

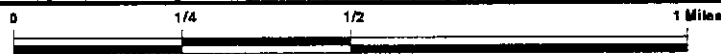
Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

OVERVIEW MAP - 0221075.4r - Erler & Kalinowski, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites (if requested)
- ▨ National Priority List Sites
- ▩ Landfill Sites

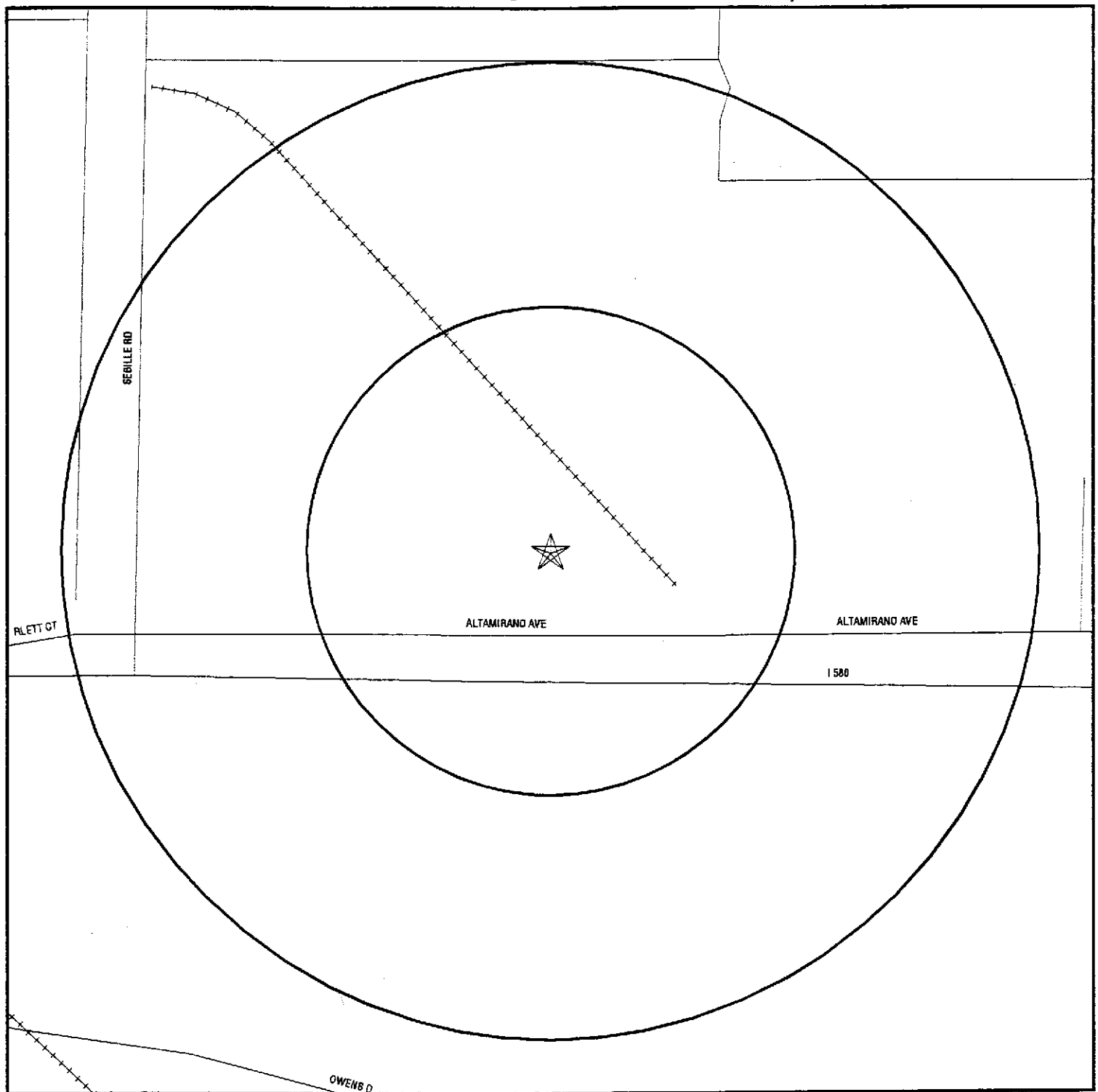
- ⚡ Power transmission lines
- ⚡ Oil & Gas pipelines







TARGET PROPERTY: Parcel 16
 ADDRESS: Dublin Blvd + Hacienda Dr
 CITY/STATE/ZIP: Dublin CA 94568
 LAT/LONG: 37.7026 / 121.8887

CUSTOMER: Erler & Kalinowski, Inc.
 CONTACT: Mr. Paul B. HOFFEY
 INQUIRY #: 0221075.4r
 DATE: January 06, 1998 6:29 pm

DETAIL MAP - 0221075.4r - Erler & Kalinowski, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites (if requested)
- ⊙ Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Power transmission lines
-  Oil & Gas pipelines

TARGET PROPERTY:	Parcel 16	CUSTOMER:	Erler & Kalinowski, Inc.
ADDRESS:	Dublin Blvd + Hacienda Dr	CONTACT:	Mr. Paul B. HOFFEY
CITY/STATE/ZIP:	Dublin CA 94568	INQUIRY #:	0221075.4r
LAT/LONG:	37.7026 / 121.8887	DATE:	January 06, 1998 6:32 pm

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
Delisted NPL	TP		NR	NR	NR	NR	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
Notify 65		1.000	0	0	0	1	NR	1
CHMIRS		1.000	0	0	1	3	NR	4
Cortese		1.000	0	0	0	5	NR	5
Toxic Pits		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP	TP		NR	NR	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
CA FID		0.250	0	0	NR	NR	NR	0
AST	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
HAZNET		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
NPL Liens	TP		NR	NR	NR	NR	NR	0
CA SLIC		0.500	0	0	0	NR	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
South Bay Region 2	TP		NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

**MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
Delisted NPL	TP		NR	NR	NR	NR	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
Notify 65		1.000	0	0	0	1	NR	1
CHMIRS		1.000	0	0	1	2	NR	3
Cortese		1.000	0	0	0	4	NR	4
Toxic Pits		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP	TP		NR	NR	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
CA FID		0.250	0	0	NR	NR	NR	0
AST	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
HAZNET		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
NPL Liens	TP		NR	NR	NR	NR	NR	0
CA SLIC		0.500	0	0	0	NR	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
South Bay Region 2	TP		NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

1
ENE
1/4-1/2
Higher

SANTA RITA JAIL
PLEASANTON, CA

CHMIRS

S100218430
N/A

CHMIRS:

OES Control Number:	8910304	DOT ID:	1993
DOT Hazard Class:	Flammable liquid		
Chemical Name:	DIESEL FUEL		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	Ground	Property Use:	Storage
Incident Date:	14-APR-89	Date Completed:	14-APR-89

2
SW
1/2-1
Lower

5934 GIBRALTAR DRIVE
PLEASANTON, CA 94588

CHMIRS

S100280079
N/A

CHMIRS:

OES Control Number:	9099726	DOT ID:	1005
DOT Hazard Class:	Not Reported		
Chemical Name:	AMMONIA, ANHYDROUS		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	21
Environmental Contamination:	Air	Property Use:	Mercantile, Business
Incident Date:	11-DEC-90	Date Completed:	11-DEC-90

3
ESE
1/2-1
Higher

EAST BAY BMW
OLD SANTA RITA RD (3830)
PLEASANTON, CA

Cortese
S Bay Reg. 2
LUST

S101306721
N/A

State LUST:

Cross Street:	ANDREWS DR	Qty Leaked:	Not reported
Reg Board:	San Francisco Bay Region		
Chemical:	Waste Oil		
Lead Agency:	Local Agency		
Case Type:	Other ground water affected		
Status:	Preliminary site assessment underway		
Abate Method:	No Action Taken - no action has as yet been taken at the site		
Review Date:	04/26/95	Confirm Leak:	0 /
Workplan:	04/09/90	Prelim Assess:	04/19/90
Pollution Char:	0 /	Remed Plan:	0 /
Remed Action:	0 /	Monitoring:	0 /
Close Date:	0 /	Release Date:	19900409

LUST Region 2:

Facility ID:	01-0530	Cross Street:	ANDREWS DR
Region:	2	Record Number:	2935
Entered Date:	05/30/1990	Last Review:	04/26/1995
Correspondence:	09/19/1990	Release Date:	04/09/1990
Case Number:	Not reported	Staff Initial:	KLG
How Discovered:	Tank Closure	Discovered Date:	04/09/1990
How Stopped:	Close Tank	Stopped Date:	04/09/1990

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

EAST BAY BMW (Continued)

S101306721

Leak Source: Tank Leak Cause: Structure Failure
 Facility Status: Preliminary Assessment
 Update Status: Not reported
 Review Status: Not reported
 Priority: Not reported
 Local Agency: Alameda County - Oakland, Hayward (unincorporated), Dublin, San Lorenzo, Albany, Castro valley
 Case Type: Other ground water or surface water is affected or threatened
 Primary Substance: Waste Oil
 Secondary Substance: 13034
 Maximum Soil Concentration: 26000
 Maximum Groundwater Impact: 3000
 Current Benzene in Groundwater: 0
 Maximum Benzene Concentration: 0
 Nuber of Wells: Not reported
 Depth to Groundwater: 30
 MTBE Contamination Level: 0
 Interim Remediation: No
 Interim Remediation Date: Not reported
 Lead Agency: Local Agency Inactive
 Case List: FUEL
 Enforcement Type: 0
 Enforcement Date: Not reported
 Responsible Party Search: Solvent - Identified and financially capable of performing work.
 Funding: Federal
 Date Status Was First Assigned - The following dates are assigned as the status progresses:
 Leak Confirmed: Not reported
 Workplan Submitted: 04/09/1990
 Assessment Underway: 04/19/1990
 Pollution Characterization: Not reported
 Corrective Action Plan: Not reported
 Remediation Underway: Not reported
 Monitoring Begun: Not reported
 Case Closed: Not reported
 Abatement: No Action Taken
 Comments: MAXSOIL TOG

CORTESE:

Facility ID: 01-000659 Data Source: LTNKA

South Bay Region 2:

Facility ID: 01-0530 Staff: Not reported
 Case Number: Not reported File Number: Not reported
 Last Update: Not reported Case Type: Not reported
 RWQCB Initials: Not reported EPA Contact: Not reported
 DOHS Initials: Not reported Map Number: Not reported
 Type: Other ground water or surface water is affected or threatened
 Lead: Local agency is responsible for the cases but the case is not being actively overseen
 Facility Status: Not reported
 Discovered Date: Not reported
 Facility Description: Not reported
 Phase of Work by Responsible Party: 3
 National Priority List: NOT REPORTED
 Primary Substance Spilled: Waste Oil
 Secondary Substance Spilled: 13034
 Problem Caused by UST: No
 Contaminant Concentration Type (1): Not reported
 Key Contaminant Concentration (1): Not reported
 Initial Maximum Concentration (1): Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

EAST BAY BMW (Continued)

S101306721

Current Maximum Concentration (1):	Not reported
Contaminant Concentration Type (2):	Not reported
Key Contaminant Concentration (2):	Not reported
Initial Maximum Concentration (2):	Not reported
Current Maximum Concentration (2):	Not reported
Contaminant Concentration Type (3):	Not reported
Key Contaminant Concentration (3):	Not reported
Initial Maximum Concentration (3):	Not reported
Plume in Length (FT):	Not reported
Size Depth (FT):	Not reported
Municipal Drinking Wells Affected:	Not reported
Private Drinking Wells Affected:	Not reported
Current Maximum Concentration (3):	Not reported
Historical Minimum Depth to Groundwater:	30 (Feet)
Maximum Soil Concentration of Contaminates:	26000 (parts per million)
Max Grndwater Concentration of Contaminates:	3000 (parts per billion)
Benzene:	0
Maximum Benzene:	0
Soil Action Needed:	Not reported
Total of Extraction Flow Rate:	Not reported
Estimated % of Contaminants Contained:	Not reported
Contaminant Source:	Not reported
Contaminant Concentration as of:	Not reported
Contaminant Concentration (1):	Not reported
Well or Boring Number (1):	Not reported
Initial Level Concentration (1):	Not reported
Current Level Concentration (1):	Not reported
Contaminant Concentration (2):	Not reported
Well or Boring Number (2):	Not reported
Initial Level Concentration (2):	Not reported
Current Level Concentration (2):	Not reported
Contaminant Concentration (3):	Not reported
Well or Boring Number (3):	Not reported
Initial Level Concentration (3):	Not reported
Current Level Concentration (3):	Not reported
Number of Municipal Wells:	Not reported
Number of Private Wells:	Not reported
Closure Name:	Not reported
Closure Date:	Not reported
Soil Action Needed Start Date:	Not reported
Soil Action Needed End Date:	Not reported
Onsite Water Action Needed:	Not reported
Onsite Water Action Needed Start Date:	Not reported
Onsite Water Action Needed End Date:	Not reported
Off Site Water Action Needed:	Not reported
Off Site Water Action Needed Start Date:	Not reported
Off Site Water Action Needed End Date:	Not reported
Estimated % of Contamination Concentration:	Not reported
Enforcement & Regulatory Action (1):	Not reported
Enforcement Action Date (1):	Not reported
Enforcement & Regulatory Action (2):	Not reported
Enforcement Action Date (2):	Not reported
Enforcement & Regulatory Action (3):	Not reported
Enforcement Action Date (3):	Not reported
Enforcement & Regulatory Action (4):	Not reported
Enforcement Action Date (4):	Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

EAST BAY BMW (Continued)

S101306721

Enforcement & Regulatory Action (5):	Not reported
Enforcement Action Date (5):	Not reported
Enforcement & Regulatory Action (6):	Not reported
Enforcement Action Date (6):	Not reported
Enforcement & Regulatory Action (7):	Not reported
Enforcement Action Date (7):	Not reported
Enforcement & Regulatory Action (8):	Not reported
Enforcement Action Date (8):	Not reported
Enforcement & Regulatory Action (9):	Not reported
Enforcement Action Date (9):	Not reported
Enforcement & Regulatory Action (10):	Not reported
Enforcement Action Date (10):	Not reported
Immediate Response Actions:	NOT REPORTED
Remediation:	Not reported
Characterization:	Not reported
Comments:	Not reported

4
SE
1/2-1
Higher

3675 OLD SANTA RITA ROAD
PLEASANTON, CA 94566

CHMIRS

S101624064
N/A

5
SW
1/2-1
Lower

PACIFIC BELL
WILLOW RD (4658)
PLEASANTON, CA

Cortese

S101306729
N/A

CORTESE:
Facility ID: 01-001231 Data Source: LTNKA

6
East
1/2-1
Higher

I-580 W/B @ SANTA RITA RD
PLEASANTON, CA

CHMIRS

S100223023
N/A

CHMIRS:
OES Control Number: 9991930 DOT ID: 1993
DOT Hazard Class: Flammable liquid
Chemical Name: DIESEL FUEL
Extent of Release: Not reported
CAS Number: Not reported Quantity Released: 60
Environmental Contamination: Ground Property Use: Freeway
Incident Date: 20-DEC-88 Date Completed: 20-DEC-88

A7
West
1/2-1
Same

SHELL
HOPYARD RD (5251)
PLEASANTON, CA

Cortese

S101306714
N/A

CORTESE:
Facility ID: 01-001485 Data Source: LTNKA

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A8 West 1/2-1 Same	CHEVRON HOPYARD RD (5280) PLEASANTON, CA CORTESE: Facility ID: 01-000504 Data Source: LTNKA	Cortese	S101306715 N/A
A9 West 1/2-1 Same	CHEVRON STATION #9-0917 5280 HOPYARD ROAD PLEASANTON, CA 94588 NOTIFY 65: Date Reported: Not reported Staff Initials: Not reported Board File Number: Not reported Facility Type: Not reported Discharge Date: Not reported Incident Description: 94588	Notify 65	S100179794 N/A
10 West 1/2-1 Higher	LEMOANE PROPERTY SCARLETT CT (6085) DUBLIN, CA 94566 CORTESE: Facility ID: 01-001010 Data Source: LTNKA	Cortese	S101293454 N/A

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
DUBLIN	S100850123	1X CSX INTERMODEAL	INTERSTATE 580	94568	HAZNET	
DUBLIN	1000455728	PARK AVENUE CLEANERS	7102 B DUBLIN BLVD	94568	RCRIS-SQG, FINDS	
DUBLIN	S102344611	TRI VALLEY VETERINARY EMERGENC	6743 DUBLIN BLVD STE 13	94568	HAZNET	
DUBLIN	S102345971	STALKER CHIROPRACTIC	7600 DUBLIN BLVD STE 108	94568	HAZNET	
DUBLIN	U001598185	VENEL J. TUMA	11878 DUBLIN GR DR.	94568	UST	00000011964
DUBLIN	U003138731		10001 DUBLIN CANYON RD	94568	UST	
DUBLIN	S102426947	CHEVRON	7007 SAN RAMON VALLEY BVD	94568	S Bay Reg. 2, LUST	01-0385
KLICKITAT COUNTY	S102512654	AT & T ROOSEVELT MICROWAVE RELAY	2 MILES NORTH OF ROOSEVELT	94588	WA ICR	
PLEASANTON	1000356186	LAWRENCE LIVERMORE NATL LAB-CAMP PARKS	CAMP PARKS	94568	RCRIS-LQG, CERC-NFRAP	

GEOCHECK VERSION 2.1 ADDENDUM FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Northern Quadrant)

BASIC WELL DATA

Site ID:	374242121533101	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1976	County:	Contra Costa
Altitude:	356.50 ft.	State:	California
Well Depth:	45.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Water Level: 27.20 ft. Date Measured: 07/12/76	Water Level: 27.80 ft. Date Measured: 10/07/76	Water Level: 27.80 ft. Date Measured: 10/25/76	Water Level: 28.00 ft. Date Measured: 11/19/76
Water Level: 28.10 ft. Date Measured: 12/02/76	Water Level: 28.20 ft. Date Measured: 12/27/76	Water Level: 28.30 ft. Date Measured: 01/14/77	Water Level: 28.30 ft. Date Measured: 01/18/77
Water Level: 28.40 ft. Date Measured: 02/15/77	Water Level: 28.70 ft. Date Measured: 03/28/77	Water Level: 28.80 ft. Date Measured: 04/25/77	Water Level: 29.50 ft. Date Measured: 09/14/77
Water Level: 29.70 ft. Date Measured: 10/27/77	Water Level: 28.00 ft. Date Measured: 02/27/78	Water Level: 26.90 ft. Date Measured: 05/05/78	Water Level: 26.90 ft. Date Measured: 07/21/78
Water Level: 27.30 ft. Date Measured: 10/11/78	Water Level: 27.60 ft. Date Measured: 01/18/79	Water Level: 27.50 ft. Date Measured: 01/22/79	Water Level: 26.80 ft. Date Measured: 03/08/79
Water Level: 26.70 ft. Date Measured: 03/19/79	Water Level: 26.70 ft. Date Measured: 03/22/79	Water Level: 26.70 ft. Date Measured: 03/27/79	Water Level: 25.60 ft. Date Measured: 04/02/79
Water Level: 26.60 ft. Date Measured: 04/09/79	Water Level: 26.30 ft. Date Measured: 04/26/79	Water Level: 26.40 ft. Date Measured: 04/30/79	Water Level: 26.30 ft. Date Measured: 05/14/79
Water Level: 26.30 ft. Date Measured: 05/29/79	Water Level: 26.40 ft. Date Measured: 05/30/79	Water Level: 26.30 ft. Date Measured: 06/12/79	Water Level: 26.40 ft. Date Measured: 07/02/79
Water Level: 26.70 ft. Date Measured: 10/15/79	Water Level: 25.60 ft. Date Measured: 01/08/80		

GEOCHECK VERSION 2.1 FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Eastern Quadrant)

BASIC WELL DATA

Site ID:	374207121531501	Distance from TP:	0 - 1/8 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1976	County:	Alameda
Altitude:	340.00 ft.	State:	California
Well Depth:	35.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Water Level: 12.80 ft.	Water Level: 14.20 ft.	Water Level: 13.30 ft.	Water Level: 14.30 ft.
Date Measured: 10/08/76	Date Measured: 12/02/76	Date Measured: 01/14/77	Date Measured: 04/25/77
Water Level: 15.30 ft.	Water Level: 15.40 ft.	Water Level: 7.00 ft.	Water Level: 8.50 ft.
Date Measured: 09/26/77	Date Measured: 10/27/77	Date Measured: 02/28/78	Date Measured: 05/05/78
Water Level: 10.30 ft.	Water Level: 11.80 ft.	Water Level: 7.70 ft.	Water Level: 10.30 ft.
Date Measured: 07/21/78	Date Measured: 10/13/78	Date Measured: 01/22/79	Date Measured: 06/04/79

GEOCHECK VERSION 2.1 FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Southern Quadrant)

BASIC WELL DATA

Site ID:	374155121533101	Distance from TP:	1/4 - 1/2 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Alameda
Altitude:	334.80 ft.	State:	California
Well Depth:	93.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Cenozoic-Quaternary
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Water Level: 18.05 ft. Date Measured: 03/16/61	Water Level: 22.55 ft. Date Measured: 09/28/61	Water Level: 31.75 ft. Date Measured: 09/06/62	Water Level: 16.05 ft. Date Measured: 03/25/63
Water Level: 16.55 ft. Date Measured: 09/20/63	Water Level: 17.25 ft. Date Measured: 03/24/64	Water Level: 16.75 ft. Date Measured: 09/30/64	Water Level: 14.45 ft. Date Measured: 03/26/65
Water Level: 18.05 ft. Date Measured: 10/08/65	Water Level: 14.85 ft. Date Measured: 03/22/66	Water Level: 17.35 ft. Date Measured: 09/26/66	Water Level: 7.00 ft. Date Measured: 09/25/67
Water Level: 9.20 ft. Date Measured: 10/26/67	Water Level: 6.50 ft. Date Measured: 03/28/68	Water Level: 6.00 ft. Date Measured: 09/26/68	Water Level: 3.40 ft. Date Measured: 04/25/69
Water Level: 12.80 ft. Date Measured: 10/06/69	Water Level: 8.70 ft. Date Measured: 04/10/70	Water Level: 7.50 ft. Date Measured: 10/30/70	Water Level: 7.00 ft. Date Measured: 04/19/71
Water Level: 7.00 ft. Date Measured: 09/13/71	Water Level: 8.00 ft. Date Measured: 03/13/72	Water Level: 19.20 ft. Date Measured: 10/03/72	Water Level: 11.30 ft. Date Measured: 03/15/73
Water Level: 4.40 ft. Date Measured: 10/02/73	Water Level: 12.10 ft. Date Measured: 03/15/74	Water Level: 15.20 ft. Date Measured: 09/17/74	Water Level: 17.00 ft. Date Measured: 09/22/75
Water Level: 16.80 ft. Date Measured: 03/08/76	Water Level: 17.20 ft. Date Measured: 09/27/76	Water Level: 18.00 ft. Date Measured: 03/17/77	Water Level: 24.00 ft. Date Measured: 08/04/77
Water Level: 18.80 ft. Date Measured: 09/23/77	Water Level: 18.65 ft. Date Measured: 10/12/77	Water Level: 18.75 ft. Date Measured: 12/01/77	Water Level: 13.35 ft. Date Measured: 03/17/78
Water Level: 13.35 ft. Date Measured: 04/11/78	Water Level: 14.55 ft. Date Measured: 05/17/78	Water Level: 16.25 ft. Date Measured: 07/26/78	Water Level: 15.95 ft. Date Measured: 09/14/78
Water Level: 21.55 ft. Date Measured: 10/13/78	Water Level: 15.75 ft. Date Measured: 04/02/79	Water Level: 17.45 ft. Date Measured: 05/15/79	Water Level: 17.65 ft. Date Measured: 06/28/79
Water Level: 18.15 ft. Date Measured: 10/31/79			

GEOCHECK VERSION 2.1 FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Western Quadrant)

BASIC WELL DATA

Site ID:	374209121532501	Distance from TP:	0 - 1/8 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1978	County:	Alameda
Altitude:	341.60 ft.	State:	California
Well Depth:	150.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Genozoic-Quaternary
Principal Lithology of Unit:	Not Reported
Further Description:	Not Reported

WATER LEVEL VARIABILITY

Water Level: 18.10 ft. Date Measured: 06/04/79	Water Level: 18.10 ft. Date Measured: 06/12/79	Water Level: 18.20 ft. Date Measured: 07/02/79	Water Level: 18.30 ft. Date Measured: 07/16/79
Water Level: 18.50 ft. Date Measured: 07/26/79	Water Level: 18.60 ft. Date Measured: 08/06/79	Water Level: 18.70 ft. Date Measured: 08/17/79	Water Level: 18.80 ft. Date Measured: 09/04/79
Water Level: 18.90 ft. Date Measured: 09/17/79	Water Level: 19.00 ft. Date Measured: 10/01/79	Water Level: 19.20 ft. Date Measured: 10/15/79	Water Level: 19.20 ft. Date Measured: 10/29/79
Water Level: 19.20 ft. Date Measured: 11/13/79	Water Level: 19.10 ft. Date Measured: 11/19/79	Water Level: 19.20 ft. Date Measured: 11/26/79	Water Level: 19.30 ft. Date Measured: 12/10/79
Water Level: 19.20 ft. Date Measured: 12/24/79	Water Level: 19.00 ft. Date Measured: 01/07/80	Water Level: 18.80 ft. Date Measured: 01/10/80	Water Level: 18.30 ft. Date Measured: 01/22/80
Water Level: 17.00 ft. Date Measured: 02/26/80	Water Level: 15.70 ft. Date Measured: 03/26/80	Water Level: 15.40 ft. Date Measured: 05/05/80	Water Level: 15.20 ft. Date Measured: 05/30/80
Water Level: 15.20 ft. Date Measured: 06/11/80	Water Level: 15.10 ft. Date Measured: 06/26/80	Water Level: 15.00 ft. Date Measured: 07/29/80	Water Level: 15.00 ft. Date Measured: 08/08/80
Water Level: 15.30 ft. Date Measured: 08/26/80	Water Level: 15.70 ft. Date Measured: 10/01/80	Water Level: 16.00 ft. Date Measured: 10/27/80	Water Level: 16.10 ft. Date Measured: 11/05/80
Water Level: 14.90 ft. Date Measured: 03/16/81	Water Level: 14.90 ft. Date Measured: 06/29/81	Water Level: 16.00 ft. Date Measured: 08/14/81	Water Level: 16.20 ft. Date Measured: 10/01/81
Water Level: 16.30 ft. Date Measured: 10/27/81	Water Level: 16.30 ft. Date Measured: 11/20/81	Water Level: 15.80 ft. Date Measured: 12/21/81	

**GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION**

Water Wells:

Well Within >2 Miles of Target Property (Northern Quadrant)

Water System Information:

Prime Station Code:	03S/01W-01G02 M	User ID:	ENG
FRDS Number Number:	0110009001	County:	Alameda
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	374500.0 1215500.0	Precision:	8
Source Name:	WELL 03 - ABANDONED		
System Number:	0110009		
System Name:	DUBLIN - SAN RAMON SD		
Owner Type:	Not Reported		
Organization That Operates System:	7051 DUBLIN BLVD		
	DUBLIN, CA 94568		
Pop Served:	22500	Connections:	DUBLIN
Area Served:	Not Reported		

Well Within 1 - 2 Miles of Target Property (Eastern Quadrant)

Water System Information:

Prime Station Code:	0110010-010	User ID:	ENG
FRDS Number Number:	0110010010	County:	Alameda
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	374130.0 1215200.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	STONERIDGE WELL 01 - TREATED		
System Number:	0110010		
System Name:	Zone 7 Water Agency		
Owner Type:	Not Reported		
Organization That Operates System:	5997 PARKSIDE DRIVE		
	PLEASANTON, CA 94588		
Pop Served:	147000	Connections:	DUBLIN-LI
Area Served:	VERMORE-PLEASANTON		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	11/13/1992	Findings:	2.000 PC/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/13/1992	Findings:	1.000 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/13/1992	Findings:	22.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	11/13/1992	Findings:	245.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	11/13/1992	Findings:	768.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/13/1992	Findings:	7.900
Chemical:	PH (LABORATORY)		
Sample Collected:	11/13/1992	Findings:	263.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	11/13/1992	Findings:	318.400 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11/13/1992	Findings:	2.400 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	11/13/1992	Findings:	285.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	11/13/1992	Findings:	42.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	11/13/1992	Findings:	44.000 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11/13/1992	Findings:	46.000 MG/L
Chemical:	SODIUM		
Sample Collected:	11/13/1992	Findings:	2.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11/13/1992	Findings:	65.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/13/1992	Findings:	29.300 MG/L
Chemical:	SILICA		
Sample Collected:	11/13/1992	Findings:	215.000 UG/L
Chemical:	BARIUM		
Sample Collected:	11/13/1992	Findings:	680.000 UG/L
Chemical:	BORON		
Sample Collected:	11/13/1992	Findings:	11.000 UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	11/13/1992	Findings:	437.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/13/1992	Findings:	18.400 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/13/1992	Findings:	.410 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	11/13/1992	Findings:	12.300
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	12/14/1992	Findings:	2.500 UNITS
Chemical:	COLOR		
Sample Collected:	12/14/1992	Findings:	708.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/14/1992	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	12/14/1992	Findings:	252.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	12/14/1992	Findings:	305.600 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/14/1992	Findings:	1.800 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/14/1992	Findings:	.150 UG/L
Chemical:	PHOSPHATE		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	12/14/1992	Findings:	264.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	12/14/1992	Findings:	43.600 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/14/1992	Findings:	38.000 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/14/1992	Findings:	46.000 MG/L
Chemical:	SODIUM		
Sample Collected:	12/14/1992	Findings:	3.200 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/14/1992	Findings:	48.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/14/1992	Findings:	.190 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	12/14/1992	Findings:	35.100 MG/L
Chemical:	SILICA		
Sample Collected:	12/14/1992	Findings:	260.000 UG/L
Chemical:	BARIUM		
Sample Collected:	12/14/1992	Findings:	400.000 UG/L
Chemical:	BORON		
Sample Collected:	12/14/1992	Findings:	404.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/14/1992	Findings:	14.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/14/1992	Findings:	.110 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	12/14/1992	Findings:	12.200
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	03/30/1993	Findings:	3.000 PC/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/30/1993	Findings:	2.000 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/30/1993	Findings:	74.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	03/30/1993	Findings:	250.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	03/30/1993	Findings:	1.000 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	06/30/1993	Findings:	598.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/30/1993	Findings:	7.700
Chemical:	PH (LABORATORY)		
Sample Collected:	06/30/1993	Findings:	236.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	06/30/1993	Findings:	286.500 MG/L
Chemical:	BICARBONATE ALKALINITY		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	06/30/1993	Findings:	1.300 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/30/1993	Findings:	232.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	06/30/1993	Findings:	54.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/30/1993	Findings:	37.000 MG/L
Chemical:	SODIUM		
Sample Collected:	06/30/1993	Findings:	2.700 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/30/1993	Findings:	24.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/30/1993	Findings:	27.600 MG/L
Chemical:	SILICA		
Sample Collected:	06/30/1993	Findings:	.240 UG/L
Chemical:	BORON		
Sample Collected:	06/30/1993	Findings:	334.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/30/1993	Findings:	8.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/30/1993	Findings:	.050 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	06/30/1993	Findings:	12.200
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	07/01/1993	Findings:	2.000 PC/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/01/1993	Findings:	2.000 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/01/1993	Findings:	16.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	07/01/1993	Findings:	326.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	08/25/1993	Findings:	584.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/25/1993	Findings:	7.400
Chemical:	PH (LABORATORY)		
Sample Collected:	08/25/1993	Findings:	226.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	08/25/1993	Findings:	275.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/25/1993	Findings:	.600 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	08/25/1993	Findings:	2480.000 UG/L
Chemical:	NITRATE NITROGEN (NO3-N)		
Sample Collected:	08/25/1993	Findings:	227.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	08/25/1993	Findings:	48.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/25/1993	Findings:	32.000 MG/L
Chemical:	SODIUM		
Sample Collected:	08/25/1993	Findings:	2.400 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/25/1993	Findings:	21.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/25/1993	Findings:	29.100 MG/L
Chemical:	SILICA		
Sample Collected:	08/25/1993	Findings:	.200 UG/L
Chemical:	BORON		
Sample Collected:	08/25/1993	Findings:	321.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/25/1993	Findings:	11.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/25/1993	Findings:	.200 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	08/25/1993	Findings:	11.800
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	08/25/1993	Findings:	2.000 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/25/1993	Findings:	5.000 PC/L
Chemical:	GROSS BETA		
Sample Collected:	08/25/1993	Findings:	4.000 PC/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	08/25/1993	Findings:	23.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	08/25/1993	Findings:	317.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	08/25/1993	Findings:	1.000 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	11/08/1994	Findings:	19.200 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/08/1994	Findings:	606.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/08/1994	Findings:	7.000
Chemical:	FIELD PH		
Sample Collected:	11/08/1994	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	11/08/1994	Findings:	239.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	11/08/1994	Findings:	290.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11/08/1994	Findings:	1.700 MG/L
Chemical:	CARBONATE ALKALINITY		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	11/08/1994	Findings:	240.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	11/08/1994	Findings:	45.600 MG/L
Chemical:	CALCIUM		
Sample Collected:	11/08/1994	Findings:	31.000 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11/08/1994	Findings:	36.000 MG/L
Chemical:	SODIUM		
Sample Collected:	11/08/1994	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11/08/1994	Findings:	26.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/08/1994	Findings:	28.500 MG/L
Chemical:	SILICA		
Sample Collected:	11/08/1994	Findings:	320.000 UG/L
Chemical:	BARIUM		
Sample Collected:	11/08/1994	Findings:	.200 UG/L
Chemical:	BORON		
Sample Collected:	11/08/1994	Findings:	17.000 UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	11/08/1994	Findings:	351.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/08/1994	Findings:	10.400 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/08/1994	Findings:	.650
Chemical:	FIELD TURBIDITY		
Sample Collected:	11/08/1994	Findings:	.190 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	11/08/1994	Findings:	.100 MG/L
Chemical:	BROMIDE		
Sample Collected:	11/08/1994	Findings:	12.200
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	11/08/1994	Findings:	.020 UG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/06/1996	Findings:	21.500 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/06/1996	Findings:	576.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/06/1996	Findings:	7.500
Chemical:	FIELD PH		
Sample Collected:	03/06/1996	Findings:	7.700
Chemical:	PH (LABORATORY)		
Sample Collected:	03/06/1996	Findings:	233.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	03/06/1996	Findings:	283.000 MG/L
Chemical:	BICARBONATE ALKALINITY		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	03/06/1996	Findings:	1.300 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/06/1996	Findings:	229.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	03/06/1996	Findings:	44.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/06/1996	Findings:	42.000 MG/L
Chemical:	SODIUM		
Sample Collected:	03/06/1996	Findings:	1.500 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/06/1996	Findings:	24.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/06/1996	Findings:	22.700 MG/L
Chemical:	SILICA		
Sample Collected:	03/06/1996	Findings:	180.000 UG/L
Chemical:	BARIUM		
Sample Collected:	03/06/1996	Findings:	.200 UG/L
Chemical:	BORON		
Sample Collected:	03/06/1996	Findings:	20.000 UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	03/06/1996	Findings:	328.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/06/1996	Findings:	10.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/06/1996	Findings:	.450
Chemical:	FIELD TURBIDITY		
Sample Collected:	03/06/1996	Findings:	.130 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	03/06/1996	Findings:	.100 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/06/1996	Findings:	12.100
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	06/19/1996	Findings:	17.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	06/19/1996	Findings:	340.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	09/26/1996	Findings:	21.800 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	09/26/1996	Findings:	2.500 UNITS
Chemical:	COLOR		
Sample Collected:	09/26/1996	Findings:	567.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/1996	Findings:	6.700
Chemical:	FIELD PH		
Sample Collected:	09/26/1996	Findings:	7.000
Chemical:	PH (LABORATORY)		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	09/26/1996	Findings:	231.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	09/26/1996	Findings:	282.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/1996	Findings:	.300 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/26/1996	Findings:	219.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	09/26/1996	Findings:	44.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/1996	Findings:	45.000 MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/1996	Findings:	1.500 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/1996	Findings:	24.000 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/1996	Findings:	24.200 MG/L
Chemical:	SILICA		
Sample Collected:	09/26/1996	Findings:	610.000 UG/L
Chemical:	BARIUM		
Sample Collected:	09/26/1996	Findings:	200.000 UG/L
Chemical:	BORON		
Sample Collected:	09/26/1996	Findings:	17.000 UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	09/26/1996	Findings:	337.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/1996	Findings:	9.790 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/26/1996	Findings:	.540
Chemical:	FIELD TURBIDITY		
Sample Collected:	09/26/1996	Findings:	.180 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	09/26/1996	Findings:	.100 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/26/1996	Findings:	11.400
Chemical:	AGRESSIVENESS INDEX		
Sample Collected:	09/26/1996	Findings:	10.100 PC/L
Chemical:	GROSS BETA		
Sample Collected:	09/26/1996	Findings:	1.400 PC/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	09/26/1996	Findings:	17.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	09/26/1996	Findings:	360.000 PC/L
Chemical:	TOTAL RADON 222		
Sample Collected:	12/17/1996	Findings:	20.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected: 12/17/1996 Findings: 365.000 PC/L
 Chemical: TOTAL RADON 222

Well Within 1 - 2 Miles of Target Property (Southern Quadrant)

Water System Information:

Prime Station Code:	03S/01E-08H04 M	User ID:	ENG
FRDS Number Number:	0110700003	County:	Alameda
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	374120.0 1215240.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 03		
System Number:	0110700		
System Name:	U.S. ARMY-CAMP PARKS		
Owner Type:	Not Reported		
Organization That Operates System:	LETTERMAN ARMY MED CNTR PRESIDIO OF SF 94129		
Pop Served:	1085	Connections:	CAMP PARK
Area Served:	S		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	03/22/1994	Findings:	960.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/1994	Findings:	7.250
Chemical:	PH (LABORATORY)		
Sample Collected:	03/22/1994	Findings:	266.700 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		
Sample Collected:	03/22/1994	Findings:	266.700 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/1994	Findings:	357.390 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	03/22/1994	Findings:	57.730 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/1994	Findings:	51.790 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/1994	Findings:	81.700 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/1994	Findings:	2.740 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/1994	Findings:	134.810 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/1994	Findings:	.330 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	03/22/1994	Findings:	1011.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/1994	Findings:	64.000 PC/L
Chemical:	TOTAL RADON 222 COUNTING ERROR		
Sample Collected:	03/22/1994	Findings:	147.000 PC/L
Chemical:	TOTAL RADON 222		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Well Within >2 Miles of Target Property (Western Quadrant)

Water System Information:

Prime Station Code:	5010010-062	User ID:	PTA
FRDS Number Number:	5010010062	County:	Stanislaus
District Number:	10	Station Type:	WELL/AMBNT/MIN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	374057.0 1215647.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 052		
System Number:	5010010		
System Name:	Modesto. City of		
Owner Type:	Not Reported		
Organization That Operates System:	PO BOX 642		
	MODESTO, CA 95353		
Pop Served:	180320	Connections:	MODESTO
Area Served:	Not Reported		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	11/01/1991	Findings:	5.000 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	11/01/1991	Findings:	2.090 PC/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/01/1991	Findings:	2.710 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/02/1993	Findings:	2.400 PIC/L
Chemical:	URANIUM		
Sample Collected:	06/02/1993	Findings:	1.400 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	06/02/1993	Findings:	2.050 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/02/1993	Findings:	1.510 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/02/1993	Findings:	3.100 PIC/L
Chemical:	URANIUM		
Sample Collected:	09/02/1993	Findings:	1.300 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	09/03/1993	Findings:	3.100 PIC/L
Chemical:	URANIUM		
Sample Collected:	12/02/1993	Findings:	1.800 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/02/1993	Findings:	.800 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	12/02/1993	Findings:	1.800 PC/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/01/1994	Findings:	260.000
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/01/1994	Findings:	8.000
Chemical:	PH (LABORATORY)		
Sample Collected:	03/01/1994	Findings:	140.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CaCO3)		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Sample Collected:	03/01/1994	Findings:	140.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/01/1994	Findings:	93.000 MG/L
Chemical:	TOTAL HARDNESS (AS CaCO3)		
Sample Collected:	03/01/1994	Findings:	27.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/01/1994	Findings:	25.000 MG/L
Chemical:	SODIUM		
Sample Collected:	03/01/1994	Findings:	4.400 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/01/1994	Findings:	180.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/01/1994	Findings:	7.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/01/1994	Findings:	.500 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	03/08/1994	Findings:	7.500 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/15/1995	Findings:	11.590 MG/L
Chemical:	NITRATE (AS NO3)		

GEOCHECK VERSION 2.1
PUBLIC WATER SUPPLY SYSTEM INFORMATION

Searched by Nearest PWS.

PWS SUMMARY:

PWS ID:	CA0110009	PWS Status:	Active	Distance from TP:	>2 Miles
Date Initiated:	March / 1992	Date Deactivated:	Not Reported	Dir relative to TP:	West
PWS Name:	DUBLIN-SAN RAMON SERVICES DIST 7051 DUBLIN BLVD DUBLIN, CA 94568				

Addressee / Facility: Not Reported

Facility Latitude:	37 42 07	Facility Longitude:	121 56 04
City Served:	DUBLIN		
Treatment Class:	Treated	Population Served:	10,001 - 50,000 Persons

PWS currently has or has had major violation(s): No

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA/NTIS

Telephone: 703-413-0223

CERCLIS: CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/01/97

Date Made Active at EDR: 11/28/97

Database Release Frequency: Monthly

Date of Data Arrival at EDR: 10/01/97

Elapsed ASTM days: 58

Date of Last EDR Contact: 09/09/97

ERNS: Emergency Response Notification System

Source: EPA/NTIS

Telephone: 202-260-2342

ERNS: Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/01/97

Date Made Active at EDR: 10/09/97

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 08/29/97

Elapsed ASTM days: 41

Date of Last EDR Contact: 08/26/97

NPL: National Priority List

Source: EPA

Telephone: 703-603-8852

NPL: National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 09/25/97

Date Made Active at EDR: 11/28/97

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 09/26/97

Elapsed ASTM days: 63

Date of Last EDR Contact: 09/22/97

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS

Telephone: 800-424-9346

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 07/01/97

Date Made Active at EDR: 11/28/97

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 09/13/97

Elapsed ASTM days: 76

Date of Last EDR Contact: 08/04/97

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS: CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/01/96

Date Made Active at EDR: 03/03/97

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/30/96

Elapsed ASTM days: 63

Date of Last EDR Contact: 10/24/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

BRS: The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/93

Database Release Frequency: Biennially

Date of Last EDR Contact: 10/22/97

Date of Next Scheduled EDR Contact: 12/22/97

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies

Database Release Frequency: Varies

Date of Last EDR Contact: Varies

Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System

Source: EPA/NTIS

Telephone: 703-908-2493

FINDS: Facility Index System. FINDS contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/01/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/29/97

Date of Next Scheduled EDR Contact: 01/05/98

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4526

HMIRS: Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/96

Database Release Frequency: Annually

Date of Last EDR Contact: 10/27/97

Date of Next Scheduled EDR Contact: 01/26/98

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/28/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/97

Date of Next Scheduled EDR Contact: 01/12/98

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 205-564-4267

NPL LIENS: Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/25/97

Date of Next Scheduled EDR Contact: 11/24/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-260-3936

PADS: PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/27/97

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/22/97

Date of Next Scheduled EDR Contact: 11/17/97

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RAATS: RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 09/15/97

Date of Next Scheduled EDR Contact: 12/15/97

ROD: Records Of Decision

Source: NTIS

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/31/95

Database Release Frequency: Annually

Date of Last EDR Contact: 09/03/97

Date of Next Scheduled EDR Contact: 12/01/97

TRIS: Toxic Chemical Release Inventory System

Source: EPA/NTIS

Telephone: 202-260-1531

TRIS: Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/95

Database Release Frequency: Annually

Date of Last EDR Contact: 09/29/97

Date of Next Scheduled EDR Contact: 12/29/97

TSCA: Toxic Substances Control Act

Source: EPA/NTIS

Telephone: 202-260-1444

TSCA: Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site. USEPA has no current plan to update and/or re-issue this database.

Date of Government Version: 01/31/95

Database Release Frequency: Annually

Date of Last EDR Contact: 09/18/97

Date of Next Scheduled EDR Contact: 12/15/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF CALIFORNIA ASTM RECORDS:

BEP: Bond Expenditure Plan

Source: Department of Health Services

Telephone: 916-255-2118

BEP: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89

Date Made Active at EDR: 08/02/94

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 07/27/94

Elapsed ASTM days: 6

Date of Last EDR Contact: 05/31/94

CAL-SITES (AWP): Annual Workplan

Source: California Environmental Protection Agency

Telephone: 916-323-3400

CAL-SITES (AWP): Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 10/29/96

Date Made Active at EDR: 03/17/97

Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/16/97

Elapsed ASTM days: 60

Date of Last EDR Contact: 07/28/97

CAL-SITES (ASPIS): Calsites

Source: Department of Toxic Substance Control

Telephone: 916-323-3400

CAL-SITES (ASPIS): The Calsites database contains potential or confirmed hazardous substance release properties.

In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 05/20/97

Date Made Active at EDR: 09/08/97

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 07/10/97

Elapsed ASTM days: 60

Date of Last EDR Contact: 10/27/97

CHMIRS: California Hazardous Material Incident Report System

Source: Office of Emergency Services

Telephone: 916-464-3277

CHMIRS: California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/94

Date Made Active at EDR: 04/24/95

Database Release Frequency: Annually

Date of Data Arrival at EDR: 03/13/95

Elapsed ASTM days: 42

Date of Last EDR Contact: 09/10/97

CORTESE: Cortese

Source: CAL EPA/Office of Emergency Information

Telephone: 916-327-1848

CORTESE: Identified Hazardous Waste and Substance Sites. The database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration.

Date of Government Version: 12/31/94

Date Made Active at EDR: 04/04/95

Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/23/95

Elapsed ASTM days: 71

Date of Last EDR Contact: 10/10/97

LUST: Leaking Underground Storage Tank Information System

Source: State Water Resources Control Board

Telephone: 916-445-6532

LUST: Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/01/97

Date Made Active at EDR: 06/30/97

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/05/97

Elapsed ASTM days: 56

Date of Last EDR Contact: 08/12/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NOTIFY 65: Proposition 65

Source: State Water Resources Control Board
Telephone: 916-657-0696

NOTIFY 65: Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Made Active at EDR: 11/19/93
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 11/01/93
Elapsed ASTM days: 18
Date of Last EDR Contact: 07/31/97

SWF/LF (SWIS): Solid Waste Information System

Source: Integrated Waste Management Board
Telephone: 916-255-4035

SWF/LF (SWIS): Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 06/01/97
Date Made Active at EDR: 09/08/97
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 07/07/97
Elapsed ASTM days: 63
Date of Last EDR Contact: 09/02/97

TOXIC PITS: Toxic Pits

Source: State Water Resources Control Board
Telephone: 916-227-4364

TOXIC PITS: Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Made Active at EDR: 09/26/95
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 08/30/95
Elapsed ASTM days: 27
Date of Last EDR Contact: 08/14/97

CA UST:

UST: Hazardous Substance Storage Container Database

Source: State Water Resources Control Board
Telephone: 916-227-4408

UST: The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Made Active at EDR: 02/12/91
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 01/25/91
Elapsed ASTM days: 18
Date of Last EDR Contact: 10/21/97

FID: Facility Inventory Database

Source: California Environmental Protection Agency
Telephone: 916-445-6532

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Made Active at EDR: 09/29/95
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 09/05/95
Elapsed ASTM days: 24
Date of Last EDR Contact: 09/29/97

WMUDS/SWAT: Waste Management Unit Database

Source: State Water Resources Control Board
Telephone: 916-227-4448

WMUDS/SWAT: Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and interested Parties Information.

Date of Government Version: 06/20/97
Date Made Active at EDR: 08/01/97
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/24/97
Elapsed ASTM days: 38
Date of Last EDR Contact: 09/08/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF CALIFORNIA NON-ASTM RECORDS:

AST: Aboveground Petroleum Storage Tank Facilities

Source: State Water Resources Control Board
Telephone: 916-227-4382

AST: Registered Aboveground Storage Tanks.

Date of Government Version: 06/09/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/11/97
Date of Next Scheduled EDR Contact: 11/10/97

HAZMAT: Hazmat Facilities

Source: City of San Jose Fire Department
Telephone: 408-277-4659

Date of Government Version: 02/11/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/27/97
Date of Next Scheduled EDR Contact: 11/24/97

HAZNET: Hazardous Waste Information System

Source: California Environmental Protection Agency
Telephone: 916-324-1781

HAZNET: Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data from non-California manifests and continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/95
Database Release Frequency: Annually

Date of Last EDR Contact: 10/22/97
Date of Next Scheduled EDR Contact: 01/19/98

SOUTH BAY: South Bay Site Management System

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

SOUTH BAY: Groundwater pollution cases in the Santa Clara Valley where the regulatory lead is the San Francisco Bay Regional Water Quality Control Board.

Date of Government Version: 09/01/96
Database Release Frequency: Annually

Date of Last EDR Contact: 09/17/97
Date of Next Scheduled EDR Contact: 12/15/97

WDS: Waste Discharge System

Source: State Water Resources Control Board
Telephone: 916-657-1571

WDS: Sites which have been issued waste discharge requirements.

Date of Government Version: 06/01/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/25/97
Date of Next Scheduled EDR Contact: 11/24/97

CALIFORNIA COUNTY RECORDS

ALAMEDA COUNTY:

Underground Tanks

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 04/07/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 10/27/97

Local Oversight Program Listing of UGT Cleanup Sites

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 12/01/96
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 10/27/97

CONTRA COSTA COUNTY:

SL: Site List

Source: Contra Costa Health Services Department
Telephone: 510-646-2286

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/02/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/11/97
Date of Next Scheduled EDR Contact: 11/10/97

KERN COUNTY:

UST: Sites & Tanks Listing

Source: Kern County Environment Health Services Department
Telephone: 805-862-8700
Kern County Sites & Tanks Listing.

Date of Government Version: 06/10/94
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

LOS ANGELES COUNTY:

HMS: Street Number List

Source: Department of Public Works
Telephone: 818-458-3517
HMS: Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 02/27/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

SWF/LF: List of Solid Waste Facilities

Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 01/31/96
Database Release Frequency: Annually

Date of Last EDR Contact: 08/26/97
Date of Next Scheduled EDR Contact: 11/24/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SITE MITI: Site Mitigation Complaint Control Log

Source: Community Health Services
Telephone: 213-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 08/21/96
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/25/97
Date of Next Scheduled EDR Contact: 11/24/97

MARIN COUNTY:

UST - Currently Permitted

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 05/12/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/14/97
Date of Next Scheduled EDR Contact: 11/10/97

NAPA COUNTY:

LUST: Sites With Reported Contamination

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 03/10/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/22/97
Date of Next Scheduled EDR Contact: 12/22/97

UST: Closed and Operating Underground Storage Tank Sites

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 10/09/96
Database Release Frequency: Annually

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

ORANGE COUNTY:

List of Industrial Site Cleanups

Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 04/11/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 12/15/97

LUST: List of Underground Storage Tank Cleanups

Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 06/26/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 12/15/97

UST: List of Underground Storage Tank Facilities

Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 06/26/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 12/15/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PLACER COUNTY:

MS: Master List of Facilities

Source: Placer County Health & Human Services

Telephone: 916-889-7335

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/14/97

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/29/97

Date of Next Scheduled EDR Contact: 12/29/97

RIVERSIDE COUNTY:

LUST: Listing of Underground Tank Cleanup Sites

Source: Department of Public Health

Telephone: 909-358-5055

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/16/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/27/97

Date of Next Scheduled EDR Contact: 01/26/98

UST: Tank List

Source: Health Services Agency

Telephone: 909-358-5055

Date of Government Version: 05/06/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/27/97

Date of Next Scheduled EDR Contact: 01/26/98

SACRAMENTO COUNTY:

LUST: Toxsite Cleanup Program - Site Specific Report

Source: Sacramento County Environmental Management

Telephone: 916-386-6706

Date of Government Version: 04/16/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/26/97

Date of Next Scheduled EDR Contact: 11/04/97

ML: Regulatory Compliance Master List

Source: Sacramento County Environmental Management

Telephone: 916-386-6706

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/03/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97

Date of Next Scheduled EDR Contact: 12/15/97

SAN BERNARDINO COUNTY:

DEHS Permit System Print-Out By Location

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/07/97

Database Release Frequency: Monthly

Date of Last EDR Contact: 09/15/97

Date of Next Scheduled EDR Contact: 12/15/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN DIEGO COUNTY:

SWF/LF: Solid Waste Facilities

Source: Department of Health Services
Telephone: 619-338-2209
San Diego County Solid Waste Facilities.

Date of Government Version: 11/08/95
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/97
Date of Next Scheduled EDR Contact: 12/01/97

HMMD: Hazardous Materials Management Division Database

Source: Hazardous Materials Management Division
Telephone: 619-338-2268

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment "H" permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/15/96
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/25/97
Date of Next Scheduled EDR Contact: 12/22/97

SAN FRANCISCO COUNTY:

LUST: Local Oversight Facilities

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

Date of Government Version: 05/14/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/18/97
Date of Next Scheduled EDR Contact: 11/17/97

UST: Active Underground Report City and County of San Francisco

Source: Department of Public Health
Telephone: 415-252-3920

Date of Government Version: 05/01/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/18/97
Date of Next Scheduled EDR Contact: 11/17/97

SAN MATEO COUNTY:

Business Inventory

Source: San Mateo County Environmental Health Services Division
Telephone: 415-363-1921

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/01/97
Database Release Frequency: Annually

Date of Last EDR Contact: 08/18/97
Date of Next Scheduled EDR Contact: 11/17/97

LUST: Fuel Leak List

Source: San Mateo County Environmental Health Services Division
Telephone: 415-363-1921

Date of Government Version: 04/21/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/97
Date of Next Scheduled EDR Contact: 11/17/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SANTA CLARA COUNTY:

LUST: Fuel Leak Site Activity Report

Source: Santa Clara Valley Water District
Telephone: 408-927-0710

Date of Government Version: 04/01/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/06/97
Date of Next Scheduled EDR Contact: 01/05/98

SOLANO COUNTY:

LUST: Leaking Underground Storage Tanks

Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 05/20/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 12/15/97

UST: Underground Storage Tanks

Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 03/13/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/97
Date of Next Scheduled EDR Contact: 12/15/97

SONOMA COUNTY:

LUST Sites

Source: Department of Health Services
Telephone: 707-525-6565

Date of Government Version: 04/04/97
Database Release Frequency: Monthly

Date of Last EDR Contact: 09/22/97
Date of Next Scheduled EDR Contact: 12/22/97

SUTTER COUNTY:

UST: Underground Storage Tanks

Source: Sutter County Department of Agriculture
Telephone: 916-741-7504

Date of Government Version: 06/01/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

VENTURA COUNTY:

BWT: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813

BWT: The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/22/97
Date of Next Scheduled EDR Contact: 12/22/97

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Listing of Underground Tank Cleanup Sites

Source: Environmental Health Division

Telephone: 805-654-2813

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/27/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/22/97

Date of Next Scheduled EDR Contact: 12/22/97

UST: Underground Tank Closed Sites List

Source: Environmental Health Division

Telephone: 805-654-2813

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/29/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/22/97

Date of Next Scheduled EDR Contact: 12/22/97

SWF/LF: Inventory of Illegal Abandoned and Inactive Sites

Source: Environmental Health Division

Telephone: 805-654-2813

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 06/01/97

Database Release Frequency: Annually

Date of Last EDR Contact: 09/02/97

Date of Next Scheduled EDR Contact: 12/01/97

California Regional Water Quality Control Board (RWQCB) LUST Records

LUST REG 1: Active Toxic Site Investigation

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220

Date of Government Version: 03/18/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/97
Date of Next Scheduled EDR Contact: 12/01/97

LUST REG 2: Fuel Leak List

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Date of Government Version: 05/23/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/26/97
Date of Next Scheduled EDR Contact: 12/22/97

LUST REG 3: LUSTIS Database

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Date of Government Version: 05/20/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/25/97
Date of Next Scheduled EDR Contact: 11/24/97

LUST REG 4: Underground Storage Tank Leak List

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-7544

Date of Government Version: 04/16/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/06/97
Date of Next Scheduled EDR Contact: 01/05/98

LUST REG 5: Leaking Underground Storage Tank Database

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-255-3125

Date of Government Version: 04/22/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

LUST REG 6L: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424

Date of Government Version: 06/27/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/15/97
Date of Next Scheduled EDR Contact: 01/12/98

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491

Date of Government Version: 05/01/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/29/97
Date of Next Scheduled EDR Contact: 11/04/97

LUST REG 7: Leaking Underground Storage Tank Case Listing

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491

Date of Government Version: 04/03/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/97
Date of Next Scheduled EDR Contact: 12/01/97

LUST REG 8: (LUSTIS) Leaking Underground Storage Tanks

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4498

Date of Government Version: 03/28/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/14/97
Date of Next Scheduled EDR Contact: 01/12/98

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 9: Leaking Underground Storage Tank Report

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 619-467-2952

Date of Government Version: 01/08/97

Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/10/97

Date of Next Scheduled EDR Contact: 12/08/97

California Regional Water Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: Active Toxic Site Investigations

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

Date of Government Version: 03/18/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/97
Date of Next Scheduled EDR Contact: 12/01/97

SLIC REG 2: North and South Bay Slic Report

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 06/30/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/26/97
Date of Next Scheduled EDR Contact: 12/22/97

SLIC REG 3: Active Slic Cases

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/20/97
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/25/97
Date of Next Scheduled EDR Contact: 11/24/97

SLIC REG 4: SLIC Sites

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-7544

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 04/01/97
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/07/97
Date of Next Scheduled EDR Contact: 01/05/98

SLIC REG 5: SLIC List

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-855-3075

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 10/31/96
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/26/97
Date of Next Scheduled EDR Contact: 11/24/97

SLIC REG 8: SLIC List

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-3298

Date of Government Version: 12/20/96
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/15/97
Date of Next Scheduled EDR Contact: 01/12/98

SLIC REG 9: Nurds/Nugtank

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 619-467-2980

Date of Government Version: 11/21/96
Database Release Frequency: Annually

Date of Last EDR Contact: 09/09/97
Date of Next Scheduled EDR Contact: 12/08/97

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: Delisted NPL Sites

Source: EPA

Telephone: 703-603-8769

DELISTED NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

NFRAP: No Further Remedial Action Planned

Source: EPA/NTIS

Telephone: 703-413-0223

NFRAP: As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SWDIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1996 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams
Source: Federal Emergency Management Agency
Telephone: 202-646-2801
WATER DAMS: National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

APPENDIX B

***COPY OF GEOPHYSICAL INVESTIGATION AT THE PEOPLESOFT
SITE, DUBLIN, CALIFORNIA, PREPARED BY JR ASSOCIATES,
DATED 24 FEBRUARY 1998***

J R ASSOCIATES

Engineering Geophysics
1886 Emory Street
San Jose, CA 95126
(408) 293-7390

GEOPHYSICAL INVESTIGATION AT THE
PEOPLE SOFT SITE
DUBLIN, CALIFORNIA

February 24, 1998

For

Erler and Kalinowski, Inc.
1730 S Amphlett Boulevard, Suite 320
San Mateo, CA 94402

By

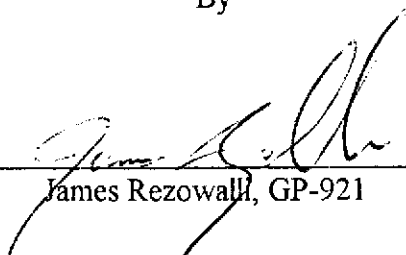

James Rezowall, GP-921

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LIST OF ILLUSTRATIONS

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Drawing 4 Area 2 Magnetic Contour Map

I INTRODUCTION

This report presents the results of a geophysical investigation performed at a site in Dublin, California. The investigation was performed for Erler and Kalinowski, Incorporated by J R Associates. The purpose of the investigation was to look for geophysical indications of buried fuel storage tanks at two locations at the site. James Rezowalli, Principal Geophysicist, and Bob Wing, Technician, of J R Associates performed the field work in February of 1998.

A. Site

The site is near the intersection of Hacienda Drive and Highway 580 in Dublin, California (Drawing 1). The site was once part of the Camp Parks military base. A map of the base showed a fuel storage depot with underground fuel tanks near the southeast corner of the site (Area 1 on Drawing 2). The map also showed a building with a boiler room that may have had a buried fuel tank. This building was in the northern part of the site (Area 2 on Drawing 2). All the buildings shown on the site map have been demolished. Only the gravel roads, several fire hydrants and several mounds of dirt believed to be part of the buildings' foundations remain. Erler and Kalinowski requested a geophysical investigation in the area of the fuel storage depot and in the area of the boiler room. The purpose of the investigation was to look for geophysical indications of buried fuel storage tanks that may not have been removed when Camp Parks was demolished.

II METHODS

Several geophysical techniques can detect buried objects. The most appropriate method for this site was a combination of magnetics and pipe locating. A magnetic investigation maps the vertical magnetic gradient. The magnetic gradient is uniform throughout a site free of metal. The magnetic gradient at a site that contains ferrous metal is not uniform. Metal objects produce magnetic anomalies with characteristic shapes and magnitudes. For example, an anomaly caused by a buried fuel tank is characterized by a strong magnetic low just south of the center of the tank and a weaker magnetic high just north of the tank. Magnetic lows typically range from -150 gammas to -1500 gammas. Magnetic highs are usually half the value of the magnetic lows. This type of anomaly is what we use to locate buried tanks.

Limited pipe locating was performed to identify buried utilities that might appear in the magnetic data. Often buried pipes cause anomalies in magnetic data. Pipe locating helps distinguish anomalies caused by buried utilities from anomalies caused by other buried objects. Pipe locating also helps find abandoned product and vent lines.

A. Magnetic Instrumentation

We used a Geometrics model 856AG proton precession magnetometer to collect magnetic data at the site. The magnetometer had two sensors and an electronics package. The magnetometer collected both total field data and vertical gradient data. The magnetometer can discriminate to 0.2 gammas in a total field of 40,000 to 60,000 gammas. Magnetic readings were stored in memory with the time of day, station numbers and line numbers of the readings. The data were downloaded to a computer and contoured.

B. Magnetic Field Procedures

Magnetic data were collected on ten-foot centers in the two areas investigated. A data collection station is shown by "+" on the magnetic contour maps. An anomaly is indicated by a series of concentric magnetic contours. There were several magnetic anomalies at the site. These anomalies will be discussed later in the report.

III RESULTS

A. Magnetic Anomalies

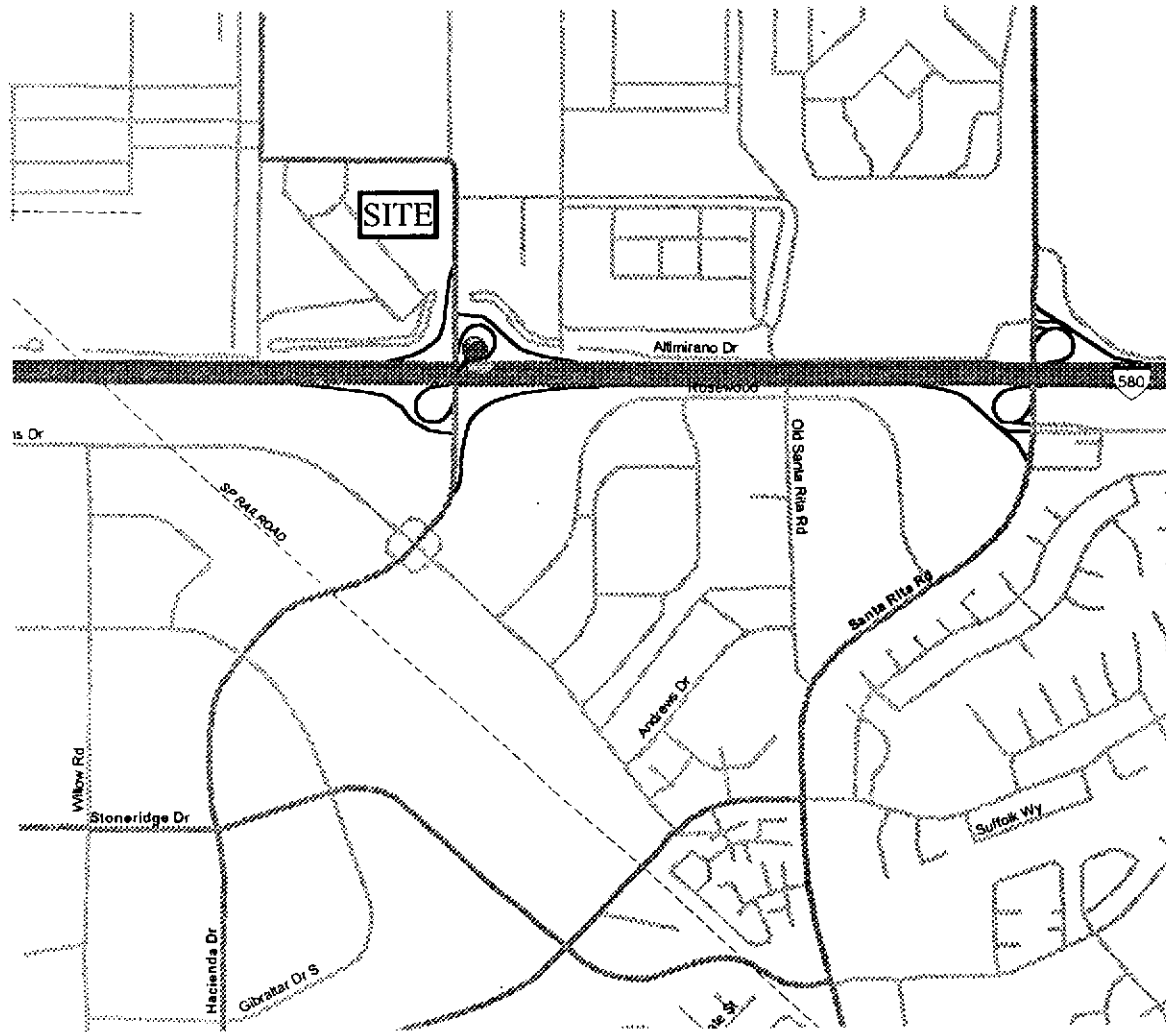
Drawing 3 shows the contour map of the magnetic data collected in the area of the fuel storage depot. There were three magnetic anomalies indicative of buried metal in this area. These anomalies are shown in Drawing 3. The site map of Camp Parks showed five fuel storage tanks. The three anomalies shown on Drawing 3 are too small to be caused by five buried tanks. The two small anomalies on the bottom left of the map are probably caused by buried metal debris or sections of pipe. The larger anomaly on the bottom right of the map could be caused by one or possibly two buried fuel tanks. We recommend potholing to find out what the source of this anomaly is. There is a water line in this area that should be avoided during potholing. Four wooden stakes were planted in the field to mark the location of these anomalies. The locations of the stakes are also shown on Drawing 3.

Drawing 4 shows the contour map of the magnetic data collected in the vicinity of the boiler room. There were two magnetic anomalies indicative of buried metal in this area. These anomalies are shown on Drawing 4. The larger anomaly on the upper left is typical of an object like a heating oil tank. There was a small section of pipe protruding from the ground near this anomaly (Drawing 4). We recommend potholing in this area to confirm what the object is and if the small section of pipe is part of a product line. The small magnetic anomaly on the upper right of Drawing 4 could be caused by metal debris. Two wooden stakes were planted in the field to mark the location of these anomalies. The locations of the stakes are shown on Drawing 4.

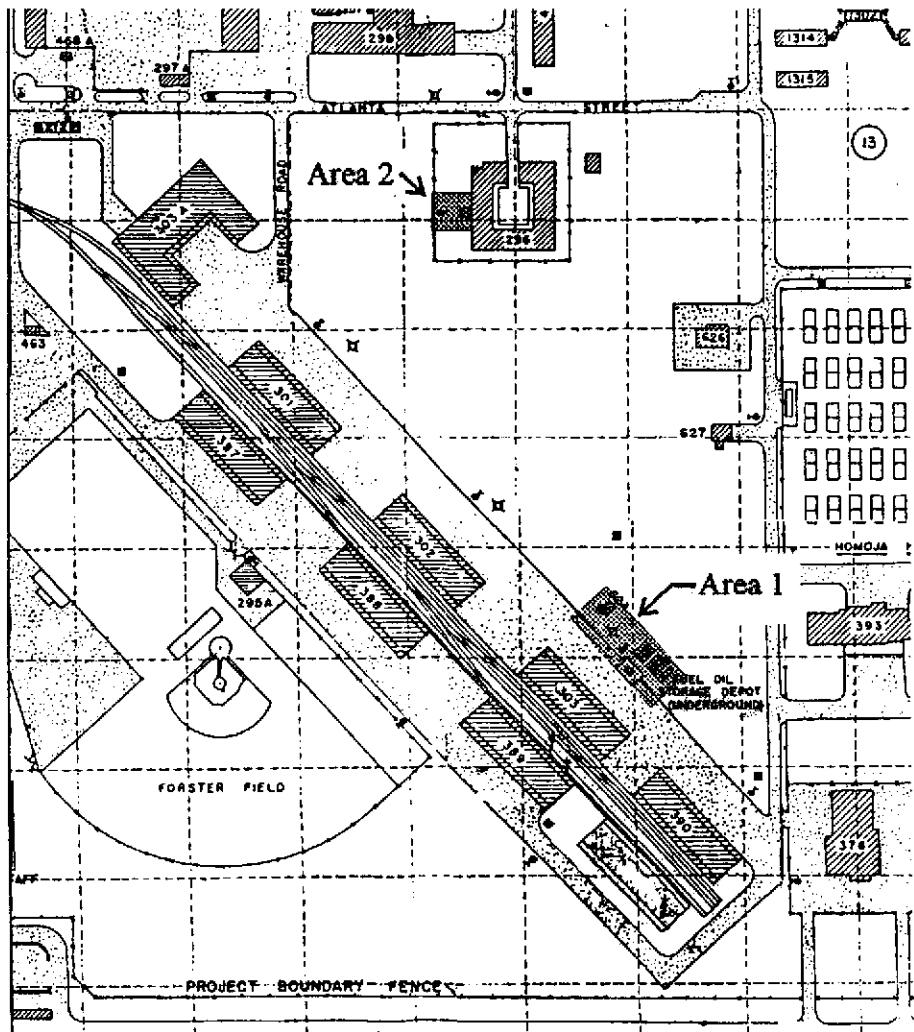
B. Limitations

Magnetic methods locate ferrous objects from the anomalies they produce in the earth's magnetic field. It is possible some ferrous objects will not produce an anomaly. Some possible reasons are that the object is buried too deep, the object is too small, the object is buried under or near another ferrous object or an object is buried near a utility. It is possible there are materials buried at the site that were not detected by the magnetometer.

We can locate most, but not all, buried utilities in a given area. A buried utility must emit a signal, either a signal transmitted by us or a naturally occurring signal, to be detected by our equipment. The most common type of buried utilities not detected are nonmetal laterals and nonmetal water pipes. Other types of utilities that might not be detected are some communication lines and metal pipelines that are electrically insulated between joints.



Vicinity Map- People Soft Site Hacienda Drive Dublin, California		
SCALE:	Not to Scale	DRAWN BY: J.J.R.
DATE:	2-23-1998	REVISID:
JOB NUMBER:		109042-98
J R ASSOCIATES Civil and Environmental Geophysics 1886 Emory Street, San Jose, CA (408) 293-7390		
DRAWING NUMBER:		1



EXPLANATION:



Area Investigated

Site Map- People Soft Site
 Hacienda Drive
 Dublin, California

SCALE: Not to Scale

DRAWN BY: J.J.R.

DATE: 2-23-1998

JOB NUMBER:

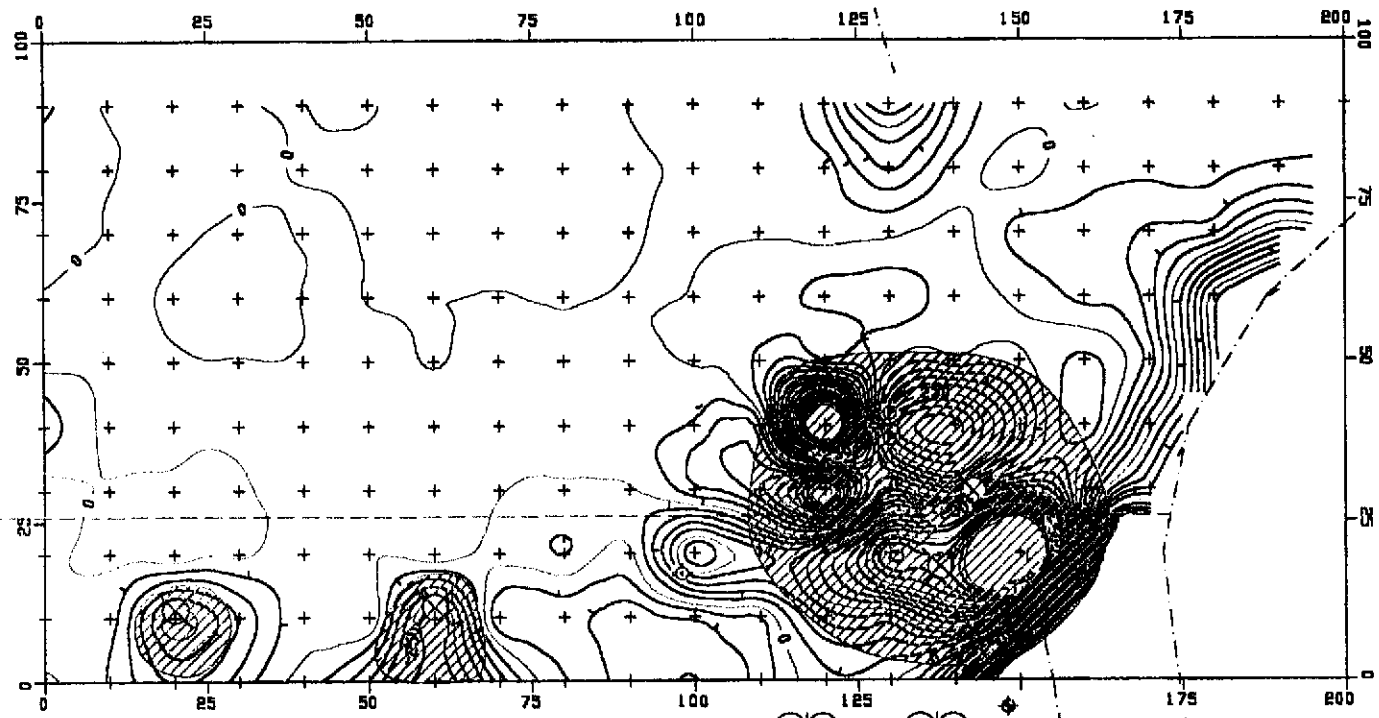
109042-98

REVISED:









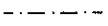
J R ASSOCIATES Civil and Environmental Geophysics
 1886 Emory Street, San Jose, CA (408) 293-7390

DRAWING NUMBER:

2

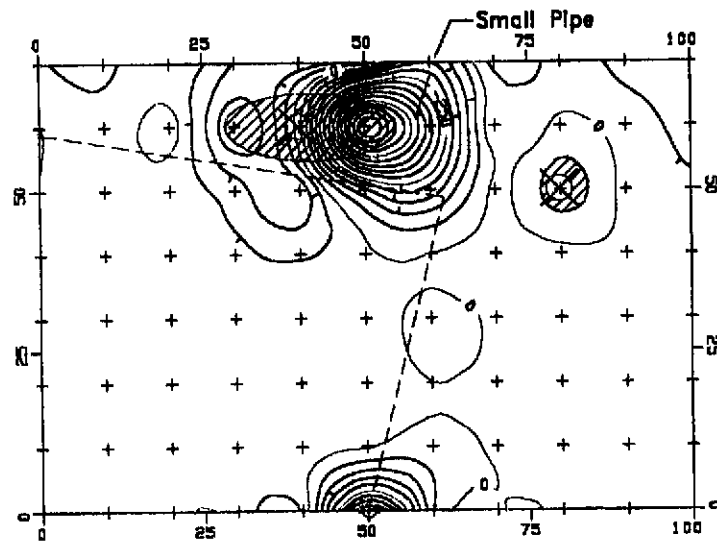


EXPLANATION:







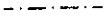
-  METAL DEBRIS
-  FIRE HYDRANT
-  POST
-  VALVE
-  SOIL BORING
-  WOODEN STAKE MARKING ANOMALY
-  MAGNETIC ANOMALY
-  BURIED PIPE
-  FENCE



Area 1 Magnetic Contour Map- People Soft Site Hacienda Drive Dublin, California			
SCALE:	1" = 30'		DRAWN BY: J.J.R.
DATE:	2-23-1998	JOB NUMBER:	109042-98
J R ASSOCIATES Civil and Environmental Geophysics 1886 Emory Street, San Jose, CA (408) 293-7390			REVISED:
			DRAWING NUMBER 3



EXPLANATION:

-  METAL DEBRIS
-  FIRE HYDRANT
- POST
-  VALVE
-  WOOD STAKE MARKING ANOMALY
-  MAGNETIC ANOMALY
-  BURIED PIPE
-  FENCE



Area 2 Magnetic Contour Map- People Soft Site Hacienda Drive Dublin, California		
SCALE: 1" = 30'		DRAWN BY: J.J.R.
DATE: 2-23-1998	JOB NUMBER: 109042-98	REVISED
J R ASSOCIATES Civil and Environmental Geophysics 1886 Emory Street, San Jose, CA (408) 293-7390		
		DRAWING NUMBER: 4

APPENDIX C

**COPIES OF EKI DAILY FIELD INSPECTION LOGS,
SOIL BORING LOGS, AND ZONE 7 DRILLING PERMIT FOR
ACTIVITIES CONDUCTED 25 – 27 FEBRUARY 1998**

Daily Inspection Report No. _____

6075

Sheet: 1 of 2
 Date: 2/25/98
 Project: PeopleSoft
 EKI Job No.: 980003.00

Contractor: Spectrum Drilling

EKI Staff On-site: Logan Hansen

Weather: Sunny, cool 60°

Temperature: 65 F Max 58 F Min

Work Hours: 8 to 5 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working):

- 7:45 I arrive on-site.
- 8:20 Spectrum arrives on-site.
Conduct H+S meeting
- 8:45 Began Drilling P-1
- 9:10 Stopped drilling location P-1. Collected water sample P-1 @ 9:20
3 Pres VOAs, 2 Amber liters, samples turbid, w/ disposable bailer
- 9:40 Driller reported broken hydraulic part on rig. Spectrum sending
out replacement rig.
- 9:55 Left location P-1 ^{working} well covered w/ sand bag
- 10:55 Replacement rig arrives.
- 11:05 Set-up on location P-2 Started drilling at 11:15
- 11:50 - Stopped drilling P-2 collected sample P-2 at _____ w/ disposable bailer.
Samples turbid - 3 Pres VOAs, 2 amber liters
- Began drilling location P-3
- Stopped drilling P-3. collected gas sample P-3 @ _____ w/ disposable
bailer - 3 Pres VOAs, 2 amber liters, samples turbid

Distribution: Project Inspection File (orig)
 Project Manager
Paul Holey

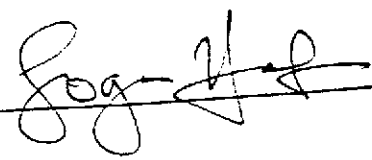
By: Logan Hansen

Sheet:	2	of	2
Date:	2/25/98		
Project:	PeopleSoft		
EKI Job No.:	980003.00		

Contractor: Spectrum

- 05:05 Began drilling location P-4.
- 05:30 Stopped drilling P-4. Collected gw sample P-4 @ 1:40⁵⁵ 3 Pres Vials, 2 Amber liters, w/ disposable bailer, turbid
- 05:50 Spectrum begins decontaminating augers.
- 06:35 Spectrum finishes decontaminating.
- 07:55 Began drilling location P-6. Collected gw sample P-6 at 15:20 3 Pres Vials, 2 Amber liters w/ disposable bailer, samples turbid.
- 15:40 Grouted boring P-6
- 16:50 Began drilling location P-5. Collected gw sample P-5 at 16:20 w/ disposable bailer. 3 Pres Vials, 2 Amber liters, samples turbid.
- 16:40 Grouted boring P-5.
- 16:50 Grouted boring P-4.
- 16:55 Grouted boring P-3.
- 17:07 Grouted boring P-2.
- 17:15 Grouted boring P-1.
- 17:30 Spectrum leaves site. I leave immediately after.

Distribution: Project Inspection File (orig)
 Project Manager
Paul Hoffman

By: 

Sheet: 1 of 1

Date: 2/25/98

Project: PeopleSoft

EKI Job No.: 980003.00

Project Location: PeopleSoft - Hacienda at Dublin Blvd, Dublin

Health & Safety Supervisor: Logan Hansen

Topics Discussed

• Today's Objectives & Hazards: Collect 6 grab groundwater samples from 6 locations of 7 total

• Work Zones, Exclusion Zones: No zones
watch for muddy areas, holes, puddles

• Personal Protective Equipment: - Steel toed boots, hard hat, long sleeves
- Level D.

• Decontamination Procedures: Steam clean augers

• Emergency Contingency Plans: In emergency call 911.
For route to hospital see Health + Safety Plan

Meeting Attendance

Name	Company	Name	Company
1 Logan Hansen	EKI	11	
2 Logan Hansen	Spectrum	12	
3 Logan Hansen	Spectrum	13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Daily Inspection Report No. _____

Sheet:	1	of	_____
Date:	2/26/98		
Project:	PeopleSoft		
EKI Job No.:	980003.00		

Contractor: Spectrum Drilling

EKI Staff On-site: Logan Hansen

Weather: Sunny, cool.

Temperature: 55° F Max _____ F Min _____

Work Hours: 8 to 5 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____

- 7:50 I arrived on site.
- 8:15 Spectrum arrives onsite.
- 8:30 Began drilling location P-7. collected sample of gw from P-7 at
- 8:45 - 3 Pres Vials, 2 Amber liters w/ disposable bailer, samples turbid.
- 9:08 ~~Grouted boring~~ Sample P-7 has oily odor - soil had odor and sheen present on soil and water
- 9:08 Grouted P-7.
- 9:25 began drilling location RR-1.
- 9:55 boring RR-1 settled to w/in 0.5 feet of ground surface. Spectrum shoveled ~~to~~ ~~to~~ surrounding gravels to fill boring
- 10:02 Collected ^{soil} samples RR-1-4.5 and RR-1-8 in 6inch brass liners previously washed + decont.
- 10:05 Started drilling location RR-2. Collected soil samples RR-2-3.5 and RR-2-4 and RR-2-6 in 6inch brass liners.
- ~~10:20 RR-2~~

Distribution: Project Inspection File (orig)
 Project Manager
Paul Haffey

By: Logan Hansen

Sheet:	2 of
Date:	2/26/98
Project:	PeopleSoft
EKI Job No.:	180003.00

Contractor: _____

Grouted 3 feet at top of boring RR-2.

9:30 began drilling location RR-3

Collected soil samples RR-3-5.5 and RR-3-8 in 6 inch brass liners. No recovery when we attempted to sample @ 3 feet. Grouted hole RR-3 @ 10:55.

11:00 Lunch

11:30 Began drilling location RR-4. Collected soil samples RR-4-4 feet and RR-4-6 feet in 6 inch brass liners.

Grouted boring RR-4.

12:00 Began drilling location RR-5. Collected soil samples RR-5-3.5 and RR-5-6 in 6 inch brass liners. Boring RR-5 caved in to within one foot of ground surface. We backfilled drilled soil into boring to ground surface.

2:20 Spectrum moving drums to road and regrouting borings that sunk overnight.

Drum count 7 drums of soil, 2 drums of deionwater. 9 Drums total left on site.

2:00 Spectrum leaves site. I leave immediately after.

Distribution: Project Inspection File (orig)
 Project Manager
Paul Holey

By: [Signature]

Sheet:	1	of	1
Date:	2/26/98		
Project:	PeopleSoft		
EKI Job No.:	980003.00		

Project Location: Parcel 16 Hacienda at Dublin Blvd, Dublin

Health & Safety Supervisor: Logan Hansen

Topics Discussed

- Today's Objectives & Hazards: Collect one grab groundwater sample from deep boring. Collect 10 shallow soil samples from 5 locations.

- Work Zones, Exclusion Zones: No zones
watch for muddy areas, puddles, holes.

- Personal Protective Equipment: Steel-toed boots, hard hat, long sleeves.
Level D.

- Decontamination Procedures: Steam clean augers
~~Route to hospital on dash of van in H+S Plan~~

- Emergency Contingency Plans: Call 911 in emergency
Route to hospital on dash of van in H+S Plan.

Meeting Attendance

Name	Company	Name	Company
1 Logan Hansen	EKI	11	
2 [Signature]	Spectram	12	
3 Dave [Signature]	Spectram	13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Daily Inspection Report No. _____

Sheet:	1	of	1
Date:	2/27/98		
Project:	PeopleSoft		
EKI Job No.:	980003.00		

Contractor: ~~HSR~~ HSR

EKI Staff On-site: Logan Hansen Paul Hoffer

Weather: Sunny, cool

Temperature: 60 F Max _____ F Min _____

Work Hours: 9 to 12 Memos Issued: _____

Photos: on digital camera

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

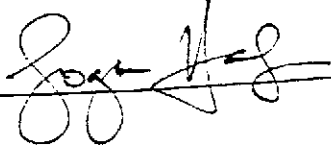
Sampling, Testing: _____

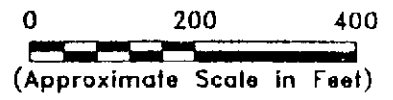
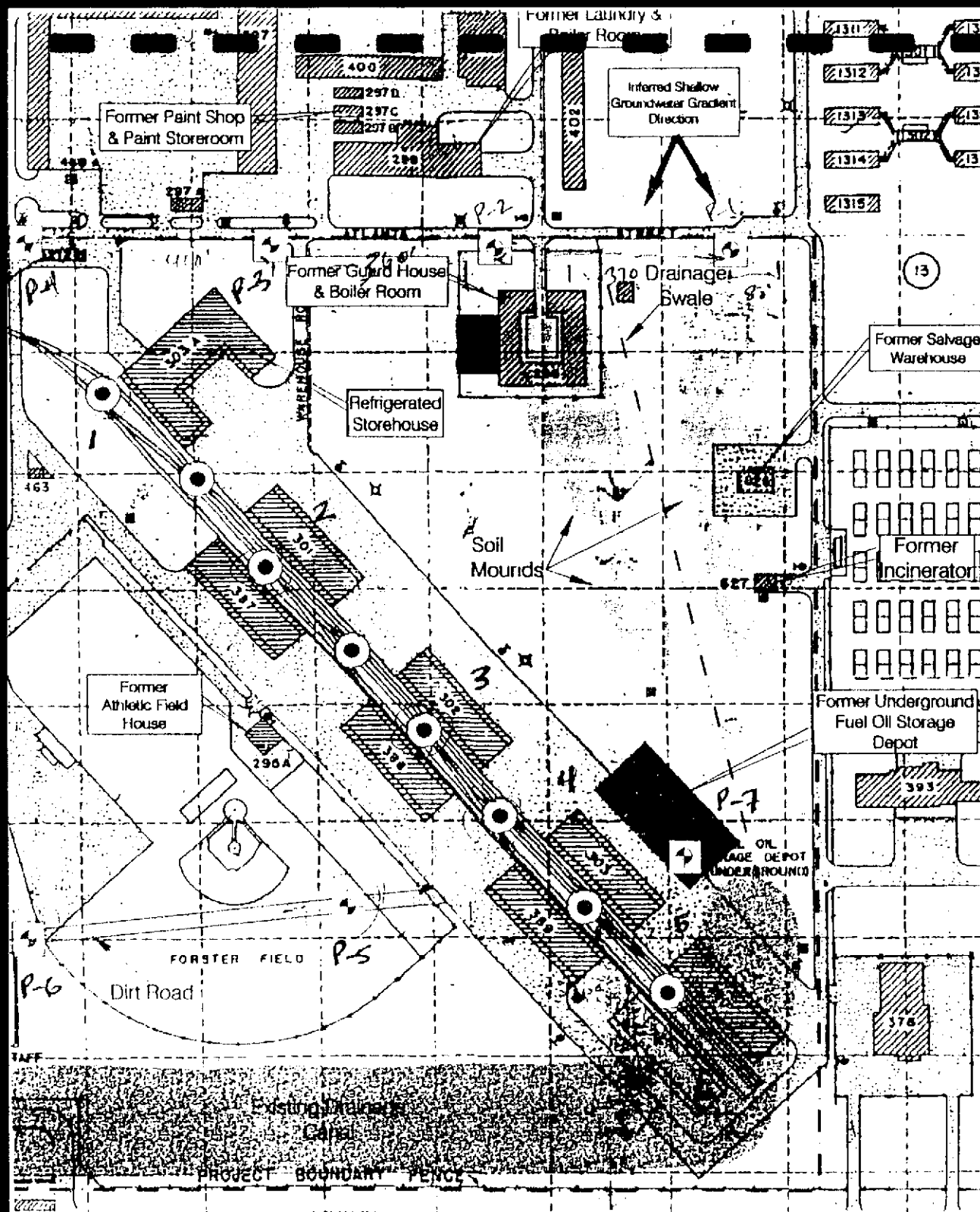
Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____






- 9:00 arrived on site - Logan Hansen and Paul Hoffer.
Backhoe operator from HSR already onsite.
- 9:20 Backhoe begins trenching near former fuel storage depot in SE corner of property - near anomalies found by geophysical survey. No tanks encountered, anomalies appear to be caused by buried pipes and concrete slabs and fragments.
- 11:15 Backhoe begins trenching near access road in area of former boiler room - magnetic anomalies also found here by geophysical survey. No tanks encountered - only concrete and rebar.
- 12:15 HSR parks backhoe - we all leave site.
(See notes on geophysical survey maps)

Distribution: Project Inspection File (orig)
Project Manager
Paul Hoffer

By: 



LEGEND

-  Approximate Subject Property Boundary
-  Approximate Location of Soil Mounds
-  Proposed Geophysical Survey Area
-  Proposed Soil Boring and Grab Groundwater Sample Location
-  Proposed Shallow Soil Boring Location

Notes:

1. All locations are approximate.
2. Historical features based on World War II era map provided by Alameda County General Services Agency.

**Erler &
Kalinowski, Inc.**

Proposed Phase II Investigations

Parcel 16, Hacienda & Dublin
Dublin, CA
January 1998
EKI 980003.00

Boring & Well Construction Log

BORING LOCATION Parcel 16, Hacienda at Dublin Blvd, Dublin		Boring/Well Name P-1
DRILLING COMPANY Spectrum		Project Name PeopleSoft
DRILLING METHOD(S) Hollow Stem Auger		Project Number 980003.00
CLAYTON CASING		ELEVATION AND CURVA TOTAL DEPTH 24 feet
BLANK CASING		DATE STARTED 2/25/98
PERFORATED CASING		DATE COMPLETED 2/25/98
SIZE AND TYPE OF FILTER PACK		STATIC WATER ELEVATION
LOGGED BY Logan Hansen		SAMPLING METHOD(S) Split spoon
ROCK Basalite Type I + II		WELL COMPLETION C SURFACE HOUSING C STAND PIPE _____ FT

Depth (Feet)	SAMPLES		WELL CONSTRUCTION	USCS LG	Liquidity	COR	SAMPLE DESCRIPTION AND DRILLING REMARKS
	Flow No.	Passing (Feet)					
1							Asphalt
2							
3							
4							
5	0	4					Clay @ 5'
6	.3	4					very dark orange brown 10% L 3/4 firm to soft, catclay lines. medium plasticity firm to moist
7	.5	6					
8							
9							
10	0	2					10/12 @ 10 color change to dark yellowish
11	.3	3					brown 10/12 4/4 firm to hard
12	.5	5					
13							
14							
15	.5	2					Silty Clay
16	.5	5					yellowish brown 10/12 3/4 mottled w/ dark firm med plasticity
17	.5	6					2/16 Sandy clay color as 1st 1/2 of 2nd ground 15% 25% firm to med, med plasticity 2

Boring & Well Construction Log

ERLER & KALINOWSKI, INC.

Project Name PeopleSoft Project Number 980005.00 Boring/Well Name P-1

SAMPLES			Depth (Feet)	WELL CONSTRUCTION	USCS Log	Liquidity	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
Type No	Recovery (Feet)	Penetration Resist (Blows/ft)						
			18					
			19					
			20					② 20 Silty Clay color 10YR 4/4, dark yellowish brown, firm, wet, med plasticity
2			20.7		CL		10YR 4/4	② 20.7
2			21	S=0.5 Sampler wet	SM		10YR 5/4	Silty Sand, yellowish brown 10YR 5/4 very soft, wet, low plasticity, fine grained, S-15% clay, 25-35% silt.
3			22					
			23					
			24	Total Depth = 24'				
			25					
			26	9:10				
			27					
			28					
			29					
			30					

BORING LOCATION Parcel 16 Hacienda at Dublin Blvd. Dublin		Boring/Well Name P-2	
DRILLING COMPANY Spectrum		Project Name Pav. 12' Int.	
DRILLING METHOD (S) Hollow Stem Auger		Project Number 980003.00	
DRILL BIT SIZE 6 inch		ELEVATION AND DIRM TOTAL DEPTH 20 ft.	
BLANK CASING		DATE STARTED 2/25/98	
PERFORATED CASING		DATE COMPLETED 2/25/98	
SIZE AND TYPE OF FILTER PACK		STATIC WATER ELEVATION	
LOGGED BY Laurin H. ...		SAMPLING METHODS Split Spoon	
GROUT Basalite Type I + II		WELL COMPLETION C SURFACE HOUSING C STAND PIPE	

DEPTH (ft)	SAMPLES		WELL CONSTRUCTION	US LBS	Logbook	COR	SAMPLE DESCRIPTION AND DRILLING REMARKS
	Regularity (Feet)	Penetration (Blows in 30 sec)					
1							Asphalt
2							
3							
4							
5	.2	6				101R 3/2	Clay, very dark a rusty brown 10/12 3/2 firm to hard, med medium plasticity caliche nodules, med dry strength
6	.5	10					
7	.5	13					
8							
9							
10	.5	4				104C 4/4	Silty clay Dark yellowish brown 10/12 4/4 soft, med plasticity dry
11	.5	12	S=0.1				
12							10.5 decreasing silt to < 5% firm to hard. C
13							
14							
15	.5	3					10.5 ss 10.5 Silty clay light olive brown 2.5/ 5/3
16	.5	6				2.5/1 3/3	firm to hard, med plasticity 2.5/6 sand 5% - 10%
17	.5	9	S=0.3				

Boring & Well Construction Log

ERLER & KALINOWSKI, INC.

Project Name PeopleSoft Project Number 920003.00 Boring/Well Name D-2

SAMPLES			Depth (Feet)	WELL CONSTRUCTION	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
Type No	Recovery (Feet)	Penetration Resist (Blows ft)						
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					
			26					
			27					
			28					
			29					
			30					
			31					
			32					

Total
Depth =
20ft.
11:50

Boring & Well Construction Log

ELLER & KLEIN WORKS, INC.

BORING LOCATION Parcel 16 Hacienda at Dublin Blvd. Dublin		Boring/Well Name P-3	
DRILLING COMPANY Spectrum		Project Name People Soft	
DRILLING METHOD(S) Airflow Stem Auger		Project Number 980003 00	
DRILL BIT(S) SIZE 6 inch		ELEVATION AND DATUM TOTAL DEPTH 16.5 ft.	
BLANK CASING		DATE STARTED 2/25/98	
PERFORATED CASING		DATE COMPLETED 2/25/98	
SIZE AND TYPE OF FILTER PACK		STATIC WATER ELEVATION	
LOGGED BY Loren Hansen		SAMPLING METHODS Split Spoon	
GROUT Basaltite Type I + II		WELL COMPLETION C SURFACE HOUSING C STAND PIPE	

SAMPLE No.	SAMPLES		DEPTH (Feet)	WELL CONSTRUCTION	USCS	Liquidity	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
	Primary (Feet)	Secondary (Feet)						
			1					
			2					
			3					
			4					
			5					10/12 3/2
	.2	3	5					slay very dark grayish brown
	.5	6	6					10/12 3/2, firm to hard,
	.5	8	6					medium plasticity, calcic
			7		CL			moist, dry
			8					
			9					
	.5	3	10					10/12 4/4
	.5	6	11					Silty clay dark yellowish brown
	.5	9	11					10/12 4/4, soft med
			12		CL			plasticity moist
			13					
			14					
	.5	4	15					@ 10.5 firm to hard
	.5	6	15					
	.5	11	15					2.54 5/8, firm to hard, med
			16					plasticity

Boring & Well Construction Log

EHLER & KALINOWSKI, INC.

BORING LOCATION Vertical to Records at Dublin, OH		Diameter of		Boring/Well Name	P-4
DRILLING COMPANY Spectrum		DRILLER Dave Gonzales		Project Name	Deedle's #1
DRILLING METHOD (S) Inflow Cement		DRILL BIT (S) SIZE 6 inch		Project Number	780003.00
COLLATION CASING		PCU		ELEVATION AND CURVE	TOTAL DEPTH 13 ft.
BLANK CASING		PCU		DATE STARTED	2/25/98
OPERATED CASING		PCU		DATE COMPLETED	2/25/98
SIZE AND TYPE OF FILTER PACK		PCU		STATIC WATER ELEVATION	
GROUT		PCU		LOGGED BY	Logan Hansen
Basaltite Type I + II		0 15		SAMPLING METHOD(S)	WELL COMPLETION
				Split Spoon	C SURFACE HOUSING D STAND PIPE

Depth (Feet)	SAMPLES		WELL CONSTRUCTION	LSS	Logbook	COR	SAMPLE DESCRIPTION AND DRILLING REMARKS
	Passport (Feet)	Perforation (Feet)					
1							Asphalt
2							
3							
4							
5							
6	.2	5					Clay Very dark reddish brown 10 1/2 3/2 firm to hard medium plasticity dry
7	.3	7	S=0.0 BZ=0.9				
8		8					
9							
10	.1	4					Silty Clay dark yellowish brown 10 1/2 4/4 hard, med plasticity dry to moist
11	.4	9					
12	.5	12					
13							① 1/3 Sand
14							dry to moist w/ to d. gravel c/s 5-15% soft moist
15							
16			Sampler wet ① 15				
17			13:30				
18			TD=15'				

Boring & Well Construction Log

ELER & KALINOWSKI, INC.

BORING LOCATION Parcel 16, Parcels at Dublin Blvd, Dublin, CA		Boring/Well Name P-5	
DRILLING COMPANY Spec Stream		Project Name Resole 2044	
DRILLING METHOD(S) Hollow Stem Auger		Project Number 980003.00	
ISOLATION CASING FROM 0 TO 0 FT.		ELEVATION AND CURVE TOTAL DEPTH 15 ft.	
BLANK CASING FROM 0 TO 0 FT.		DATE STARTED 2/25/98	
PERFORATED CASING FROM 0 TO 0 FT.		DATE COMPLETED 2/25/98	
SIZE AND TYPE OF FILTER PACK FROM 0 TO 0 FT.		STARTING WATER ELEVATION	
GROUT Basalite Type I + II		LOGGED BY Loran Hansen	
FROM 0 TO 15 FT.		SAMPLING METHOD(S) Split Spoon	
		WELL COMPLETION C SURFACE HOUSING C STAND PIPE	

Sample No.	SAMPLES		WELL CONSTRUCTION	USERS LOG	LITHOLOGY	CORR	SAMPLE DESCRIPTION AND DRILLING REMARKS
	Primary (Feet)	Secondary (Feet)					
			15:50				Topsoil
1							
2							
3							
4							
5	2	4					2 to 3 in. very dark grayish brown 15% 2 1/2
6	2	4					Soft to firm med plasticity clay to moist
7				3L			@ 6 decreasing silt to 45%
8							
9							
10	5	8					2 to 3 in. dark grayish brown 10% 2 1/2 soft wet
11	5	8					45% fine sand, slightly sticky
12			Sample wet				
13							
14							
15							
16							
17							
18			15:15 Feed 15:10				
19							

Boring & Well Construction Log

ENTER & KELLINGSON, INC.

BORING LOCATION Parcel 16 Hacienda at Dasha Blvd Dasha CA		Boring/Well Name P-6	
DRILLING COMPANY Spectra		Project Name PeopleSoft	
DRILLING METHOD(S) Hollow Stem Auger		Project Number 980003.00	
CRILLER Dart Conicals		ELEVATION AND CASIN TOTAL DEPTH 16.5 ft	
CRILL BIT(S) SIZE 6 inch		DATE STARTED 2/25/98	
BLANK CASING		DATE COMPLETED 2/25/98	
REINFORCED CASING		STATIC WATER ELEVATION	
SIZE AND TYPE OF FILTER PACK		LOGGED BY Loan Hansen	
GROUP Basaltic Type I+II		SAMPLING METHODS Split-spoon	
		WELL COMPLETION <input type="checkbox"/> SURFACE HOUSING <input type="checkbox"/> STAND PIPE	

SAMPLE NO.	SAMPLES		DEPTH (Feet)	WELL CONSTRUCTION	LOG	LITHOLOGY	COR	SAMPLE DESCRIPTION and DRILLING REMARKS
	Primary (Feet)	Secondary (Feet)						
1			14:55					Topsoil
2								
3								
4								
5	0	5					10 1/2	Silty clay - very dark smoky brown
6	.5	5					2 1/2	10 1/2 3/2 soft to firm caliche
7	.5	9						clingers medium plasticity dry to moist
8								
9								
10	.5	3					10 1/2	@ 10 color change to brown
11	.5	5					4 1/3	10 1/2 4/3 hard rootlets.
12	.5	12						
13			BE=1.0					
14								
15								
16			15:15				10 1/2	@ 15.5 color change to brown
17			TD=16.5 feet				7 1/3	10 1/2 5/3 16 5 1/2 ft with white
18								
19								
20								

Boring & Well Construction Log

ERL & KALINOWSKI, INC.

BORING LOCATION Parcel No. Hacienda 2 - Dublin Blvd Dublin CA		Boring/Well Name P-7	
DRILLING COMPANY Spectrum		Project Name Pesticide I	
DRILLING METHOD(S) Hollow Stem Auger		Project Number 980003.00	
DRILL BIT(S) SIZE 6 inch		ELEVATION AND GRADE TOTAL DEPTH 10 feet	
BLANK CASING FROM 10 FT.		DATE STARTED 2/26/98	
ISOLATED CASING FROM 10 FT.		DATE COMPLETED 2/26/98	
SIZE AND TYPE OF FILTER PACK FROM 10 FT.		STATIC WATER ELEVATION	
LOGGED BY Logan Hansen		SAMPLING METHODS Split Spoon	
GROUT Basaltite Type I and II		WELL COMPLETION <input type="checkbox"/> SURFACE HOUSING <input type="checkbox"/> STAND PIPE	

DEPTH (Feet)	WELL CONSTRUCTION	USC LOG	LITHOLOGY	CORR	SAMPLE DESCRIPTION and DRILLING REMARKS
1					gravel fill
2					Note: logged from cuttings
3					no defect
4					Clay very dark grayish brown 10YR 4/4
5	Sampler wet				dry to moist firm to hard med plasticity
6					~3-10' feet
7					Silty Clay dark yellowish brown 10YR 4/4 5-15% silt
8					fine sand, low plasticity soft wet
9					@ ~10 feet
10					Sandy clay dark bluish gray 10Y 4/1
11	TD = 10 feet				petroleum odor fine sand (25-35%) wet, low plasticity soft.
12	E:40				

Boring & Well Construction Log

DRILLING LOCATION	Parcel 16 Hacienda at Dublin Blvd Dublin CA	Boring/Well Name	RR-1
DRILLING COMPANY	Spectrum	DRILLER	Dave Gonzalez
DRILLING METHOD (S)	Hollow Stem Auger	DRILL BIT (S) SIZE	6 inch
DRILLING CASING		PROJECT NAME	DeeDee Sol I
BLANK CASING		PROJECT NUMBER	980003.00
PERFORATED CASING		ELEVATION AND DATUM	TOTAL DEPTH 7.5 feet
SIZE AND TYPE OF FILTER PACK		DATE STARTED	2/26/98
GROUND	none - hole caved to w/in 0.5 feet of grade	DATE COMPLETED	2/26/98
		STATIC WATER ELEVATION	
		LOGGED BY	Lozano
		SAMPLING METHODS	<input checked="" type="checkbox"/> Split Spoon
		WELL COMPLETION	<input type="checkbox"/> SURFACE HOUSING <input type="checkbox"/> STAND PIPE _____ FT

SAMPLES			WELL CONSTRUCTION	USED LOG	LOCATION	DATE	SAMPLE DESCRIPTION AND DRILLING REMARKS
DEPTH (Feet)	PERFORATED CASING (Feet)	BLANK CASING (Feet)					
							fill gravel to 4 feet
1							
2							
3							
4							
5							vent
6	.2	4	S= 0.2				fine dark grayish brown 10YR 3/2
7	.5	7	compaction				
8	.5	10					
9							
10							
11							
12							fine dark yellowish brown (10YR 4/4)
13							
14							0.9 fine to med sand
15							
16							
17							
18							
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98							
99							
100							

BORING LOCATION Parcel 16, Hacienda at Dublin Blvd Dublin, CA		Spring/Well Name RR-2	
DRILLING COMPANY Spectrum		DRILLER Dave Gonzalez	
DRILLING METHOD (S) Hollow Stem Auger		PROJECT NAME DesoSoft	
		PROJECT NUMBER 980003.00	
RELATION CASING	FROM 0 TO 0 FT	ELEVATION AND DATUM	
BLANK CASING	FROM 0 TO 0 FT	DATE STARTED 2/26/98	DATE COMPLETED 2/26/98
PERFORATED CASING	FROM 0 TO 0 FT	STATIC WATER ELEVATION	
SIZE AND TYPE OF FILTER PACK	FROM 0 TO 0 FT	LOGGED BY Logan Hansen	
	FROM 0 TO 0 FT	SAMPLING METHOD Split Spoon	
GROUP Basaltic Type I and II	FROM 0 TO 3 FT	WELL COMPLETION C SURFACE HOUSING D STAND PIPE _____ FT	

SAMPLES		WELL CONSTRUCTION	USCS LOG	LITHOLOGY	CORRECTION	SAMPLE DESCRIPTION AND DRILLING REMARKS
No.	Remarks (Flow, Zone, etc.)					
		10:05				gravel to 3 feet
2	5					VERY
3	6	S=0.5				fine sand 15' down
3	7					(OVR 3'±)
	4					
	5	S=0.8				
	7					
	8	TD=5ft				
	9					
	10					
						Boring cased to within 3 feet of grade.
						(A) RR-2-3.5 @ 10:10
						(B) RR-2-4 @ 10:10
						(C) RR-2-6 @ 10:17

BORING LOCATION Parcel 13 Hacienda at Dublin Blvd. Dublin CA		Spring/Well Name RR-3	
DRILLING COMPANY Spectrum		Project Name PeopleSoft	
DRILLER Dave Gonzalez		Project Number 980003.00	
DRILLING METHOD(S) Hollow Stem Auger		ELEVATION AND DATE TOTAL DEPTH 7 feet	
DRILL BIT(S) SIZE 6 inch		DATE STARTED 2/26/98	
ELEVATION CASING		DATE COMPLETED 2/26/98	
BLANK CASING		STATIC WATER ELEVATION	
PERFORATED CASING		LOGGED BY Logan Hansen	
SIZE AND TYPE OF FILTER PACK		SAMPLING METHOD(S) Split spoon	
GROUT Basalite Type I and II		WELL COMPLETION C SURFACE HOUSING C STAND PIPE	

SAMPLES			WELL CONSTRUCTION	LOG	LITHOLOGY	CASE	SAMPLE DESCRIPTION and DRILLING REMARKS
Core No.	Primary Zone (Feet)	Secondary Zone (Feet)					
			10:30				Gravel to 3 feet
			2				at 3' dollar watch in recovery from sampler - installed a sand catcher and sampled again
			3				- no recovery again
			4				drilled to 5'
			5				at 5' silty clay look yellowish brown
			6	S=0.9			
			7	S=0.4			
			8				(A) RR-3-5.5 @ 10:45
			9				(B) RR-3-8 @ 10:52
				TD=7.0			

Boring & Well Construction Log

ESLER & BELLING WELLS, INC.

BORING LOCATION Parcel 110 Hacienda at Dublin Blvd. Dublin CA		Spring/Well Name RR-4	
DRILLING COMPANY Spectrum		Project Name PeopleSoft	
DRILLING METHOD(S) Hollow Stem Auger		Project Number 980003.00	
RELATION CASING		ELEVATION AND CASING TOTAL DEPTH 5 feet	
BLANK CASING		DATE STARTED 2/26/98	
PERFORATED CASING		DATE COMPLETED 2/26/98	
SIZE AND TYPE OF FILTER PACK		STATIC WATER ELEVATION	
VALVE		LOGGED BY Logan Lighten	
GROUT Basaltite Type I + II		SAMPLING METHODS Split Spoon	
		WELL COMPLETION C SURFACE HOUSING D STAND PIPE _____ FT	

Type No.	SAMPLES		Depth (Feet)	WELL CONSTRUCTION			Log	Lagging	Casing	SAMPLE DESCRIPTION AND DRILLING REMARKS
	Quantity (Feet)	Pressure (PSI)		Drill Bit (Size)	Drill Bit (Size)	Drill Bit (Size)				
			11:30							Travel to 3-22+
			1							
			2							
	2	7	3							very
	2	7	4							Clay like silty brown (10/12 3/2)
A	X	5	17							
			12							is silty clay with wet
			4)							into yellowish brown 10/12 4/4
B	X		8		S=0.8					
			7							is silty sand & - in grain
			8							loose wet
			9							
										(A) RR-4-4 @ 11:40
										(B) RR-4-6 @ 11:48

Boring & Well Construction Log

ENTER IN ALL SPACES, INC.

BORING LOCATION Parcel 16 Hacienda at Dublin Blvd Dublin CA			Boring/Well Name RR-5		
DRILLING COMPANY Spectrum			Project Name People Soft		
DRILLER Lore Gonzalez			Project Number 980003.00		
DRILLING METHOD (S) Hollow Stem Auger			CRILL BIT (S) SIZE 6 inch		
RELATION CASING			ELEVATION AND DATUM TOTAL DEPTH 5 feet		
BLANK CASING			DATE STARTED 2/26/98		
TEMPERATED CASING			DATE COMPLETED 2/26/98		
SIZE AND TYPE OF FILTER PACK			STATIC WATER ELEVATION		
LOGGED BY Loren Hansen			SAMPLING METHOD Split Spoon		
SOIL Basaltite Type I + II			WELL COMPLETION C SURFACE HOUSING D STAND PIPE		

TIME	SAMPLES		WELL CONSTRUCTION	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
	Feet	Feet					
			12:00				brill to 3 feet
							2B5
							Clay - dark grayish brown
	3	4					
	5	2					
	5	5	S=0.8				
		4					
		6	S=0.6				(A) RR-5-3.5 @ 12:07
		9	TD=5 feet				(B) RR-5-6 @ 12:15
			12:12				



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588-5127

PHONE (510) 484-2600 FAX (510) 462-3914

February 17, 1998

Mr. Paul Hoffey
Erler & Kalinowski, Inc.
1730 S. Amphlett Blvd., Ste. 320
San Mateo, CA 94402

Dear Mr. Hoffey:

Enclosed is drilling permit 98019 for a contamination investigation at Interstate 580 and Hacienda Drive in Dublin for Nicholas L. Sica, Inc.

Please note that permit condition A-2 requires that a drilling report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, and permit number. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact Wyman Hong at extension 235 or me at extension 240.

Very truly yours,

Craig A. Mayfield
Water Resources Engineer III

CAM:WH:arr
Enc.



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600

FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Northwest corner of
Intersection of I-580 and
Hacienda Blvd, Dublin, CA (vacant
property)

PERMIT NUMBER 98019

LOCATION NUMBER _____

CLIENT

Name Nicholas L. Sica, Inc.
Address 330 Town + Country Voice (650) 324-5313
Palo Alto, CA 94301 Zip _____

**SEE ATTACHED
MAP**

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT

Name Erler + Kalinowski, Inc. Fax 650 578-9131
Address 1730 S. Amphlett Voice 650 578-1172
San Mateo Zip 94402

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT

Well Construction	_____	Geotechnical Investigation	_____
Cathodic Protection	_____	General	_____
Water Supply	_____	Contamination	<u>X</u>
Monitoring	_____	Well Destruction	_____

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE

Domestic _____ Industrial _____ Other N/A
Municipal _____ Irrigation _____

C. GEOTECHNICAL

Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:

Mud Rotary _____ Air Rotary _____ Auger X
Cable _____ Other _____

D. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO.

512268

E. WELL DESTRUCTION

See attached.

WELL PROJECTS

N/A
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number _____

7 soil borings to 25' bgs max.
8 soil borings to 5' bgs max.
No wells

GEOTECHNICAL PROJECTS

N/A
Number of Borings _____ Maximum _____
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE

25 Feb '98

ESTIMATED COMPLETION DATE

26 Feb '98

Approved

Wyman Hong
Wyman Hong

Date 17 Feb 98

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S

SIGNATURE Paul B. Hoffer Date 17 Feb. 1998

APPENDIX D

**COPIES OF ANALYTICAL LABORATORY DATA SHEETS
FOR SOIL AND GROUNDWATER SAMPLES COLLECTED
25 - 27 FEBRUARY 1998**



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

Client Proj. ID: 980003.00/PeopleSoft
Lab Proj. ID: 9802164

Sampled: 02/26/98
Received: 02/26/98
Analyzed: see below

Attention: Paul Hoffey

Reported: 03/12/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
---------	-------	---------------	-----------------	----------------

Lab No: 9802164-01
Sample Desc: **SOLID,RR-1-4.5**

Arsenic by ICP/MS	ug/kg	03/06/98	75	4000
Cadmium by ICP/MS	ug/kg	03/06/98	5.0	170
Chromium by ICP/MS	ug/kg	03/06/98	50	32000
Copper by ICP/MS	ug/kg	03/06/98	130	28000
Lead by ICP/MS	ug/kg	03/06/98	75	6300
Nickel by ICP/MS	ug/kg	03/06/98	130	34000
Zinc by ICP/MS	ug/kg	03/06/98	100	52000

Lab No: 9802164-02
Sample Desc: **SOLID,RR-2-(3.5-4)comp**

Arsenic by ICP/MS	ug/kg	03/06/98	75	4200
Cadmium by ICP/MS	ug/kg	03/06/98	5.0	87
Chromium by ICP/MS	ug/kg	03/06/98	50	31000
Copper by ICP/MS	ug/kg	03/06/98	130	26000
Lead by ICP/MS	ug/kg	03/06/98	75	7200
Nickel by ICP/MS	ug/kg	03/06/98	130	33000
Zinc by ICP/MS	ug/kg	03/06/98	100	47000

Lab No: 9802164-03
Sample Desc: **SOLID,RR-3-5.5**

Arsenic by ICP/MS	ug/kg	03/06/98	75	3400
Cadmium by ICP/MS	ug/kg	03/06/98	5.0	90
Chromium by ICP/MS	ug/kg	03/06/98	50	25000
Copper by ICP/MS	ug/kg	03/06/98	130	20000
Lead by ICP/MS	ug/kg	03/06/98	75	6000
Nickel by ICP/MS	ug/kg	03/06/98	130	30000
Zinc by ICP/MS	ug/kg	03/06/98	100	39000

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft

Sampled: 02/26/98

Lab Proj. ID: 9802164

Received: 02/26/98

Analyzed: see below

Attention: Paul Hoeffy

Reported: 03/12/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9802164-04 Sample Desc : SOLID,RR-4-4				
Arsenic by ICP/MS	ug/kg	03/06/98	75	15000
Cadmium by ICP/MS	ug/kg	03/06/98	5.0	83
Chromium by ICP/MS	ug/kg	03/06/98	50	27000
Copper by ICP/MS	ug/kg	03/06/98	130	37000
Lead by ICP/MS	ug/kg	03/06/98	75	7200
Nickel by ICP/MS	ug/kg	03/06/98	130	33000
Zinc by ICP/MS	ug/kg	03/06/98	100	54000

Lab No: 9802164-05 Sample Desc : SOLID,RR-5-3.5				
Arsenic by ICP/MS	ug/kg	03/06/98	75	3400
Cadmium by ICP/MS	ug/kg	03/06/98	5.0	91
Chromium by ICP/MS	ug/kg	03/06/98	50	27000
Copper by ICP/MS	ug/kg	03/06/98	130	22000
Lead by ICP/MS	ug/kg	03/06/98	75	7000
Nickel by ICP/MS	ug/kg	03/06/98	130	34000
Zinc by ICP/MS	ug/kg	03/06/98	100	44000

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

SEQUOIA ANALYTICAL - ELAP #1210

[Signature]
Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Lab Proj. ID: 9802164	Sampled: Received: 02/26/98 Analyzed: see below Reported: 03/12/98
Attention: Paul Hoeffy		

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9802164-06				
Sample Desc : SOLID,Method Blank				
Arsenic by ICP/MS	ug/kg	03/06/98	15	N.D.
Cadmium by ICP/MS	ug/kg	03/06/98	2.0	N.D.
Chromium by ICP/MS	ug/kg	03/06/98	10	960
Copper by ICP/MS	ug/kg	03/06/98	25	130
Lead by ICP/MS	ug/kg	03/06/98	15	23
Nickel by ICP/MS	ug/kg	03/06/98	25	200
Zinc by ICP/MS	ug/kg	03/06/98	20	1000

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: RR-1-4.5
Matrix: SOLID
Analysis Method: EPA 8150
Lab Number: 9802164-01

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/03/98
Analyzed: 03/09/98
Reported: 03/12/98

GC Batch Number: GC0303988150EXA
Instrument ID: GCPE05

Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
4-D	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Alapron	40	N.D.
Dicamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
MCPA	20000	N.D.
MCPP	20000	N.D.
Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-1-4.5 Matrix: SOLID Analysis Method: EPA 8015 Mod Lab Number: 9802164-01	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/05/98 Reported: 03/12/98
Attention: Paul Hoffey		

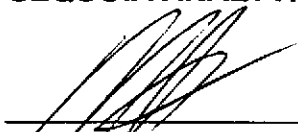
QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: RR-2-(3.5-4)comp
Matrix: SOLID
Analysis Method: EPA 8150
Lab Number: 9802164-02

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/03/98
Analyzed: 03/09/98
Reported: 03/12/98


QC Batch Number: GC0303988150EXA
Instrument ID: GCPE05

Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,4-D	40	N.D.
2,4-DB	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Dalapon	40	N.D.
Dicamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
MCPA	20000	N.D.
MCPP	20000	N.D.
Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	92

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-2-(3.5-4)comp Matrix: SOLID Analysis Method: EPA 8015 Mod Lab Number: 9802164-02	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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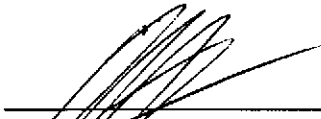
QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	102

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: RR-3-5.5
Matrix: SOLID
Analysis Method: EPA 8150
Lab Number: 9802164-03

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/03/98
Analyzed: 03/06/98
Reported: 03/12/98

GC Batch Number: GC0303988150EXA
Instrument ID: GCPE05

Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
4-D	40	N.D.
4-DB	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Alaapon	40	N.D.
Alcamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
ICPA	20000	N.D.
ICPP	20000	N.D.

Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-3-5.5 Matrix: SOLID Analysis Method: EPA 8015 Mod Lab Number: 9802164-03	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	86

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

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-4-4 Matrix: SOLID Analysis Method: EPA 8150 Lab Number: 9802164-04	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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GC Batch Number: GC0303988150EXA
Instrument ID: GCPE05

Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
4-D	40	N.D.
4-DB	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Alaopon	40	N.D.
Alcamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
DCPA	20000	N.D.
DCPP	20000	N.D.

Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	91

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-4-4 Matrix: SOLID Analysis Method: EPA 8015 Mod Lab Number: 9802164-04	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern: Unidentified HC	1.0	2.9 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 81

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Eriar & Kalinowski, Inc.
730 South Amphlett, Ste 320
San Mateo, CA 94402

Client Proj. ID: 980003.00/PeopleSoft
Sample Description: RR-5-3.5
Matrix: SOLID
Analysis Method: EPA 8150
Lab Number: 9802164-05

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/03/98
Analyzed: 03/06/98
Reported: 03/12/98

Attention: Paul Hoffey

GC Batch Number: GC0303988150EXA
Instrument ID: GCPE05

Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
4-D	40	N.D.
4-DB	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Alaopon	40	N.D.
Alcamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
CPA	20000	N.D.
CPP	20000	N.D.
Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: RR-5-3.5 Matrix: SOLID Analysis Method: EPA 8015 Mod Lab Number: 9802164-05	Sampled: 02/26/98 Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern: Unidentified HC	1.0	6.6
		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	98

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

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: Method Blank Matrix: SOLID Analysis Method: EPA 8150 Lab Number: 9802164-06	Sampled: Received: 02/26/98 Extracted: 03/03/98 Analyzed: 03/09/98 Reported: 03/12/98
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C Batch Number: GC0303988150EXA
Instrument ID: GCPE05

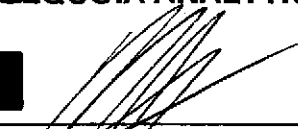
Chlorinated Herbicides (EPA 8150)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,4-D	40	N.D.
2,4-DB	40	N.D.
2,4,5-T	40	N.D.
2,4,5-TP (Silvex)	40	N.D.
Dalapon	40	N.D.
Dicamba	40	N.D.
Dichloroprop	40	N.D.
Dinoseb	40	N.D.
MCPA	20000	N.D.
MCP	20000	N.D.

Surrogates	Control Limits %	% Recovery
Dichlorophenylacetic acid	30 150	90

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: Method Blank
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9802164-06

Sampled:
Received: 02/26/98
Extracted: 03/03/98
Analyzed: 03/05/98
Reported: 03/12/98

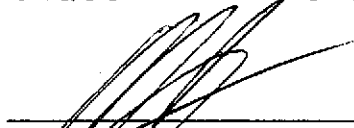
QC Batch Number: GC0303980HBPEXA
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft

Received: 02/26/98

Lab Proj. ID: 9802164

Reported: 03/12/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 26 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregery
Project Manager



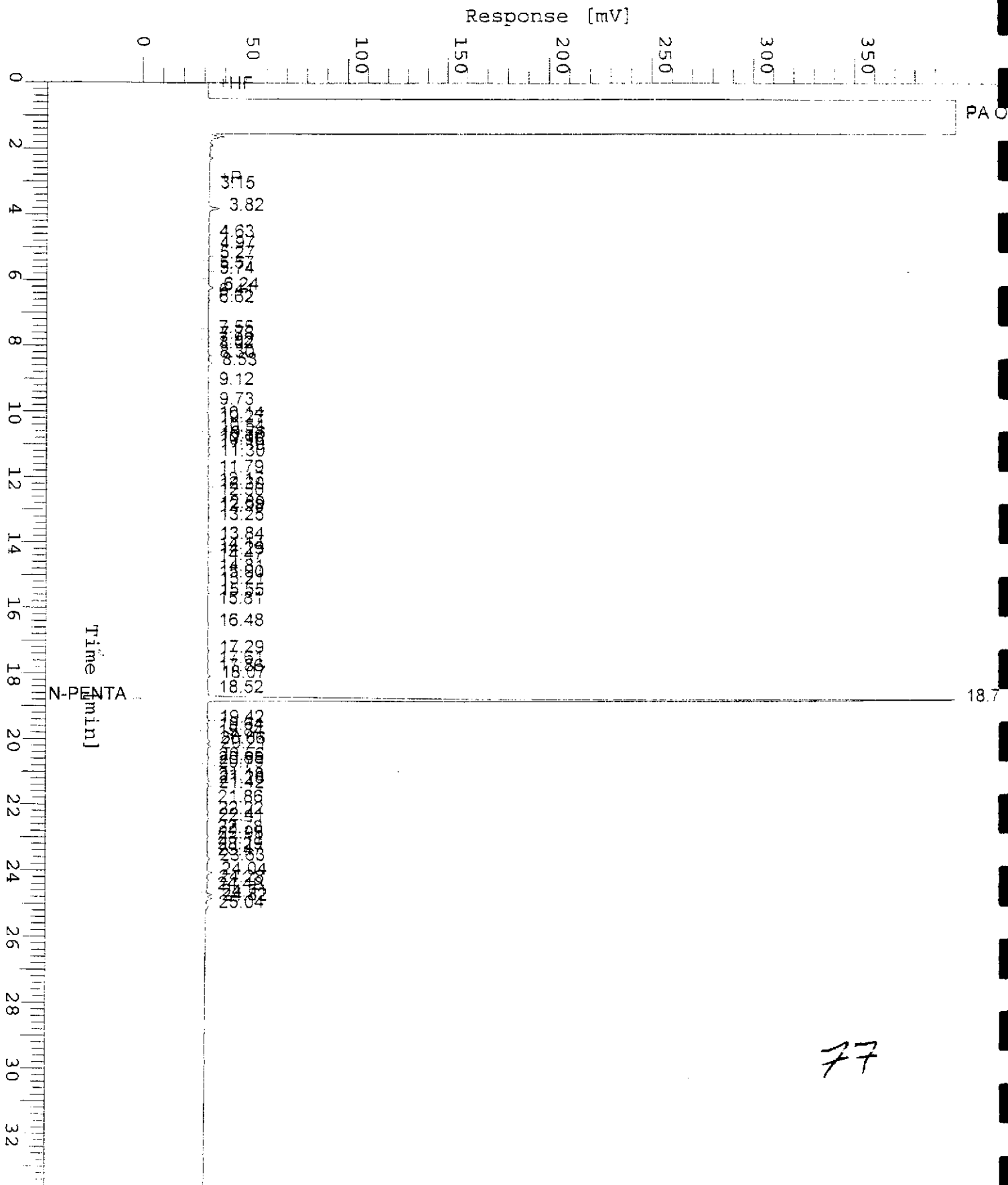
Chromatogram

Sample Name : DS9802I64-1 (20:1) SG
FileName : S:\GHP_19\0308\304A029.raw
Method : TPH19A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: RR-1-4.5
Date : 3/5/98 17:57
Time of Injection: 3/5/98 17:23
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Page 1 of 1



Chromatogram

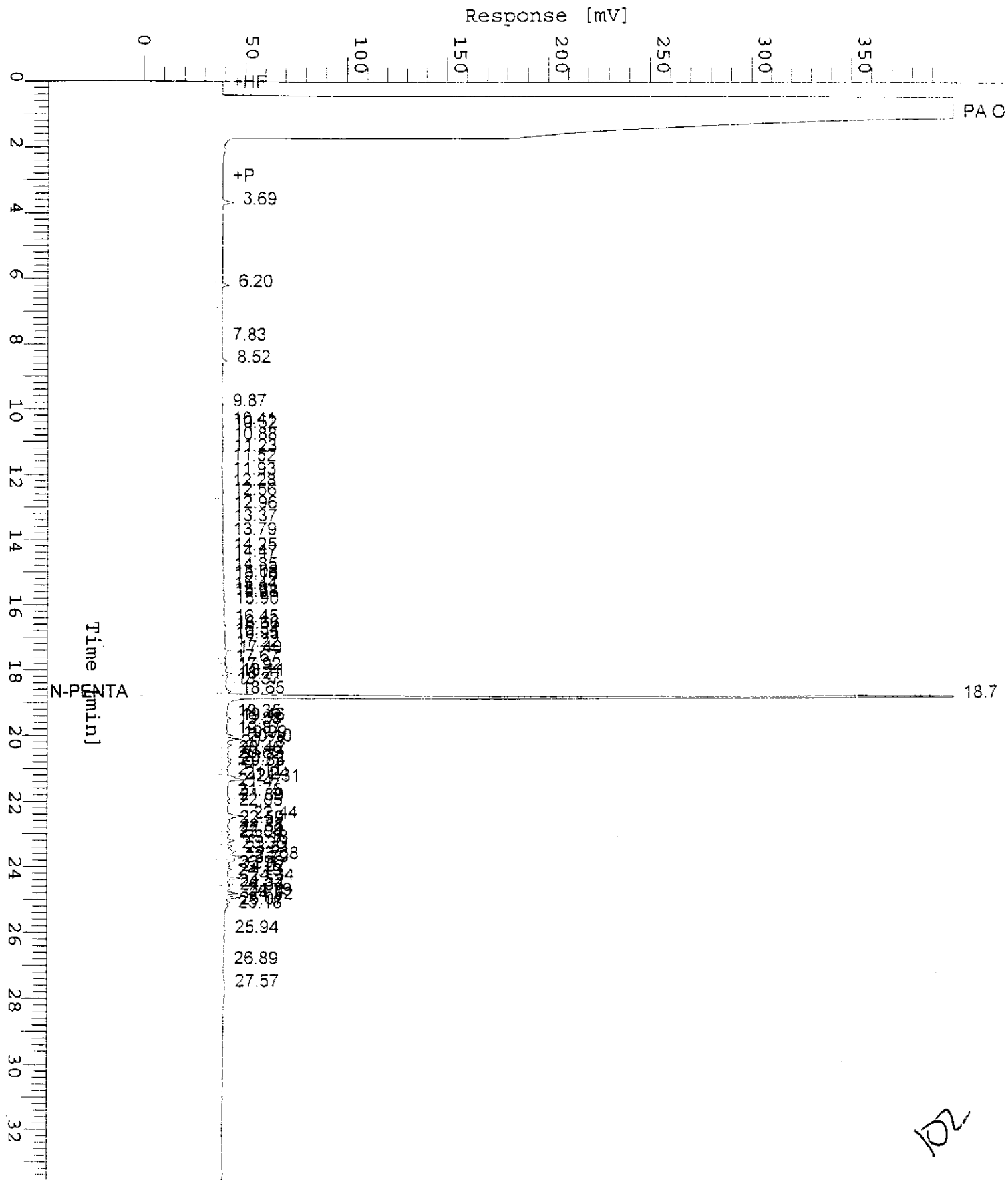
Sample Name : DS9802I64-2 (20:1) SG RS1
File Name : S:\GHP_04\0315\309A010.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 33.65 min
Plot Offset : 0 mV

Sample #: RR-2-3.5-4
Date : 3/9/98 16:52
Time of Injection: 3/9/98 16:19
Low Point : 0.00 mV
Plot Scale : 400.0 mV

Page 1 of 1

High Point : 400.00 mV



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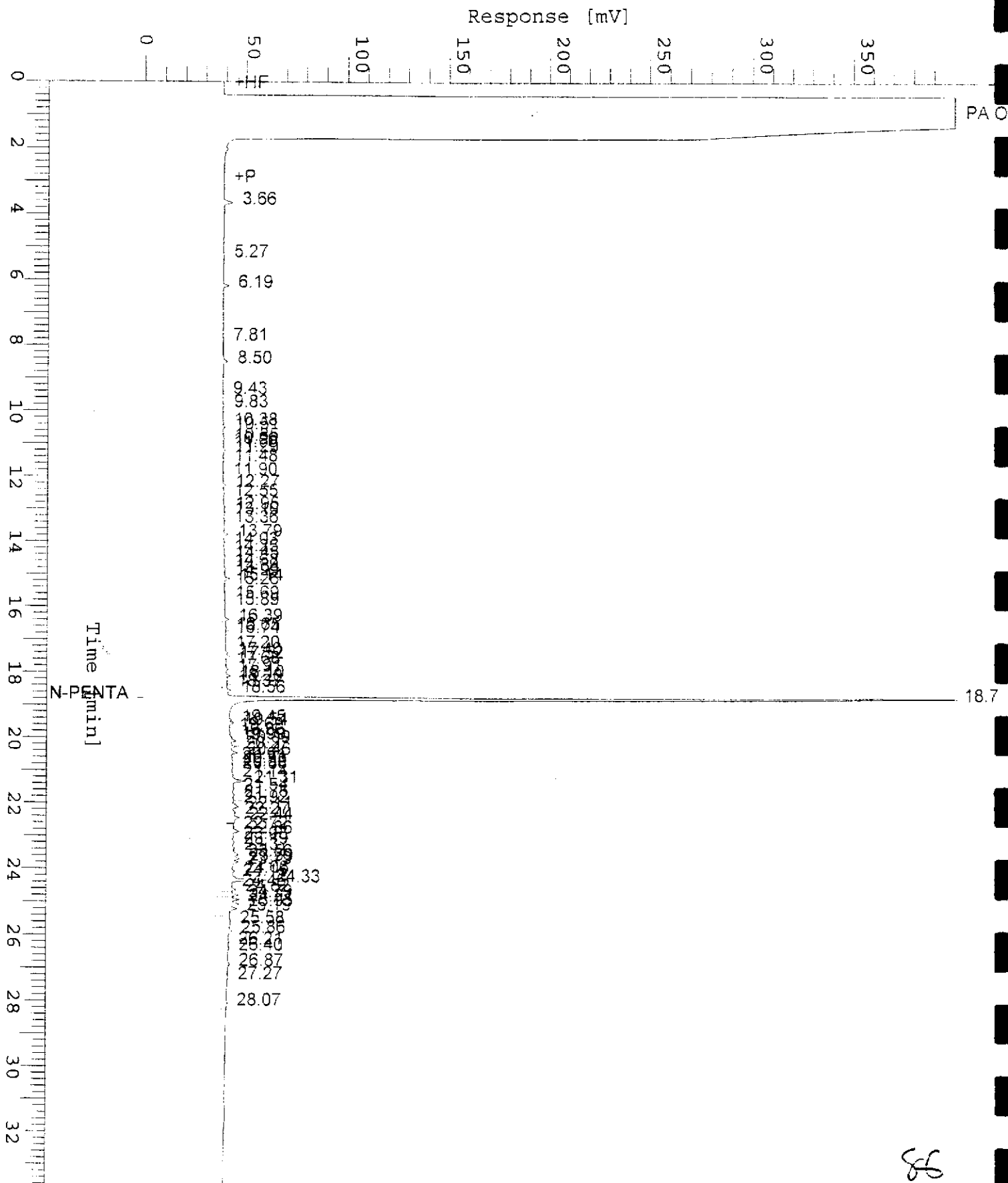
Chromatogram

Sample Name : DS9802I64-3 (20:1) SG
FileName : S:\GHP_04\0315\309A011.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: RR-3-5.5
Date : 3/9/98 17:33
Time of Injection: 3/9/98 16:59
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Page 1 of 1



Chromatogram

Sample Name : DS9802I64-4 (20:1) SG RS1

Sample #: RR-4-4

Page 1 of 1

FileName : S:\GHP_04\0315\309A012.raw

Date : 3/9/98 18:14

Method : TPH04A

Time of Injection: 3/9/98 17:40

Start Time : 0.00 min

End Time : 33.65 min

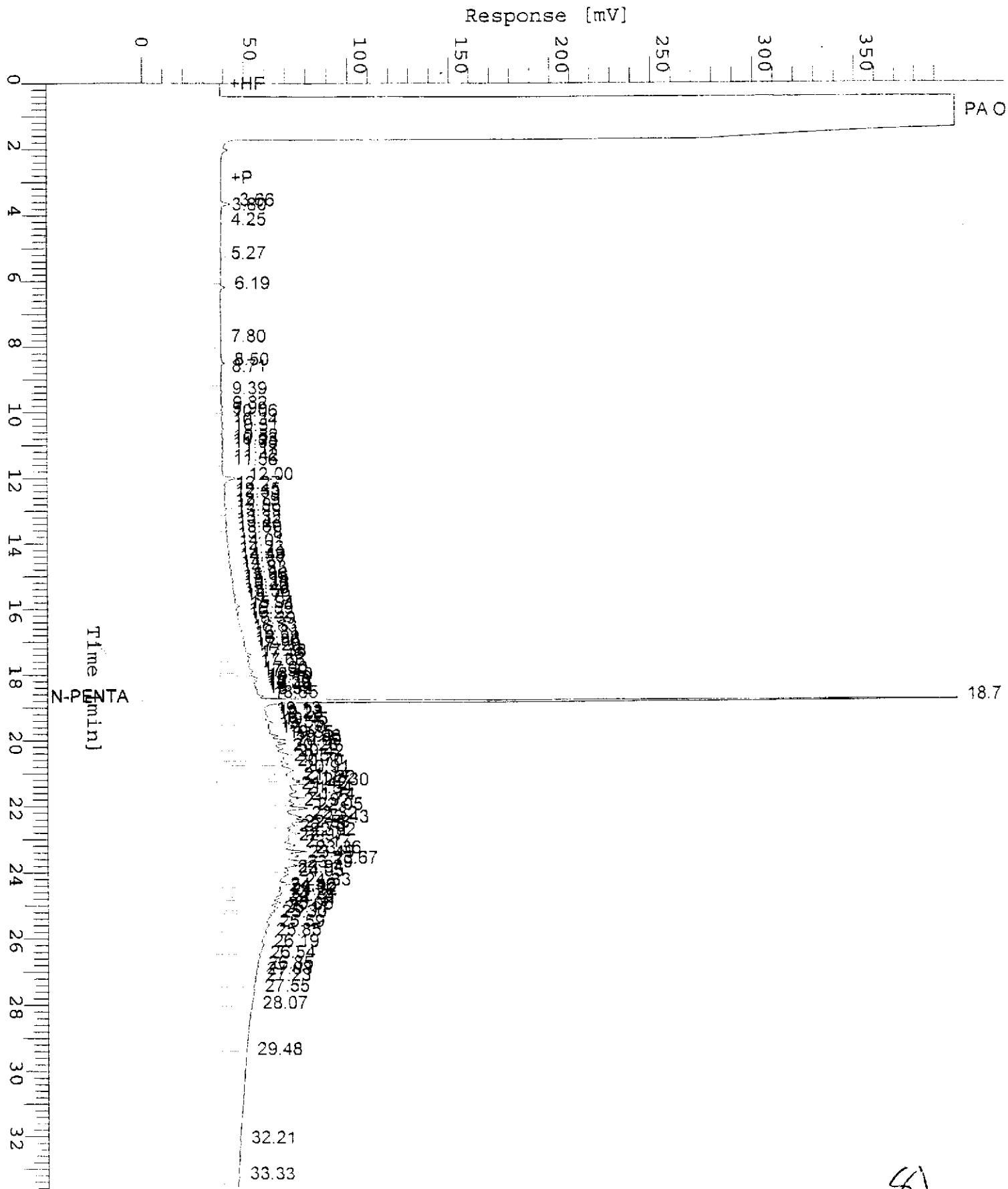
Low Point : 0.00 mV

High Point : 400.00 mV

Scale Factor: 0.0

Plot Offset: 0 mV

Plot Scale: 400.0 mV



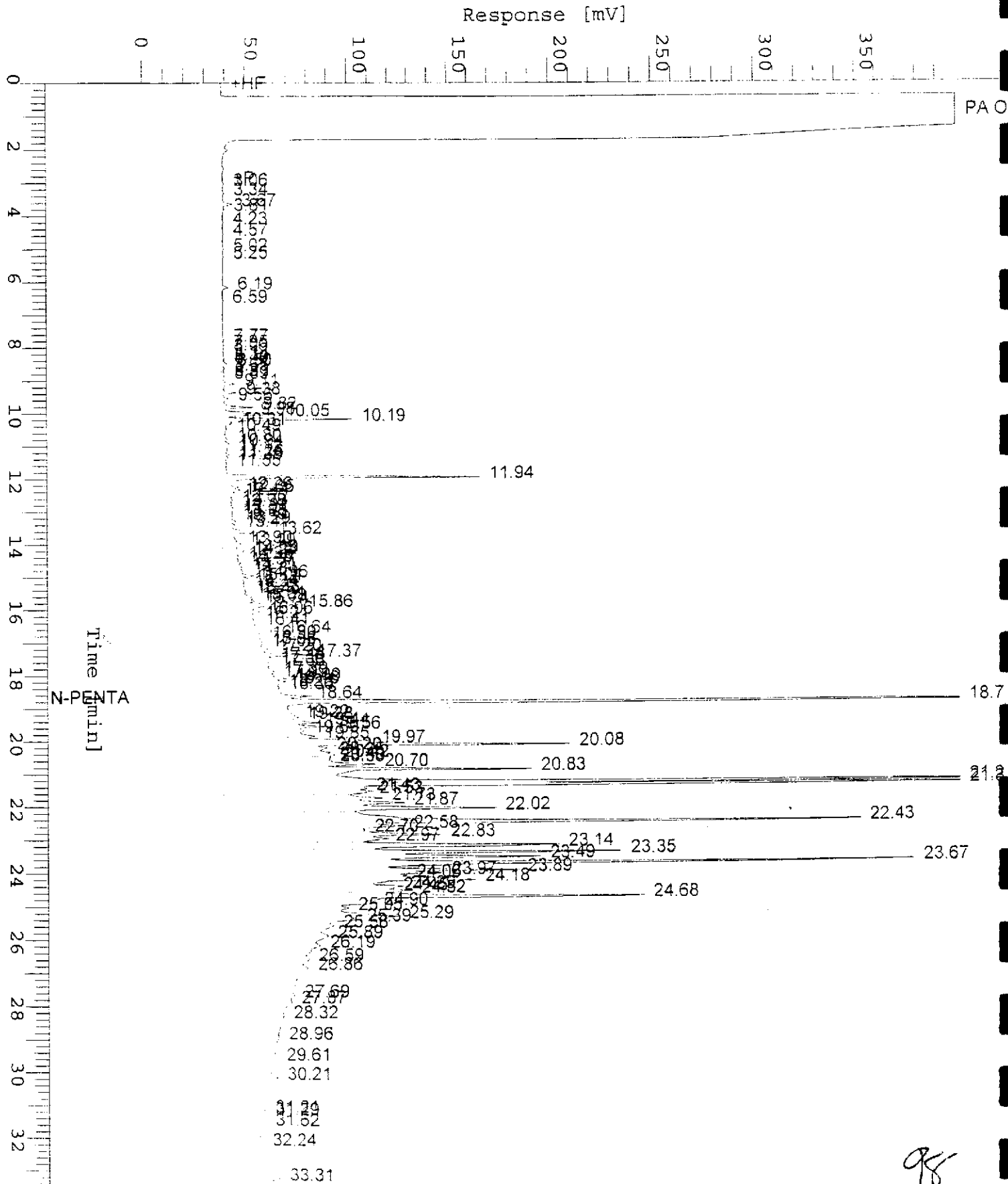
61

Chromatogram

Sample Name : DS9802I64-5 (20:1) SG RSI
FileName : S:\GHP_04\0315\309A013.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: RR-5-3.5
Date : 3/9/98 18:55
Time of Injection: 3/9/98 18:21
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



98



Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Project ID: 980003.00/PeopleSoft Matrix: SOLID Sample Descript.: RR-1-4.5 Work Order #: 9802164 -01-06	Reported: Mar 25, 1998
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QUALITY CONTROL DATA REPORT

Analyte:	2,4-D	2,4,5-TP	2,4,5-T
QC Batch#:	GC0303988150EXA	GC0303988150EXA	GC0303988150EXA
Analy. Method:	EPA 8150	EPA 8150	EPA 8150
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	B. Sullivan	B. Sullivan	B. Sullivan
MS/MSD #:	9802164-01-MSD	9802164-01-MSD	9802164-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	03/03/98	03/03/98	03/03/98
Analyzed Date:	03/06/98	03/06/98	03/06/98
Instrument I.D.#:	PE5	PE5	PE5
Conc. Spiked:	83 µg/Kg	83 µg/Kg	83 µg/Kg
Result:	69	72	130
MS % Recovery:	83	87	157
Dup. Result:	76	76	130
MSD % Recov.:	92	92	157
RPD:	9.7	5.4	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:	LCS030398-LCS	LCS030398-LCS	LCS030398-LCS
Prepared Date:	03/03/98	03/03/98	03/03/98
Analyzed Date:	03/06/98	03/06/98	03/06/98
Instrument I.D.#:	PE5	PE5	PE5
Conc. Spiked:	83 µg/Kg	83 µg/Kg	83 µg/Kg
LCS Result:	64	71	110
LCS % Recov.:	77	86	133

MS/MSD	30-150	30-150	30-150
LCS	30-150	30-150	30-150
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.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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

9802164.ERL <1>





Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Project ID: 980003.00/PeopleSoft Matrix: SOLID Sample Descript.: RR-1-4.5 Work Order #: 9802164-01-06	Reported: Mar 25, 1998
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QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0303980HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 3550

Analyst: A. Porter
MS/MSD #: 9802164-01-MSD
Sample Conc.: N.D.
Prepared Date: 03/03/98
Analyzed Date: 03/05/98
Instrument I.D.#: GCHP19
Conc. Spiked: 25 mg/Kg

Result: 18
MS % Recovery: 72

Dup. Result: 19
MSD % Recov.: 76

RPD: 5.4
RPD Limit: 0-50

LCS #: LCS030398-LCS

Prepared Date: 03/03/98
Analyzed Date: 03/05/98
Instrument I.D.#: GCHP19
Conc. Spiked: 25 mg/Kg

LCS Result: 21
LCS % Recov.: 84

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

[Signature]
Mike Gregory
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

9802164.ERL <2>





Erler & Kalinowski, Inc. Client Project ID: 980003.00/PeopleSoft
 1730 So. Amphlett Blvd., Suite 320 Matrix: SOLID
 San Mateo, CA 94402 Sample Descript.: RR-1-4.5
 Attention: Paul Hoeffy Work Order #: 9802164-01-06 Reported: Mar 25, 1998

QUALITY CONTROL DATA REPORT (ICP/MS)

Analyte:	Arsenic	Selenium	Lead	Thallium
QC Batch#:	ME0305982008MDE	ME0305982008MDE	ME0305982008MDE	ME0305982008MDE
Analy. Method:	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8
Prep. Method:	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8

Analyst:	R. Butler	R. Butler	R. Butler	R. Butler
MS/MSD #:	9802164-01-MSD	9802164-01-MSD	9802164-01-MSD	9802164-01-MSD
Sample Conc.:	4000	N.D.	6300	170
Prepared Date:	03/05/98	03/05/98	03/05/98	03/05/98
Analyzed Date:	03/06/98	03/06/98	03/06/98	03/06/98
Instrument I.D.#:	MPE5	MPE5	MPE5	MPE5
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
Result:	6200	1500	9300	2400
MS % Recovery:	88	60	120	89
Dup. Result:	5300	1000	9000	2400
MSD % Recov.:	52	40	108	89
RPD:	16	40	3.3	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	LCS030998-LCS	LCS030998-LCS	LCS030998-LCS	LCS030998-LCS
Prepared Date:	03/05/98	03/05/98	03/05/98	03/05/98
Analyzed Date:	03/06/98	03/06/98	03/06/98	03/06/98
Instrument I.D.#:	MPE5	MPE5	MPE5	MPE5
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
LCS Result:	2200	2200	2300	2300
LCS % Recov.:	88	88	92	92

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

SEQUOIA ANALYTICAL

Mike Gregory
 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

9802164.ERL <3>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.
 Project Number: EKI 980003.00
 Project Name: PeopleSoft
 Source of Samples: Shallow Soil Borings
 Location: Dublin, CA

Page 2 of 4

Analytical Laboratory: Sequoia Analytical
 Date Sampled: 2/26/98
 Sampled By: Logan Hansen
 Report Results To: Paul Hoeffy, EKI
 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	RR-1-4.5	Soil	One 6-inch liner	9:40	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
2	RR-2-3.5 *	Soil	One 6-inch liner (half full)	10:10	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
3	RR-3-5.5	Soil	One 6-inch liner	10:45	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
4	RR-4-4	Soil	One 6-inch liner	11:40	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
5	RR-5-3.5	Soil	One 6-inch liner	12:07	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard

Special Instructions: * Please composite these samples for analysis RR-2-3.5 and RR-2-4 (on page 3).

Relinquished By:		Received By:	
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation
Logan Hansen / <i>Logan Hansen</i> / EKI	2/26/98	5:25	
	2-26-98	15X	M. Salan / 1.5 / 500

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

9802164

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 3 of 4

Date Sampled: 2/26/98

Project Name: PeopleSoft

Sampled By: Logan Hansen

Source of Samples: Shallow Soil Borings

Report Results To: Paul Hoeffy, EKI

Location: Dublin, CA

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)
	RR-2	Soil	One 6-inch liner		(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
6	RR-2-4	Soil	One 6-inch liner (half full)	10:10	(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Arsenic and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
	RR-2	Soil	One 6-inch liner		(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
	RR-2	Soil	One 6-inch liner		(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
	RR-2	Soil	One 6-inch liner		(1) EPA 8150 and (2) ICPMS Metals: Cadmium, Chromium, Copper, Lead, Nickel, Zinc and (3) EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard

Special Instructions: * Please composite this sample w/ RR-2-3.5 for analysis (see page 2)

Relinquished By:		Received By:	
Name / Signature / Affiliation	Date Time	Name / Signature / Affiliation	Date Time
Logan Hansen / <i>Logan Hansen</i> / EKI	2/26/98 15:25		
	2/26/98 15:25	M. Santos / <i>M. Santos</i> / S&L	



COPY

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-01

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft
Sample Descript: P-1
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-01

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
2,3-Trichlorobenzene	2.0	N.D.
2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
2,4-Trimethylbenzene	2.0	N.D.
3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-01	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
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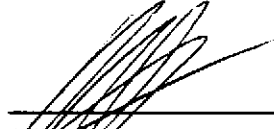
QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	120 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50	% Recovery 80

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-2
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-02

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

C Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft Sample Descript: P-2 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-02	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	106
Toluene-d8	88 110	100
4-Bromofluorobenzene	86 115	90

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-02

Sampled: 02/25/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/06/98
Reported: 03/11/98

GC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	50 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50	150
		78

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: ~~P-3~~
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-03

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

Attention: Paul Hoeffy

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft
Sample Description: 3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-03

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Dichloroethylene	2.0	N.D.
Dichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	104
Toluene-d8	88 110	101
Bromofluorobenzene	86 115	92

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-03	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
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QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-04

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Stylybenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
o-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

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404 N. Wiget Lane
819 Striker Avenue, Suite 8

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft Sample Descript: P-4 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-04	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
---	--	---

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	100
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	4.2
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	105
Toluene-d8	88 110	101
4-Bromofluorobenzene	86 115	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-04

Sampled: 02/25/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/06/98
Reported: 03/11/98

Attention: Paul Hoeffy

Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-5 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-06	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-06

Sampled: 02/25/98
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

Attention: Paul Hoeffy

Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Dichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-5
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-06

Sampled: 02/25/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/09/98
Reported: 03/11/98

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-6
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-05

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

GC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Stylybenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
o-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



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Walnut Creek, CA 94598
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(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft Sample Descript: P-6 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-05	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
---	--	---

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	6.6

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-05

Sampled: 02/25/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/07/98
Reported: 03/11/98

GC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



COPY

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802139-01

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/09/98
Reported: 03/11/98

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	5000	120000
Chromatogram Pattern: Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Description: P-7
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802139-01

Sampled: 02/26/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

C Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	40	N.D.
Bromobenzene	40	N.D.
Bromochloromethane	40	N.D.
Bromodichloromethane	40	N.D.
Bromoform	40	N.D.
Bromomethane	40	N.D.
n-Butylbenzene	40	N.D.
sec-Butylbenzene	40	N.D.
tert-Butylbenzene	40	N.D.
Carbon tetrachloride	40	N.D.
Chloroethane	40	N.D.
Chloroform	40	N.D.
Chloromethane	40	N.D.
2-Chlorotoluene	40	N.D.
4-Chlorotoluene	40	N.D.
Dibromochloromethane	40	N.D.
1,2-Dibromoethane	40	N.D.
Dibromomethane	40	N.D.
1,2-Dibromo-3-chloropropane	100	N.D.
1,2-Dichlorobenzene	40	N.D.
1,3-Dichlorobenzene	40	N.D.
1,4-Dichlorobenzene	40	N.D.
Dichlorodifluoromethane	40	N.D.
1,1-Dichloroethane	40	N.D.
1,2-Dichloroethane	40	N.D.
1,1-Dichloroethylene	40	N.D.
cis-1,2-Dichloroethylene	40	N.D.
trans-1,2-Dichloroethylene	40	N.D.
Monochlorobenzene	40	N.D.
1,2-Dichloropropane	40	N.D.
1,3-Dichloropropane	40	N.D.
2,2-Dichloropropane	40	N.D.
1,1-Dichloropropene	40	N.D.
Ethylbenzene	40	N.D.
Hexachlorobutadiene	40	N.D.
Isopropylbenzene	40	N.D.
o-Isopropyltoluene	40	N.D.
Methylene chloride	100	N.D.
Naphthalene	40	N.D.





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-7 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802139-01	Sampled: 02/26/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
Attention: Paul Hoeffy		

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	40	N.D.
Styrene	40	N.D.
1,1,1,2-Tetrachloroethane	40	N.D.
1,1,2,2-Tetrachloroethane	40	N.D.
Tetrachloroethylene	40	N.D.
Toluene	40	N.D.
1,2,3-Trichlorobenzene	40	N.D.
1,2,4-Trichlorobenzene	40	N.D.
1,1,1-Trichloroethane	40	N.D.
1,1,2-Trichloroethane	40	N.D.
Trichloroethylene	40	N.D.
Trichlorofluoromethane	40	N.D.
1,2,3-Trichloropropane	40	N.D.
1,2,4-Trimethylbenzene	40	N.D.
1,3,5-Trimethylbenzene	40	N.D.
Vinyl chloride	40	N.D.
Total Xylenes	40	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	107
Toluene-d8	88 110	99
4-Bromofluorobenzene	86 115	94

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-07

Sampled:
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

GC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
o-Xylylene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
o-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
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FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-07

Sampled:
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A

Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	98
Toluene-d8	88 110	101
4-Bromofluorobenzene	86 115	91

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Erlar & Kalinowski, Inc.
30 South Amphlett, Ste 320
San Mateo, CA 94402

Attention: Paul Hoeffy

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-07

Sampled:
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/06/98
Reported: 03/11/98

Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



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

Client Proj. ID: 980003.00/PeopleSoft
Lab Proj. ID: 9802H52

Received: 02/26/98
Reported: 03/11/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 26 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

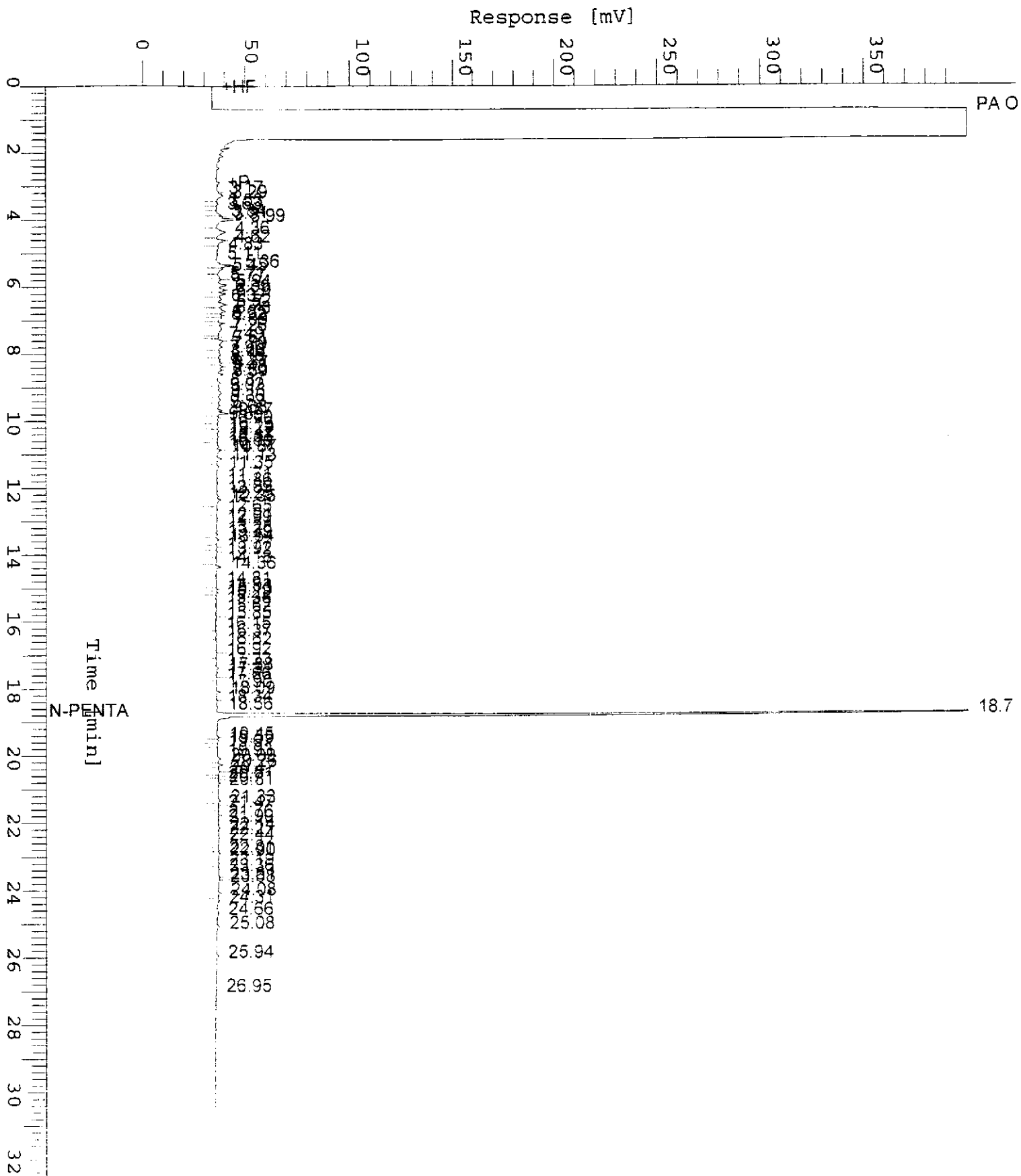


Chromatogram

Sample Name : DW9802H52-1 (500:1) SG
FileName : S:\GHP_05\0308\306A021.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: P-1
Date : 3/11/98 14:34
Time of Injection: 3/6/98 21:29
Low Point : 0.00 mV
Plot Scale: 400.0 mV

Page 1 of 1



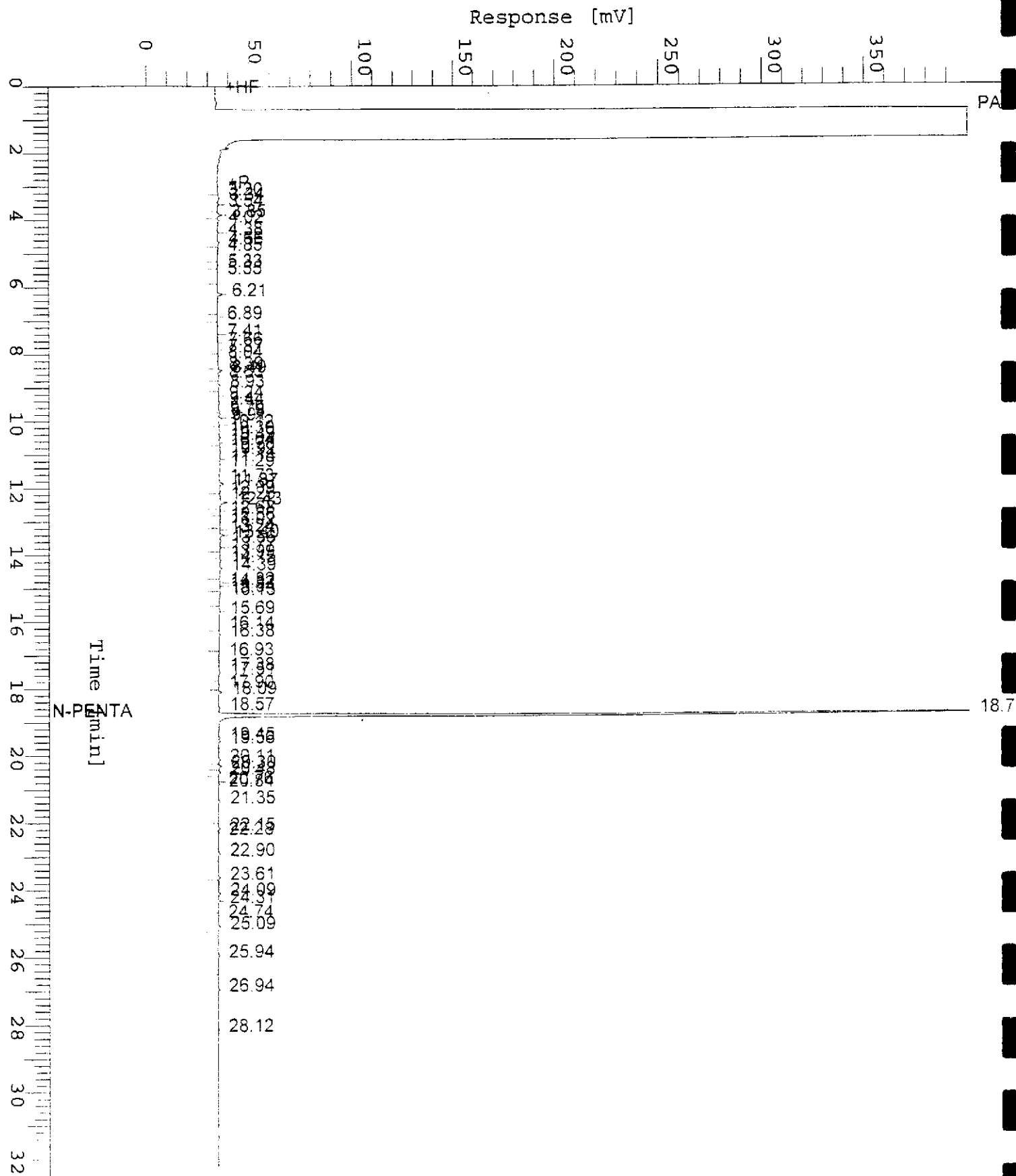
Chromatogram

Sample Name : DW9802H52-2 (500:1) SG
 FileName : S:\GHP_05\0308\306A022.raw
 Method : TPH05A
 Start Time : 0.00 min
 Scale Factor: 0.0

End Time : 33.65 min
 Plot Offset: 0 mV

Page 1 of 1

Sample #: P-2
 Date : 3/11/98 14:34
 Time of Injection: 3/6/98 22:10
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV
 High Point : 400.00 mV





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Project ID: 980003.00/PeopleSoft
Matrix: LIQUID
Sample Descript.: P-7
Work Order #: 9802H52 -01-07

Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0305980HBPEXD
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: G. Fish
MS/MSD #: 9802139-01-MSD
Sample Conc.: 120000*
Prepared Date: 03/05/98
Analyzed Date: 03/09/98
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 120000*
MS % Recovery: 0.0

Dup. Result: 440000*
MSD % Recov.: 32000

RPD: 114*
RPD Limit: 0-50

*MS/MSD diluted due to matrix interference

LCS #: LCS030598-LCS

Prepared Date: 03/05/98
Analyzed Date: 03/06/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

9802H52.ERL <1>



Erler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Project ID: 980003.00/PeopleSoft Matrix: LIQUID Sample Descript.: P-1 Work Order #: 9802H52-01-07	Reported: Mar 18, 1998
---	---	------------------------

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	L. Zhu	L. Zhu	L. Zhu	L. Zhu	L. Zhu
MS/MSD #:	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	46	44	45	43	43
MS % Recovery:	92	88	90	86	86
Dup. Result:	50	46	47	46	45
MSD % Recov.:	100	92	94	92	90
RPD:	8.3	4.4	4.3	6.7	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	50	46	47	45	45
LCS % Recov.:	100	92	94	90	90

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

9802H52.ERL <2>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

9802 H52

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 1 of 2

Date Sampled: 2/25/98

Project Name: PeopleSoft

Sampled By: Logan Hansen

Source of Samples: Temporary Wells

Report Results To: Paul Hoeffy, EKI

Location: Dublin, CA

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)
01	P-1	grab gw	2 Amber Liters	9:20	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-1	grab gw	3 VOAs w/ HCl	9:20	EPA 8260	Standard
02	P-2	grab gw	2 Amber Liters	11:55	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-2	grab gw	3 VOAs w/ HCl	11:55	EPA 8260	Standard
03	P-3	grab gw	2 Amber Liters	12:45	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-3	grab gw	3 VOAs w/ HCl	12:45	EPA 8260	Standard
04	P-4	grab gw	2 Amber Liters	13:35	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-4	grab gw	3 VOAs w/ HCl	13:35	EPA 8260	Standard
05	P-6	grab gw	2 Amber Liters	15:20	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-6	grab gw	3 VOAs w/ HCl	15:20	EPA 8260	Standard

Special Instructions:

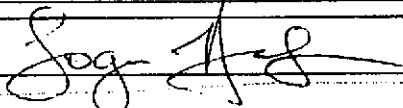
Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

Logan Hansen/  /EKI	2/23/98 18:40	
	2/25/98 1840	Chenier Goble / @ / Sequoia

9802452

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 2 of 2

Date Sampled: 2/25/98

Project Name: PeopleSoft

Sampled By: Logan Hansen

Source of Samples: Temporary Wells

Report Results To: Paul Hoffee, EKI

Location: Dublin, CA

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)
06	P-5	grab gw	2 Amber Liters	16:20	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
1	P-5	grab gw	3 VOAs w/ HCl	16:20	EPA 8260	Standard
 	 	grab gw	2 Amber Liters	 	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
 	 	grab gw	2 VOAs	 	EPA 8260	Standard
 	 	grab gw	2 Amber Liters	 	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
 	 	grab gw	3 VOAs	 	EPA 8260	Standard
 	 	grab gw	2 Amber Liters	 	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
 	 	grab gw	3 VOAs	 	EPA 8260	Standard
 	 	grab gw	2 Amber Liters	 	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
 	 	grab gw	3 VOAs	 	EPA 8260	Standard

Special Instructions:

Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

Logan Hansen/ <i>Logan Hansen</i>	/EKI	2/25/98	18:40	<i>Paul Hoffee</i>
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Erier & Kalinowski, Inc.
1730 South Amphlett, Ste 320
San Mateo, CA 94402

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: METHOD BLANK
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802139-02

Sampled:
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/05/98
Reported: 03/11/98

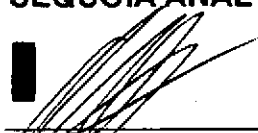
GC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: METHOD BLANK Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802139-02	Sampled: Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
---	---	--

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft
Sample Descript: METHOD BLANK
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802139-02

Sampled:
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

C Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
1-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft

Received: 02/26/98

Lab Proj. ID: 9802I39

Reported: 03/11/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 11 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

8260 Note:

Sample 9802I39-01 was diluted 20 times due to high late-eluting compounds.

Q - Surrogate diluted out.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



1802 121

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 1 of 4

Date Sampled: 2/26/98

Project Name: PeopleSoft

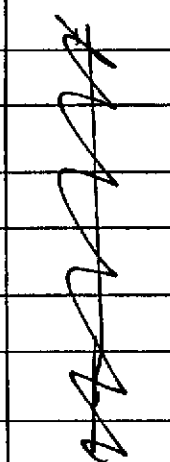
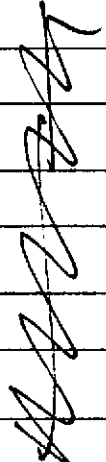
Sampled By: Logan Hansen

Source of Samples: Temporary Wells

Report Results To: Paul Hoffey, EKI

Location: Dublin, CA

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)
Q1	P-7	grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	One week Standard
D1	P-7	grab gw	3 VOAs w/ HPLC		EPA 8260	One week Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	3 VOAs		EPA 8260	Standard

Special Instructions:

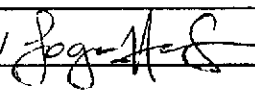
Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

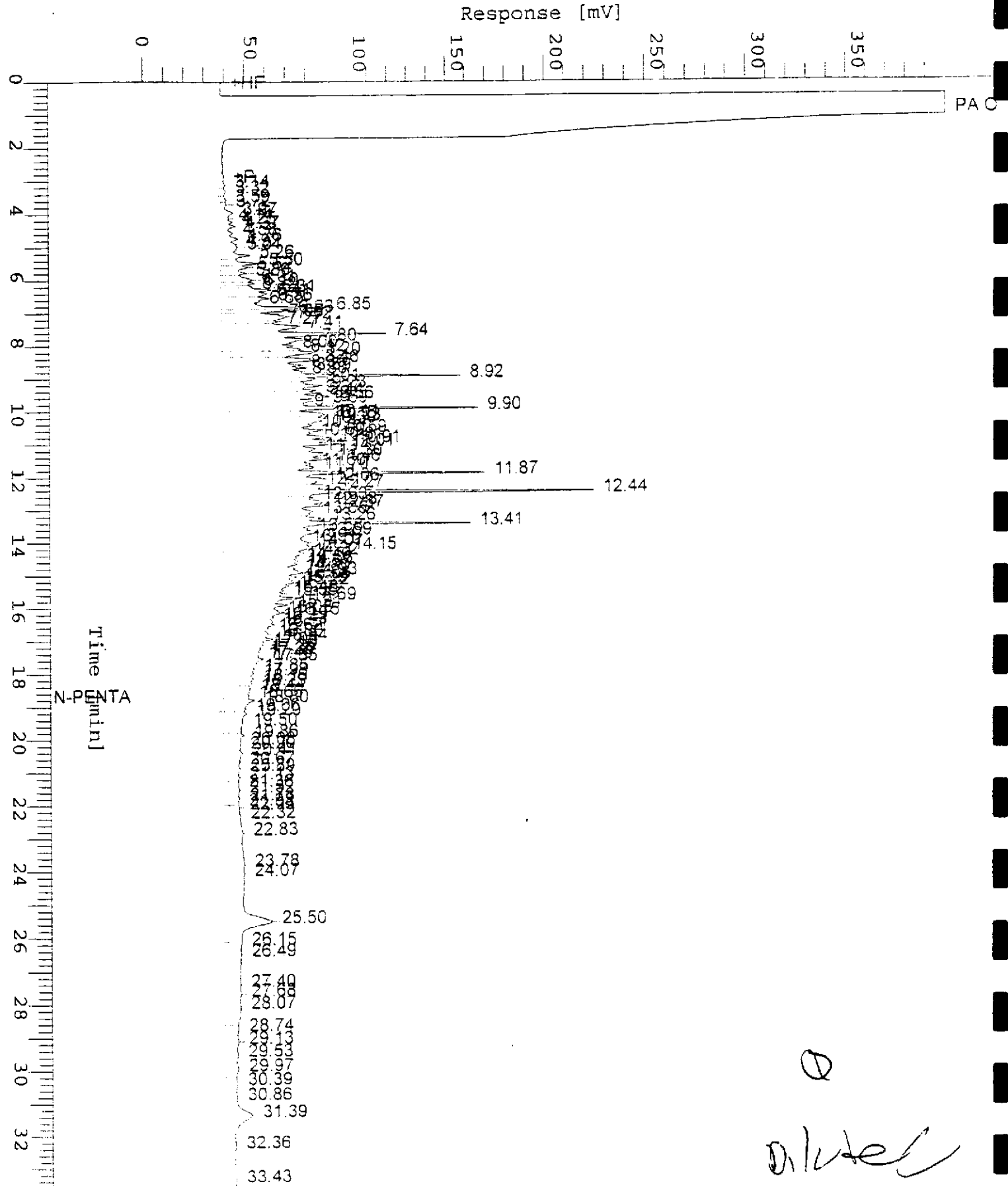
Logan Hansen/ 	/EKI	2/26/98	15:25	
		2-26-98	1525	M. Santos / EKI / SGA

Chromatogram

Sample Name : DW9802I39-1 (500.1*100) RS1
FileName : S:\GHP_04\0315\309A014.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 33.65 min
Plot Offset : 0 mV

Sample #: P-7
Date : 3/9/98 19:36
Time of Injection: 3/9/98 19:02
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



Q
Diluted



Erler & Kalinowski, Inc. Client Project ID: 980003.00/PeopleSoft
1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID
San Mateo, CA 94402 Sample Descript.: P-7
Attention: Paul Hoeffy Work Order #: 9802139 -01, 02 Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0305980HBPEXD
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: G. Fish
MS/MSD #: 9802139-01-MSD
Sample Conc.: 120000*
Prepared Date: 03/05/98
Analyzed Date: 03/09/98
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 120000*
MS % Recovery: 0.0

Dup. Result: 440000*
MSD % Recov.: 32000

RPD: 114*
RPD Limit: 0-50

*MS/MSD diluted due to matrix interference

LCS #: LCS030598-LCS

Prepared Date: 03/05/98
Analyzed Date: 03/06/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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.



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

Client Project ID: 980003.00/PeopleSoft
Matrix: LIQUID
Sample Descript.: P-1
Work Order #: 9802139-01, 02

Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

	L. Zhu	L. Zhu	L. Zhu	L. Zhu	L. Zhu
MS/MSD #:	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	46	44	45	43	43
MS % Recovery:	92	88	90	86	86
Dup. Result:	50	46	47	46	45
MSD % Recov.:	100	92	94	92	90
RPD:	8.3	4.4	4.3	6.7	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	50	46	47	45	45
LCS % Recov.:	100	92	94	90	90

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



APPENDIX E

**COPIES OF EKI DAILY FIELD INSPECTION LOGS
AND ZONE 7 DRILLING PERMIT FOR
ACTIVITIES CONDUCTED 13 - 15 APRIL 1998**

Contractor: Precision Sampling, Inc. ^{Mike Casey} _{Steve Yonge}EKI Staff On-site: Ben Hsieh, Paul HoffeyWeather: Overcast; occasional drizzleTemperature: 50 F Max 45 F MinWork Hours: 8 to 6 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____

8:00 Arrived on-site. Paul Hoffey from EKI and Mike Casey (Precision) and Steve Yonge (Precision) were already on-site.

8:20 An on-site meeting was held to discuss health and safety.

8:30 Precision began setting up over location FD-3. Paul informed Contractor that the hole should be advanced down to at least 15 ft below ground surface. Contractor is using a displacement probe tip to speed up the drilling process (2-inch diameter).

9:20 Contractor inserted 15 ft. of slotted PVC casing (1-inch dia) into the hole and moved the rig to location FD-2.

10:20 Contractor finished advancing to 20-ft bgs at FD-2 and began setting up at FD-1. No water has been encountered at FD-3 and FD-2 yet.

12:15 A saturated sand zone was encountered at 25-26 ft bgs at FD-1. Contractor stopped advancing at total depth of 28 ft bgs. and inserted slotted casing for the

Distribution: Project Inspection File (orig)
Project Manager

By: Ben Hsieh

Sheet: 2 of 2Date: 4/13/98Project: People SoftEKI Job No.: 980003.02

Contractor: _____

bottom 10 ft. of the hole2:35 Contractor took lunch break.

4:10 Contractor set up the rig at FD-3 and began advancing a smaller probe (2-inch diam. instead of 2½ inch) down the same hole to 30 ft bgs. Used calibrated OVM to monitor soil & breathing zone = 0 ppm.

4:15 I collected groundwater sample from the casing at FD-1 using clean, disposable bailer. The water level was about 10 - 12 ft bgs.

4:15 Contractor finished advancing the smaller probe at FD-3 to 30 ft bgs. and placed a 15-ft slotted section ~~of~~ PVC casing into the hole.

4:20 I collected a groundwater sample from FD-3. Groundwater level was about 12 ft bgs. Contractor set up at FD-2 and began advancing the smaller diameter probe down the same hole to 30 ft bgs.

4:15 Contractor finished advancing to 30 ft bgs. and began to set up over location FD-4.

4:20 I sampled the groundwater in FD-2.

4:35 Paul Hoffey returned to site. Contractor's rig got stuck in the mud for 15 minutes, but was able to get out eventually.

4:20 I handed my amber glass jar samples to Paul for delivery to Clayton Laboratory. Paul left site.

4:50 Contractor finished drilling FD-4 to 30 ft bgs.

4:55 I collected a groundwater sample at FD-4.

5:10 Contractor decontaminated equipment, grouted up the hole at FD-4, and prepared to leave.

5:25 I left site.

Distribution: Project Inspection File (orig)
Project Manager

By: Ben Hoick

Contractor: Precision Sampling, Inc. ^{Ken Jacob - trainer} - John

Sheet: 1 of 2

EKI Staff On-site: Ben Hsieh

Date: 4/14/98

Weather: Overcast, rain (late afternoon)

Project: People Soft

Temperature: 50 F Max 65 F Min

EKI Job No.: 980003.02

Work Hours: 8 to 7:30 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____

8:00 Arrived on-site.

8:15 I showed the Contractor where the first location is.

8:20 Contractor was delayed for 10 minutes when their trailer got stuck in the mud.

8:30 Paul Hoeffey arrived on-site. A health and safety meeting was held. Paul and I informed Contractor that the goal today is to complete at least 7 locations.

8:50 Contractor began setting up and drilling at location FD-5.

10:30 Contractor finished advancing to 30 ft bgs with the ^{2.5} inch diameter probe, inserted the slotted PVC casing, and moved on to FD-6.

10:45 I sampled ground water from FD-5.

11:40 Contractor finished advancing to 30 ft. bgs at FD-6 and moved on to P-8. I sampled the groundwater at ~~FD-6~~ FD-6.

12:30 Contractor and I broke for lunch. I sampled P-8 after lunch.

Distribution: Project Inspection File (orig)
Project Manager

By: Ben Hsieh

Sheet:	2	of	2
Date:	4/14/98		
Project:	Peoplesoft		
EKI Job No.:	980003.02		

Contractor: _____

- 1:05 Contractor began setting up at location P-10.
- 2:15 Contractor finished drilling P-10 to 20 ft and moved on to location P-9.
- 2:20 I sampled the ground water at P-10.
- 3:00 Contractor finished drilling P-9 to 20 ft. I sampled P-9.
- 3:15 Mr. Floyd Davis from the City of Dublin arrived to observe our work.
- 3:30 Mr. Davis left site. Contractor and I mobilized the drill rig to location OA-1 in the field to the west.
- 3:35 Paul Hoeffey arrived on-site.
- 4:40 Contractor finished drilling at OA-1 and wanted to quit for the day due to the rain and muddy conditions.
- 4:42 I called Paul Hoeffey. Paul informed me to ~~ask~~ ask the Contractor to attempt another hole and to tell him that EKI will note any overtime hours. I did so.
- 4:50 I sampled the groundwater at OA-1. The water level was shallow, around 4-5 ft bgs.
- 5:00 Contractor set up at OA-2 without getting stuck in the mud.
- 5:50 Contractor finished drilling OA-2 to 20 ft. bgs.
- 6:00 I sampled groundwater at OA-2. Water level was only about 6 inches bgs. Contractor had difficulty moving the rig in the mud and had to use metal trans plates for traction.
- 6:30 Contractor eventually drove the rig out of the field area and prepared to grout the last 3 holes. Contractor prepared to leave.
- 6:35 I left site to deliver samples to Sequoia.

Distribution: Project Inspection File (orig)
Project Manager

By: Ben Hsieh

Contractor: Precision Sampling, Inc. ^{Ken} ^{Steve} ^{John}

EKI Staff On-site: Ben Hsieh

Weather: Fair

Temperature: 55 F Max 70 F Min

Work Hours: 7 to 7:30 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working):

- 7:00 Arrived on-site. Ken, Steve, and John were still setting up their equipment.
- 7:30 Contractor drove Bobcat rig into the field to drill at OA-3. However, rig got stuck in the mud about 30 ft in. Contractor had to use metal trans plates to advance the rig.
- 8:20 Contractor eventually drove the rig out to location OA-4 and began drilling/pushing to 20 ft bgs.
- 9:10 Contractor finished drilling at OA-4 and began setting up at OA-3.
- 9:15 I collected groundwater sample at OA-4 using a pre-cleaned disposable bailer.
- 10:00 Contractor finished drilling at OA-3 to 20 ft bgs. Contractor began making its way back to the road.
- 10:30 I collected groundwater sample at OA-3
- 10:55 Contractor began setting up at location OA-7.
- 11:50 Contractor finished drilling at OA-7 to 20 ft bgs.

Sheet: 1 of 2
 Date: 4/15/98
 Project: People soft
 EKJ Job No.: 980003.02

Distribution: Project Inspection File (orig)
Project Manager

By: Ben Hsieh

Sheet: 2 of 2Date: 4/15/98Project: People SoftEKI Job No.: 980003.02

Contractor: _____

12:45 After lunch break, I sampled the groundwater at OA-7.

Contractor set up at OA-6.

1:30 Contractor finished drilling to 20 ft bgs. at OA-6

1:45 I collected groundwater sample at OA-6.

1:40 Contractor finished drilling to 20 ft bgs. at OA-5.

2:50 I sampled groundwater at OA-5.

3:10 Contractor moved rig and equipment to new location at the eastern parcel. Paul marked out two new sample locations west of the excavation area (FD-7 & FD-8). Contractor began drilling ~~FD-7~~ FD-7 to 25 ft bgs.

4:00 Contractor finished drilling ~~FD-7~~ FD-7. However, I verified w/ a bailer that there was no water in the hole. I informed the Contractor that they may set up at ~~FD-7~~ FD-8.

5:05 Contractor finished drilling ~~FD-8~~ FD-8 to 30 ft bgs.

5:25 I collected a groundwater sample from ~~FD-8~~ FD-8.

The water level was about 13 - 15 ft bgs.

5:30 I called Paul to update him.

5:35 Contractor pulled out the 1-inch PVC casing in FD-7 and began to re-drill the same hole to 30 ft bgs.

6:15 Contractor finished re-drilling FD-7 to 30 ft bgs.

6:30 I collected groundwater sample at FD-7. There was only about 1 foot of water in FD-7, so I was only able to fill up 1 amber liter glass jar.

7:00 The Contractor grouted up the hole, moved the drums to the drum storage area, and prepared to leave.

7:15 I left site after calling Paul Hoeffey.

Distribution: Project Inspection File (orig)

Project Manager

By: Ben Hsieh

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.
 Project Number: 980003.02
 Project Name: Hacienda Dr. & Dublin
 Source of Samples: Enviro-Core locations
 Location: Dublin, California

Analytical Laboratory: Sequoia Analytical
 Date Sampled: 4/13/98
 Sampled By: Ben Hsieh
 Report Results To: Paul Hottel
 Phone Number: 650-578-1172

Page 1 of 1

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)
	FD-1	Water	3 VOAs	1:15	BTEX Compounds (EPA 8020)	Standard
	FD-3		3 VOAs	2:20		
	FD-2		3 VOAs	3:20		
	FD-4		3 VOAs	4:55		
	FD-4	↓	2 - amber liter jars	4:55	TEPH w/ silica gel cleanup (8015m)	↓

Special Instructions:

Relinquished By:
 Name / Signature / Affiliation

Date Time

Received By:
 Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/14/98	7:08	

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/14/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core locations

Report Results To: Paul Hoffey

Location: Dublin, California

Phone Number: 650-578-9172

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)	
	FD-5	Water	3 VOAs	10:45	BTEX compounds (EPA 8020)	Standard	
	FD-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)		
	FD-6		3 VOAs	11:40	BTEX Compounds (EPA 8020)		
	FD-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)		
	P-8		3 VOAs		VOCs (EPA 8260)		
	P-8		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)		
	P-10		3 VOAs	2:20	VOCs (EPA 8260)		
	P-10		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)		
	P-9		3 VOAs	3:00	VOCs (EPA 8260)		
	P-9		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)		
	OA-1	↓	3 VOAs	4:50	VOCs (EPA 8260)		↓

Special Instructions:

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

<u>Ben Hsieh / Ben Hsieh / EKI</u>	<u>4/14/98</u>	<u>7:08</u>	
			<u>[Signature]</u> <u>4/14/98 19:08</u>

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.
 Project Number: 980003.02
 Project Name: Hacienda Dr. & Dublin
 Source of Samples: Enviro-core locations
 Location: Dublin, CA

Analytical Laboratory: Sequoia Analytical
 Date Sampled: 4/14/98
 Sampled By: Ben Hsieh
 Report Results To: Paul Hoeffey
 Phone Number: 650-578-1172

Page 2 of 2

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)
	OA-1	Water	2 amber liters	4:50	TEPH w/ silica gel cleanup (8015m)	Standard
	OA-2	↓	3 VOAs	6:00	VOCs (EPA 8260)	↓
	OA-2	↓	2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	↓

Special Instructions:

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
Ben Hsieh / Ben Hsieh / EKI	4/14/98	7:08		4/14/98	19:08

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-Core locations

Report Results To: Paul HOFFEY

Location: Dublin, CA

Phone Number: 650-578-1172

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)	
	OA-4	Water	3 VOAs	9:15	VOCs (EPA 8260)	Standard	
	OA-4		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)		
	OA-3		3 VOAs	10:30	VOCs (EPA 8260)		
	OA-3		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)		
	OA-7		3 VOAs	12:45	VOCs (EPA 8260)		
	OA-7		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)		
	OA-6		3 VOAs	1:45	VOCs (EPA 8260)		
	OA-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)		
	OA-5		3 VOAs	2:50	VOCs (EPA 8260)		
	OA-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)		
	FD-8	↓	3 VOAs	5:25	BTEX compounds (EPA 8020)		↓

Special Instructions:

Analyze TEPH quantified against diesel please.

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / <u>Ben Hsieh</u> / EKI	4/16/98	9:27	Alex Abdul <u>Alex</u> Sepinor

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 2 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core location

Report Results To: Paul Hoffer

Location: Dublin, CA

Phone Number: 650-578-1172

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)
	FD-8	Water	2 amber liters	5:25	TEPH w/ silica gel cleanup (8015m.)	Standard
	FD-7	↓	3 VOAs	6:50	BTEX compounds (EPA 8020)	↓
	FD-7	↓	1 amber liter jar	6:50	TEPH w/ silica gel cleanup (8015m.)	↓

Special Instructions:
See first page.

Relinquished By:
Name / Signature / Affiliation

Date Time

Received By:
Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/16/98	9:27	Alex ABAP	Mar	Sequim



Zone 7 Alameda County Flood Control & Water Conservation District

RECEIVED

5997 Parkside Drive ■ Pleasanton, California 94588-5127 ■ Phone (510) 484-2600 ■ Fax (510) 462-3914

APR 06 1998

ERLER & KALINOWSKI, INC.

Telefax Transmittal

COPY

Date: 4-6-98

Deliver To: Paul Haffley

Name of Firm: Erler & Kalinowski

Fax Number: (650) 578-9131

From: Wynnan Hong

Number of Pages: 2

(Including Cover Page)

For Voice Contact Call: (510) 484-2600, Extension:

For Return Fax: (510) 462-3914

Remarks: Drilling permit 98042 for a contamination investigation at Hacienda Dr & Interstate 580 in Dublin.



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE. PLEASANTON, CALIFORNIA 94588-5127 PHONE (510) 484-2600 X235
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Vacant land between
Hacienda Drive and Dublin Bart Station
North of I-570 (see attached map)

PERMIT NUMBER 98042

WELL NUMBER _____

APN _____

California Coordinates Source _____ ft. Accuracy ± _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name Nicholas L. Sica, Inc.
Address 330 Town & Country Phone 650-521-5313
City Palo Alto, CA Zip 94304

- A. GENERAL
 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name Erler + Kalinowski, Inc.
Address 1730 S. Amphlett Blvd Fax 650-578-9131
City San Mateo, CA Phone 650-578-1172
Zip 94402

- B. WATER SUPPLY WELLS
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

TYPE OF PROJECT
Well Construction
Cathodic Protection
Water Supply
Monitoring
Geotechnical Investigation:
General
Contamination
Well Destruction

PROPOSED WATER SUPPLY WELL USE N/A
New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:
Mud Rotary Air Rotary Auger
Cable Other Geoprobe

- D. GEOTECHNICAL Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremie cement grout shall be used in place of compacted cuttings.
- E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO. 636387 (Precision Sampling, Inc.)

WELL PROJECTS N/A
Drill Hole Diameter _____ in. Maximum _____ ft.
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number _____

- F. WELL DESTRUCTION See attached.
- G. SPECIAL CONDITIONS

GEOTECHNICAL PROJECTS N/A
Number of Borings _____ Maximum _____ ft.
Hole Diameter _____ in. Depth _____ ft.

(*) 17 borings to 20 ft. logs max.
Collect grab groundwater samples.
Grout all. No wells.

ESTIMATED STARTING DATE 13 April
ESTIMATED COMPLETION DATE 15 April

Approved Wyman Hong Date 6 Apr 98
Wyman Hong

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Paul B. Hoffer Date 6 April 1998

APPENDIX F

**COPIES OF ANALYTICAL LABORATORY DATA SHEETS
FOR GROUNDWATER SAMPLES COLLECTED
13 - 15 APRIL 1998**



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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-8
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-03

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-8
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-03

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

GC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Page:

6





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-8 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-03	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
Attention: Paul Hoffey		

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Description: P-9
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-05

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

GC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
m-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
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FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-9 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-05	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
---	---	---

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	90
Toluene-d8	88	110	102
4-Bromofluorobenzene	86	115	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-9
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-05

Sampled: 04/14/98
Received: 04/14/98
Extracted: 04/16/98
Analyzed: 04/17/98
Reported: 04/24/98

GC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	70

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-10
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-04

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-10
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-04

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

GC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1-Tetrachloroethane	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	88
Toluene-d8	88 110	104
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-10 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-04	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/17/98 Reported: 04/24/98
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QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804955-08

Sampled:
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/24/98

GC Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-08	Sampled: Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-08

Sampled:
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
2,3-Trichlorobenzene	2.0	N.D.
2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-08	Sampled: Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
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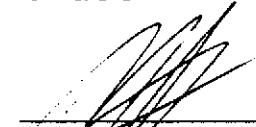
QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank A Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-09	Sampled: Received: 04/14/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/24/98
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GC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/14/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core locations

Report Results To: Paul HOFFEY

Location: Dublin, California

9804955

Phone Number: 650-578-9172

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	FD-5	Water	3 VOAs	10:45	BTEX compounds (EPA 8020)	Standard ↓
	FD-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
02	FD-6		3 VOAs	11:40	BTEX Compounds (EPA 8020)	
	FD-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
03	P-8		3 VOAs		VOCs (EPA 8260)	
	P-8		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
04	P-10		3 VOAs	2:20	VOCs (EPA 8260)	
	P-10		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
05	P-9		3 VOAs	3:00	VOCs (EPA 8260)	
	P-9		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
06	OA-1	↓	3 VOAs	4:50	VOCs (EPA 8260)	

Special Instructions:

Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

<u>Ben Hsieh / Ben Hsieh / EKI</u>	<u>4/14/98</u>	<u>7:08</u>	
			<u>[Signature]</u> <u>4/14/98</u> <u>19:08</u>

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 2 of 2

Date Sampled: 4/14/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core locations

Report Results To: Paul HOFFEY

Location: Dublin, CA

9804955

Phone Number: 650-578-1172

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)
06	OA-1	Water	2 amber liters	4:50	TEPH w/ silica gel cleanup (8015m)	Standard
07	OA-2	↓	3 VOAs	6:00	VOCs (EPA 8260)	↓
	OA-2	↓	2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	↓

Special Instructions:

Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/14/98	7:08		

4/14/98 19:08



Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Lab Proj. ID: 9804955

Received: 04/14/98
Reported: 04/24/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 34 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

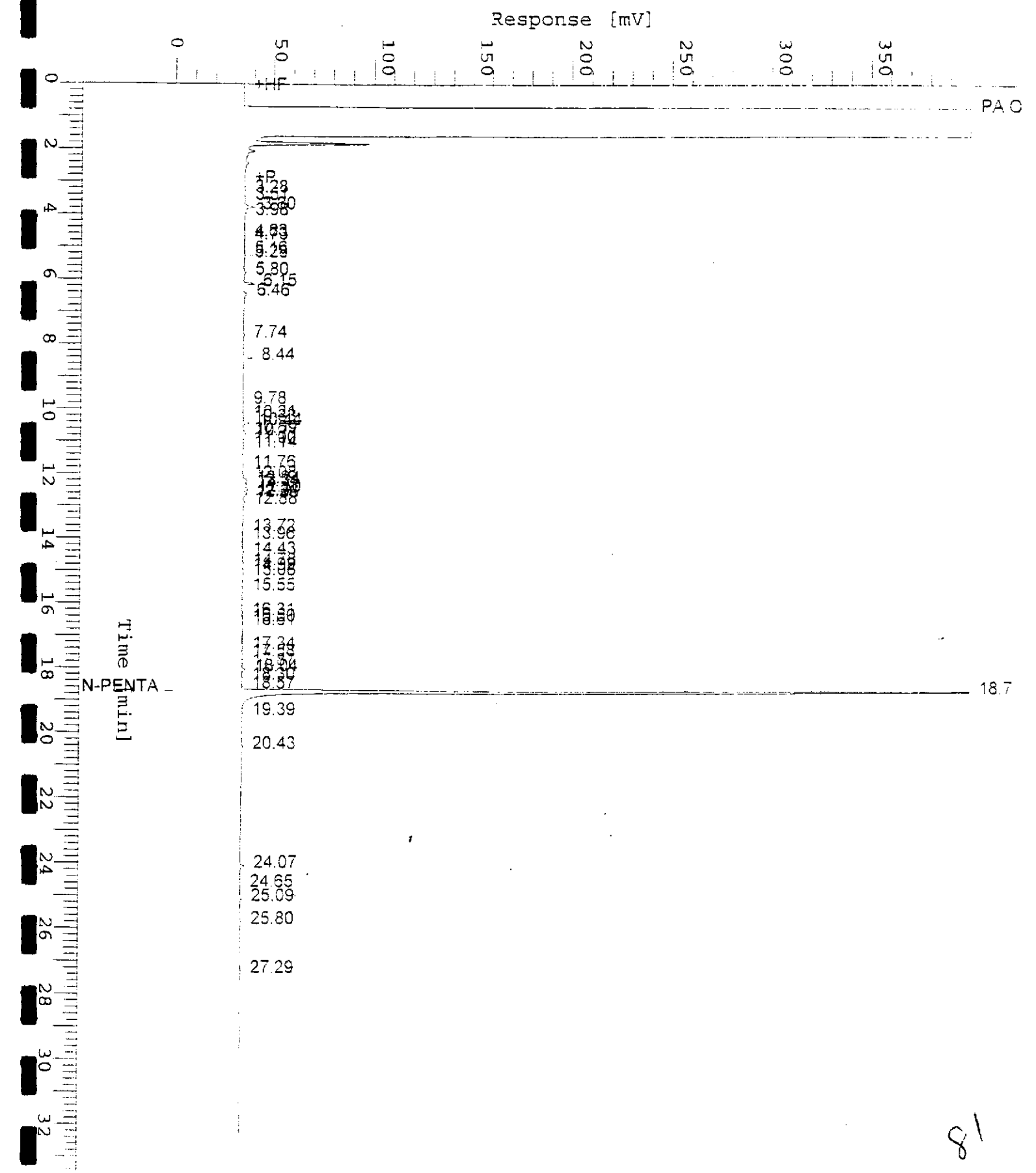
Mike Gregory
Project Manager



Chromatogram

Sample Name : DW9804955-1 (500:1) SG
FileName : S:\GHP_05\0419\41SA035.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: FD-5
Date : 4/16/98 21:35
Time of Injection: 4/16/98 21:02
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Scale: 400.0 mV



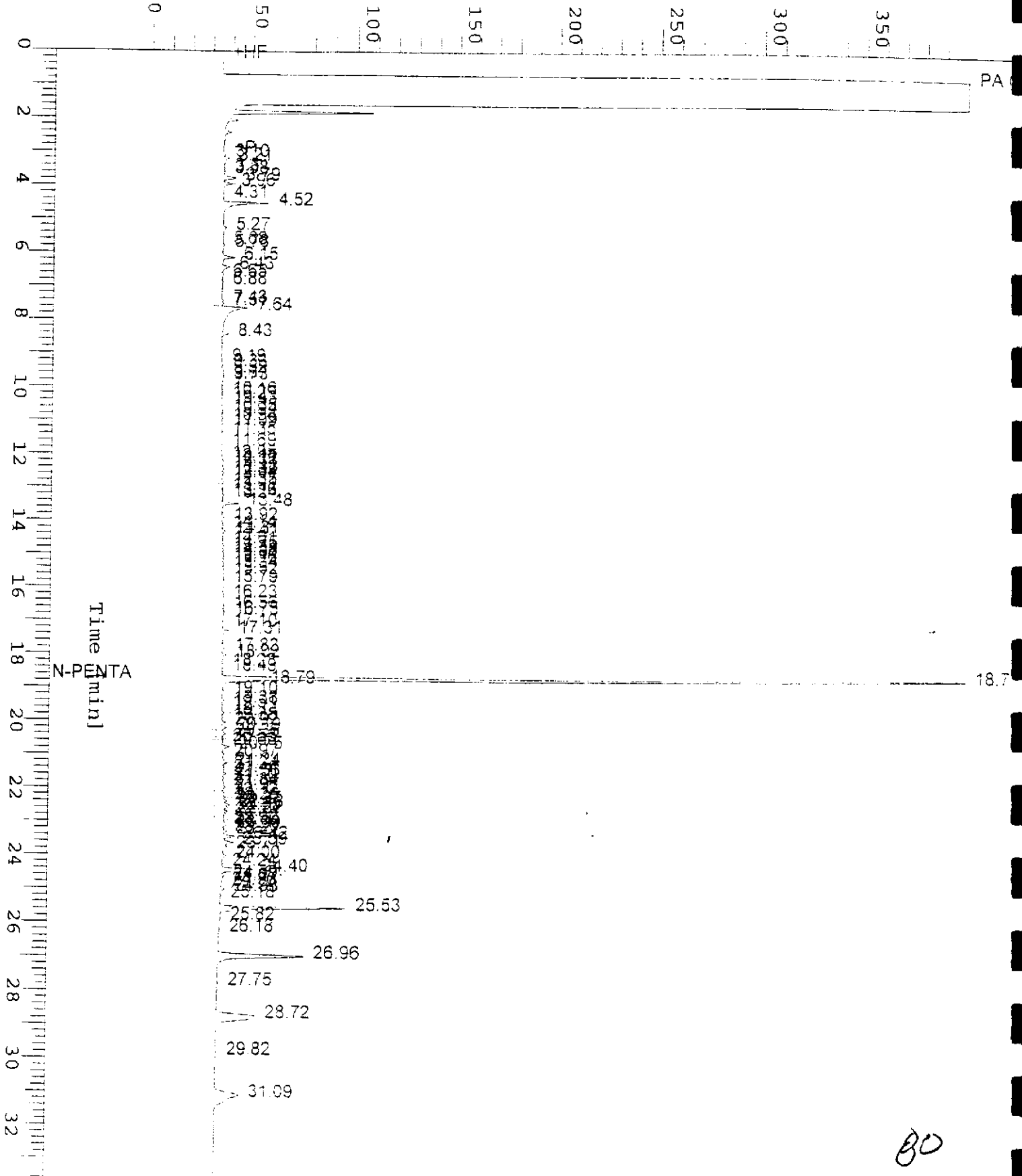
81

Sample Name : DW9804955-5 (500:1) SG
FileName : S:\GHP_05\0419\415A042.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: OA-1
Date : 4/17/98 02:22
Time of Injection: 4/17/98 01:49
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Response [mV]

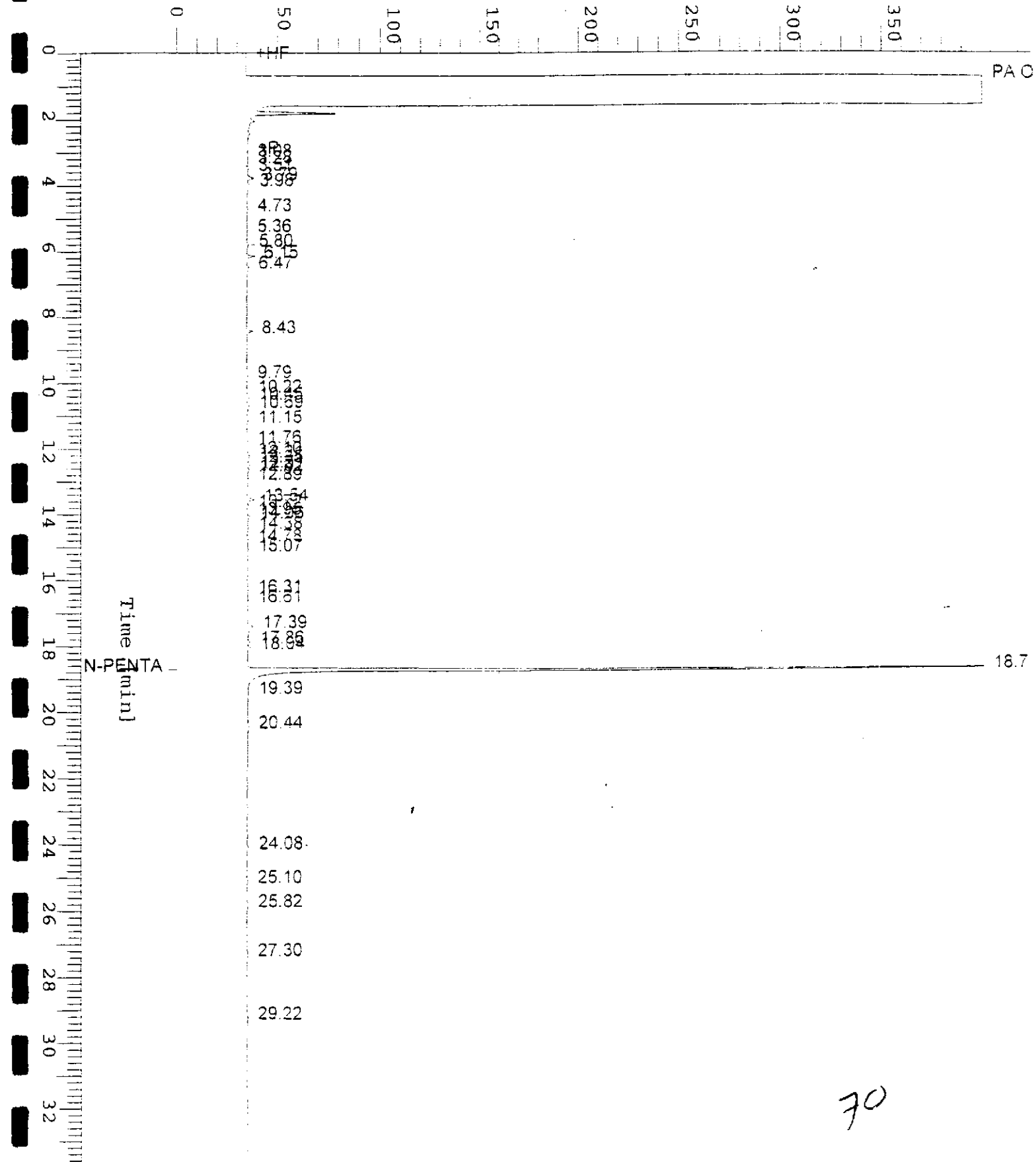


Chromatogram

Sample Name : DW9804955-5 (500:1) SG
 FileName : S:\GHP_05\0419\415A041.raw
 Method : TPH05A
 Start Time : 0.00 min
 Scale Factor : 0.0

Sample #: P-9
 Date : 4/17/98 01:41
 Time of Injection: 4/17/98 01:08
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV
 Page 1 of 1
 High Point : 400.00 mV
 End Time : 33.65 min
 Plot Offset: 0 mV

Response [mV]



70

Sample Name : DW9804955-4 (500:1) SG
FileName : S:\GHP_05\0419\415A040.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: P-10
Date : 4/17/98 01:00
Time of Injection: 4/17/98 00:27
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Response [mV]

0 50 100 150 200 250 300 350

0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32

Time [min]

+P
3.53
3.98
4.73
5.28
5.80
6.47
8.43
9.79
10.22
10.70
11.16
11.70
12.20
12.70
13.20
13.70
14.20
14.70
15.20
16.61
17.34
18.04
18.57
19.39
20.22
24.08
24.65
25.09
25.79
27.27
29.18

PA

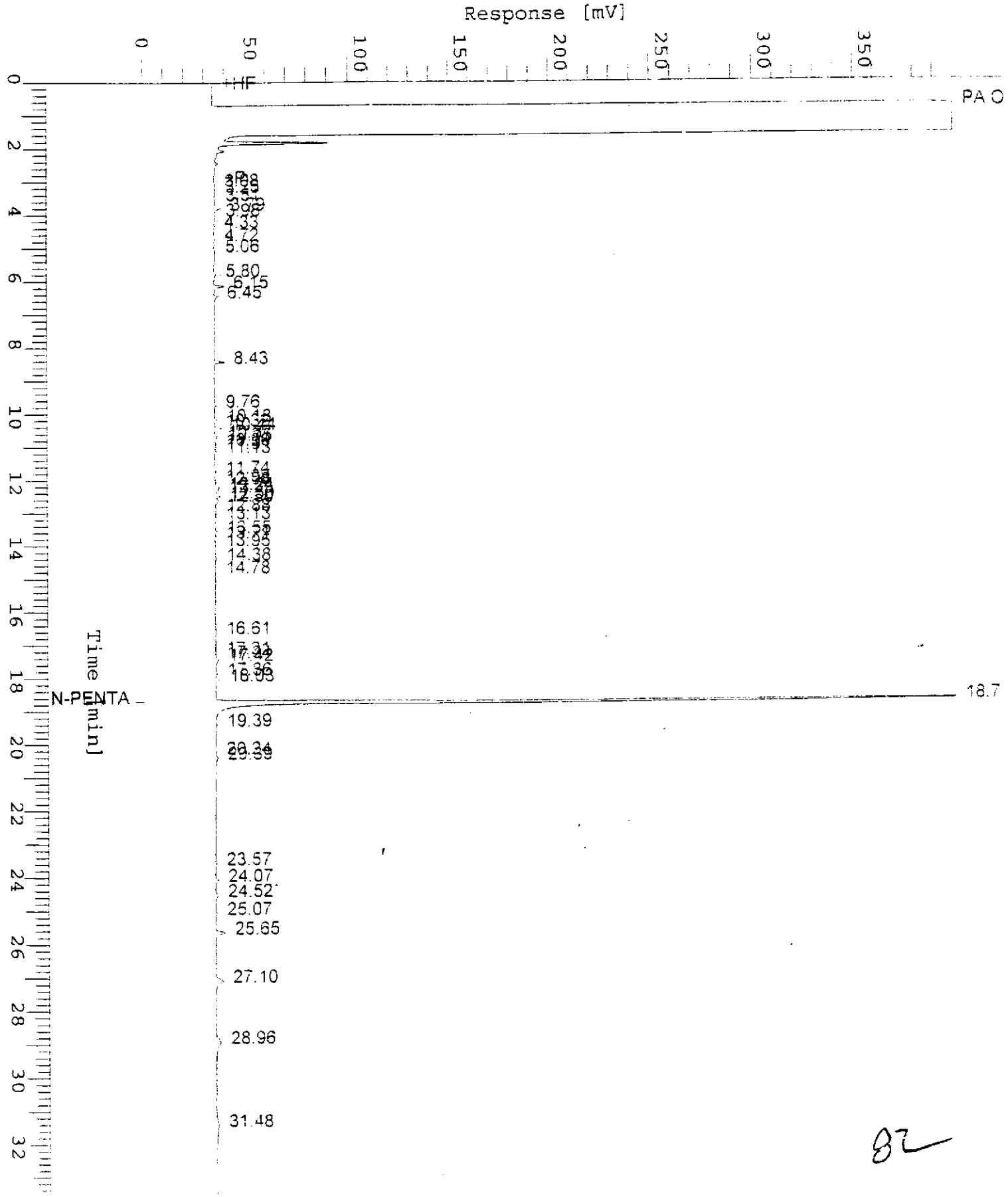
18.7

73

Chromatogram

Sample Name : DW9804955-3 (500:1) SG
FileName : S:\GHP_05\0419\415A039.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor : 0.0

Sample #: P-8
Date : 4/17/98 00:19
Time of Injection: 4/16/98 23:46
Low Point : 0.00 mV
High Point : 400.00 mV
End Time : 33.65 min
Plot Offset: 0 mV
Plot Scale: 400.0 mV

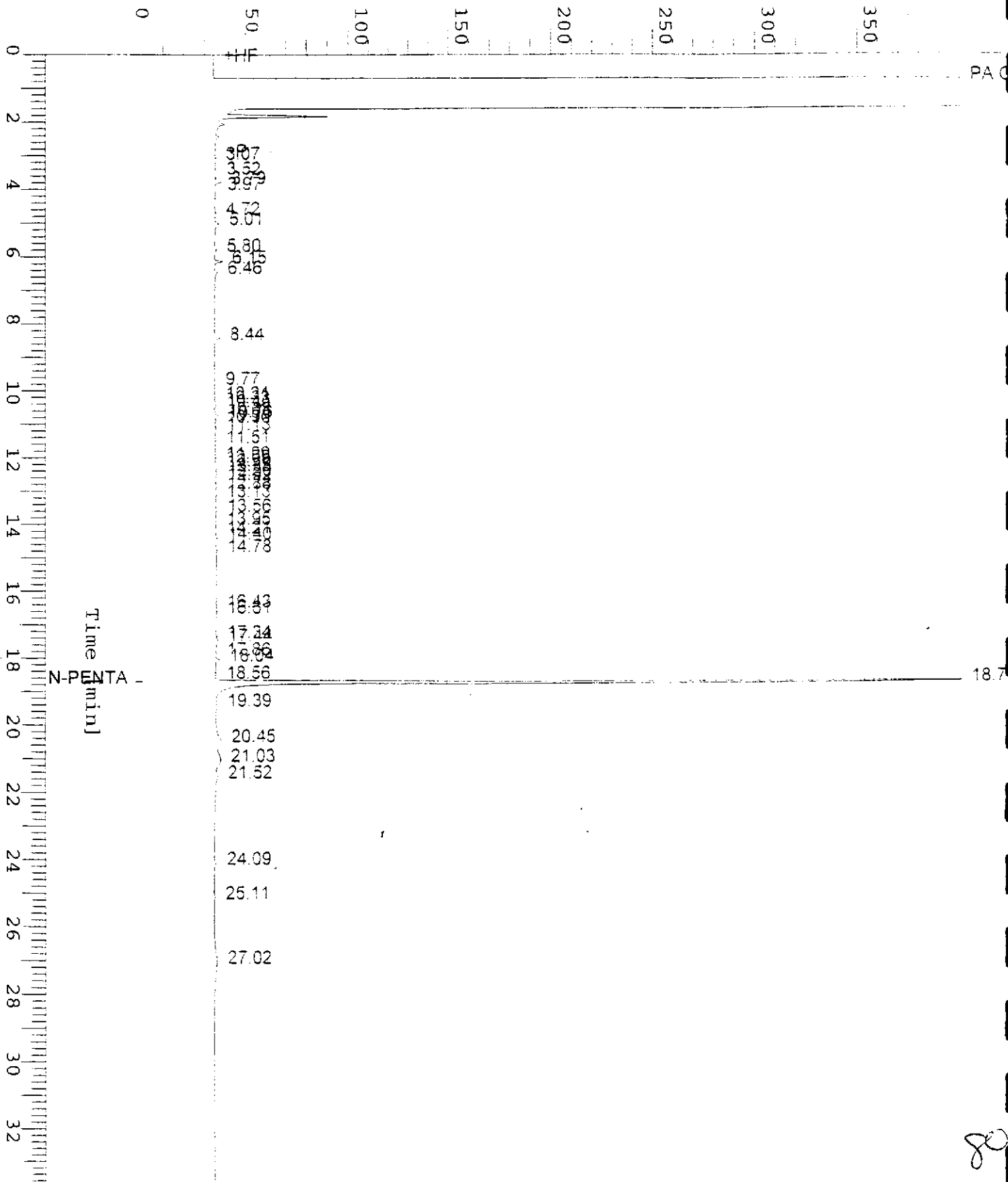


82

Sample Name : DW9804955-2 (500:1) SG
FileName : S:\GHP_05\0419\415A018.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: FD-6
Date : 4/16/98 23:38
Time of Injection: 4/16/98 23:05
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Offset: 0 mV
Plot Scale: 400.0 mV

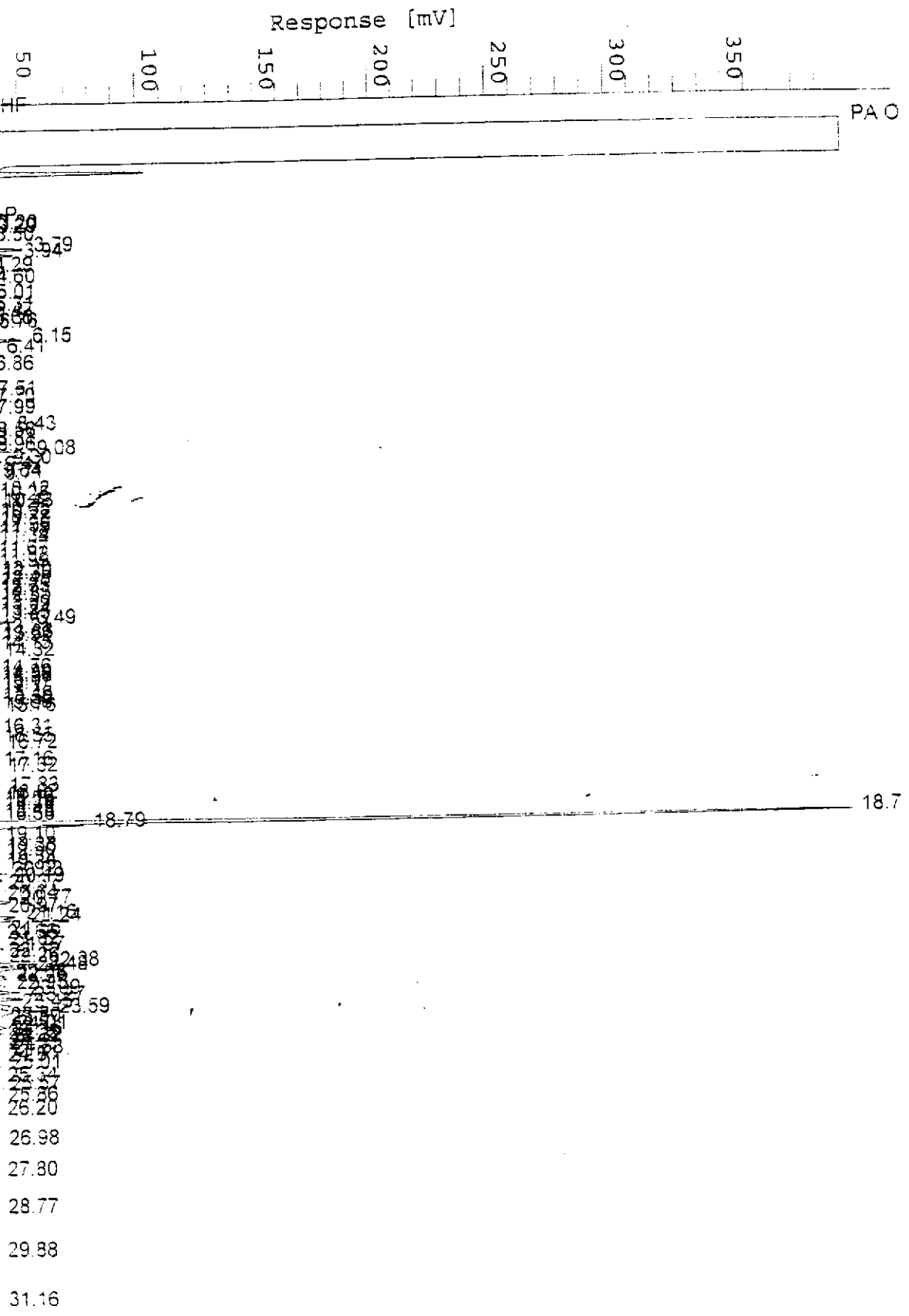
Response [mV]



80

Sample Name : DW9804955-7 (500:1) SG RX1
 FileName : S:\GHP_05\0426\421A026.raw
 Method : TPHOSA
 Start Time : 0.00 min
 Scale Factor : 0.0

Sample #: OA-2
 Date : 4/22/98 02:26
 Time of Injection: 4/22/98 01:53
 Low Point : 0.00 mV
 High Point : 400.00 mV
 Plot Scale: 400.0 mV



Time [min]

N-PENTA

77



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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804955 -01, 02, 08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	TPH Gas
QC Batch#:	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	33	72
MS % Recovery:	110	110	110	110	120
Dup. Result:	10	10	10	31	71
MSD % Recov.:	100	100	100	103	118
RPD:	9.5	9.5	9.5	6.3	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	34	73
LCS % Recov.:	110	110	110	113	122

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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

Mike Gregory
Project Manager

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

9804955.ERL < 1 >





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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804955-01-06, 08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0416980HBPEXA
Analy. Method: EPA 8015M
Prep. Method: N.A.

Analyst: A. Porter
MS/MSD #: 9804955-01-MSD
Sample Conc.: N.D.
Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

Result: 770
MS % Recovery: 77

Dup. Result: 740
MSD % Recov.: 74

RPD: 4.0
RPD Limit: 0-50

LCS #: LCS041698-LCS

Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 690
LCS % Recov.: 69

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

9804955.ERL <2>





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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: QA-3
Work Order #: 9804955-07, 09

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0420980HBPEXE
Analy. Method: EPA 8015M
Prep. Method: N.A.

Analyst: A. Porter
MS/MSD #: 9804B93-02-MSD
Sample Conc.: 57
Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

Result: 710
MS % Recovery: 65

Dup. Result: 750
MSD % Recov.: 69

RPD: 5.5
RPD Limit: 0-50

LCS #: LCS042098-LCS

Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

9804955.ERL <3>





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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804955-03-08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Analyzed Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	46	52	44	44
MS % Recovery:	84	92	104	88	88
Dup. Result:	42	46	52	45	45
MSD % Recov.:	84	92	104	90	90
RPD:	0.0	0.0	0.0	2.2	2.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS
Prepared Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Analyzed Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	44	49	56	49	48
LCS % Recov.:	88	98	112	98	96

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Gregory
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





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: **QA-1**
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-06

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: OA-1
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-06

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Dichloroethylene	2.0	N.D.
Dichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Methyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	87
Toluene-d8	88	110	107
1-Bromofluorobenzene	86	115	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: **OA-1**
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-06

Sampled: 04/14/98
Received: 04/14/98
Extracted: 04/16/98
Analyzed: 04/17/98
Reported: 04/24/98

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	92 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	80

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: OA-2
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-07

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

GC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
m-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: OA-2
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-07

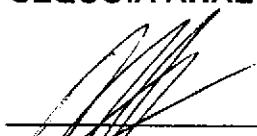
Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: OA-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-07

Sampled: 04/14/98
Received: 04/14/98
Extracted: 04/20/98
Analyzed: 04/22/98
Reported: 04/24/98

GC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	C9-C24
Surrogates -Pentacosane (C25)	Control Limits % 50 150	% Recovery 77

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: **QA-3**
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-02

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

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404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600 FAX (650) 364-9233
(510) 988-9600 FAX (510) 988-9673
(916) 921-9600 FAX (916) 921-0100
(707) 792-1865 FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-02

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery	
1,2-Dichloroethane-d4	76	114	85
Toluene-d8	88	110	104
1-Bromofluorobenzene	86	115	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-02	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
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QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP19B

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Page:

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COPY

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-01

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600 FAX (650) 364-9233
(510) 988-9600 FAX (510) 988-9673
(916) 921-9600 FAX (916) 921-0100
(707) 792-1865 FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-4 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-01	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/20/98 Reported: 04/27/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	89
Toluene-d8	88 110	106
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-01

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/21/98
Reported: 04/27/98

GC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-05

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite B
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: QA-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-05

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
2,3-Trichlorobenzene	2.0	N.D.
2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
2,4-Trimethylbenzene	2.0	N.D.
3,5-Trimethylbenzene	2.0	N.D.
vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	88
Toluene-d8	88	110	106
Bromofluorobenzene	86	115	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-5
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-05

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-6
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-04

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

Attention: Paul Hoffer

Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Bromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Toluene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
Isopropyltoluene	2.0	N.D.
Ethylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-6
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-04

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	85
Toluene-d8	88 110	103
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Wainut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600 FAX (650) 364-9233
(510) 988-9600 FAX (510) 988-9673
(916) 921-9600 FAX (916) 921-0100
(707) 792-1865 FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-04	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
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GC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
Pentacosane (C25)	50 150	84

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-7 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-03	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/21/98 Reported: 04/27/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-7
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-03

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Methyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	85
Toluene-d8	88	110	105
1,4-Bromofluorobenzene	86	115	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Page:

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Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-7 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-03	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
Attention: Paul Hoffey		


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: FB-1	Date Sampled: 04/13/98
Lab Number: 9804188-01A	Date Received: 04/13/98
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	ND	50
TPH-Diesel	--	ND	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	23 *	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.
Note: The sample went through a silica gel cleanup prior to analysis.
* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: FD-2	Date Sampled: 04/13/98
Lab Number: 9804188-02A	Date Received: 04/13/98
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	170	70
TPH-Diesel	--	ND	200 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	49*	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.

Detection limits increased due to limited sample volume.

a Diesel detection limit increased due to presence of unknown hydrocarbons.

* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: ED-3	Date Sampled: 04/13/98
Lab Number: 9804188-03A	Date Received: 04/13/98
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	100*	60
TPH-Diesel	--	ND	60
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	57	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.
Detection limits increased due to limited sample volume.

* Results should be considered estimated concentrations due to recovery problems with the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9804188-04A	Date Received: --
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	ND	50
TPH-Diesel	--	ND	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	41 *	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.

* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

REQUEST FOR LABORATORY ANALYTICAL SERVICES

RUSH
(X)

IMPORTANT

Wed 9 AM April 15
Page 1 of 1

Date Results Requested: Fri 4/17/98
 Rush Charges Authorized? Yes No
 Phone or fax results

For Clayton Use Only
Clayton Lab Project No.

9804188

REPORT RESULTS TO
 Name Paul Haffey Client Job No. 980003.00
 Company Erlar + Kabinowski Dept.
 Mailing Address 1730 S. Amphlett Blvd Su. 320
 City, State, Zip San Mateo CA 94402
 Telephone No. 650-578-1172 FAX No. 650-578-9131

SEND INVOICE TO
 Purchase Order No. 980003.00
 Name
 Company (SAME) Dept.
 Address
 City, State, Zip

Special Instructions and/or specific regulatory requirements:
 (method, limit of detection, etc.) ~~XXXXXXXXXXXXXXXXXXXX~~
* Use 8015m with Silica Gel
Cleanup - Look for weathered diesel.
 * Explanation of Preservative:

Samples are:
 (check if applicable)
 Drinking Water
 Groundwater
 Wastewater

Number of Containers	ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)										FOR LAB USE ONLY
	1	2	3	4	5	6	7	8	9	10	
	X										
	X										02
	X										03

*EPA 8015m**

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)
FD-1	4/13/98	pm	H ₂ O	/
FD-2	"	pm	"	/
FD-3	"	pm	"	/

CHAIN OF CUSTODY
 Collected by: Paul B. Haffey (print)
 Relinquished by: Paul B. Haffey Date/Time 13 April 98
 Method of Shipment:
 Authorized by: Paul B. Haffey Date 4/13/98
 (Client Signature MUST Accompany Request)

Collector's Signature: Paul B. Haffey
 Received by: Cheryl Allen Date/Time 4/13/98
 Received at Lab by: Cheryl Allen Date/Time 4/13/98
 Sample Condition Upon Receipt: Acceptable Other (explain) 4:30

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

Detroit Regional Lab
 22345 Roethel Drive
 Novi, MI 48375
 (800) 806-5887
 (248) 344-1770
 FAX (248) 344-2855

Atlanta Regional Lab
 400 Chastain Center Blvd., N.W., Suite 490
 Kennesaw, GA 30144
 (800) 252-9919
 (770) 499-7500
 FAX (770) 423-4990

San Francisco Regional Lab
 1252 Quarry Lane
 Pleasanton, CA 94566
 (800) 294-1755
 (510) 426-2657
 FAX (510) 426-0106

Seattle Regional Lab
 4636 E. Marginal Way S., Suite 215
 Seattle, WA 98134
 (800) 568-7755
 (206) 763-7364
 FAX (206) 763-4189

DISTRIBUTION:
 White = Clayton Laboratory
 Yellow = Clayton Accounting
 Pink = Client Copy



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

COPY

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-1 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804956-01	Sampled: 04/13/98 Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/28/98
---	--	---


QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
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FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: ~~FD-2~~
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-03

Sampled: 04/13/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/28/98

GC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
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


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-3 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804956-02	Sampled: 04/13/98 Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/28/98
---	---	---

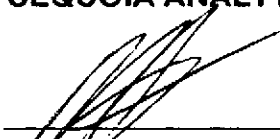
QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	92

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

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: ~~FD-4~~
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-04

Sampled: 04/13/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/28/98

GC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804956-04	Sampled: 04/13/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/17/98 Reported: 04/28/98
Attention: Paul HOFFEY		

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





**Sequoia
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680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

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(916) 921-9600 FAX (916) 921-0100
(707) 792-1865 FAX (707) 792-0342

COPY

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-5
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804955-01

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/24/98

Attention: Paul HOFFEY

Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	83

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-01	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
---	--	--

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoffey

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-6
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804955-02

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/24/98

GC Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-02	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
---	--	--

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	80

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: FD-7
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804B93-07

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/23/98
Reported: 04/27/98

GC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: **FD-7***
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-07

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/22/98
Reported: 04/27/98

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	110
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: FD-8 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804893-06	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/23/98 Reported: 04/27/98
---	--	---

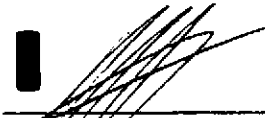
GC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: PD-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-06

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/22/98
Reported: 04/27/98


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	180 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804B93-08

Sampled:
Received: 04/16/98
Analyzed: 04/23/98
Reported: 04/27/98

GC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	95

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-08	Sampled: Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
---	--	---


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-08

Sampled:
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

C Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-08	Sampled: Received: 04/16/98 Analyzed: 04/20/98 Reported: 04/27/98
---	--	--

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	95

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank A
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-09

Sampled:
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
o-Chlorotoluene	2.0	N.D.
p-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Stylybenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
Isopropyltoluene	2.0	N.D.
Ethylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Eter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: Method Blank A Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-09	Sampled: Received: 04/16/98 Analyzed: 04/21/98 Reported: 04/27/98
--	--	--

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	90
Toluene-d8	88	110	104
4-Bromofluorobenzene	86	115	99

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-Core locations

Report Results To: Paul HOFFEY

Location: Dublin, CA

9804893

Phone Number: 650-578-1172

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	OA-4	Water	3 VOAs	9:15	VOCs (EPA 8260)	Standard
↓	OA-4		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
2	OA-3		3 VOAs	10:30	VOCs (EPA 8260)	
↓	OA-3		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
3	OA-7		3 VOAs	12:45	VOCs (EPA 8260)	
↓	OA-7		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
4	OA-6		3 VOAs	1:45	VOCs (EPA 8260)	
↓	OA-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
5	OA-5		3 VOAs	2:50	VOCs (EPA 8260)	
↓	OA-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
6	FD-8	↓	3 VOAs	5:25	BTEX compounds (EPA 8020)	↓

Special Instructions:

Analyze TEPH quantified against diesel please.

Relinquished By:

Name / Signature / Affiliation

Date Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/16/98	9:27	Alex Abud / Alex / Sequoia

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 2 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core location

Report Results To: Paul Hoffey

Location: Dublin, CA

Phone Number: 650-578-1172

9804893

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)
6	FD-8	Water	2 amber liters	5:25	TEPH w/ silica gel cleanup (8015m.)	Standard
7	FD-7	↓	3 VOAs	6:50	BTEX compounds (EPA 8020)	↓
↓	FD-7	↓	1 amber liter jar	6:50	TEPH w/ silica gel cleanup (8015m.)	↓

Special Instructions:

See first page.

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/16/98	9:27	Alex ABAP	Atad	Sequoia



Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
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FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin

Received: 04/16/98

Lab Proj. ID: 9804B93

Reported: 04/27/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 35 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager





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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: OA-3
Work Order #: 9804B93 -01-08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0420980HBPEXE SG
Analy. Method: EPA 8015M

Analyst: A. Porter
MS/MSD #: 9804B93-02-MSD
Sample Conc.: 57
Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

Result: 710
MS % Recovery: 65

Dup. Result: 750
MSD % Recov.: 69

RPD: 5.5
RPD Limit: 0-50

LCS #: LCS042098-LCS

Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
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

Mike Gregory
Project Manager

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

9804B93.ERL <1>





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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-01-03, 08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Analyzed Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	46	52	44	44
MS % Recovery:	84	92	104	88	88
Dup. Result:	42	46	52	45	45
MSD % Recov.:	84	92	104	90	90
RPD:	0.0	0.0	0.0	2.2	2.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS
Prepared Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Analyzed Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	44	49	56	49	48
LCS % Recov.:	88	98	112	98	96

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Mike Gregory
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



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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-04, 05, 09

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Analyzed Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	49	53	48	49
MS % Recovery:	84	98	106	96	98
Dup. Result:	43	52	56	50	51
MSD % Recov.:	86	104	112	100	102
RPD:	2.4	5.9	5.5	4.1	4.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS
Prepared Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Analyzed Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	41	48	53	48	47
LCS % Recov.:	82	96	106	96	94

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mika Gregory
Project Manager





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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-06-08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Analyzed Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.9	9.9	10	30	65
MS % Recovery:	99	99	100	100	108
Dup. Result:	10	10	10	31	68
MSD % Recov.:	100	100	100	103	113
RPD:	1.0	1.0	0.0	3.3	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS
Prepared Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Analyzed Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	67
LCS % Recov.:	100	100	100	103	112

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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

Mike Gregory
Project Manager

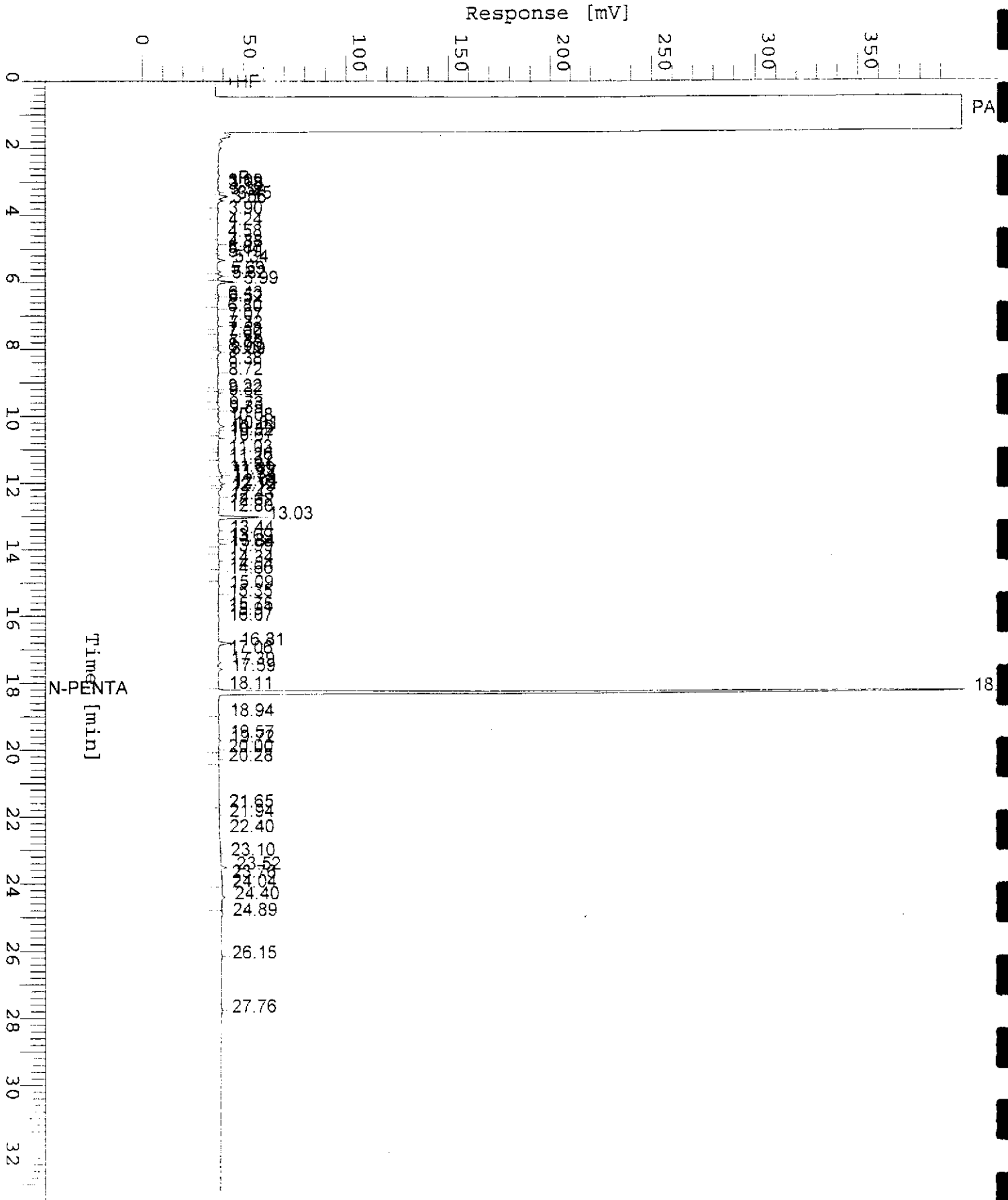
** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9804B93.ERL <4>



Sample Name : DW9804B93-2 (500:1)
FileName : S:\GHP_19\0426\420B041.raw
Method : TPH19A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: OA-3
Date : 4/29/98 15:19
Time of Injection: 4/21/98 22:24
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Offset: 0 mV
Plot Scale: 400.0 mV



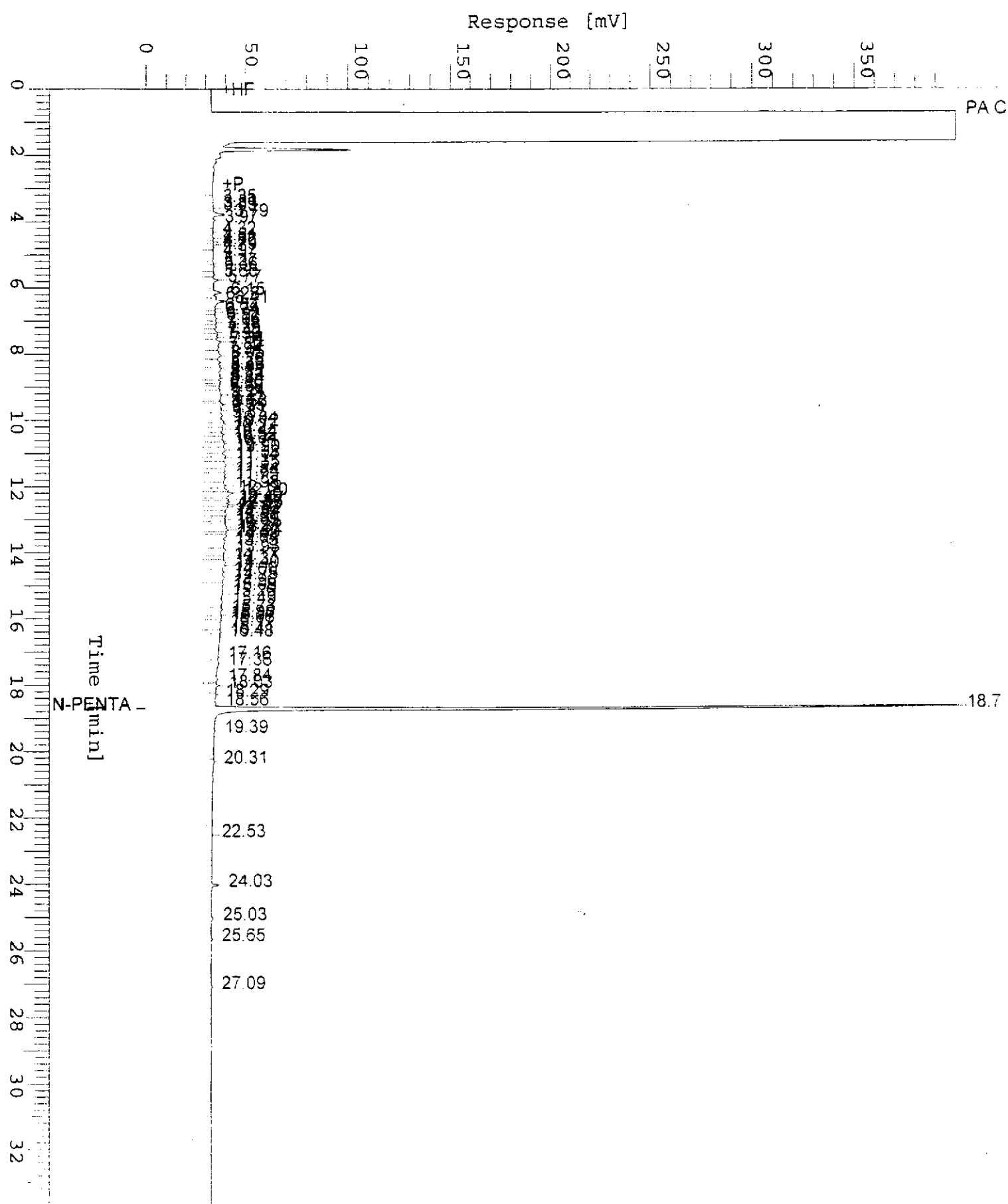
N-PENTA

Chromatogram

Sample Name : DW9804B93-6 (500:1) SG
FileName : S:\GHP_05\0426\421A024.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor : 0.0

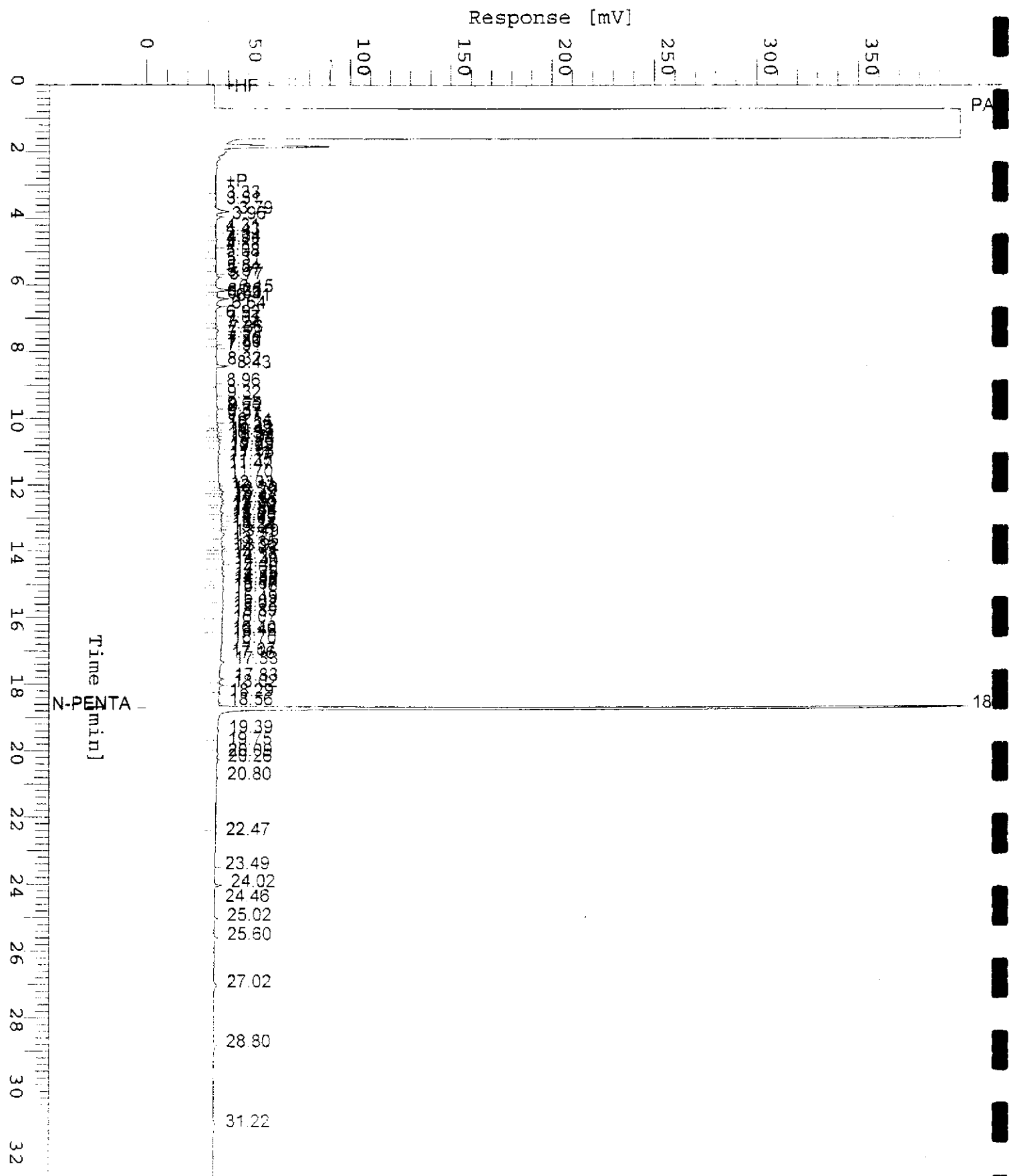
End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-8
Date : 4/29/98 15:21
Time of Injection: 4/22/98 00:30
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Scale: 400.0 mV



Sample Name : DW9804893-7 (500:1) SG
 FileName : S:\GHP_05\0426\421A025.raw
 Method : TPH05A
 Start Time : 0.00 min
 Scale Factor: 0.0

Sample #: FD-7
 Date : 4/29/98 15:22
 Time of Injection: 4/22/98 01:11
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV
 End Time : 33.65 min
 Plot Offset: 0 mV
 High Point : 400.00 mV





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-05

Sampled:
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/28/98


Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804956-05	Sampled: Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/28/98
Attention: Paul Hoeffy		

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager

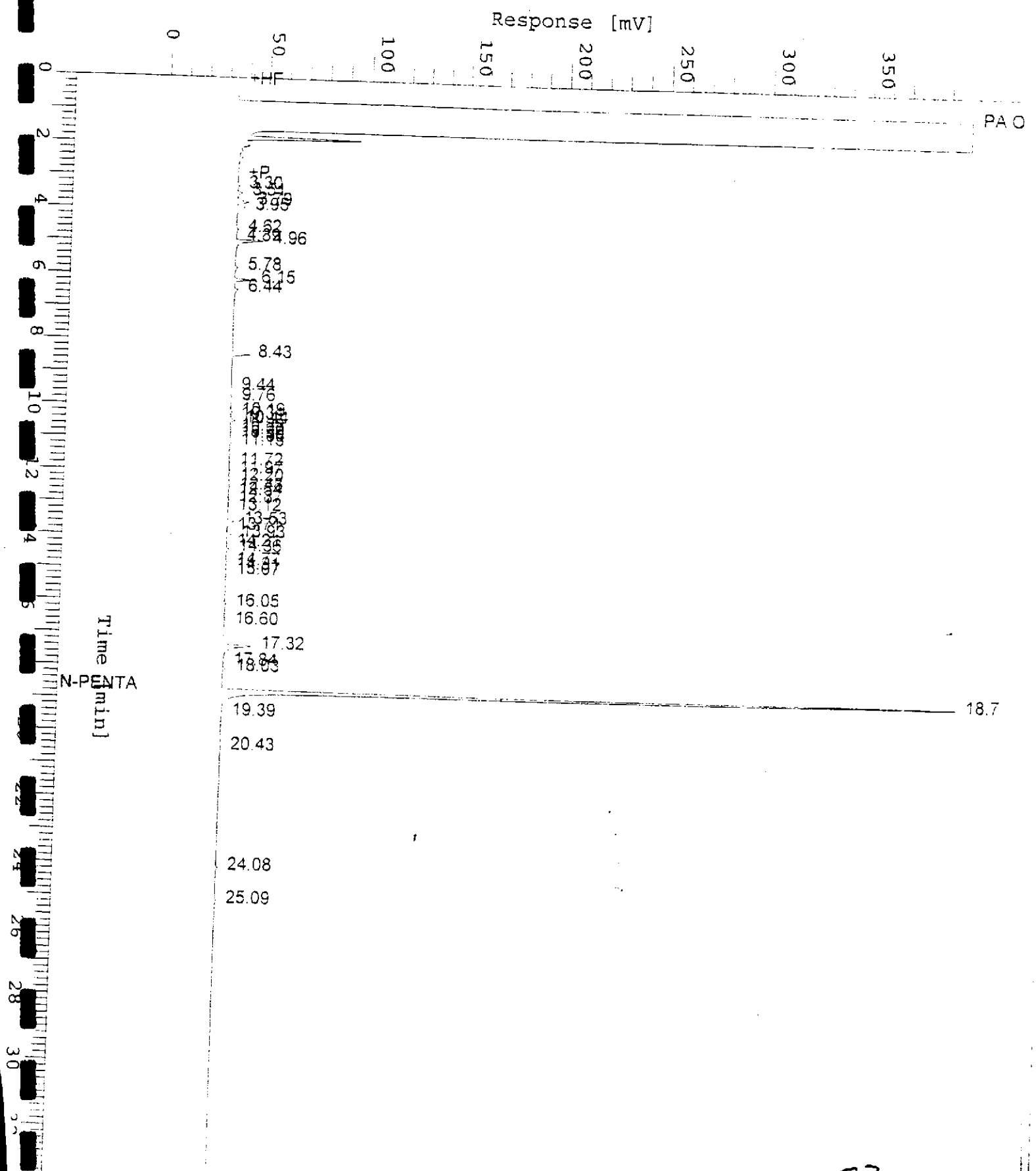


Chromatogram

Sample Name : DW9804956-4 (500:1) SG
FileName : S:\GHP_05\0419\415A044.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-4
Date : 4/17/98 03:44
Page 1 of 1
Time of Injection: 4/17/98 03:10
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Scale: 400.0 mV





Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin

Received: 04/14/98

Lab Proj. ID: 9804956

Reported: 04/28/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-4
Work Order #: 9804956 -01-05

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	32	63
MS % Recovery:	110	110	110	107	105
Dup. Result:	10	10	10	31	62
MSD % Recov.:	100	100	100	103	103
RPD:	9.5	9.5	9.5	3.2	1.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	10	10	32	63
LCS % Recov.:	110	100	100	107	105

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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

Mike Gregory
Project Manager

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

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**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804956-04, 05

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0416980HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 5030

Analyst: A. Porter
MS/MSD #: 9804955-01-MSD
Sample Conc.: N.D.
Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

Result: 770
MS % Recovery: 77

Dup. Result: 740
MSD % Recov.: 74

RPD: 4.0
RPD Limit: 0-50

LCS #: LCS041698-LCS

Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 690
LCS % Recov.: 69

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

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APPENDIX G

**HUMAN HEALTH RISK ASSESSMENT
CALCULATIONS, ASSUMPTIONS AND PARAMETERS**

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 1

Date Sampled: 4/13/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-Core locations

Report Results To: Paul Hoffee

Location: Dublin, California

9804956

Phone Number: 650-578-1172

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	FD-1	Water	3 VOAs	1:15	BTEX Compounds (EPA 8020)	Standard
02	FD-3		3 VOAs	2:20		
03	FD-2		3 VOAs	3:20		
04	FD-4		3 VOAs	4:55		
1	FD-4	↓	2 - amber liter jars	4:55	TEPH w/ silica gel cleanup (8015m)	↓

Special Instructions:

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/14/98	7:08		
				4/14/98 19:08

APPENDIX G
SCREENING HUMAN HEALTH RISK CALCULATIONS

APPENDIX G SCREENING HUMAN HEALTH RISK CALCULATIONS

This appendix presents calculations conducted to estimate potential human health risks from exposure to impacted groundwater at **Parcel 16 and the Option Area Parcel** at the intersection of Hacienda Drive and Dublin Boulevard, Dublin, California ("Subject Properties"). **Both parcels were considered herein as one site for purposes of human health risk assessment.** These calculations address potential human health risks from volatile organic chemical ("VOC") concentrations found in groundwater samples collected onsite and at adjoining properties to the north and south.

Tetrachloroethene ("PCE") is the primary VOC detected in groundwater from the Subject Properties. PCE also is the dominant VOC in samples collected from the upgradient offsite properties. Other VOCs have been detected sporadically in groundwater and at lower concentrations. However, **all VOCs detected in groundwater were conservatively retained as chemicals of concern ("COCs")** for this risk evaluation.

G.1 HUMAN HEALTH RISK CALCULATIONS

The objective of a screening risk calculation is to evaluate if potential adverse health risks are likely to occur to present and future populations that may be exposed to COCs present in soil and groundwater at a particular site. In general, exposure of people to COCs can result from many different processes, or pathways. Examples of exposure pathways can include inhalation of vapors emanating from volatile COCs in soil or groundwater, ingestion of soil or groundwater containing COCs, and dermal contact with soil or groundwater containing COCs.

At the Parcel 16 and the Option Area Parcel, COCs have been detected in groundwater samples collected from the Subject Properties, and in samples collected from property immediately adjacent to the north (Parcel 15). COCs have not been detected in soil. The source of the COCs in groundwater is offsite and upgradient; migration of groundwater has brought COCs onto the site.

Excavation at the Subject Properties to depths at which groundwater could be encountered (approximately 10 feet) was considered unlikely, and local groundwater will not be used for drinking, bathing, or irrigation, thus **the only potential exposure pathway considered in this assessment to be complete was inhalation of COCs volatilizing from groundwater.** This section presents toxicity information for each of the COCs, the assumptions used in the risk evaluation, and the results of the risk evaluation.

These risk assessment calculations for the Subject Properties were performed using the following guidelines published by the California Environmental Protection Agency

("Cal-EPA"), the United States Environmental Protection Agency ("USEPA"), and the American Society for Testing and Materials ("ASTM"):

- Cal-EPA, January 1994, *Preliminary Endangerment Assessment Guidance Manual*.
- USEPA, December 1989, *Risk Assessment Guidance for Superfund, Volume 1 - Human Health Evaluation Manual (Part A)*.
- ASTM, November 1995, *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites ("RBCA")*.

Although all three guidance documents were relied upon to perform the risk assessment calculations, exposure point concentrations due to volatilization and attendant potential risks are estimated primarily through the use of transport models and risk equations provided by ASTM [1995].

G.1.1 Representative VOC Concentrations in Groundwater

In order to calculate hypothetical risks, a single concentration value, or representative concentration ("RC") for each of the COCs present must first be established. An RC is calculated from a set of samples, and is a statistic that is assumed to represent the concentration of each COC over the entire site.

RC = UCL₉₅

At the Subject Properties, RCs for each COC were calculated as the lesser of the maximum encountered concentration or the 95% Upper Confidence Limit ("UCL₉₅") for the mean concentration, assuming a lognormal distribution of concentrations [Cal-EPA, 1992]. COCs were assumed to be present at a concentration of one-half the detection limit of the analysis for samples in which the samples were not detected [USEPA, 1989]. A summary of groundwater sample analysis results, along with the RCs of each detected analyte, may be seen in Table G-1. Upper confidence limits for the means were consistently less than the maximum detected COC concentrations, so representative COC concentrations were established as the UCL₉₅ values.

As shown in Table G-1, detection of COCs in groundwater from the Subject Properties was rare, with only 4 out of 14 onsite samples showing concentrations above the detection limits. For the purpose of this screening risk analysis, however, the conservative assumption was made to consider all onsite and offsite concentrations as a single population with a single representative concentration.

G.1.2 Toxicity Criteria

This section provides quantitative estimates of the toxic effects associated with the COCs included in the risk assessment calculations. The two broad categories of adverse human health effects recognized in the assessment of health risks are non-carcinogenic and carcinogenic effects. Health criteria for each of these effects are presented separately.

The toxicity criteria developed by both Cal-EPA and USEPA are derived primarily for two exposure routes, ingestion and inhalation. Another potential exposure pathway is dermal absorption. However, as discussed in Section G.1.3, the risk assessment calculations in this document assume that local groundwater will not be used for drinking, bathing, or irrigation, rendering the ingestion and dermal absorption pathways incomplete. Thus, inhalation of volatilized COCs is the only exposure pathway considered herein.

G.1.2.1 Non-Carcinogenic Toxicity Criteria

Non-carcinogenic effects encompass adverse, chronic human health effects that do not result in the production of tumors, but which include both developmental and reproductive effects. When the chemical dose levels for non-carcinogens exceed the chemical-specific threshold doses, the potentially exposed populations may exhibit adverse health effects. Dose levels less than the threshold level are assumed not to produce adverse health effects in exposed individuals.

Threshold levels for non-carcinogenic effects are expressed as reference doses ("RfDs"). An RfD, published in units of milligrams per kilogram of body weight per day (mg/kg-day), reflects the maximum chemical dose level that must be exceeded before adverse effects would be expected to occur, but generally incorporates a safety or uncertainty factor of two or more orders of magnitude. This definition suggests that an RfD represents the maximum "safe" dosage of a chemical. A low RfD indicates a low threshold dose level, and therefore a higher chemical toxicity. Conversely, a chemical with a higher RfD value is less toxic, in the context of the noncarcinogenic adverse health effects it can cause.

The following hierarchy for selecting RfD values was used in the risk screening evaluation. The preferred source for reference doses was the Integrated Risk Information System ("IRIS") online database [USEPA, 1997]. The toxicity values available in IRIS are updated regularly and have undergone agency review and verification by work groups comprising staff from several USEPA program offices. Next in precedence was the California EPA Office of Environmental Health Hazard Assessment Technical Support Document for the Determination of Noncancer Chronic Reference Exposure Levels ("Cal-EPA OEHHA") [Cal-EPA, 1997]. In the absence of toxicity data from IRIS or Cal-EPA OEHHA, the FY-1997 edition of USEPA's Health Effects Assessment Summary Tables ("HEAST") was used [USEPA, 1997a]. These tables are updated regularly and contain work group-verified or interim toxicity values based on the toxicological literature. The fourth source of toxicity information is a series of specific

risk assessment issue papers published by the USEPA National Center for Environmental Assessment ("NCEA") in Cincinnati, Ohio. The values obtained from NCEA are based on a variety of USEPA reports and the toxicological literature, but are not work-group verified.

As recommended in agency guidelines, the non-carcinogenic effects of potential human carcinogens are also considered in these risk assessment calculations [USEPA, 1989; Cal-EPA, 1992, 1994a]. This strategy provides for a more thorough evaluation of the potential non-carcinogenic effects posed by the COCs.

Inhalation toxicity information and RfD values used for the non-carcinogenic effects of COCs detected in groundwater from the Subject Properties and adjoining properties are summarized in Table G-2.

G.1.2.2 Carcinogenic Toxicity Criteria

Toxicity criteria that indicate the potential carcinogenicity of chemicals are called slope factors ("SFs"). USEPA defines slope factors as the "...plausible upper-bound estimates of the probability of a carcinogenic response per unit of chemical intake over a lifetime" [USEPA, 1989]. SFs are developed using mathematical models and are expressed in reciprocal units of exposure, $(\text{mg}/\text{kg}\text{-day})^{-1}$. Chemicals having a higher SF are believed to be inherently more carcinogenic, i.e., more potent, than those with a lower SF.

The USEPA also categorizes chemicals that are potentially carcinogenic according to the strength of the existing experimental evidence (i.e., human and animal studies). The USEPA Human Health Assessment Group ranks chemicals from Group A ("known human carcinogen") to Group E ("evidence of non-carcinogenicity for humans"). The Group A designation is assigned to those chemicals known to be carcinogenic to humans as substantiated by positive epidemiological evidence. Chemicals not known to be human carcinogens are classified into other categories based on the strength of the available human and animal toxicological data. The USEPA carcinogen ranking classification is presented in Table G-3 for each potential human carcinogen included in the risk screening evaluation.

Cal-EPA's recommended hierarchy was used to select health criteria for the carcinogens included in the risk screening evaluation [Cal-EPA, 1994a]. The preferred source for carcinogenic slope factors is the list of SFs published by the Cal-EPA Standards and Criteria Work Group, dated 1 November 1994 [Cal-EPA, 1994b]. The secondary source of SFs is the IRIS database [USEPA, 1997].

Inhalation toxicity information and slope factors used for the carcinogenic COCs are summarized in Table G-3. **Xylenes were not included as carcinogens in the risk calculations.** This group of chemicals is listed as a Class D carcinogen (i.e., "not classifiable as to carcinogenicity") in USEPA's IRIS database, and Cal-EPA does not recognize this chemical as a human carcinogen [California Code of Regulations, Title 22,

Section 12000] and thus has not issued a carcinogenic slope factor to be used for this chemical [Cal-EPA, 1994b].

G.1.3 Identification of Exposed Populations and Relevant Exposure Pathways

At present, the Subject Properties are vacant. Parcel 15, north of Parcel 16, is where the "BH-series" samples were obtained and is also vacant. Plans are underway to develop the Subject Properties as a campus with several office buildings. ~~NO additional parking is planned for the buildings.~~ Based on this use, hypothetical future populations at the Subject Properties were divided into two groups for the purpose of the screening risk analysis:

- Commercial or industrial building occupants who work indoors.
- Maintenance workers who work outdoors.

Due to the type of use planned for the Subject Properties, only one exposure pathway, inhalation of air containing VOCs volatilized from groundwater, was considered to be potentially complete. No COCs have been detected in soils; this precludes consideration of soil exposure pathways such as dermal contact and incidental ingestion of soil containing COCs. Risks were evaluated separately for volatilization of COCs into indoor and outdoor air. The indoor air calculations pertain to the hypothetical future indoor worker population, and the outdoor air calculations are relevant for the hypothetical outdoor worker population.

Ingestion of and dermal contact with COCs in groundwater were not included as complete exposure pathways for the following reasons:

- **Groundwater at the Subject Properties was encountered at an average depth of 10.4 feet below ground surface ("bgs") in April 1998 [Treadwell & Rollo, 1998].** The planned building foundation design is a system of interconnected footings and grade beams that will extend to approximately 36 inches below grade [Treadwell & Rollo, 1998]. Thus, **direct exposure to groundwater may only occur during other deep construction/excavation activities which are likely to be of short duration and frequency, and therefore would not likely pose a significant public health concern.**
- **No drinking water wells exist onsite.** Water used by businesses planned on the Subject Properties will be supplied by the Alameda County Zone 7 Water Agency, which obtains water from deep wells and surface reservoirs located offsite. Therefore, exposure to shallow impacted groundwater through direct ingestion or dermal contact is unlikely to occur.

G.1.4 Calculation of Exposure Point Concentrations

Exposure parameter values for potentially exposed populations are summarized in Table G-4. The exposure assumptions are based on default values recommended by the USEPA [USEPA, 1989, 1991] and the California EPA [Cal-EPA, 1992]. The source of each exposure assumption is referenced in Table G-4.

Concentrations of VOCs volatilized from groundwater into indoor building air and from groundwater into ambient outdoor air were estimated using the equations presented in RBCA. The parameter values used in the RBCA model equations are summarized in Table G-5. ~~Site-specific parameter values were used when available~~ [Treadwell & Rollo, 1998]; otherwise default ASTM parameter values or best professional judgement were used [ASTM, 1995]. All parameter sources are noted in Table G-5. Physical and chemical parameters specific to each chemical of concern that are used in the risk calculations are summarized in Table G-6.

G.1.5 Risk Calculations

Calculations of hypothetical estimates of incremental lifetime carcinogenic risk and potential adverse non-carcinogenic health hazards are presented in this section. Hypothetical risk estimates are calculated for each COC for the indoor and outdoor air exposure pathways. Equations used to calculate risk and hazard estimates for each hypothetical future population are included in the footnotes to Tables G-7 and G-8.

For future commercial and industrial building occupants at the Subject Properties, characterization of cancer risk entailed estimating the incremental risk of developing cancer over a lifetime of 70 years due to a 25-year working exposure to COCs detected in groundwater. Incremental carcinogenic risk is calculated by multiplying the estimated dose from a COC's exposure point concentration times the cancer slope factor for that COC. ~~Calculated carcinogenic risks for individual COCs are then summed to obtain the total estimated lifetime incremental cancer risk.~~ A range of lifetime incremental carcinogenic risk of 10^{-4} to 10^{-6} is deemed acceptable by the USEPA [USEPA, 1989]. Notification to site occupants is required by California Proposition 65 if carcinogenic risks are judged to exceed 10^{-5} [California Code of Regulations, Title 22, Section 12703].

The non-carcinogenic risk characterization represents the relationship between the chemical doses estimated for the populations of concern and the toxicity of the individual non-carcinogenic COCs. The calculated hazard index ("HI") for each COC is a ratio of the estimated exposure dose divided by the RfD (or "safe" dose) for that chemical. Hazard indices for all COCs present are summed. If the total HI exceeds one, the intake of the COCs is greater than the "safe" dosage level represented by the RfDs, and therefore adverse health effects may occur in the exposed population. When the total HI is less than one, adverse health effects are not expected to occur.

Results of the risk assessment calculations for each potentially exposed population are presented in Tables G-7 and G-8, and are discussed below. Calculated cancer risk estimates and noncancer hazard indices are presented in this report using one significant figure only, consistent with U.S. EPA guidance [USEPA, 1989].

G.1.5.1 Indoor Workers (Commercial or Industrial Building Occupants)

Carcinogenic risks and non-carcinogenic hazard indices resulting from exposure of indoor workers to COCs in groundwater are low. Table G-7 presents the calculated estimate of human health risks to commercial or industrial building occupants due to inhalation of COCs volatilized from groundwater under the Subject Properties. As discussed earlier, **groundwater chemical analyses from offsite were also used in the calculations as a conservative assumption** (the source of COCs is upgradient of Parcel 16).

The total non-carcinogenic hazard index for indoor workers due to exposure to COCs volatilizing from groundwater is 0.01, which is significantly below 1.0, the threshold value at which non-carcinogenic effects may occur. The total estimated lifetime incremental cancer risk for indoor workers from exposure to COCs volatilizing from groundwater is 6×10^{-7} . This estimated risk value is less than the U.S. EPA range of acceptable risks (i.e., 10^{-4} to 10^{-6}) and is significantly less than the Proposition 65 notification level of 10^{-5} .

G.1.5.2 Outdoor Workers (Maintenance Personnel)

Carcinogenic risks and non-carcinogenic hazard indices due to exposure of outdoor workers to COCs in groundwater are lower than those of indoor workers. Table G-8 presents estimated human health risks to commercial or industrial outdoor maintenance personnel from inhalation of COCs volatilized from groundwater.

The total non-carcinogenic hazard index for outdoor workers created by exposure to COCs in volatilizing from groundwater is 0.006, which is significantly below 1.0, the threshold value at which non-carcinogenic effects may occur. The total estimated lifetime incremental cancer risk for outdoor workers from exposure to COCs volatilizing from groundwater is 3×10^{-7} . As with the hypothetical indoor worker population, this risk value is less than the range of acceptable risks (i.e., 10^{-4} to 10^{-6}) and is significantly less than the Proposition 65 notification level of 10^{-5} .

These estimated risks were calculated using many conservative default parameters in the RBCA guidance (e.g., building air exchange rate), and from other sources (e.g. areal fraction of cracks in building floor, [Daugherty, 1992]). Moreover, **as a conservative assumption, chemical concentrations in groundwater from adjacent properties were combined with onsite groundwater concentrations for the calculations.** The source of

COCs in groundwater on the Subject Properties is from a historic release that occurred on the adjacent, upgradient property (Parcel 15).

G.2 CONCLUSIONS

Based on these risk assessment calculations, it is concluded that the primary COCs detected in groundwater at or adjacent to the Subject Properties do not pose a significant human health risk at current concentrations. Given that the release of COCs to groundwater on the upgradient property likely occurred 50 years ago, concentrations of COCs on the Subject Properties are not likely to increase.

Under existing conditions, the hazard index risk values are significantly less than the threshold value at which non-carcinogenic effects may occur (i.e., 1.0). Likewise, the total estimated lifetime incremental carcinogenic risks are between 10^{-6} and 10^{-7} . These incremental cancer risks are less than both the acceptable maxima range of 10^{-4} to 10^{-6} and the Proposition 65 notification level of 10^{-5} .

G.3 REFERENCES

ASTM, 1995, *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*. American Society for Testing and Materials, Designation: E 1739-95, November 1995.

California Code of Regulations, Title 22, Section 12000, Revised 6 June 1997.

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Cal-EPA, 1994a. *Preliminary Endangerment Assessment Guidance Manual, Department of Toxic Substances Control*. California Environmental Protection Agency, January 1994.

Cal-EPA, 1994b. *California Cancer Potency Factors: Update*. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Standards and Criteria Work Group, Sacramento, California, 1 November 1994.

Cal-EPA, 1997, *Technical Support Document for the Determination of Non-Cancer Chronic Reference Exposure Levels*. California Environmental Protection

Agency, Air Toxic and Epidemiology Section, Office of Environmental Health Hazard Assessment, October 1997.

- Daugherty, S.J., 1992, *Regulatory Approaches to Hydrocarbon Contamination from Underground Storage Tanks*, in Kostecki, P.T, and E.J. Calabrese, eds., *Hydrocarbon Contaminated Soils and Groundwater: Analysis, Fate, Environmental and Public Health Effects, Remediation*. Vol. 1. Lewis Publishers.
- Treadwell & Rollo, 1998, *Geotechnical Investigation, PeopleSoft Dublin Campus Master Plan, Dublin, California*. Treadwell & Rollo, Inc., 23 April 1998.
- USEPA, 1989. *Risk Assessment Guidance for Superfund, Volume 1- Human Health Evaluation Manual (Part A)*. United States Environmental Protection Agency, Office of Environmental Emergency and Remedial Response ("OERR"), EPA/540/12-89/002, Washington, D.C., December 1989.
- USEPA, 1991. *Human Health Evaluation Manual, Supplemental Guidance, Standard Default Exposure Factors*, United States Environmental Protection Agency, Office of Solid Waste and Emergency Response ("OSWER"), Directive 9285.6-03, Washington, D.C., March 1991.
- USEPA, 1997. *Integrated Risk Information System ("IRIS") Database*, United States Environmental Protection Agency, Washington, D.C., 1997.
- USEPA, 1997a. *Health Effects Assessment Summary Tables, Annual FY-1997*, United States Environmental Protection Agency, Office of Emergency and Remedial Response ("OERR"), Washington, D.C., 1997.

Table G-1

**Summary of Chemical Analytical Data for Groundwater Samples
Parcel 16 and the Option Area Parcel, Dublin, California**

Sample	Collection Date	Concentration in Groundwater (ug/L)				
		Tetra- chloroethene (PCE)	Tri- chloroethene (TCE)	Carbon Tetrachloride	Chloroform	Xylenes
P-1	Feb-98	<2	<2	<2	<2	<2
P-2	Feb-98	<2	<2	<2	<2	<2
P-3	Feb-98	83	<2	<2	<2	<2
P-3A ^(a)	Oct-87 to Mar 95	15	1.6	<2	<2	<2
P-4	Feb-98	100	4.2	<2	<2	<2
P-5	Feb-98	<2	<2	<2	<2	<2
P-6	Feb-98	<2	<2	<2	<2	6.6
P-7	Feb-98	<40	<40	<40	<40	<40
P-8	Apr-98	<2	<2	<2	<2	<2
P-9	Apr-98	<2	<2	<2	<2	<2
P-10	Apr-98	<2	<2	<2	<2	<2
OA-1	Apr-98	<2	<2	<2	<2	<2
OA-2	Apr-98	<2	<2	<2	<2	<2
OA-3	Apr-98	<2	<2	<2	<2	<2
OA-4	Apr-98	<2	<2	<2	<2	<2
OA-5	Apr-98	29	5	<2	<2	<2
OA-6	Apr-98	<2	<2	<2	<2	<2
OA-7	Apr-98	<2	<2	<2	<2	<2
BH-1	Apr-98	24	1	4.2	5.3	<2
BH-2	Apr-98	<2	<2	<2	<2	<2
BH-3	Apr-98	<2	<2	<2	<2	<2
BH-4	Apr-98	<1	1.1	1.3	5.1	<2
BH-5	Apr-98	<2	<2	<2	<2	<2
BH-6	Apr-98	120	2.5	17	21	<2
BH-7	Apr-98	2	<1	1.5	4.5	<2
BH-8	Apr-98	25	<1	<1	<1	<2
BH-9	Apr-98	280	<1	<1	<1	<2
Number of Samples Analyzed		27	27	27	27	27
Number of Analyte Detections		9	6	4	4	1
Frequency of Detection (%)		33.3%	22.2%	14.8%	14.8%	3.7%
Minimum Detected Concentration		2.2	1	1.3	4.5	6.6
Maximum Detected Concentration		280	5	17	21	6.6
UCL ₉₅ ^(b)		109	2.3	2.7	3.5	2.0
Representative Concentration in ug/L ^(c)		109	2.3	2.7	3.5	2.0

Note:

- (a) Concentration shown is the maximum encountered over the sampling period
- (b) 95% upper confidence limit ("95% UCL"), based on two assumptions:
 - 1) The underlying distribution of chemical concentrations is assumed to be lognormal.
 - 2) Samples with non-detectable concentrations of an analyte are assumed to contain the analyte at a concentration equal to one-half the detection limit.
- (c) Representative concentrations calculated as the lesser of either the maximum detected concentration, or the 95% UCL of the samples (see note (b) above).

Table G-2

**Inhalation Non-Carcinogenic Toxicity Information for Chemicals of Concern
Parcel 16 and the Option Area Parcel, Dublin, California**

Compound	Inhalation Reference Dose (mg/kg-day)	Non-Carcinogenic Effects	Source^(a)
Tetrachloroethene	0.011	Adverse effects on alimentary system.	Cal-EPA OEHHA
Trichloroethene	0.17	Adverse effects on nervous system and eyes.	Cal-EPA OEHHA
Carbon Tetrachloride	0.011	Adverse effects on alimentary and nervous systems.	Cal-EPA OEHHA
Chloroform	0.000086	Liver cyst formation in dogs.	USEPA-NCEA
Xylenes	0.057	Nervous system and respiratory system effects	Cal-EPA OEHHA

Notes:

(a) Reference doses were obtained from the U.S. Environmental Protection Agency Integrated Risk Information System ("IRIS"), the U.S. EPA 1997 Health Effects Assessment Summary Tables ("HEAST"), the U.S. EPA National Center for Environmental Assessment Risk Assessment Issue Papers ("NCEA"), or the California EPA Office of Environmental Health Hazard Assessment Technical Support Document for the Determination of Noncancer Chronic Reference Exposure Levels ("Cal-EPA OEHHA"), in order of precedence.

Table G-3

Inhalation Carcinogenic Toxicity Information for Chemicals of Concern
Parcel 16 and the Option Area Parcel, Dublin, California

Compound	Weight of Evidence Classification ^(a)	Inhalation Slope Factor (mg/kg-d) ⁻¹	Carcinogenic Effects	Source ^(b)
Tetrachloroethene	B2	0.021	Under review	Cal-EPA Memo
Trichloroethene	B2	0.01	Under review	Cal-EPA Memo
Carbon Tetrachloride	B2	0.15	Liver cell carcinomas in rats, mice, hamsters.	Cal-EPA Memo
Chloroform	B2	0.019	Several tumor types formed in rats and mice.	Cal-EPA Memo
Xylenes	D	(c)	-	-

Notes:

(a) U.S. EPA weight-of-evidence classification is as follows:

A = Human Carcinogen

B1 or B2 = Probable Human Carcinogen; B1 indicates that limited human data are available; B2 indicates that there is sufficient evidence in animals and inadequate or no evidence in humans.

C = Possible Human Carcinogen

D = Not Classifiable as to Human Carcinogenicity

E = Evidence of Non-Carcinogenicity for Humans

Weight-of-evidence information obtained from the U.S. Environmental Protection Agency Integrated Risk Information System database ("IRIS"), the July 1997 U.S. EPA Health Effects Assessment Summary Tables ("HEAST"), or the U.S. EPA National Center for Environmental Assessment Risk Assessment Issue Papers ("NCEA"), in order of precedence.

(b) Slope factors were obtained from the California Environmental Protection Agency Memorandum of 1 November 1997 Concerning Cancer Potency Factors ("Cal-EPA Memo"), the U.S. EPA IRIS database, the 1997 U.S. EPA HEAST, or the U.S. EPA NCEA, in order of precedence.

(c) A hyphen (-) indicates no information is available from the listed sources for that category and chemical.

Table G-4
Summary of Human Exposure Assumptions
Parcel 16 and the Option Area Parcel, Dublin, California

Parameter	Variable	Value ^(a)	Reference (see below)
Air Inhalation Rate (m ³ /day)	IRa	20	USEPA (1991), Cal-EPA (1992)
Averaging Time (days)			
Non-Carcinogens	AT	9125	USEPA (1991), Cal-EPA (1992)
Carcinogens	AT	25550	USEPA (1991), Cal-EPA (1992)
Body Weight (kg)	BW	70	USEPA (1991), Cal-EPA (1992)
Exposure Duration (years)	ED	25	USEPA (1991), Cal-EPA (1992)
Exposure Frequency (days/year or events/year)	EF	250	USEPA (1991), Cal-EPA (1992)

Note:

(a) Exposure assumptions are applicable to all adult indoor and outdoor workers.

References:

Cal-EPA, 1992, *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency, Department of Toxic Substances Control, Sacramento, California, July 1992.

USEPA, 1991, *RAGS, Volume 1 - Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors*. Interim Final, OSWER Directive 9285.6-03, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, March 1991.

Table G-5
Physical Parameter Assumptions for Site
Parcel 16 and the Option Area Parcel, Dublin, California

Symbol	Value	Variable	Source
h_{cap}	5	Thickness of capillary fringe (cm)	ASTM, 1995 ^(a)
h_v	313	Thickness of vadose zone (cm)	T&R, 1998 ^(b)
L_B	300	Enclosed-space volume / infiltration area ratio (cm)	ASTM, 1995
L_{crack}	15	Enclosed-space foundation or wall thickness (cm)	ASTM, 1995
L_{gw}	318	Depth to groundwater, i.e. $h_{cap} + h_v$ (cm)	ASTM, 1995
θ_T	0.44	Total soil porosity (cm^3 / cm^3 soil)	T&R, 1998
θ_{acrack}	0.29	Volumetric air content in foundation or wall cracks (cm^3 air / cm^3 crack)	EKI ^(c)
θ_{wcrack}	0.15	Volumetric H_2O content in foundation or wall cracks (cm^3 H_2O / cm^3 crack)	EKI ^(c)
θ_{as}	0.19	Volumetric air content in vadose zone soil (cm^3 air / cm^3 soil)	T&R, 1998
θ_{ws}	0.25	Volumetric H_2O content in vadose zone soil (cm^3 H_2O / cm^3 soil)	T&R, 1998
θ_{acap}	0.04	Volumetric air content in capillary fringe soil (cm^3 air / cm^3 soil)	ASTM, 1995
θ_{wcap}	0.40	Volumetric H_2O content in capillary fringe soil (cm^3 H_2O / cm^3 soil)	ASTM, 1995
η	0.001	Areal fraction of cracks in foundation or wall (cm^2 cracks / cm^2 total area)	Daugherty, 1992 ^(d)
ρ_s	1.58	Soil bulk density (g soil / cm^3 soil)	T&R, 1998
τ	7.88E+08	Averaging time for vapor flux (sec)	ASTM, 1995
ER	0.00023	Enclosed-space air exchange rate (sec^{-1})	ASTM, 1995
U_{air}	225	Wind speed above ground surface in ambient mixing zone (cm / sec)	ASTM, 1995
δ_{air}	200	Ambient air mixing zone height (cm)	ASTM, 1995
W	6.29E+04	Width of source area parallel to wind or groundwater flow direction (cm)	EKI ^(e)

Notes:

- (a) Parameter values were defaults taken from the ASTM RBCA guide:
 ASTM, 1995, *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*. American Society for Testing and Materials, Designation E 1739-95, 10 September 1995.
- (b) Parameter values were derived or estimated from physical properties measured onsite and documented in:
 T&R, 1998, *Geotechnical Investigation, PeopleSoft Dublin Campus Master Plan, Dublin, California*. Treadwell & Rollo, Inc. 23 April 1998.
- (c) Best professional judgement by EKI personnel. Moisture content in floor cracks is conservatively assumed to be similar to but somewhat less than moisture content of vadose zone soil.
- (d) Estimate taken from Daugherty, S.J, et al. 1992 (see Appendix G for complete reference)
- (e) Square root of site area as estimated from aerial photographs.

Table G-6

Groundwater

**Chemical Properties and Model Parameters of Compounds in the Soils
Parcel 16 and the Option Area Parcel, Dublin, California**

Compound	Solubility ^(a) (mg/L, 20°C)	H ^(b) (unitless)	D _{air} ^(c) (cm ² /s)	D _{water} ^(d) (cm ² /s)	VFw _{esp} ^(e) (L H ₂ O/m ³ air)	VFw _{amb} ^(e) (L H ₂ O/m ³ air)
Tetrachloroethene	150	0.54	0.074	7.6E-06	2.6E-03	1.2E-03
Trichloroethene	1090	0.30	0.081	8.4E-06	1.6E-03	8.5E-04
Carbon Tetrachloride	798	0.96	0.079	8.2E-06	4.8E-03	2.1E-03
Chloroform	8210	0.11	0.088	9.2E-06	7.0E-04	4.9E-04
Xylenes	166	0.24	0.071	7.2E-6	1.1E-03	6.4E-04

Notes:

- (a) Solubility values from: (Multiple listed values were averaged)
Montgomery, J.H., 1996, *Groundwater Chemicals Desk Reference*, 2nd ed. Lewis Pub. Co., Chelsea, Michigan.
- (b) Henry's Law Constants calculated through the method of Gossett:
Gossett, J.M., 1987, *Measurement of Henry's Law Constants for C₁ and C₂ Chlorinated Hydrocarbons*. Env. Sci. Technol. v.21 pp.202-208,
or obtained from Montgomery [1996].
- (c) Diffusivity in air estimated using the FSG ("Fuller's") Method from:
Lyman, W.J. et al., 1990, *Handbook of Chemical Property Estimation Methods*.
Amer. Chem. Soc., Wash. D.C. (pp. 17-9 to 17-13)
- (d) Diffusivity in water estimated using the method of Hayduk & Laudie from Lyman, et al. [1990].
- (e) Volatilization Factors to model evaporative transfer of chemicals from groundwater to enclosed-space air (VFw_{esp}), and to ambient air (VFw_{amb}) calculated according to method described in:
ASTM, 1995, *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*. American Society for Testing and Materials, Designation E 1739-95, 10 September 1995.

Table G-7

Characterization of Human Health Risks due to Inhalation of COCs Volatilized from Groundwater
for Future ~~Developments~~
Parcel 16 and the Option Area Parcel, Dublin, California

Compound	Representative Concentration in Groundwater ^(a) (ug/L)	VFW _{esp} ^(b) (L H ₂ O /m ³ air)	Non-Carcinogen Chronic Daily Intake ^(c) (mg/kg-day)	Carcinogen Chronic Daily Intake ^(c) (mg/kg-day)	Non-Carcinogen Inhalation Reference Dose (RfDi) ^(d) (mg/kg-day)	Carcinogen Inhalation Slope Factor (SFo) ^(e) (mg/kg-d) ⁻¹	Estimated Non-Carcinogen Hazard Index ^(f)	Estimated Lifetime Incremental Cancer Risk ^(g)
Tetrachloroethene	109	2.6E-03	5.5E-05	2.0E-05	0.011	0.021	5.0E-03	4.1E-07
Trichloroethene	2.3	1.6E-03	7.1E-07	2.5E-07	0.17	0.01	4.2E-06	2.5E-09
Carbon Tetrachloride	2.7	4.8E-03	2.5E-06	9.1E-07	0.011	0.15	2.3E-04	1.4E-07
Chloroform	3.5	7.0E-04	4.8E-07	1.7E-07	0.000086	0.019	5.6E-03	3.3E-09
Xylenes	2.0	1.1E-03	4.4E-07	1.6E-07	0.057	-	7.6E-06	-
Total Estimated Risk due to Inhalation of COCs Volatilized from Groundwater to Outdoor Air:							1E-02	1E-02

Notes:

- (a) Refer to Table G-1 for compilation of representative concentrations (RCs).
- (b) Chemical-specific volatilization factor from soil to indoor air calculated using the Risk-Based Corrective Action model ("RBCA") [ASTM, 1995]. Parameters used in the RBCA model are listed in Tables G-5 and G-6.
- (c) Chronic daily intakes (CDIs) were estimated using methods recommended by U.S. EPA or Cal-EPA. The following equation was used to calculate CDIs: (Refer to Table G-4 for parameters used.)

$$CDI_{(inhalation)} = \frac{C_a \cdot IR_a \cdot EF \cdot ED}{BW \cdot AT}$$

5.6E-07

where:

$CDI_{(inhalation)}$ = Chronic Daily Intake (mg/kg-day)

Ca = Exposure Point Air Concentration (mg/m³) = $RC * VF_{wesp} * 0.001mg/ug$

IRa = Air Inhalation Rate (m³/day)

EF = Exposure Frequency (days/year)

ED = Exposure Duration (years)

BW = Body Weight (kg)

AT = Averaging Time (days)

*representative conc.
vol. factor - enclosed space air*

- (d) Chronic reference doses (RfDs) for non-carcinogenic effects are listed in Table G-2, along with their sources. A hyphen (-) indicates an RfD is not available for this compound.
- (e) Slope Factors (SFs) for carcinogenic effects are listed in Table G-3, along with their sources. A hyphen (-) indicates an SF is not available for this compound.
- (f) Non-carcinogenic hazard index (HI) for compound i is defined as the CDI_i / RfD_i . The non-carcinogenic HI, summed for all compounds and exposure pathways, assumes that there is a level of exposure (i.e., RfD) below which it is unlikely even for sensitive populations to experience adverse health effects (U.S. EPA, 1989). If the chronic daily intake (i.e., CDI) exceeds this RfD threshold (i.e., HI greater than 1), there may be concern for potential non-carcinogenic effects.
- Estimated lifetime incremental cancer risk for chemical i is defined as $CDI_i \times SF_i$. The estimated incremental lifetime cancer risk to an individual developing cancer due to COCs is given by the sum of incremental cancer risks for all chemicals and exposure pathways.

Table G-8

Characterization of Human Health Risks due to Inhalation of COCs Volatilized from Groundwater
for Future ~~Workers~~
Parcel 16 and the Option Area Parcel, Dublin, California

Compound	Representative Concentration in Groundwater ^(a) (ug/L)	VFW _{amb} ^(b) (L H ₂ O /m ³ air)	Non-Carcinogen Chronic Daily Intake ^(c) (mg/kg-day)	Carcinogen Chronic Daily Intake ^(c) (mg/kg-day)	Non-Carcinogen Inhalation Reference Dose (RfDi) ^(d) (mg/kg-day)	Carcinogen Inhalation Slope Factor (SFo) ^(e) (mg/kg-d) ⁻¹	Estimated Non-Carcinogen Hazard Index ^(f)	Estimated Lifetime Incremental Cancer Risk ^(g)
Tetrachloroethene	109	1.2E-03	2.6E-05	9.4E-06	0.011	0.021	2.4E-03	2.0E-07
Trichloroethene	2.3	8.5E-04	3.8E-07	1.4E-07	0.17	0.01	2.2E-06	1.4E-09
Carbon Tetrachloride	2.7	2.1E-03	1.1E-06	4.0E-07	0.011	0.15	1.0E-04	6.0E-08
Chloroform	3.5	4.9E-04	3.3E-07	1.2E-07	0.000086	0.019	3.9E-03	2.3E-09
Xylenes	2.0	6.4E-04	2.4E-07	8.7E-08	0.057	-	4.3E-06	-
Total Estimated Risk due to Inhalation of COCs Volatilized from Groundwater to Outdoor Air:							6E-03	3E-07

Notes:

- (a) Refer to Table G-1 for compilation of representative concentrations (RCs).
- (b) Chemical-specific volatilization factor from soil to outdoor air calculated using the Risk-Based Corrective Action model ("RBCA") [ASTM, 1995]. Parameters used in the RBCA model are listed in Tables G-5 and G-6.
- (c) Chronic daily intakes (CDIs) were estimated using methods recommended by U.S. EPA or Cal-EPA. The following equation was used to calculate CDIs: (Refer to Table G-4 for parameters used.)

$$CDI_{(inhalation)} = \frac{Ca \cdot IRa \cdot EF \cdot ED}{BW \cdot AT}$$

where:

$CDI_{(inhalation)} = \text{Chronic Daily Intake (mg/kg-day)}$

$Ca = \text{Exposure Point Air Concentration (mg/m}^3) = RC * VFWamb * 0.001\text{mg/ug}$

$IRa = \text{Air Inhalation Rate (m}^3\text{/day)}$

$EF = \text{Exposure Frequency (days/year)}$

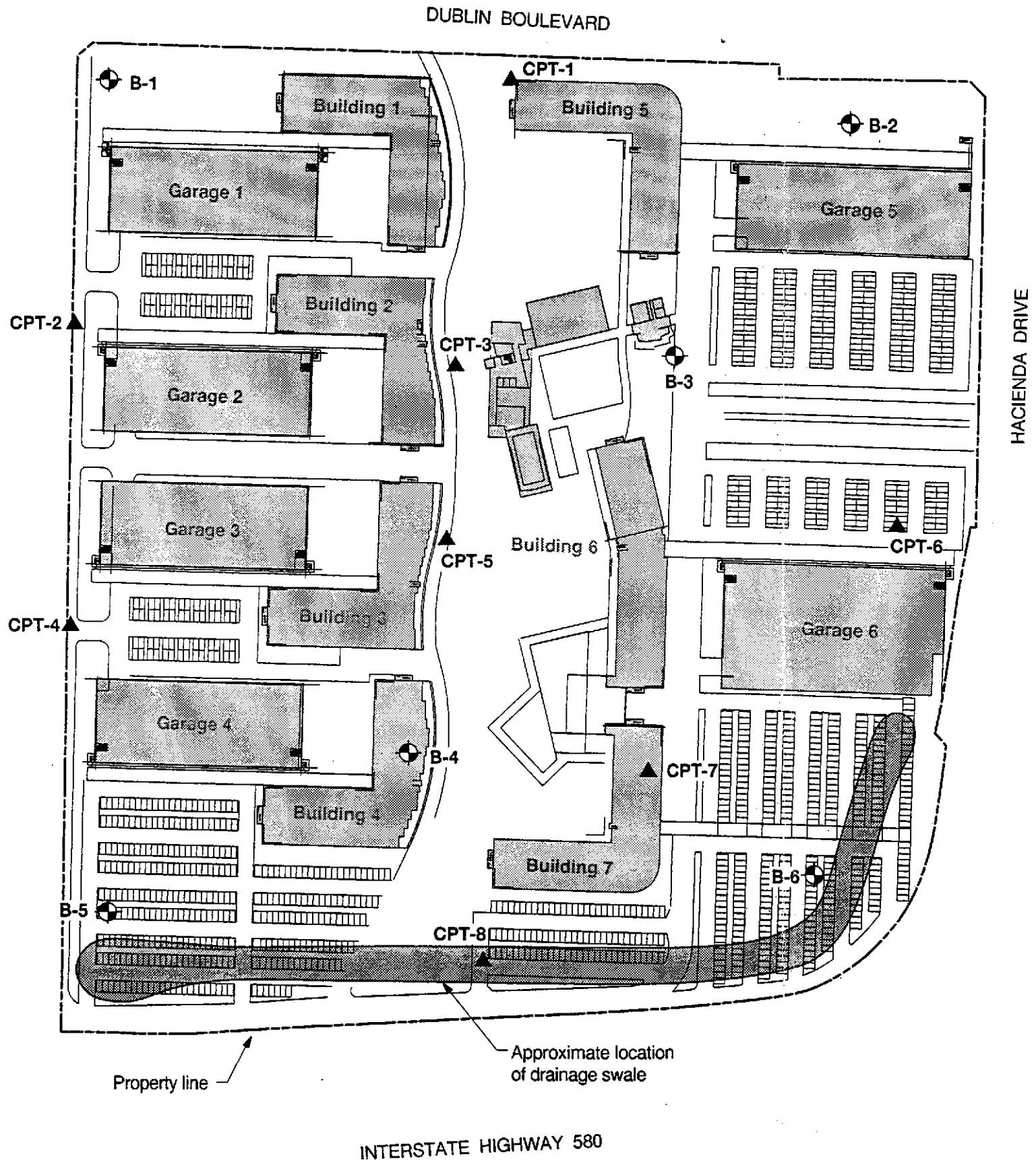
$ED = \text{Exposure Duration (years)}$

$BW = \text{Body Weight (kg)}$

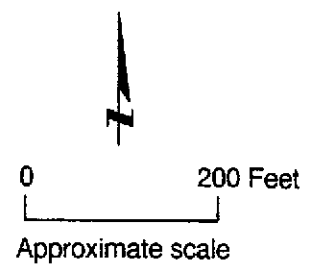
$AT = \text{Averaging Time (days)}$

- (d) Chronic reference doses (RfDs) for non-carcinogenic effects are listed in Table G-2, along with their sources. A hyphen (-) indicates an RfD is not available for this compound.
- (e) Slope Factors (SFs) for carcinogenic effects are listed in Table G-3, along with their sources. A hyphen (-) indicates an SF is not available for this compound.
- (f) Non-carcinogenic hazard index (HI) for compound *i* is defined as the CDI_i / RfD_i . The non-carcinogenic HI, summed for all compounds and exposure pathways, assumes that there is a level of exposure (i.e., RfD) below which it is unlikely even for sensitive populations to experience adverse health effects (U.S. EPA, 1989). If the chronic daily intake (i.e., CDI) exceeds this RfD threshold (i.e., HI greater than 1), there may be concern for potential non-carcinogenic effects.
- (g) Estimated lifetime incremental cancer risk for chemical *i* is defined as $CDI_i \times SF_i$. The estimated incremental lifetime cancer risk to an individual developing cancer due to COCs is given by the sum of incremental cancer risks for all chemicals and exposure pathways.

4/98.

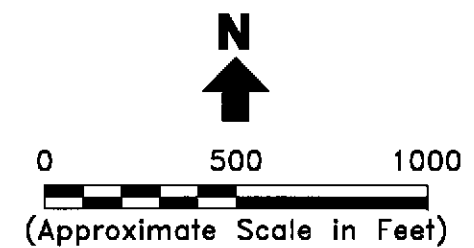
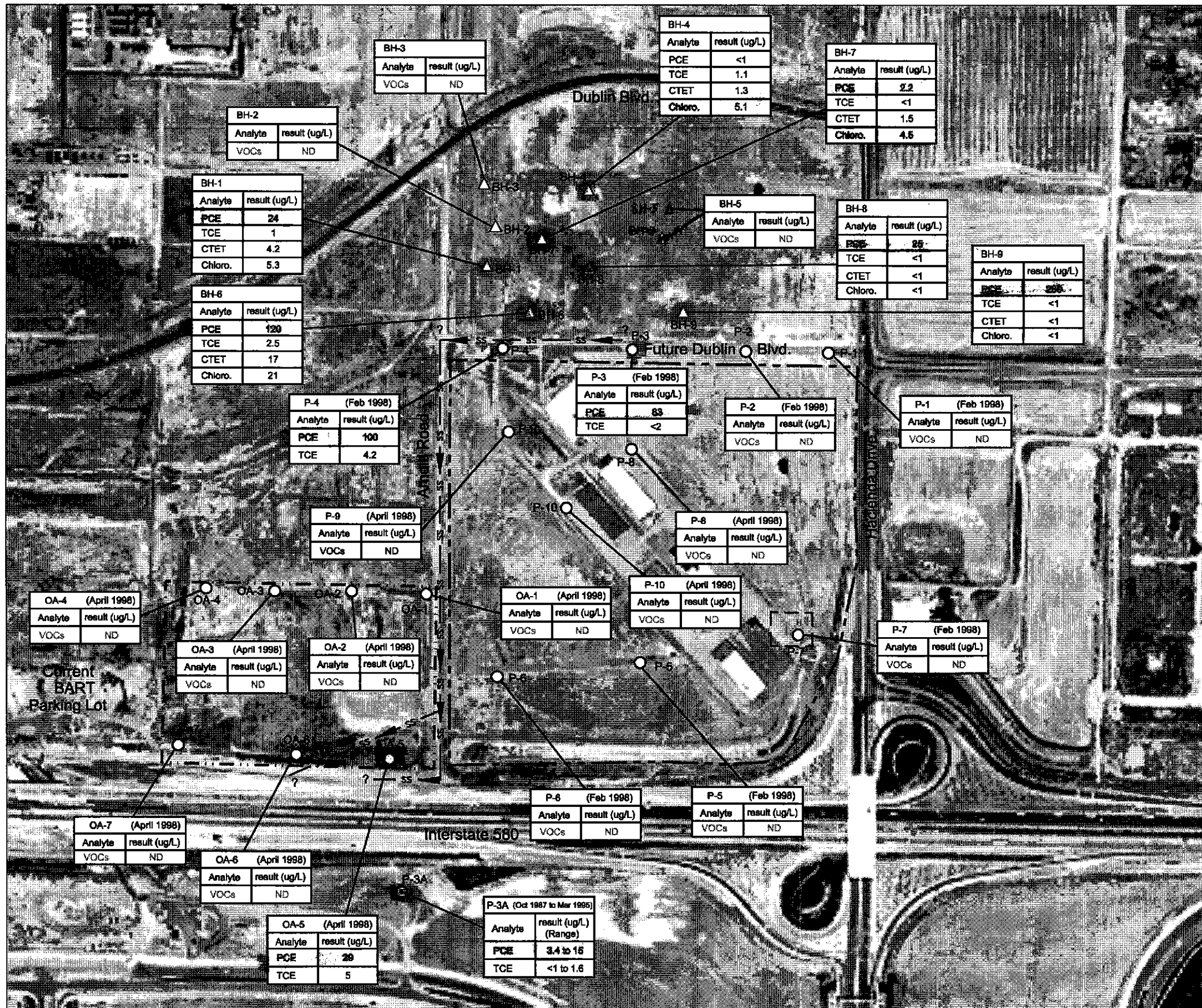


- EXPLANATION**
- B-1 Approximate location of boring performed by Treadwell & Rollo for this investigation, January 1998
 - CPT-1 Approximate location of cone penetration test performed by Treadwell & Rollo for this investigation, January 1998



Reference: Site Plan, provided by Gensler, March 1998.

PEOPLESOFT DUBLIN CAMPUS MASTER PLAN Dublin, California	
SITE PLAN	
Project No. 2275.01	Figure 2

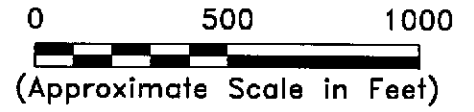


- LEGEND**
- Approximate Boundary of Parcel 16
 - - - - - Approximate Boundary of Option Area Parcel
 - ← ss --- Approximate Sanitary Sewer Line Alignment
 - [-] Approximate Location of Former Underground Fuel Oil Storage Depot
 - Approximate Location of Soil Boring and Grab Groundwater Sample by EKI (Collected February & April 1998)
 - △ Approximate Location of Soil Boring and Grab Groundwater Sample by Versar, Inc. (Collected April 1998) Data Provided by Alameda County General Services Agency
 - ⊙ Source for Data: "Summary of Environmental Activities, Hacienda, Pleasanton, California," Environ, 9 Dec. 1997
- VOCs Volatile Organic Compounds using EPA Method 8260
- PCE Tetrachloroethylene
- TCE Trichloroethylene
- CTET Carbon Tetrachloride
- Chloro Chloroform

- Notes:**
1. All locations are approximate.
 2. Basemap from: Pacific Aerial Surveys photograph dated 5 July 1994.

Erler & Kalinowski, Inc.

Grab Groundwater Sample Analytical Results for VOCs for Parcel 15, Parcel 16 and Option Area Parcel
Hacienda Dr. and Dublin Blvd.
Dublin, California
May 1998
EKI 980003.00
Figure 2



LEGEND

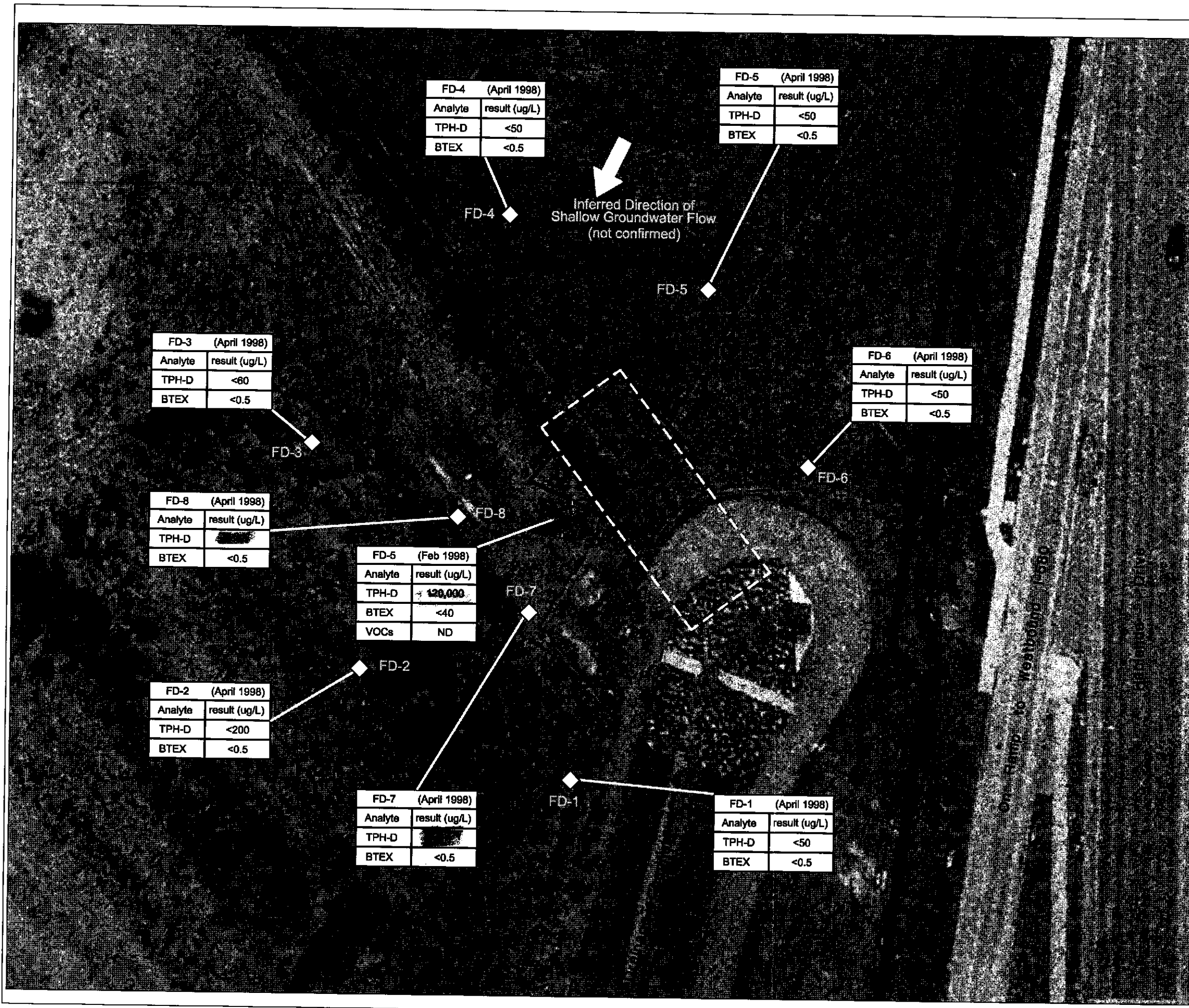
- Approximate Boundary of Parcel 16
- - - - - Approximate Boundary of Option Area Parcel
- ← SS → Approximate Sanitary Sewer Line Alignment
- [- - -] Approximate Location of Former Underground Fuel Oil Storage Depot
- Approximate Location of Soil Boring and Grab Groundwater Sample (Collected February & April 1998)
- TPH-D Total Petroleum Hydrocarbons as Diesel using EPA Method 8015m with Silica Gel Clean up.
- BTEX Benzene, Toluene, Ethylbenzene and Total Xylenes, using EPA Method 8020
- * Laboratory reported unidentified hydrocarbons (c9-c24) in the sample not reflective of diesel fuel.

Notes:

1. All locations are approximate.
2. Basemap from: Pacific Aerial Surveys photograph dated 5 July 1994.

Erlor & Kalinowski, Inc.

Grab Groundwater Sample Analytical Results for TEPH & BTEX for Parcel 15, Parcel 16 and Option Area Parcel
 Hacienda Dr. and Dublin Blvd.
 Dublin, California
 May 1998
 EKI 980003.00
 Figure 2A



FD-4 (April 1998)	
Analyte	result (ug/L)
TPH-D	<50
BTEX	<0.5

FD-5 (April 1998)	
Analyte	result (ug/L)
TPH-D	<50
BTEX	<0.5

FD-3 (April 1998)	
Analyte	result (ug/L)
TPH-D	<60
BTEX	<0.5

FD-6 (April 1998)	
Analyte	result (ug/L)
TPH-D	<50
BTEX	<0.5

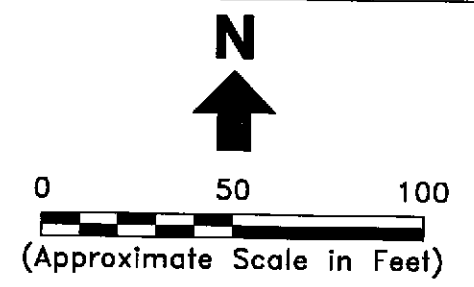
FD-8 (April 1998)	
Analyte	result (ug/L)
TPH-D	<60
BTEX	<0.5

FD-5 (Feb 1998)	
Analyte	result (ug/L)
TPH-D	120,000
BTEX	<40
VOCs	ND

FD-2 (April 1998)	
Analyte	result (ug/L)
TPH-D	<200
BTEX	<0.5

FD-7 (April 1998)	
Analyte	result (ug/L)
TPH-D	<60
BTEX	<0.5

FD-1 (April 1998)	
Analyte	result (ug/L)
TPH-D	<50
BTEX	<0.5



LEGEND

- Approximate Area of Buried Debris Removal (April 1998)
- Approximate Location of Former Underground Fuel Oil Storage Depot
- Fence
- Drainage Swale
- Approximate Location of Grab Groundwater Sample (Collected February 1998)
- Approximate Location of Grab Groundwater Sample (Collected April 1998)
- TPH-D Total Petroleum Hydrocarbons as Diesel using EPA Method 8015m with Silica Gel Clean up.
- BTEX Benzene, Toluene, Ethylbenzene and Total Xylenes, using EPA Method 8020
- VOCs Volatile Organic Compounds using EPA Method 8260
- * Laboratory reported unidentified hydrocarbons (c9-c24) in the sample not reflective of diesel fuel.

Notes:

1. All locations are approximate.
2. Basemap from: Kier & Wright Civil Engineers & Surveyors, Inc. (1998)

Erler & Kalinowski, Inc.

Analytical Results for
 Grab Groundwater Samples for
 Former Fuel Oil Depot Area
 Hacienda Dr. and Dublin Blvd.
 Dublin, California
 May 1998
 EKI 980003.00
 Figure 3



Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804893-08	Sampled: Received: 04/16/98 Analyzed: 04/23/98 Reported: 04/27/98
Attention: Paul Hoffey		

QC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	95

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-08

Sampled:
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-08

Sampled:
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite B
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-08	Sampled: Received: 04/16/98 Analyzed: 04/20/98 Reported: 04/27/98
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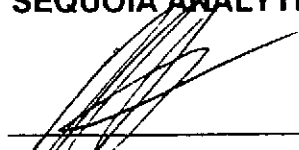
QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	95

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



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

Attention: Paul Hoffey

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank A
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-09

Sampled:
Received: 04/16/98

Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: Method Blank A
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-09

Sampled:
Received: 04/16/98

Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	90
Toluene-d8	88 110	104
4-Bromofluorobenzene	86 115	99

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

SEQUOIA ANALYTICAL - ELAP #1210


Michael Gregory
Project Manager



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-Core locations

Report Results To: Paul HOFFEY

Location: Dublin, CA

9804893

Phone Number: 650-578-1172

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	OA-4	Water	3 VOAs	9:15	VOCs (EPA 8260)	Standard
↓	OA-4		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
2	OA-3		3 VOAs	10:30	VOCs (EPA 8260)	
↓	OA-3		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
3	OA-7		3 VOAs	12:45	VOCs (EPA 8260)	
↓	OA-7		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
4	OA-6		3 VOAs	1:45	VOCs (EPA 8260)	
↓	OA-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
5	OA-5		3 VOAs	2:50	VOCs (EPA 8260)	
↓	OA-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m.)	
6	FD-8	↓	3 VOAs	5:25	BTEX compounds (EPA 8020)	

Special Instructions:

Analyze TEPH quantified against diesel please.

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / <u>Ben Hsieh</u> / EKI	4/16/98	9:27	Alex Abdul <u>Alor</u> Sequoia

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 2 of 2

Date Sampled: 4/15/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core location

Report Results To: Paul Hoffer

Location: Dublin, CA

9804893

Phone Number: 650-578-1172

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)
6	FD-8	Water	2 amber liters	5:25	TEPH w/ silica gel cleanup (8015m.)	Standard
7	FD-7	↓	3 VOAs	6:50	BTEX compounds (EPA 8020)	↓
↓	FD-7	↓	1 amber liter jar	6:50	TEPH w/ silica gel cleanup (8015m.)	↓

Special Instructions:
See first page.

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
Ben Hsieh / Ben Hsieh / EKI	4/16/98	9:27	Alex ABAP / Alex ABAP / Sequoia		



Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
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FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin

Received: 04/16/98

Lab Proj. ID: 9804B93

Reported: 04/27/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 35 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
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Erler & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Paul HOFFEY

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: OA-3
Work Order #: 9804B93 -01-08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0420980HBPEXE SG
Analy. Method: EPA 8015M

Analyst: A. Porter
MS/MSD #: 9804B93-02-MSD
Sample Conc.: 57
Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

Result: 710
MS % Recovery: 65

Dup. Result: 750
MSD % Recov.: 69

RPD: 5.5
RPD Limit: 0-50

LCS #: LCS042098-LCS

Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

9804B93.ERL <1>





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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-01-03, 08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Analyzed Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	46	52	44	44
MS % Recovery:	84	92	104	88	88
Dup. Result:	42	46	52	45	45
MSD % Recov.:	84	92	104	90	90
RPD:	0.0	0.0	0.0	2.2	2.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS
Prepared Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Analyzed Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	44	49	56	49	48
LCS % Recov.:	88	98	112	98	96

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-04, 05, 09

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A	MS0421988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD	9804C94-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Analyzed Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	49	53	48	49
MS % Recovery:	84	98	106	96	98
Dup. Result:	43	52	56	50	51
MSD % Recov.:	86	104	112	100	102
RPD:	2.4	5.9	5.5	4.1	4.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS	LCS042198-LCS
Prepared Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Analyzed Date:	04/21/98	04/21/98	04/21/98	04/21/98	04/21/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	41	48	53	48	47
LCS % Recov.:	82	96	106	96	94

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



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

Client Project ID: 980003.02 Hacienda Dr./Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804B93-06-08

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A	GC042398BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD	9804D26-04-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Analyzed Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.9	9.9	10	30	65
MS % Recovery:	99	99	100	100	108
Dup. Result:	10	10	10	31	68
MSD % Recov.:	100	100	100	103	113
RPD:	1.0	1.0	0.0	3.3	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS	LCS042398-LCS
Prepared Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Analyzed Date:	04/23/98	04/23/98	04/23/98	04/23/98	04/23/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	67
LCS % Recov.:	100	100	100	103	112

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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.

Mike Gregory
Project Manager

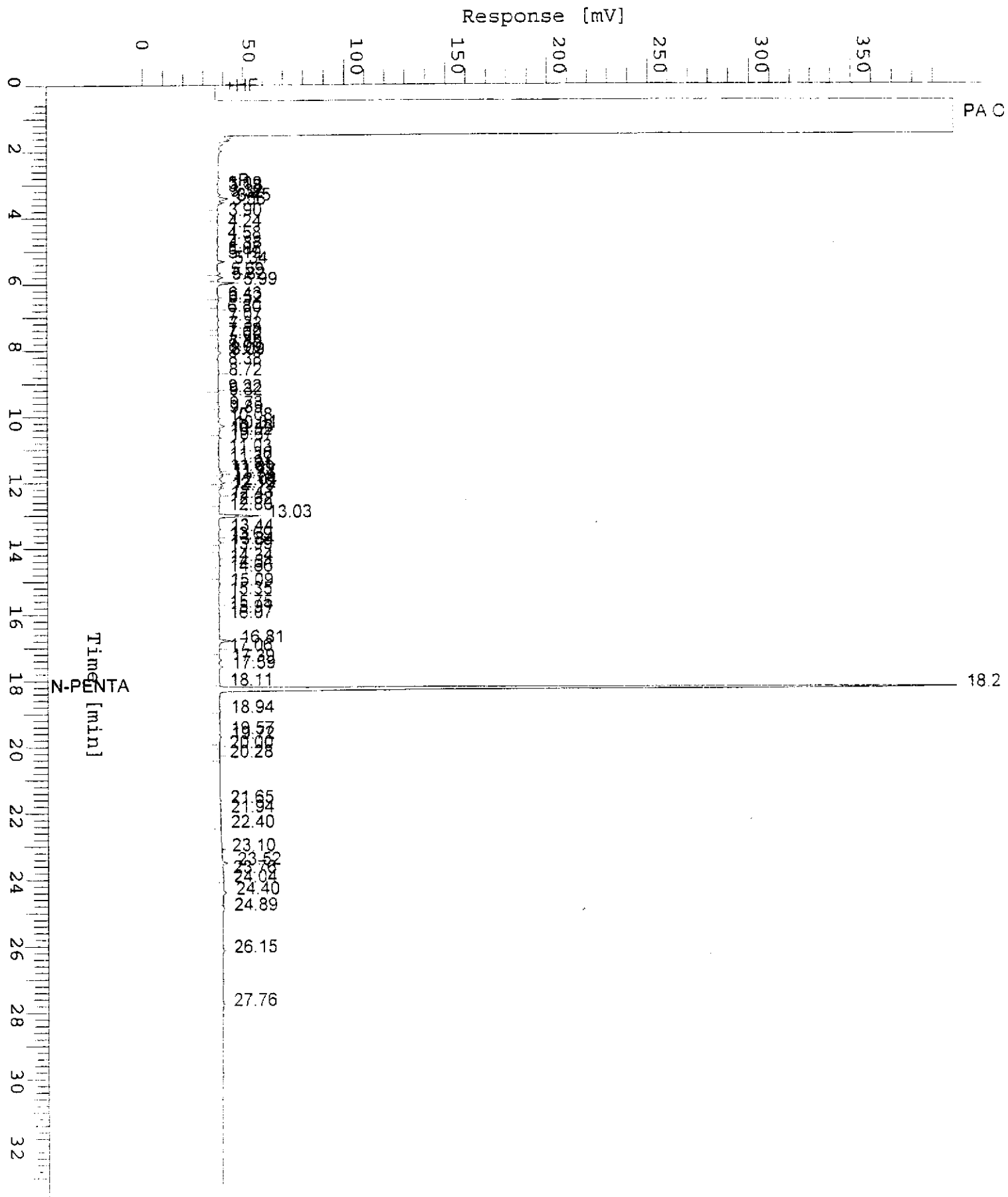
** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9804B93.ERL <4>



Sample Name : DW9804B93-2 (500:1)
FileName : S:\GHP_19\0426\420BC41.raw
Method : TPH19A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: OA-3
Date : 4/29/98 15:19
Time of Injection: 4/21/98 22:24
Low Point : 0.00 mV
Plot Scale: 400.0 mV
End Time : 33.65 min
Plot Offset: 0 mV
High Point : 400.00 mV

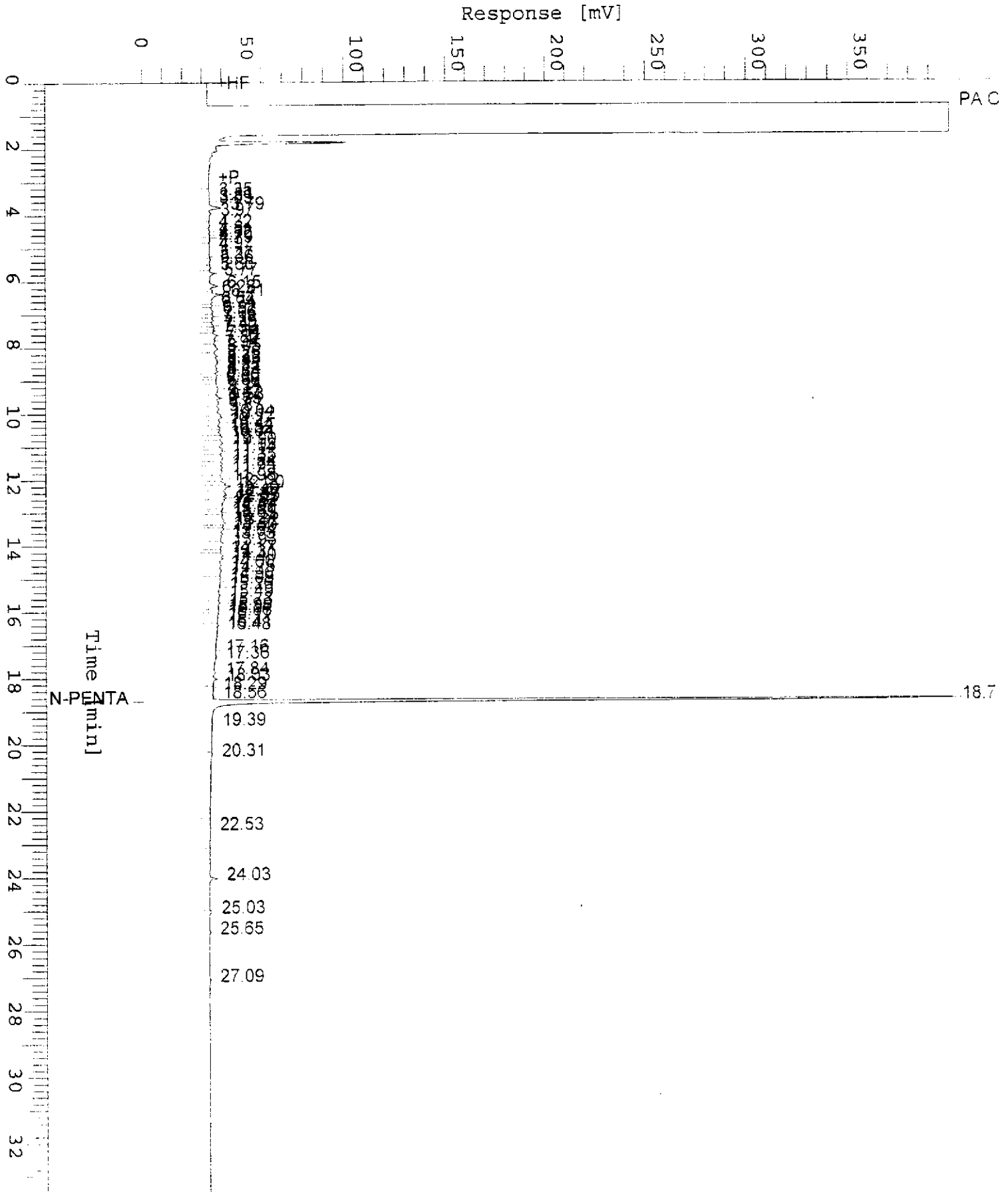


Chromatogram

Sample Name : DW9804B93-6 (500:1) SG
FileName : S:\GHP_05\0426\421A024.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

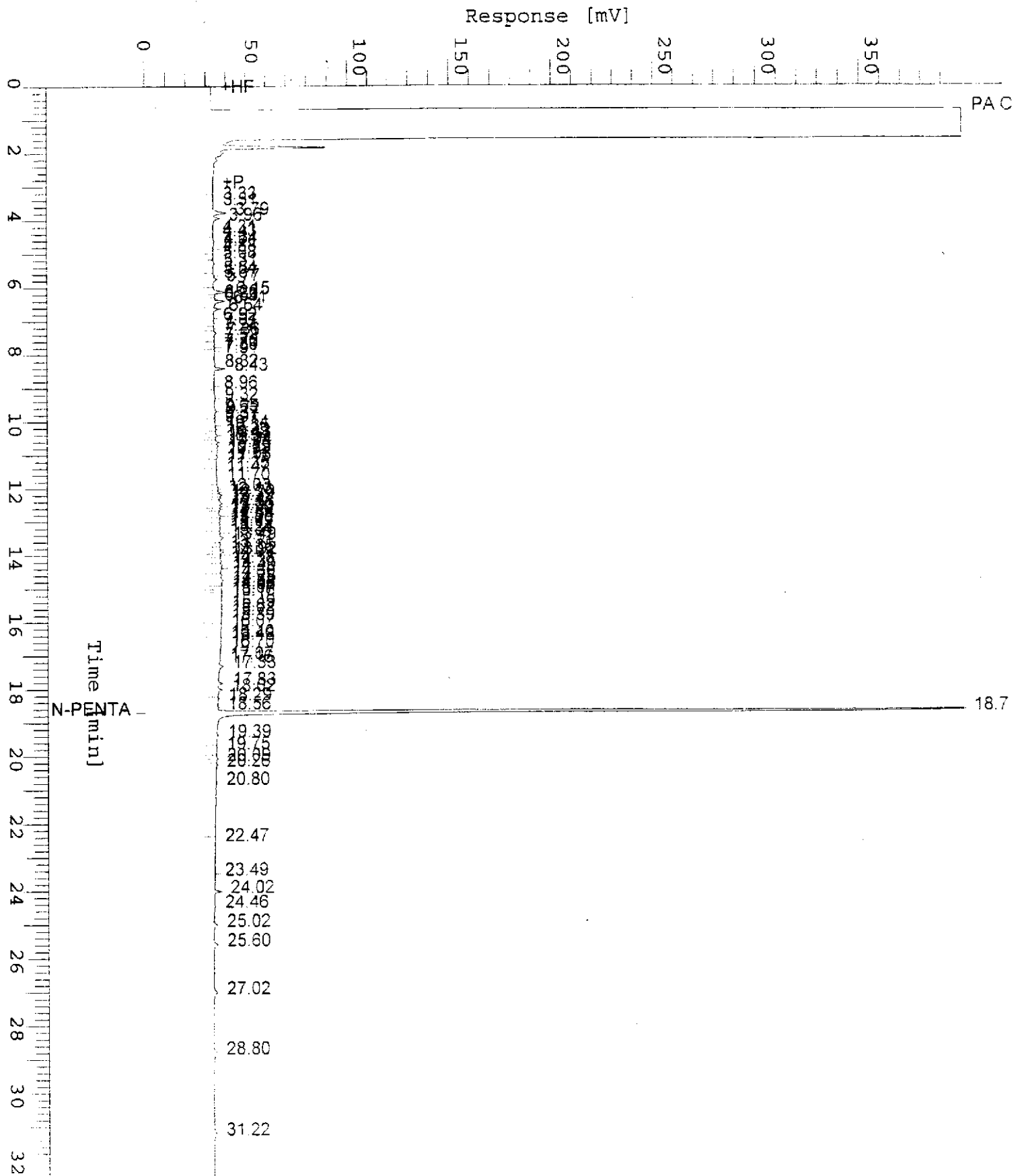
End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-8
Date : 4/29/98 15:21
Time of Injection: 4/22/98 00:30
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



Sample Name : DW9804B93-7 (500:1) SG
 FileName : S:\GHP_05\0426\421A025.raw
 Method : TPH05A
 Start Time : 0.00 min End Time : 33.65 min
 Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: FD-7 Page 1 of 1
 Date : 4/29/98 15:22
 Time of Injection: 4/22/98 01:11
 Low Point : 0.00 mV High Point : 400.00 mV
 Plot Scale: 400.0 mV





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804956-05	Sampled: Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/28/98
Attention: Paul HOFFEY		

QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804956-05	Sampled: Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/28/98
Attention: Paul Hoffey		

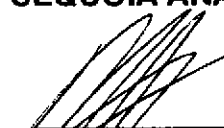
QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager

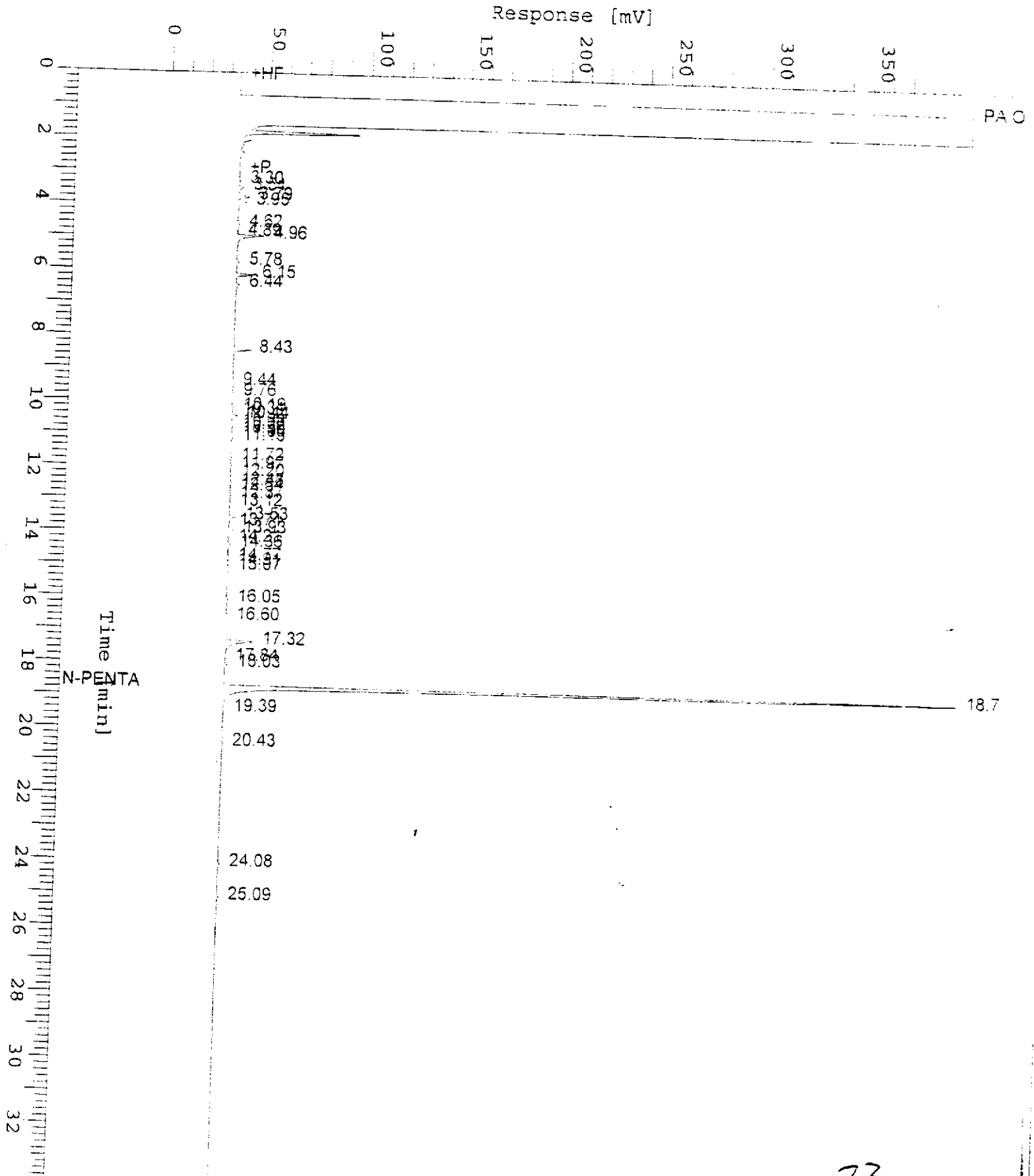


Chromatogram

Sample Name : DW9804956-4 (500:1) SG
FileName : S:\GHP_05\0419\415A044.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-4
Date : 4/17/98 03:44
Time of Injection: 4/17/98 03:10
Low Point : 0.00 mV
Plot Scale: 400.0 mV
Page 1 of 1
High Point : 400.00 mV



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Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Lab Proj. ID: 9804956

Received: 04/14/98
Reported: 04/28/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
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Erter & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Paul Hoeffy

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-4
Work Order #: 9804956 -01-05

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A	GC042298BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD	9804956-04-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	32	63
MS % Recovery:	110	110	110	107	105
Dup. Result:	10	10	10	31	62
MSD % Recov.:	100	100	100	103	103
RPD:	9.5	9.5	9.5	3.2	1.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	10	10	32	63
LCS % Recov.:	110	100	100	107	105

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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

Mike Gregory
Project Manager

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

9804956.ERL < 1 >





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
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FAX (650) 364-9233
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Erler & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Paul HOFFEY

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804956-04, 05

Reported: May 8, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0416980HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 5030

Analyst: A. Porter
MS/MSD #: 9804955-01-MSD
Sample Conc.: N.D.
Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

Result: 770
MS % Recovery: 77

Dup. Result: 740
MSD % Recov.: 74

RPD: 4.0
RPD Limit: 0-50

LCS #: LCS041698-LCS
Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L
LCS Result: 690
LCS % Recov.: 69

MS/MSD 50-150
LCS 60-140
Control Limits

Please Note:
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SEQUOIA ANALYTICAL

Mike Gregory
Mike Gregory
Project Manager

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

9804956.ERL <2>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: *Sequoia Analytical*

Project Number: *980003.02*

Page *1* of *1*

Date Sampled: *4/13/98*

Project Name: *Hacienda Dr. & Dublin*

Sampled By: *Ben Hsieh*

Source of Samples: *Enviro-core locations*

Report Results To: *Paul Hoffee*

Location: *Dublin, California*

9804956

Phone Number: *650-578-1172*

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)
<i>01</i>	<i>FD-1</i>	<i>Water</i>	<i>3 VOAs</i>	<i>1:15</i>	<i>BTEX Compounds (EPA 8020)</i>	<i>Standard</i>
<i>02</i>	<i>FD-3</i>		<i>3 VOAs</i>	<i>2:20</i>		
<i>03</i>	<i>FD-2</i>		<i>3 VOAs</i>	<i>3:20</i>		
<i>04</i>	<i>FD-4</i>		<i>3 VOAs</i>	<i>4:55</i>		
<i>1</i>	<i>FD-4</i>	<i>↓</i>	<i>2 - amber liter jars</i>	<i>4:55</i>	<i>TEPH w/ silica gel cleanup (8015m)</i>	<i>↓</i>

Special Instructions:

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

<i>Ben Hsieh / Ben Hsieh / EKI</i>	<i>4/14/98</i>	<i>7:08</i>	<i>[Signature]</i>	<i>4/14/98 19:08</i>



**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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

COPY

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802139-01

Sampled: 02/26/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/09/98
Reported: 03/11/98

Attention: Paul Hoffey

QC Batch Number: GC0305980HBPEXD

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	5000	120000
Chromatogram Pattern: Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-7
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802139-01

Sampled: 02/26/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	40	N.D.
Bromobenzene	40	N.D.
Bromochloromethane	40	N.D.
Bromodichloromethane	40	N.D.
Bromoform	40	N.D.
Bromomethane	40	N.D.
n-Butylbenzene	40	N.D.
sec-Butylbenzene	40	N.D.
tert-Butylbenzene	40	N.D.
Carbon tetrachloride	40	N.D.
Chloroethane	40	N.D.
Chloroform	40	N.D.
Chloromethane	40	N.D.
2-Chlorotoluene	40	N.D.
4-Chlorotoluene	40	N.D.
Dibromochloromethane	40	N.D.
1,2-Dibromoethane	40	N.D.
Dibromomethane	40	N.D.
1,2-Dibromo-3-chloropropane	100	N.D.
1,2-Dichlorobenzene	40	N.D.
1,3-Dichlorobenzene	40	N.D.
1,4-Dichlorobenzene	40	N.D.
Dichlorodifluoromethane	40	N.D.
1,1-Dichloroethane	40	N.D.
1,2-Dichloroethane	40	N.D.
1,1-Dichloroethylene	40	N.D.
cis-1,2-Dichloroethylene	40	N.D.
trans-1,2-Dichloroethylene	40	N.D.
Monochlorobenzene	40	N.D.
1,2-Dichloropropane	40	N.D.
1,3-Dichloropropane	40	N.D.
2,2-Dichloropropane	40	N.D.
1,1-Dichloropropene	40	N.D.
Ethylbenzene	40	N.D.
Hexachlorobutadiene	40	N.D.
Isopropylbenzene	40	N.D.
p-Isopropyltoluene	40	N.D.
Methylene chloride	100	N.D.
Naphthalene	40	N.D.





Sequoia Analytical

680 Chesapeake Drive
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819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
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(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft Sample Descript: P-7 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802139-01	Sampled: 02/26/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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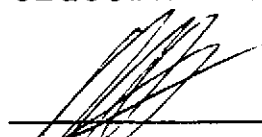
QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	40	N.D.
Styrene	40	N.D.
1,1,1,2-Tetrachloroethane	40	N.D.
1,1,2,2-Tetrachloroethane	40	N.D.
Tetrachloroethylene	40	N.D.
Toluene	40	N.D.
1,2,3-Trichlorobenzene	40	N.D.
1,2,4-Trichlorobenzene	40	N.D.
1,1,1-Trichloroethane	40	N.D.
1,1,2-Trichloroethane	40	N.D.
Trichloroethylene	40	N.D.
Trichlorofluoromethane	40	N.D.
1,2,3-Trichloropropane	40	N.D.
1,2,4-Trimethylbenzene	40	N.D.
1,3,5-Trimethylbenzene	40	N.D.
Vinyl chloride	40	N.D.
Total Xylenes	40	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	107
Toluene-d8	88	110	99
4-Bromofluorobenzene	86	115	94

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: METHOD BLANK Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802I39-02	Sampled: Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/05/98 Reported: 03/11/98
Attention: Paul Hoeffy		

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: METHOD BLANK
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802139-02

Sampled:
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft Sample Descript: METHOD BLANK Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802139-02	Sampled: Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
---	---	--


QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	98
Toluene-d8	88	110	101
4-Bromofluorobenzene	86	115	91

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Sequoia
Analytical

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

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft

Received: 02/26/98

Lab Proj. ID: 9802139

Reported: 03/11/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 11 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

8260 Note:

Sample 9802139-01 was diluted 20 times due to high late-eluting compounds.

Q - Surrogate diluted out.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



1802101

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 1 of 4

Date Sampled: 2/26/98

Project Name: PeopleSoft

Sampled By: Logan Hansen

Source of Samples: Temporary Wells

Report Results To: Paul Hoffey, EKI

Location: Dublin, CA

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)
Q1	P-7	grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	One week Standard
01	P-7	grab gw	3 VOAs w/tec		EPA 8260	One week Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard
		grab gw	2 Amber Liters		EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
		grab gw	3 VOAs		EPA 8260	Standard

Special Instructions:

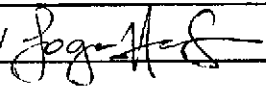
Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

Logan Hansen/ 	/EKI	2/26/98	15:25	
		2-26-98	1525	M. Shinn / P.J. / SUC

Chromatogram

Sample Name : DW9802I39-1 (500:1*100) RS1
File Name : S:\GHP_04\0315\309A014.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 33.65 min
Plot Offset : 0 mV

Sample #: 2-7

Date : 3/9/98 19:36

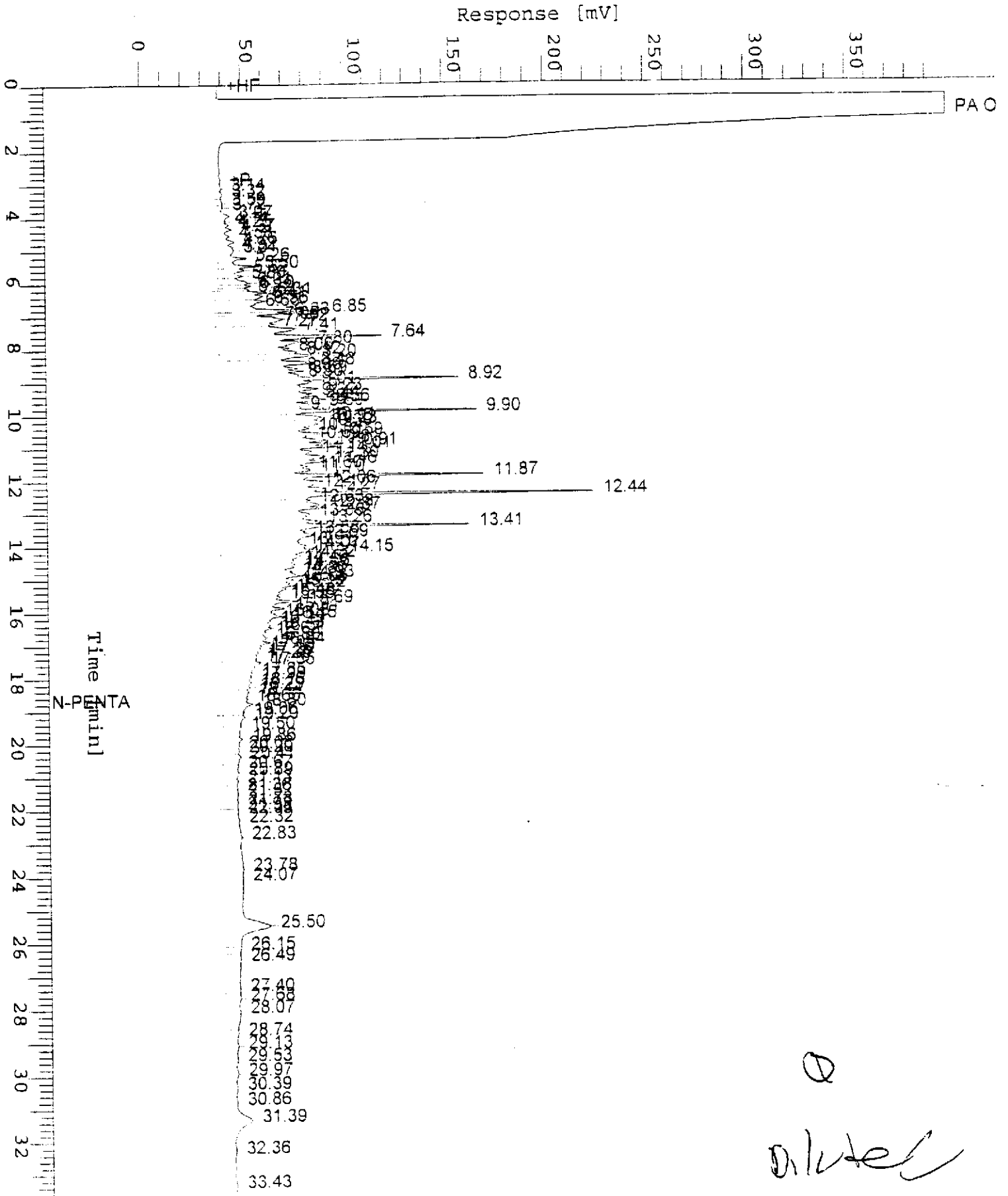
Time of Injection: 3/9/98 19:02

Low Point : 0.00 mV

Plot Scale: 400.0 mV

Page 1 of 1

High Point : 400.00 mV





Eler & Kalinowski, Inc. 1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402 Attention: Paul Hoeffey	Client Project ID: 980003.00/PeopleSoft Matrix: LIQUID Sample Descript.: P-7 Work Order #: 9802139 -01, 02	Reported: Mar 18, 1998
---	---	------------------------

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0305980HBPEXD
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: G. Fish
MS/MSD #: 9802139-01-MSD
Sample Conc.: 120000*
Prepared Date: 03/05/98
Analyzed Date: 03/09/98
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 120000*
MS % Recovery: 0.0

Dup. Result: 440000*
MSD % Recov.: 32000

RPD: 114*
RPD Limit: 0-50

*MS/MSD diluted due to matrix interference

LCS #: LCS030598-LCS

Prepared Date: 03/05/98
Analyzed Date: 03/06/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD	50-150
LCS	60-140
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

Mike Gregory
Project Manager

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

9802139.ERL < 1 >





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

Client Project ID: 980003.00/PeopleSoft
Matrix: LIQUID
Sample Descript.: P-1
Work Order #: 9802139-01, 02

Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	L. Zhu	L. Zhu	L. Zhu	L. Zhu	L. Zhu
MS/MSD #:	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	46	44	45	43	43
MS % Recovery:	92	88	90	86	86
Dup. Result:	50	46	47	46	45
MSD % Recov.:	100	92	94	92	90
RPD:	8.3	4.4	4.3	6.7	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	50	46	47	45	45
LCS % Recov.:	100	92	94	90	90

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Mike Gregory
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





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

Attention: Paul HOFFEY

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-4
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-04

Sampled: 04/13/98
Received: 04/14/98

Analyzed: 04/22/98
Reported: 04/28/98

QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	95

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804956-04	Sampled: 04/13/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/17/98 Reported: 04/28/98
Attention: Paul Hoeffy		

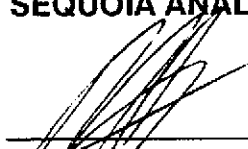
QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





COPY

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-5 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804955-01	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/24/98
Attention: Paul Hoffey		

QC Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	83

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-01	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
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QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-6
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804955-02

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/24/98

QC Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr. & Dublin Sample Descript: FD-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-02	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/16/98 Reported: 04/24/98
Attention: Paul Hoffey		


QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	80

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: FD-7 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804B93-07	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/23/98 Reported: 04/27/98
Attention: Paul Hoeffy		


QC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: FD-7 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-07	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/22/98 Reported: 04/27/98
Attention: Paul Hoeffy		

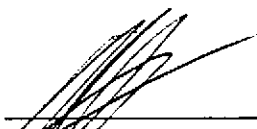
QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	110 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	92

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: FD-8 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804B93-06	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/23/98 Reported: 04/27/98
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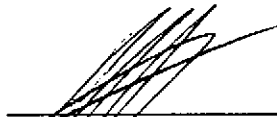
QC Batch Number: GC042398BTEX03A
Instrument ID: GCHP03

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: FD-8 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-06	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/22/98 Reported: 04/27/98
--	--	--


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	180
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: FD-1	Date Sampled: 04/13/98
Lab Number: 9804188-01A	Date Received: 04/13/98
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	ND	50
TPH-Diesel	--	ND	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	23 *	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.

* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: FD-2	Date Sampled: 04/13/98
Lab Number: 9804188-02A	Date Received: 04/13/98
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
---------	-------	----------------------	---------------------------

Total Extractables

Total-Extractables	--	170	70
TPH-Diesel	--	ND	200 a

Surrogates

		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	49*	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.
Detection limits increased due to limited sample volume.

a Diesel detection limit increased due to presence of unknown hydrocarbons.

* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification:	FD-3	Date Sampled:	04/13/98
Lab Number:	9804188-03A	Date Received:	04/13/98
Sample Matrix/Media:	WATER	Date Extracted:	04/13/98
Extraction Method:	EPA 3510	Date Analyzed:	04/14/98
Method Reference:	EPA 8015 (Modified)	Analyst:	DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	100	60
TPH-Diesel	--	ND	60
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	57	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20
quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.
Detection limits increased due to limited sample volume.

* Results should be considered estimated concentrations due to recovery problems with
the Laboratory Control Sample.

Analytical Results
for
Erler & Kalinowski
Client Reference: 980003.00
Clayton Project No. 98041.88

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9804188-04A	Date Received: --
Sample Matrix/Media: WATER	Date Extracted: 04/13/98
Extraction Method: EPA 3510	Date Analyzed: 04/14/98
Method Reference: EPA 8015 (Modified)	Analyst: DTT

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Total Extractables</u>			
Total-Extractables	--	ND	50
TPH-Diesel	--	ND	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>OC Limits (%)</u>
p-Terphenyl	92-94-4	41 *	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Total Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel.
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

Note: The sample went through a silica gel cleanup prior to analysis.

* Results should be considered estimated concentrations due to the low surrogate recovery and recovery problems with the Laboratory Control Sample.

Clayton

ENVIRONMENTAL
CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

RUSH
(X)

IMPORTANT

Wed 9 AM April 15
Page 1 of 1

Date Results Requested: ~~Tues. April 14, 1998~~

For Clayton Use Only
Clayton Lab Project No.

Rush Charges Authorized? Yes No
 Phone or ~~fax~~

9804188

REPORT RESULTS TO

Name: Paul Haffen Client Job No. 980003.00
 Company: Erlar + Kalinowski Dept. _____
 Mailing Address: 1730 S. Amphlett Blvd. Su. 320
 City, State, Zip: San Mateo CA 94402
 Telephone No. 650-578-1172 FAX No. 650-578-9131

Purchase Order No. 980003.00

Name _____
 Company: (SAME) Dept. _____
 Address _____
 City, State, Zip _____

Special instructions and/or specific regulatory requirements:
 (method, limit of detection, etc.) ~~XXXXXXXXXXXXXXXXXXXX~~

* Use 8015m with Silica Gel
 Cleanup - Look for weathered diesel.

Explanation of Preservative: _____

Samples are:
 (check if applicable)

Drinking Water
 Groundwater
 Wastewater

ANALYSIS REQUESTED
 (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED										FOR LAB USE ONLY				
						1	2	3	4	5	6	7	8	9	10		11	12		
FD-1	4/13/98	pm	H ₂ O	/		X														01
FD-2	"	pm	"	/		X														02
FD-3	"	pm	"	/		X														03

CHAIN OF CUSTODY

Collected by: Paul B. Haffey (print) Collector's Signature: Paul B. Haffey

Relinquished by: _____ Date/Time _____ Received by: _____ Date/Time _____

Relinquished by: Paul B. Haffey Date/Time 13 April 98 Received by: _____ Date/Time _____

Method of Shipment: _____ Received at Lab by: Cheryl Allen Date/Time 4/13/98

Authorized by: Paul B. Haffey Date 4/13/98 Sample Condition Upon Receipt: Acceptable Other (explain) 4:30

(Client Signature MUST accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

<p>Detroit Regional Lab 22345 Roethel Drive Novi, MI 48375 (800) 806-5887 (248) 344-1770 FAX (248) 344-2655</p>	<p>Atlanta Regional Lab 400 Chastain Center Blvd., N.W., Suite 490 Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 FAX (770) 423-4990</p>	<p>San Francisco Regional Lab 1252 Quarry Lane Pleasanton, CA 94566 (800) 294-1755 (510) 426-2657 FAX (510) 426-0106</p>	<p>Seattle Regional Lab 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189</p>
---	--	--	---

DISTRIBUTION:
 White = Clayton Laboratory
 Yellow = Clayton Accounting
 Pink = Client Copy



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite B
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

COPY

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-1
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-01

Sampled: 04/13/98
Received: 04/14/98
Analyzed: 04/22/98
Reported: 04/28/98

QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



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

Attention: Paul Hoffey

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: FD-2
Matrix: LIQUID
Analysis Method: EPA 8020
Lab Number: 9804956-03

Sampled: 04/13/98
Received: 04/14/98

Analyzed: 04/22/98
Reported: 04/28/98


QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
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



Mike Gregory
Project Manager



Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: FD-3 Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804956-02	Sampled: 04/13/98 Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/28/98
Attention: Paul Hoffey		

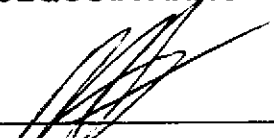
QC Batch Number: GC042298BTEX21A
Instrument ID: GCHP21

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	92

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd., North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-8 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-03	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
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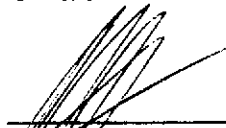
QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager

02/2



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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-03

Sampled: 04/14/98
Received: 04/14/98
Extracted: 04/16/98
Analyzed: 04/16/98
Reported: 04/24/98

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	82

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-9 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-05	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
---	---	---

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-9
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-05

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	90
Toluene-d8	88 110	102
4-Bromofluorobenzene	86 115	101

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-9
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-05

Sampled: 04/14/98
Received: 04/14/98
Extracted: 04/16/98
Analyzed: 04/17/98
Reported: 04/24/98

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	70

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



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Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-10
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-04

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

Attention: Paul Hoeffy

QC Batch Number: MS0417988260F2A

Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Sre. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
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FAX (707) 792-0342

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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-10
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-04

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	88
Toluene-d8	88 110	104
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: P-10 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-04	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/17/98 Reported: 04/24/98
Attention: Paul Hoffey		

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8020 Lab Number: 9804955-08	Sampled: Received: 04/14/98 Analyzed: 04/22/98 Reported: 04/24/98
Attention: Paul Hoeffy		

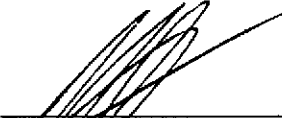
QC Batch Number: GC042298BTEX02A
Instrument ID: GCHP02

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-08

Sampled:
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
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FAX (916) 921-0100
FAX (707) 792-0342

Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-08	Sampled: Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
--	--	--


QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	95

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804955-08

Sampled:
Received: 04/14/98
Extracted: 04/16/98
Analyzed: 04/16/98
Reported: 04/24/98

QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: Method Blank A Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-09	Sampled: Received: 04/14/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/24/98
Attention: Paul Hoffey		

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: 980003.02

Page 1 of 2

Date Sampled: 4/14/98

Project Name: Hacienda Dr. & Dublin

Sampled By: Ben Hsieh

Source of Samples: Enviro-core locations

Report Results To: Paul Hoffey

Location: Dublin, California

9804955

Phone Number: 650-578-9172

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	FD-5	Water	3 VOAs	10:45	BTEX compounds (EPA 8020)	Standard ↓
	FD-5		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
02	FD-6		3 VOAs	11:40	BTEX Compounds (EPA 8020)	
	FD-6		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
03	P-8		3 VOAs		VOCs (EPA 8260)	
	P-8		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
04	P-10		3 VOAs	2:20	VOCs (EPA 8260)	
	P-10		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
05	P-9		3 VOAs	3:00	VOCs (EPA 8260)	
	P-9		2 amber liters	"	TEPH w/ silica gel cleanup (8015m)	
06	OA-1	↓	3 VOAs	4:50	VOCs (EPA 8260)	

Special Instructions:

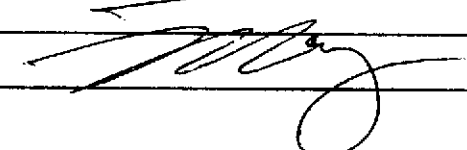
Relinquished By:

Name / Signature / Affiliation

Date Time

Received By:

Name / Signature / Affiliation

Ben Hsieh / Ben Hsieh / EKI	4/14/98	7:08	
			 4/14/98 19:08

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: *Sequoia Analytical*

Project Number: *980003.02*

Page 2 of 2

Date Sampled: *4/14/98*

Project Name: *Hacienda Dr. & Dublin*

Sampled By: *Ben Hsieh*

Source of Samples: *Enviro-core locations*

Report Results To: *Paul Hoeffy*

Location: *Dublin, CA*

9804955

Phone Number: *650-578-1172*

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)
<i>06</i>	<i>0A-1</i>	<i>Water</i>	<i>2 amber liters</i>	<i>4:50</i>	<i>TEPH w/ silica gel cleanup (8015m)</i>	<i>Standard</i>
<i>07</i>	<i>0A-2</i>	↓	<i>3 VOAs</i>	<i>6:00</i>	<i>VOCs (EPA 8260)</i>	↓
	<i>0A-2</i>	↓	<i>2 amber liters</i>	<i>"</i>	<i>TEPH w/ silica gel cleanup (8015m)</i>	↓

Special Instructions:

Relinquished By:

Name / Signature / Affiliation

Date Time

Received By:

Name / Signature / Affiliation

<i>Ben Hsieh / Ben Hsieh / EKI</i>	<i>4/14/98</i>	<i>7:08</i>	<i>[Signature]</i>	<i>4/14/98 19:08</i>
			<i>[Signature]</i>	



Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
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Erler & Kalinowski, Inc.
1730 South Amphlett, Ste 320
San Mateo, CA 94402
Attention: Paul Hoffey

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin

Received: 04/14/98

Lab Proj. ID: 9804955

Reported: 04/24/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 34 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager



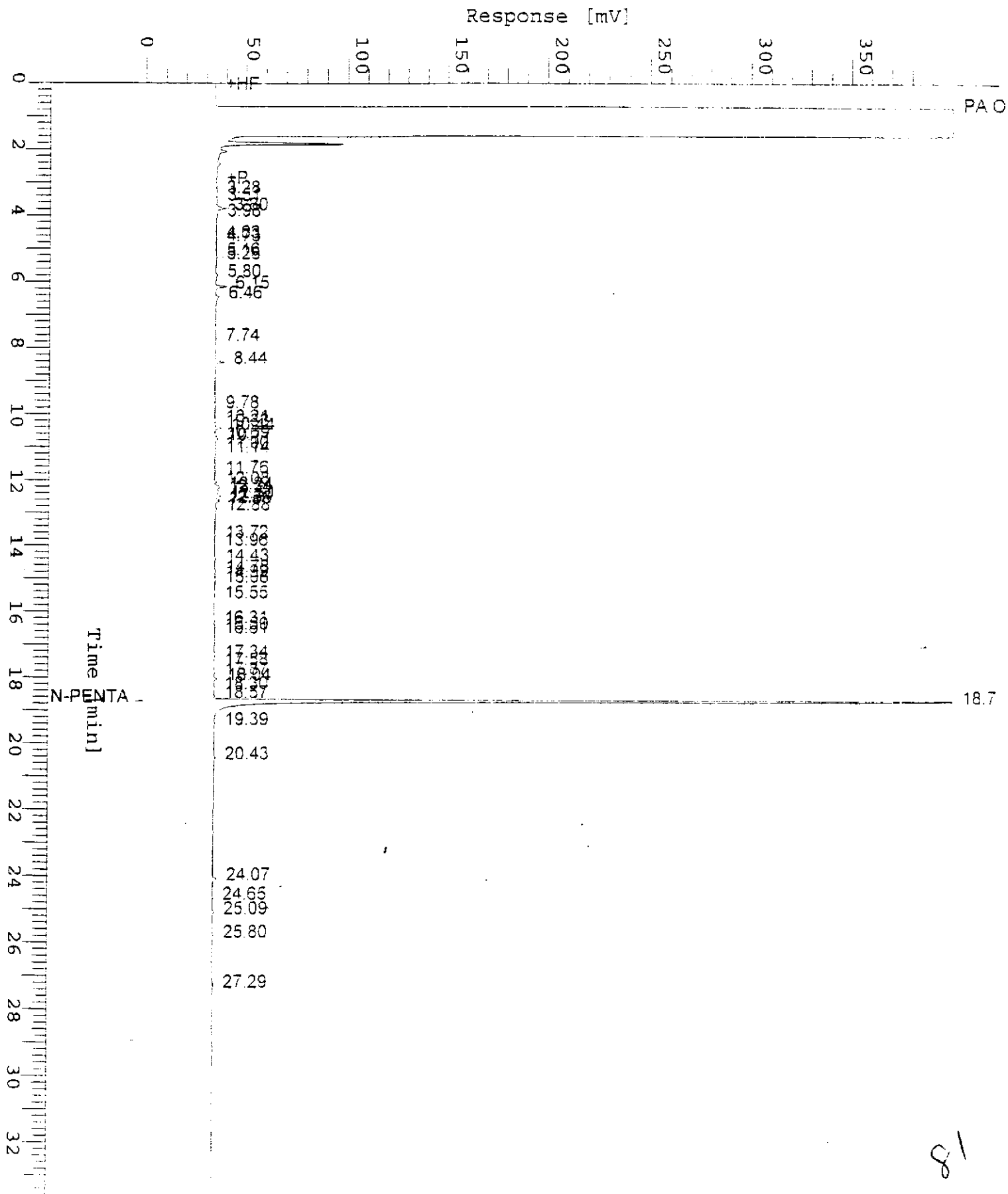
Chromatogram

Sample Name : DW9804955-1 (500:1) SG
FileName : S:\GHP_05\0419\415A035.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-5
Date : 4/16/98 21:35
Time of Injection: 4/16/98 21:02
Low Point : 0.00 mV
High Point : 400.00 mV
Plot Scale: 400.0 mV

Page 1 of 1



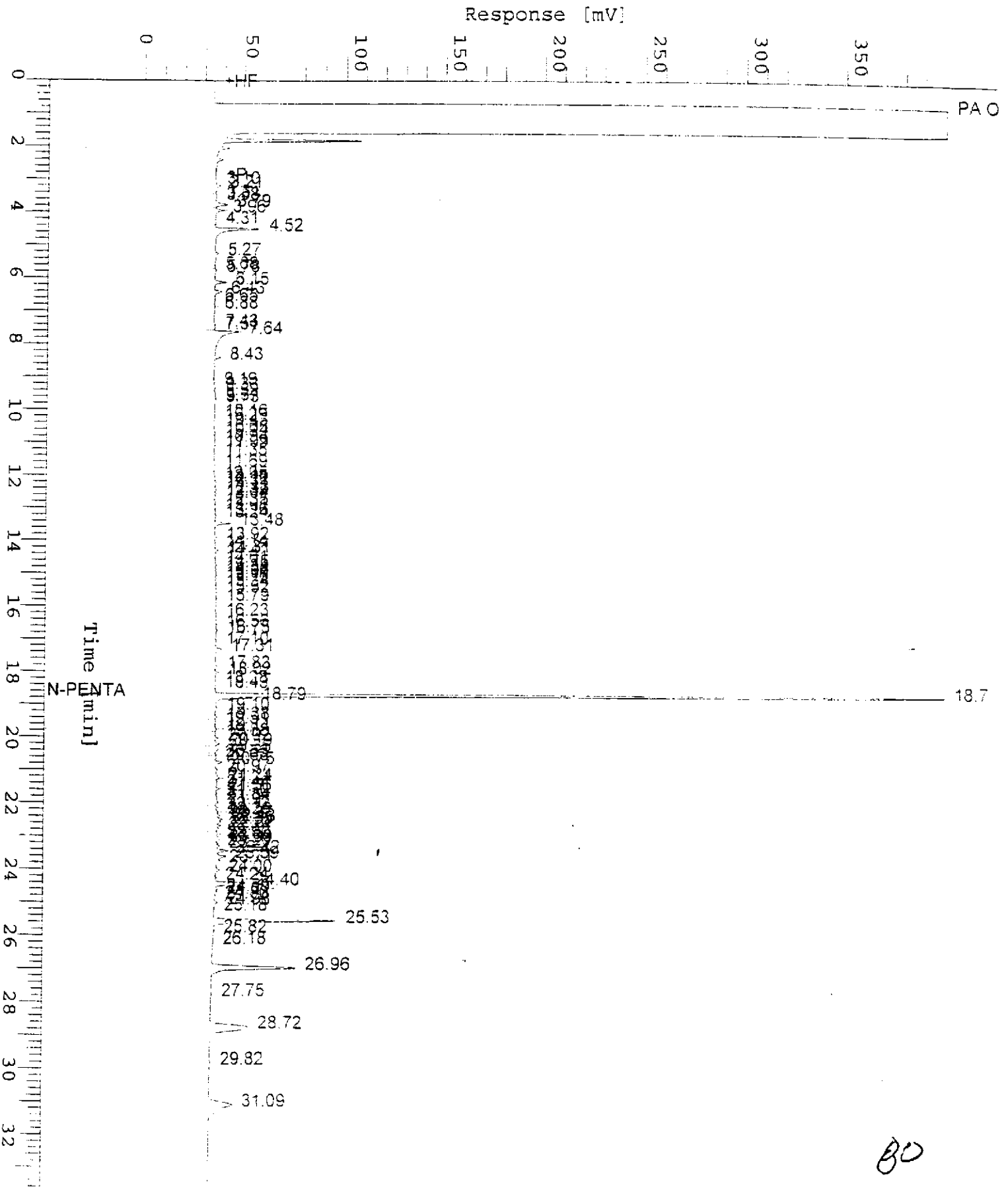
Chromatogram

Sample Name : DW9804955-6 (500:1) SG
FileName : S:\GHP_05\0419\415A042.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 33.65 min
Plot Offset : 0 mV

Sample #: OA-1
Date : 4/17/98 02:22
Time of Injection: 4/17/98 01:49
Low Point : 0.00 mV
Plot Scale: 400.0 mV

Page 1 of 1
High Point : 400.00 mV



80

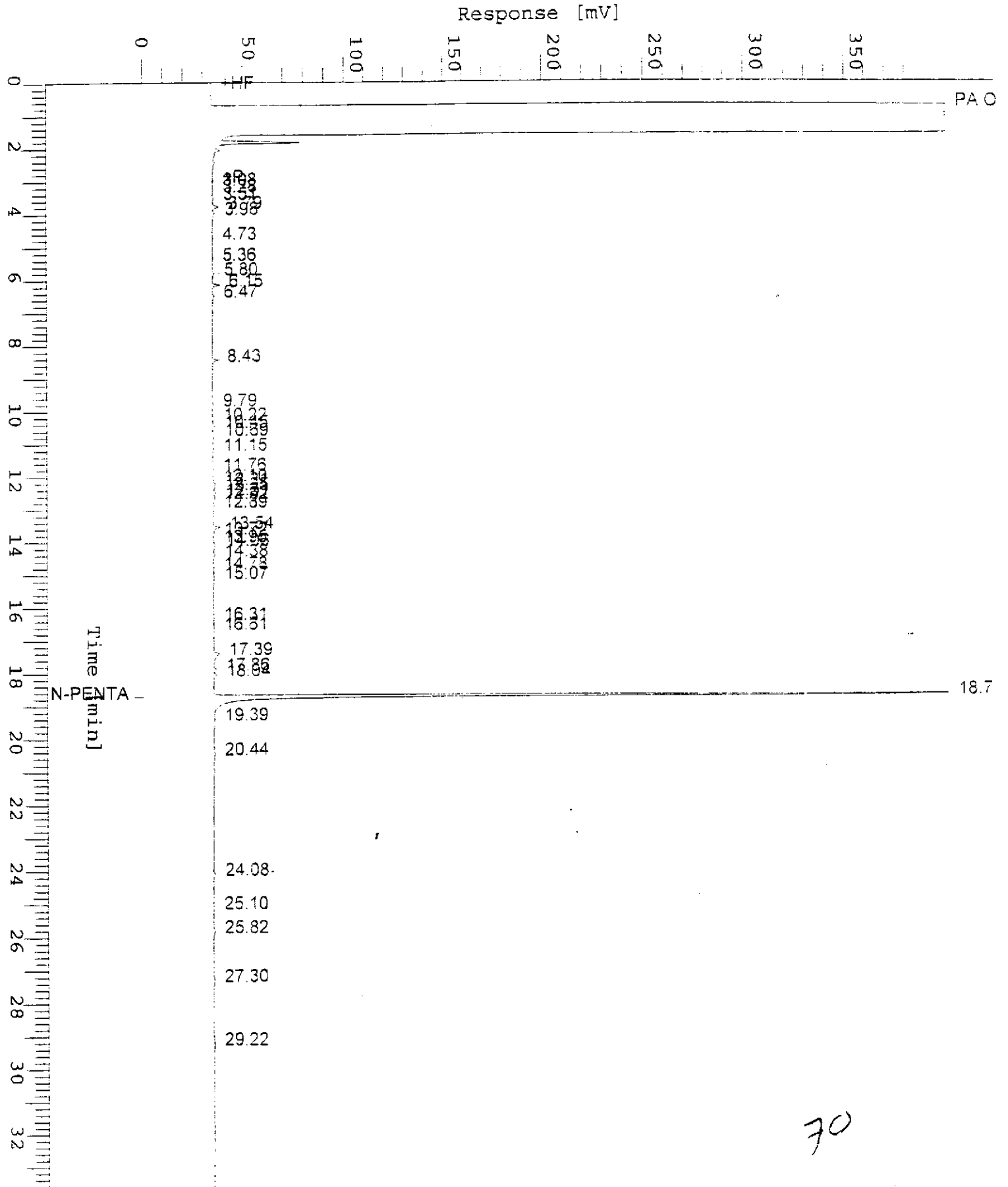
Chromatogram

Sample Name : DW9804955-5 (500:1) SG
FileName : S:\GHP_05\0419\415A041.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: P-9
Date : 4/17/98 01:41
Time of Injection: 4/17/98 01:08
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Page 1 of 1



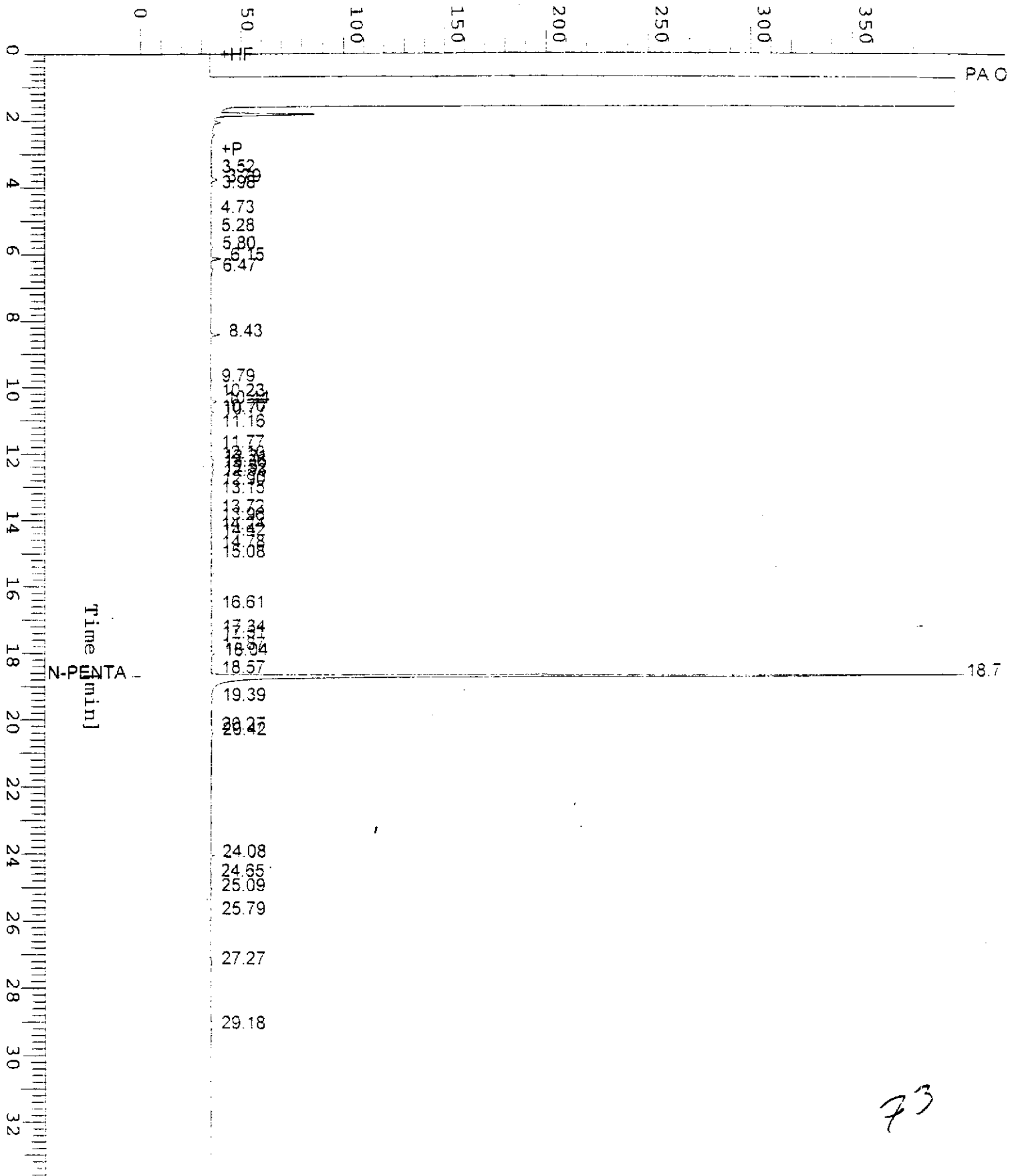
Chromatogram

Sample Name : DW9804955-4 (500:1) SG
FileName : S:\GHP_05\0419\415A040.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: 9-10
Date : 4/17/98 01:00
Time of Injection: 4/17/98 00:27
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Response [mV]



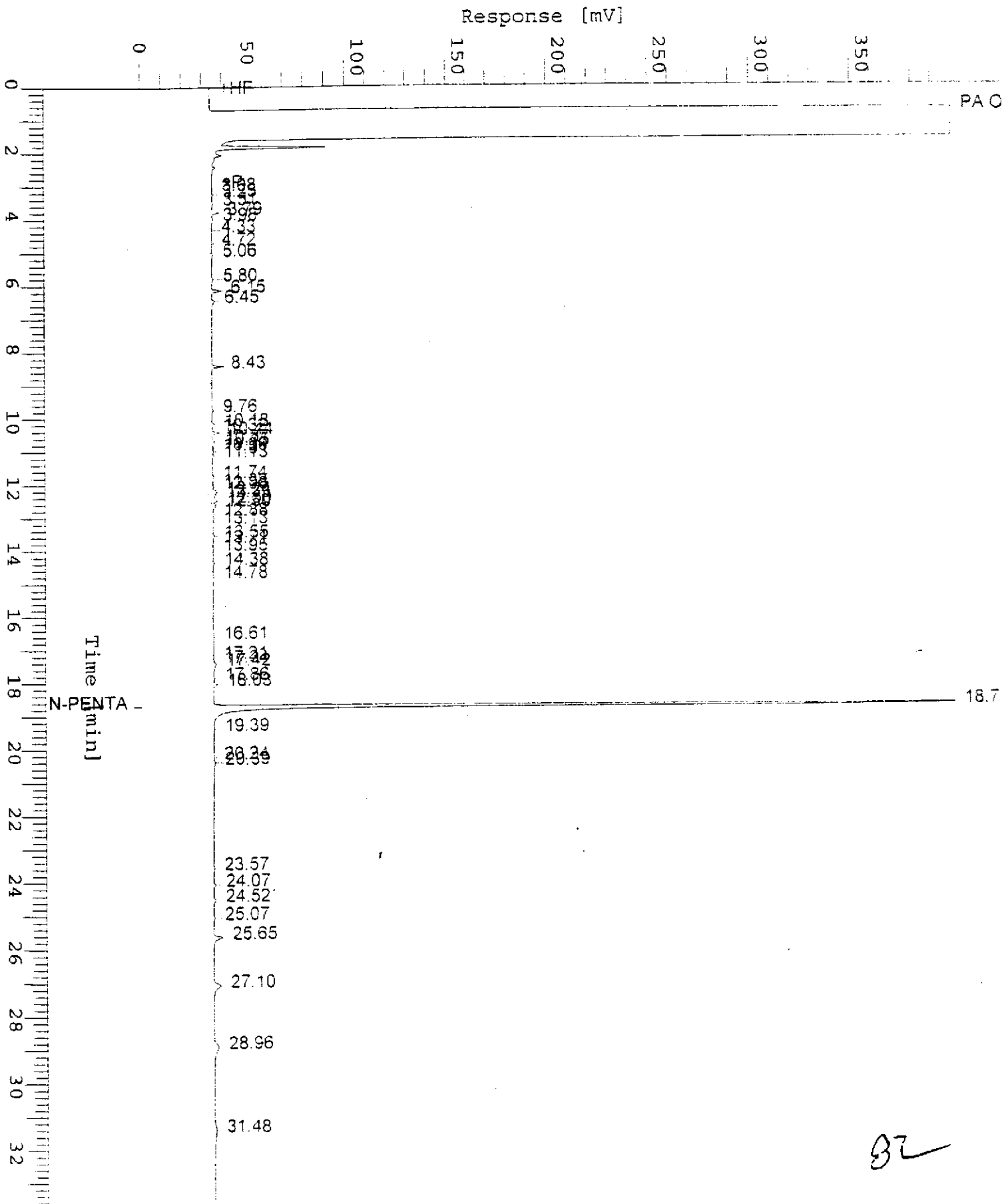
73

Chromatogram

Sample Name : DW9804955-3 (500:1) SG
 FileName : S:\GHP_05\0419\415A039.raw
 Method : TPH05A
 Start Time : 0.00 min
 Scale Factor: 0.0

End Time : 33.65 min
 Plot Offset: 0 mV

Sample #: P-8
 Date : 4/17/98 00:19
 Time of Injection: 4/16/98 23:46
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV
 High Point : 400.00 mV



32

Chromatogram

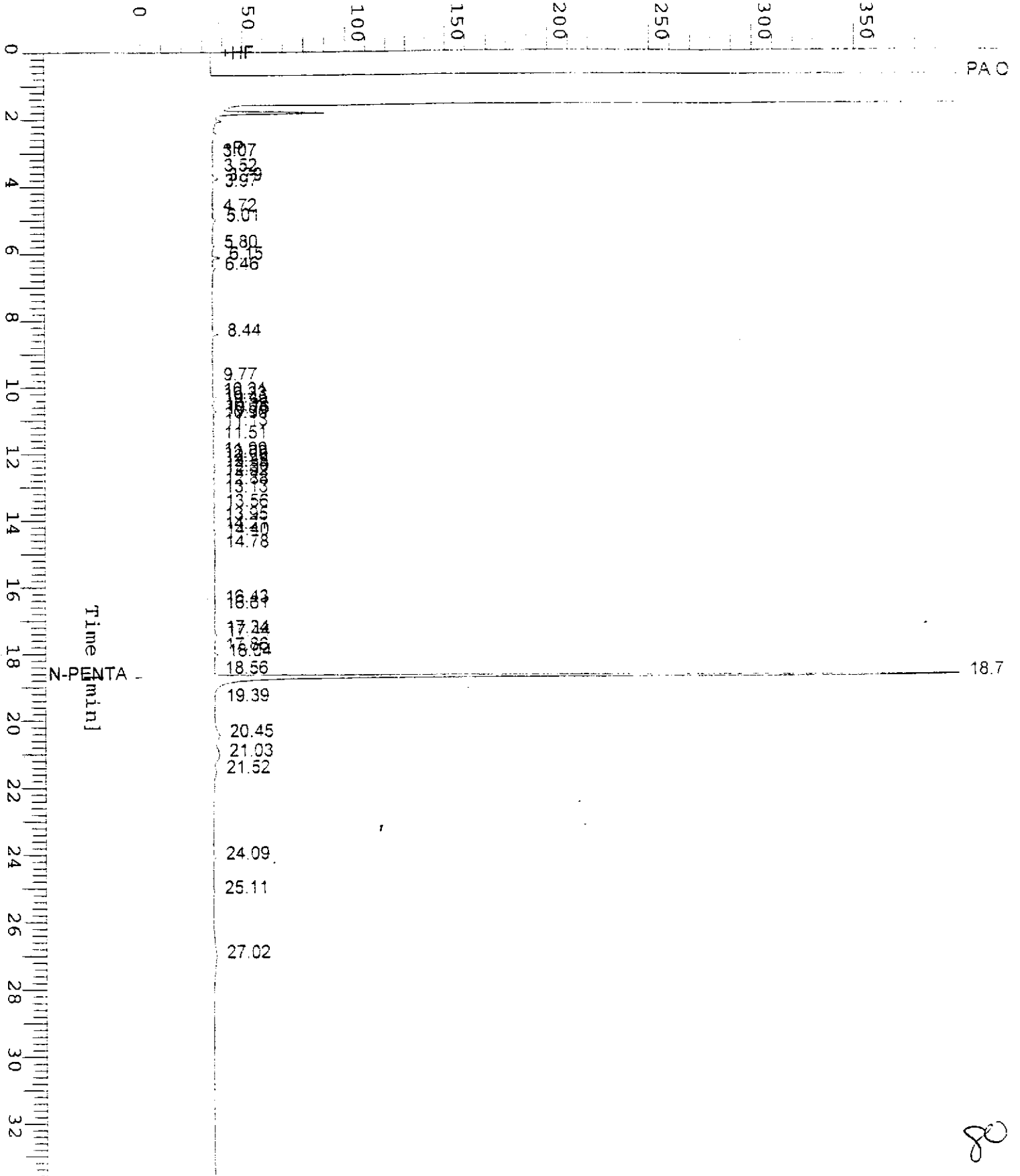
Sample Name : DW9804955-2 (500:1) SG
FileName : S:\GHP_05\0419\415A038.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: FD-6
Date : 4/16/98 23:38
Time of Injection: 4/16/98 23:05
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Page 1 of 1

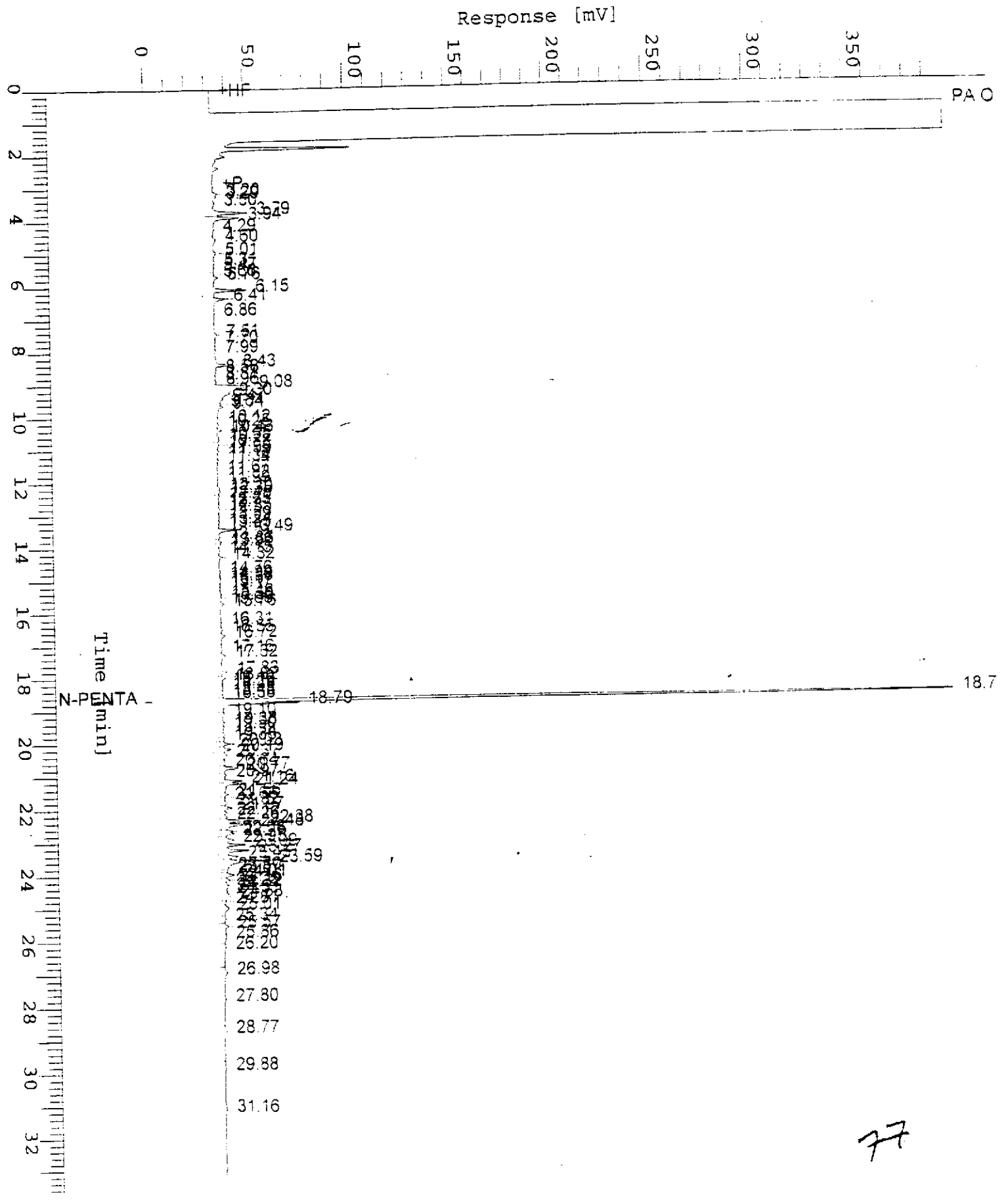
Response [mV]



80

Sample Name : DW9804955-7 (500:1) SG RX1
 File Name : S:\GHP_05\0426\421A026.raw
 Method : TPH05A
 Start Time : 0.00 min
 Scale Factor : 0.0

Sample #: OA-2
 Date : 4/22/98 02:26
 Time of Injection: 4/22/98 01:53
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV





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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804955 -01, 02, 08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	TPH Gas
QC Batch#:	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A	GC042298BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD	9804955-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	33	72
MS % Recovery:	110	110	110	110	120
Dup. Result:	10	10	10	31	71
MSD % Recov.:	100	100	100	103	118
RPD:	9.5	9.5	9.5	6.3	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS	LCS042298-LCS
Prepared Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Analyzed Date:	04/22/98	04/22/98	04/22/98	04/22/98	04/22/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	34	73
LCS % Recov.:	110	110	110	113	122

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
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

Mike Gregory
Project Manager

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

9804955.ERL <1>





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: FD-5
Work Order #: 9804955-01-06, 08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0416980HBPEXA
Analy. Method: EPA 8015M
Prep. Method: N.A.

Analyst: A. Porter
MS/MSD #: 9804955-01-MSD
Sample Conc.: N.D.
Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

Result: 770
MS % Recovery: 77

Dup. Result: 740
MSD % Recov.: 74

RPD: 4.0
RPD Limit: 0-50

LCS #: LCS041698-LCS

Prepared Date: 04/16/98
Analyzed Date: 04/16/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 690
LCS % Recov.: 69

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
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

9804955.ERL <2>



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

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: OA-3
Work Order #: 9804955-07, 09

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0420980HBPEXE
Analy. Method: EPA 8015M
Prep. Method: N.A.

Analyst: A. Porter
MS/MSD #: 9804B93-02-MSD
Sample Conc.: 57
Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

Result: 710
MS % Recovery: 65

Dup. Result: 750
MSD % Recov.: 69

RPD: 5.5
RPD Limit: 0-50

LCS #: LCS042098-LCS

Prepared Date: 04/20/98
Analyzed Date: 04/21/98
Instrument I.D.#: GCHP19
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
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

Mike Gregory
Project Manager

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

9804955.ERL <3>





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Wainut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
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San Mateo, CA 94402
Attention: Paul HOFFEY

Client Project ID: 980003.02/Hacienda Dr. & Dublin
Matrix: LIQUID
Sample Descript.: XSD
Work Order #: 9804955-03-08

Reported: Apr 29, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A	MS0417988260F2A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD	9804A10-01-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Analyzed Date:	04/17/98	04/17/98	04/17/98	04/17/98	04/17/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	42	46	52	44	44
MS % Recovery:	84	92	104	88	88
Dup. Result:	42	46	52	45	45
MSD % Recov.:	84	92	104	90	90
RPD:	0.0	0.0	0.0	2.2	2.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS	LCS042098-LCS
Prepared Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Analyzed Date:	04/20/98	04/20/98	04/20/98	04/20/98	04/20/98
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	44	49	56	49	48
LCS % Recov.:	88	98	112	98	96

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

9804955.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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft
Sample Descript: P-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-06

Sampled: 02/25/98
Received: 02/26/98

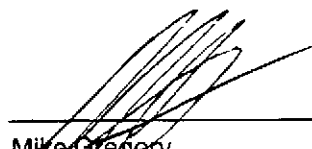
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoffey	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-06	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/09/98 Reported: 03/11/98
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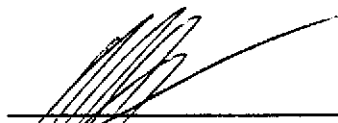
QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-6
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-05

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Elder & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-6 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-05	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	6.6

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	98
Toluene-d8	88	110	103
4-Bromofluorobenzene	86	115	89

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul HOFFEY	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-05	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/07/98 Reported: 03/11/98
---	--	--

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: Method Blank
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-07

Sampled:
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-07	Sampled: Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-07	Sampled: Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
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QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft

Received: 02/26/98

Lab Proj. ID: 9802H52

Reported: 03/11/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 26 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager



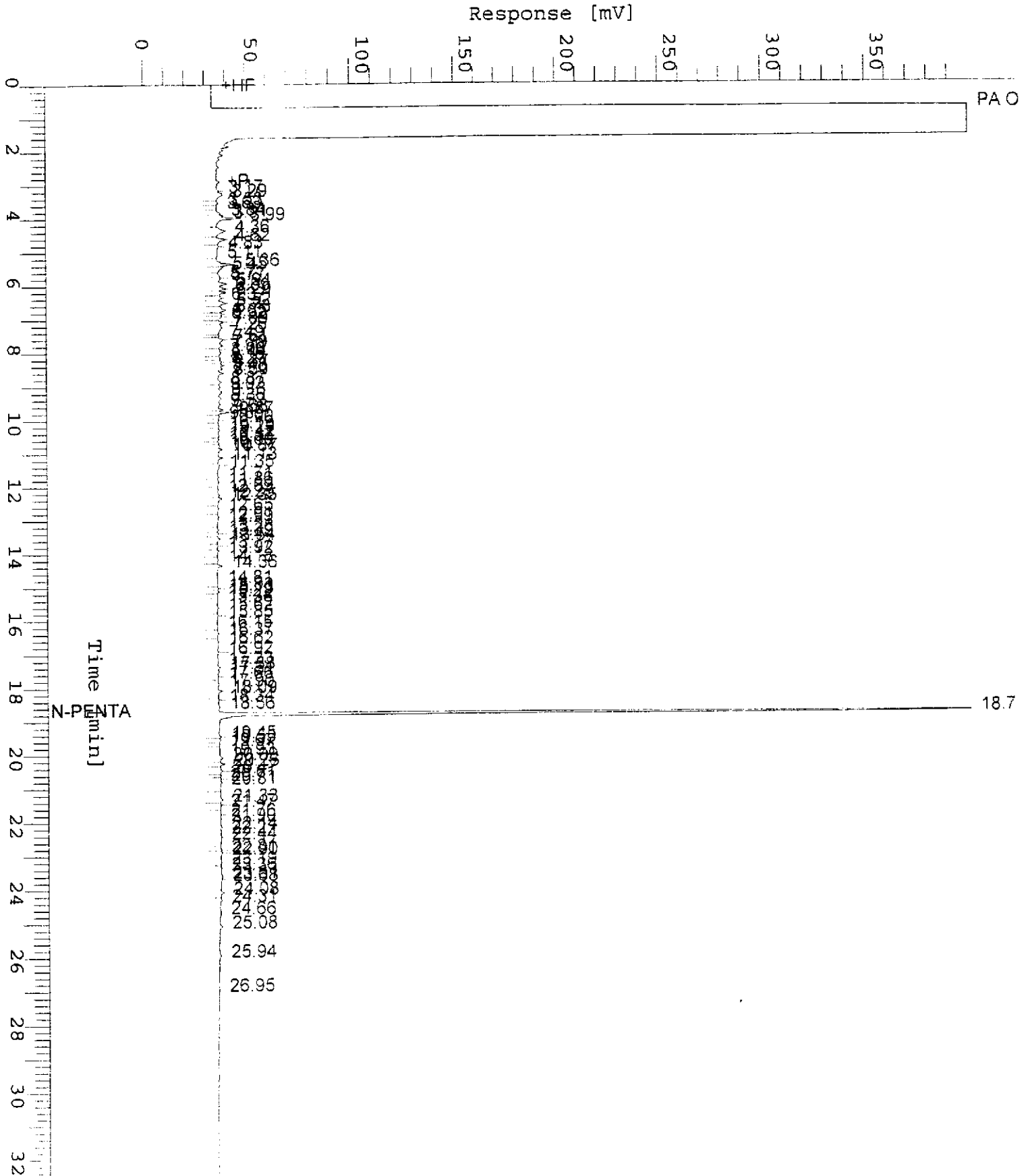
Chromatogram

Sample Name : DW9802H52-1 (500:1) SG
FileName : S:\GHP_05\0308\306A021.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: P-1
Date : 3/11/98 14:34
Time of Injection: 3/6/98 21:29
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

Page 1 of 1

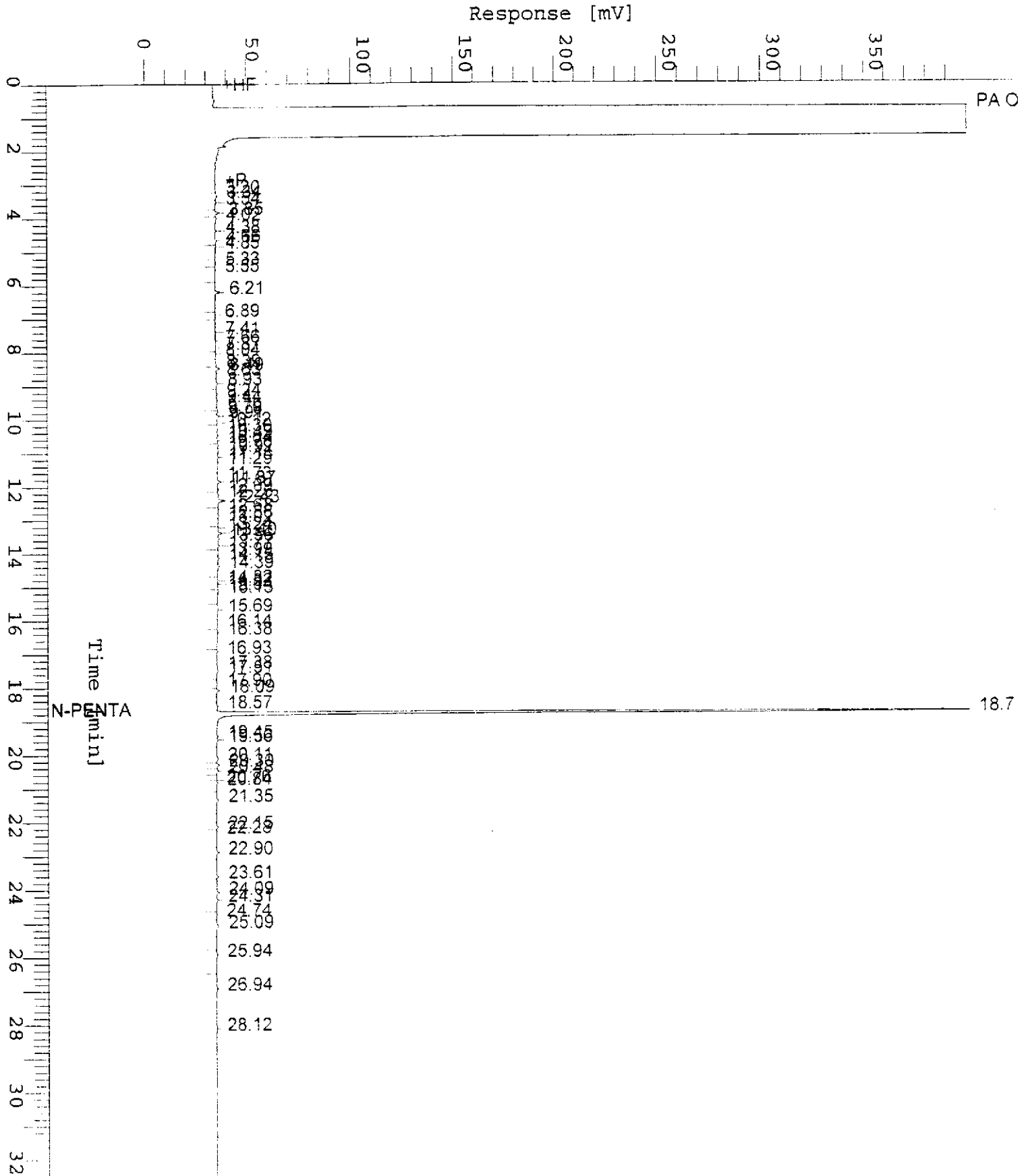


Chromatogram

Sample Name : DW9802H52-2 (500:1) SG
FileName : S:\GHP_05\0308\306A022.raw
Method : TPH05A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: P-2
Date : 3/11/98 14:34
Time of Injection: 3/6/98 22:10
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV





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

Client Project ID: 980003.00/PeopleSoft
Matrix: LIQUID
Sample Descript.: P-7
Work Order #: 9802H52 -01-07

Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0305980HBPEXD
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: G. Fish
MS/MSD #: 9802139-01-MSD
Sample Conc.: 120000*
Prepared Date: 03/05/98
Analyzed Date: 03/09/98
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 120000*
MS % Recovery: 0.0

Dup. Result: 440000*
MSD % Recov.: 32000

RPD: 114*
RPD Limit: 0-50

*MS/MSD diluted due to matrix interference

LCS #: LCS030598-LCS

Prepared Date: 03/05/98
Analyzed Date: 03/06/98
Instrument I.D.#: GCHP5
Conc. Spiked: 1000 µg/L

LCS Result: 650
LCS % Recov.: 65

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Gregory
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.





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

Client Project ID: 980003.00/PeopleSoft
Matrix: LIQUID
Sample Descript.: P-1
Work Order #: 9802H52-01-07

Reported: Mar 18, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A	MS0302988260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.

Analyst:	L. Zhu	L. Zhu	L. Zhu	L. Zhu	L. Zhu
MS/MSD #:	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD	9802H52-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	46	44	45	43	43
MS % Recovery:	92	88	90	86	86
Dup. Result:	50	46	47	46	45
MSD % Recov.:	100	92	94	92	90
RPD:	8.3	4.4	4.3	6.7	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS	LCS030298-LCS
Prepared Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Analyzed Date:	03/02/98	03/02/98	03/02/98	03/02/98	03/02/98
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	50	46	47	45	45
LCS % Recov.:	100	92	94	90	90

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
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.

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

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

9802H52

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 980003.00

Page 1 of 2

Date Sampled: 2/25/98

Project Name: PeopleSoft

Sampled By: Logan Hansen

Source of Samples: Temporary Wells

Report Results To: Paul HOFFEY, EKI

Location: Dublin, CA

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)
01	P-1	grab gw	2 Amber Liters	9:20	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
L	P-1	grab gw	3 VOAs w/ HCl	9:20	EPA 8260	Standard
02	P-2	grab gw	2 Amber Liters	11:55	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
J	P-2	grab gw	3 VOAs w/ HCl	11:55	EPA 8260	Standard
03	P-3	grab gw	2 Amber Liters	12:45	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
J	P-3	grab gw	3 VOAs w/ HCl	12:45	EPA 8260	Standard
04	P-4	grab gw	2 Amber Liters	13:35 13:35	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
J	P-4	grab gw	3 VOAs w/ HCl	13:35 13:35	EPA 8260	Standard
05	P-6	grab gw	2 Amber Liters	15:20	EPA 8015m for Total Extractable Hydrocarbons with silica gel cleanup	Standard
L	P-6	grab gw	3 VOAs w/ HCl	15:20	EPA 8260	Standard

Special Instructions:

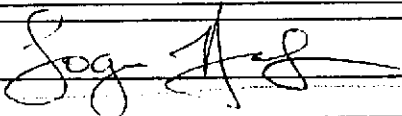
Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

Logan Hansen/  /EKI	2/25/98	10:40	
	2/25/98	1840	Chenier Coates / @ / Sequoia



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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: P-8
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-03

Sampled: 04/14/98
Received: 04/14/98

Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





COPY

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

Attention: Paul Hoeffy

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-1
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-01

Sampled: 02/25/98
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-1 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-01	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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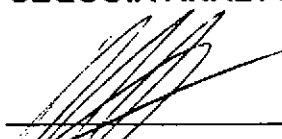
QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	99
Toluene-d8	88	110	100
4-Bromofluorobenzene	86	115	92

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-01	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
Attention: Paul Hoffey		

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	120
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	80

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-2
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-02

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-2 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9802H52-02	Sampled: 02/25/98 Received: 02/26/98 Analyzed: 03/02/98 Reported: 03/11/98
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QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802H52-02

Sampled: 02/25/98
Received: 02/26/98
Extracted: 03/05/98
Analyzed: 03/06/98
Reported: 03/11/98

QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	59 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	78

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-03

Sampled: 02/25/98
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



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(916) 921-9600

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FAX (916) 921-0100

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

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-03

Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	83
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-03	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
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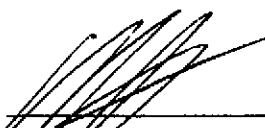
QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	76

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-04

Sampled: 02/25/98
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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: 980003.00/PeopleSoft
Sample Descript: P-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-04


Sampled: 02/25/98
Received: 02/26/98
Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	100
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	4.2
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.00/PeopleSoft Sample Descript: P-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9802H52-04	Sampled: 02/25/98 Received: 02/26/98 Extracted: 03/05/98 Analyzed: 03/06/98 Reported: 03/11/98
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QC Batch Number: GC0305980HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	73

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoffey

Client Proj. ID: 980003.00/PeopleSoft
Sample Descript: P-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9802H52-06

Sampled: 02/25/98
Received: 02/26/98

Analyzed: 03/02/98
Reported: 03/11/98

QC Batch Number: MS0302988260H6A
Instrument ID: H6

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



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

Client Proj. ID: 980003.02/Hacienda Dr.&Dublin
Sample Descript: OA-1
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804955-06

Sampled: 04/14/98
Received: 04/14/98
Analyzed: 04/20/98
Reported: 04/24/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Wainut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342


Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: OA-1 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-06	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	96

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: OA-1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-06	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/16/98 Analyzed: 04/17/98 Reported: 04/24/98
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QC Batch Number: GC0416980HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	92 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	80

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Paul Hoeffy	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: OA-2 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-07	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: OA-2 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804955-07	Sampled: 04/14/98 Received: 04/14/98 Analyzed: 04/20/98 Reported: 04/24/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	87
Toluene-d8	88 110	107
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02/Hacienda Dr.&Dublin Sample Descript: OA-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804955-07	Sampled: 04/14/98 Received: 04/14/98 Extracted: 04/20/98 Analyzed: 04/22/98 Reported: 04/24/98
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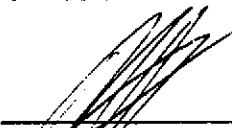
QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	95 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	77

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-02

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite B
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-3 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-02	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/20/98 Reported: 04/27/98
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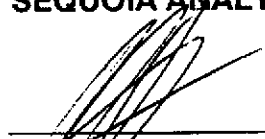
QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-02	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
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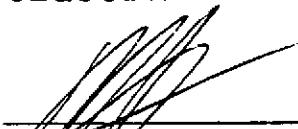
QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP19B

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	57 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	75

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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Erier & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-4 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-01	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/20/98 Reported: 04/27/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-4
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-01

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/20/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	89
Toluene-d8	88 110	106
4-Bromofluorobenzene	86 115	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-01	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
Attention: Paul Hoffey		


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-5 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-05	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/21/98 Reported: 04/27/98
Attention: Paul Hoeffy		

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Attention: Paul Hoffey

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-5
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-05

Sampled: 04/15/98
Received: 04/16/98

Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	29
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	5.0
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	88
Toluene-d8	88 110	106
4-Bromofluorobenzene	86 115	100

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-5
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-05

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/21/98
Reported: 04/27/98


QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	81

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





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

Attention: Paul Hoeffy

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-6
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-04

Sampled: 04/15/98
Received: 04/16/98

Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0421988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Wainur Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-6 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-04	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/21/98 Reported: 04/27/98
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QC Batch Number: MS0421988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114
Toluene-d8	88	110
4-Bromofluorobenzene	86	115

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9804B93-04

Sampled: 04/15/98
Received: 04/16/98
Extracted: 04/20/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	84

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-7 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9804B93-03	Sampled: 04/15/98 Received: 04/16/98 Analyzed: 04/21/98 Reported: 04/27/98
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QC Batch Number: MS0417988260F2A
Instrument ID: F2

Volatile Organics (EPA 8260)

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	2.0	N.D.
Bromobenzene	2.0	N.D.
Bromochloromethane	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
n-Butylbenzene	2.0	N.D.
sec-Butylbenzene	2.0	N.D.
tert-Butylbenzene	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chloroethane	2.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
2-Chlorotoluene	2.0	N.D.
4-Chlorotoluene	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,2-Dibromoethane	2.0	N.D.
Dibromomethane	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethylene	2.0	N.D.
cis-1,2-Dichloroethylene	2.0	N.D.
trans-1,2-Dichloroethylene	2.0	N.D.
Monochlorobenzene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
1,3-Dichloropropane	2.0	N.D.
2,2-Dichloropropane	2.0	N.D.
1,1-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Isopropylbenzene	2.0	N.D.
p-Isopropyltoluene	2.0	N.D.
Methylene chloride	5.0	N.D.
Naphthalene	2.0	N.D.





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Petaluma, CA 94954

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FAX (916) 921-0100
FAX (707) 792-0342

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

Client Proj. ID: 980003.02 Hacienda Dr./Dublin
Sample Descript: OA-7
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9804B93-03

Sampled: 04/15/98
Received: 04/16/98
Analyzed: 04/21/98
Reported: 04/27/98

QC Batch Number: MS0417988260F2A
Instrument ID: F2

Analyte	Detection Limit ug/L	Sample Results ug/L
n-Propylbenzene	2.0	N.D.
Styrene	2.0	N.D.
1,1,1,2-Tetrachloroethane	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethylene	2.0	N.D.
Toluene	2.0	N.D.
1,2,3-Trichlorobenzene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethylene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
1,2,3-Trichloropropane	2.0	N.D.
1,2,4-Trimethylbenzene	2.0	N.D.
1,3,5-Trimethylbenzene	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76 114	85
Toluene-d8	88 110	105
4-Bromofluorobenzene	86 115	96

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 980003.02 Hacienda Dr./Dublin Sample Descript: OA-7 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9804B93-03	Sampled: 04/15/98 Received: 04/16/98 Extracted: 04/20/98 Analyzed: 04/21/98 Reported: 04/27/98
Attention: Paul HOFFEY		

QC Batch Number: GC0420980HBPEXE
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH) with Silica Gel Cleanup

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	79

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

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager

