# OFFICE OF THE STATE ARCHITECT
# PHASE II SITE INVESTIGATION

for

## CALIFORNIA DEPARTMENT OF TRANSPORTATION
## HAYWARD MAINTENANCE STATION
## 21195 CENTER STREET
## CASTRO VALLEY, CALIFORNIA

April 4, 1991


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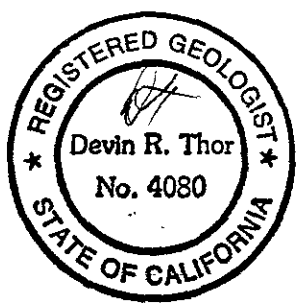


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## 1.0 INTRODUCTION

At the request of the Office of the State Architect, Tetra Tech, Inc. has completed a Site Investigation at the Caltrans Hayward Maintenance Station in Castro Valley, California. The purpose of the subsurface investigation was to complete the delineation of the vertical and lateral extent of petroleum contaminated soil that resulted from the previous underground storage tanks. After review of previous investigation reports, an additional eight soil borings were completed to depths of 11 to 51 feet around north, northeast, east, and southeast extent of the contaminant plume. The site investigation (SI) was conducted through on-site screening for volatile emissions, soil sampling, and laboratory analysis for halogenated volatile organics, aromatic compounds, and petroleum hydrocarbon compounds. This report includes a description of the site, a discussion of Tetra Tech's field investigations, presentation of the investigation results, and recommendations for further action.

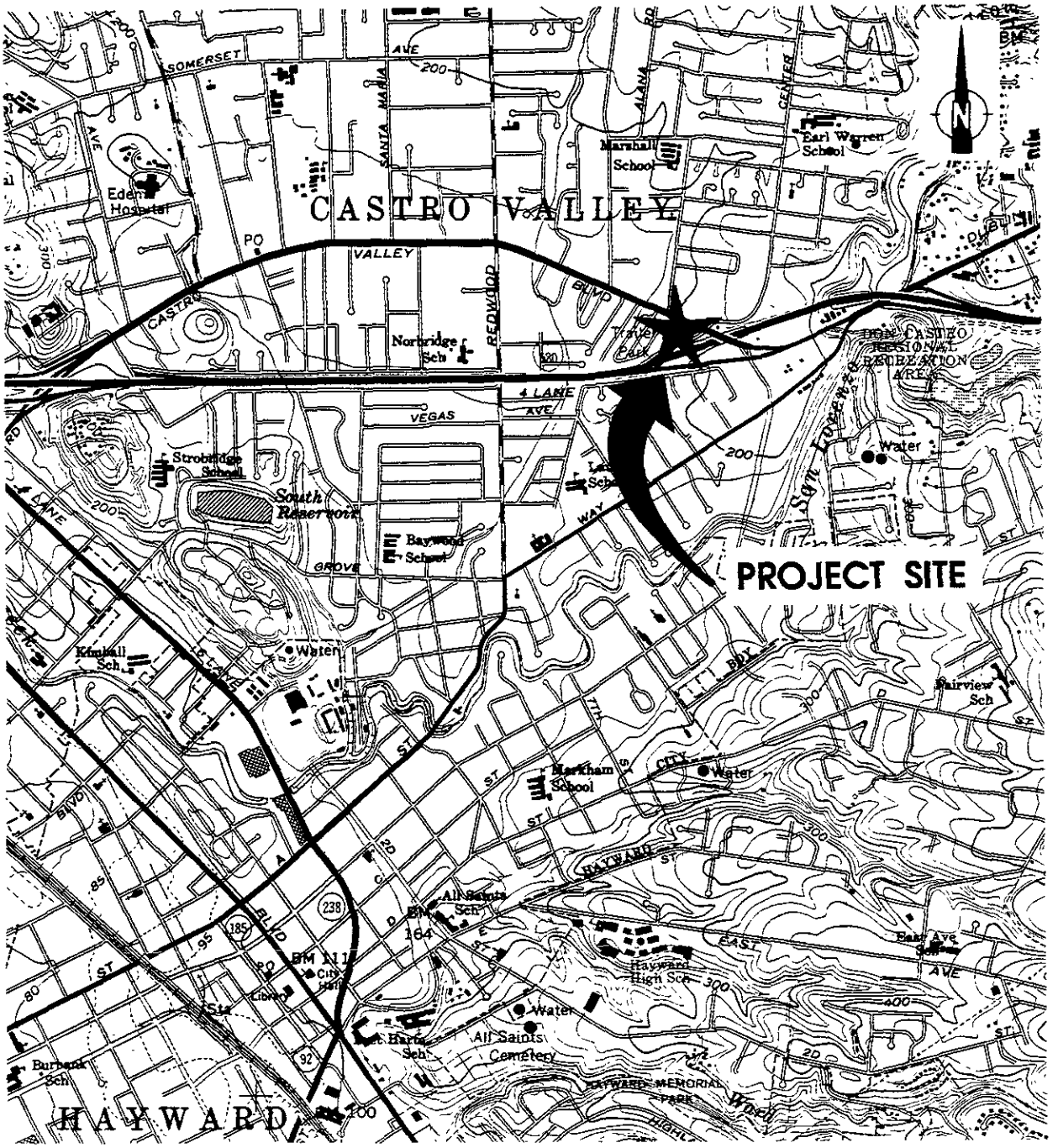
## 2.0 SITE BACKGROUND

### 2.1 SITE LOCATION AND DESCRIPTION

The project site is the Caltrans Hayward Maintenance Station located at 21195 Center Street in the City of Castro Valley, California. A site location map is presented in Figure 1. The site is currently managed by the State of California. Both of the underground fuel tanks at the facility have been removed. The majority of the property has been paved with asphalt or concrete, however the area where the previous tanks and dispenser island were removed has been backfilled, but not paved.

### 2.2 SITE HISTORY

Based on records provided by the Office of the State Architects (OSA), a 260 gallon diesel tank and a 1000 gallon gasoline tank were removed from the Hayward Maintenance Station in January of 1989. After the removing the tanks, three soil samples were collected from the bottom of the excavation for analysis. The test results from these samples indicated the presence of both gasoline and diesel contamination.




**SITE INVESTIGATION**
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**FIGURE 1** **PROJECT SITE LOCATION**

In January of 1990, Geo/Resource Consultants, Inc. performed a Preliminary Site Assessment (PSA) of the petroleum contamination at the Hayward Maintenance Station. The soil investigation consisted of six soil borings that were completed in, and around, the perimeter of the previous tank excavation and dispenser island. The area of highest reported contamination was around and beneath the fuel dispensing island. The contamination beneath the former fuel island showed the presence of both gasoline and diesel contamination.

The PSA Report delineated the lateral extent of contamination plume to the northwest, west, and southwest; however did not adequately define the southeast, east, northeast, or north extent of the petroleum contamination. The vertical extent of contamination was delineated in each of the preliminary assessment borings, with the exception of PSA boring B-1. Diesel contamination was present in the final sample collected from boring B-1 at the depth of 31 feet, however no gasoline or volatile aromatic compounds were detected. A copy of the Geo/Resource PSA is presented in Appendix A.

## 2.3 REGULATORY AGENCY REVIEW

The results of the PSA were forwarded to both the Alameda County - Department of Health Services (ACHCSA), and the San Francisco - Regional Water Quality Control Board (SFRWQCB) for review. After review, the ACHCSA requested further subsurface investigations be performed to define the extent of the petroleum contamination. The ACHCSA is serving as the lead enforcement agency, with copies of all correspondence forwarded to the SFRWQCB.

## 3.0 SUBSURFACE CONDITIONS

### 3.1 SITE GEOLOGY

The subject site lies within the Castro Valley, and is bound by the Diablo Hills on the north, east and south sides, and the northwest trending Hayward fault to the west. The hills surrounding Castro Valley are the source of sedimentary deposits which have been transported mainly by sheet flow runoff and streams, and accumulate in the valley bottom.

Borings completed at the Hayward maintenance station indicate that approximately 28 to 35 feet of alluvial deposits are overlying bedrock, which consists of dark yellowish brown siltstone. These alluvial deposits consist mainly of interbedded finer grained sands, silts, and clays. Occasional sandy gravel and gravelly sand lenses were encountered.

Bedding within the alluvial deposits are anticipated to be very poorly developed, irregular, and discontinuous. Differentiated deposits included a northwesterly dipping, dark yellowish brown sandy clay which varies from approximately 3 to 15 feet in thickness. Beneath the sandy clay layer is a dark yellowish brown sandy silt which grades downward into silty sands and occasional lenses of sandy gravel. Section profiles of the facilities near surface lithology is shown in Sections A - A', and B - B' as presented in Figure 3. Boring logs completed during Tetra Tech's investigation are presented in Appendix B, while boring logs completed during the PSA are presented in Appendix A.

## 3.2 SITE HYDROGEOLOGY

The Hayward Maintenance Station lies within the East Bay Plain, Castro Valley Ground Water Sub-Basin, as reported by the Alameda County Flood Control and Water Conservation District. Depth to groundwater in the vicinity has been reported to historically vary from 28 to 35 feet below ground surface. As discussed in the PSA Report and addressed by Mr. Scott Seery of the ACEHCA, the recent drought conditions appear to have contributed to the decline in local groundwater levels. During Tetra Tech's boring program, moist soils were encountered from approximately 15 feet bgs to bedrock. Weathered bedrock was first encountered at approximately 34 to 37 feet bgs, where grayish fractured siltstone bedrock was encountered.

Very damp sediments were encountered at depths ranging from 11.5 to 34 feet below ground surface (bgs). Moisture bearing materials were however, generally confined to a zone of coarser grained materials 17 to 28 feet BGS. Boring B-6 was drilled to a depth of 11.5 feet at which point saturated earth materials were encountered. Saturation in boring B-6 was attributed to a leaking underground water line in the vicinity of the boring, and is not expected to be representative of local hydrogeologic conditions.

Annual fluctuations of the groundwater table are expected to occur in response to seasonal precipitation. Due to the inclination of the fine grained bedrock unit and the relative porosity of the overlying alluvium, long term retention or storage of groundwater is not anticipated within the site boundaries. Although no groundwater was encountered, Tetra Tech designed and installed a monitoring well to allow the collection and analysis of a formation water sample.

## 4.0 SOIL INVESTIGATION PROGRAM

### 4.1 APPROACH

The principal objective of this investigation was to define the vertical and lateral extent of the petroleum contamination beneath the site. The investigation was focused along the eastern perimeter of the pumping island and former location of the storage tanks. Selection of boring locations were based on contaminant levels reported in the previously referenced PSA Report (*see Appendix A*).

### 4.2 DRILLING

On February 6 and 7, 1991, Tetra Tech drilled eight hollow stem auger borings to a maximum depth of 51.5 feet. The eight borings were placed in a semi-circle around the east side of the former fuel dispenser island and tank location. Each boring location was selected to determine if petroleum compounds were present in the surrounding soils. As prescribed in the work plan, borings were completed to a minimum depth of 40 feet below ground surface (bgs), or to a depth of 15 feet below any obvious contamination detected through field screening. Each boring was continued to bedrock where refusal was encountered. In order to prevent any of the eight borings from serving as a future conduit for contamination, each boring was backfilled with a bentonite slurry.

As outlined in Tetra Tech's site investigation work plan, the drilling was conducted using a standard 8-inch diameter hollow-stem auger on a CME 75 drilling rig. Hollow stem augers were used in order to allow the collection of undisturbed soil samples through the center of the augers. An overview of the site showing each boring location with respect to the previous tank excavation and dispenser island are presented in Figure 2. A cross profile of the borings with respect to the tank excavation and lithologic contacts are presented in Figure 3. Copies of photographs of the drill rig and the site are presented in Photographs 1 and 2.

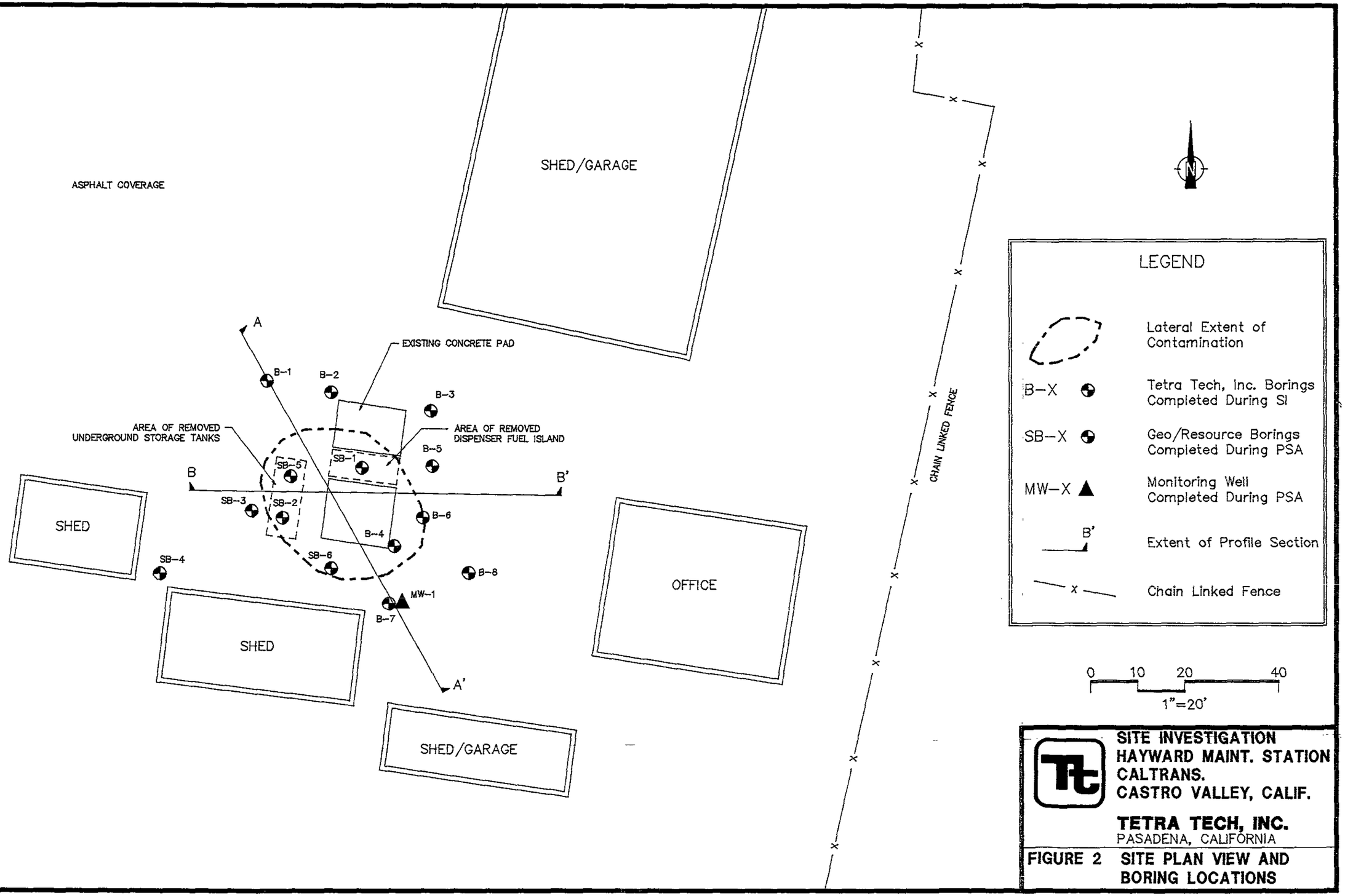


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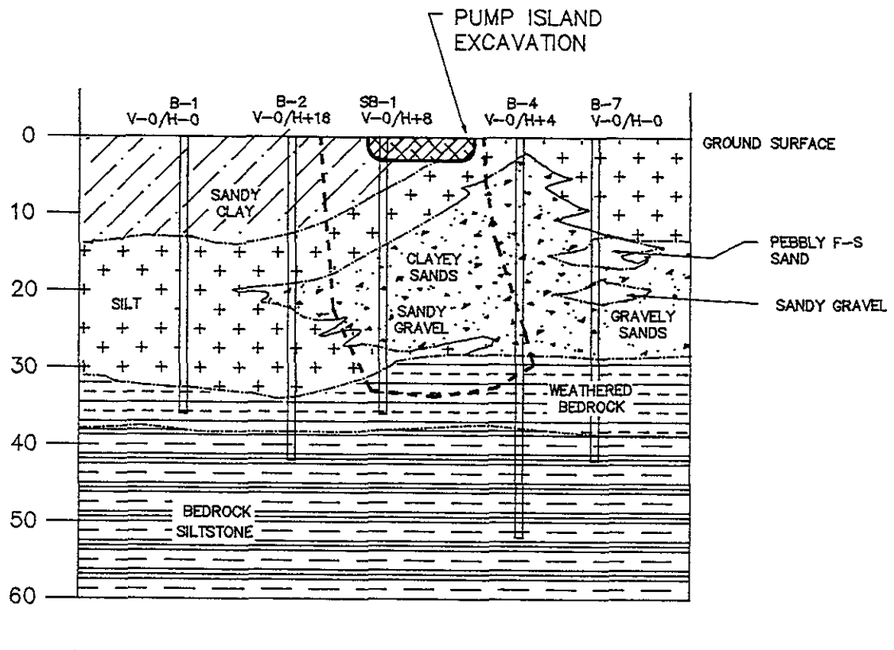
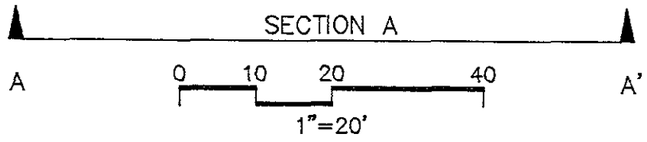
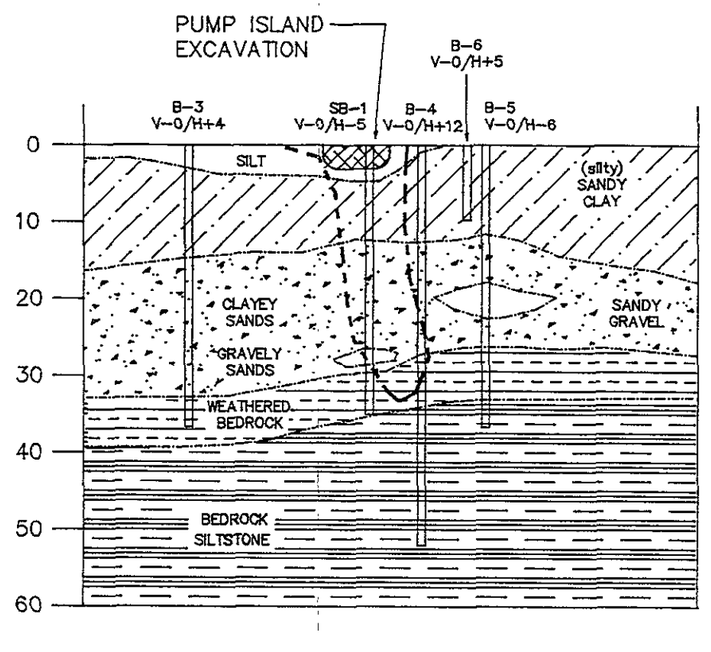
**FIGURE 2 SITE PLAN VIEW AND BORING LOCATIONS**

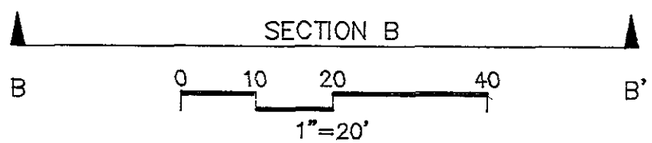



SECTION FROM NW TO SE

NOTE: Vertical Scale Does Not Represent Actual Elevation




SECTION FROM W TO E

NOTE: Vertical Scale Does Not Represent Actual Elevation

LEGEND

BEDROCK
SILTSTONE

SILTSTONE

CLAYEY SANDS
GRAVELY SANDS
SANDY GRAVEL

SANDY CLAY
(silty)

----- EXTENT OF CONTAMINATION

..... APPROXIMATE DEPTH OF
SOIL CLASSIFICATION CHANGE

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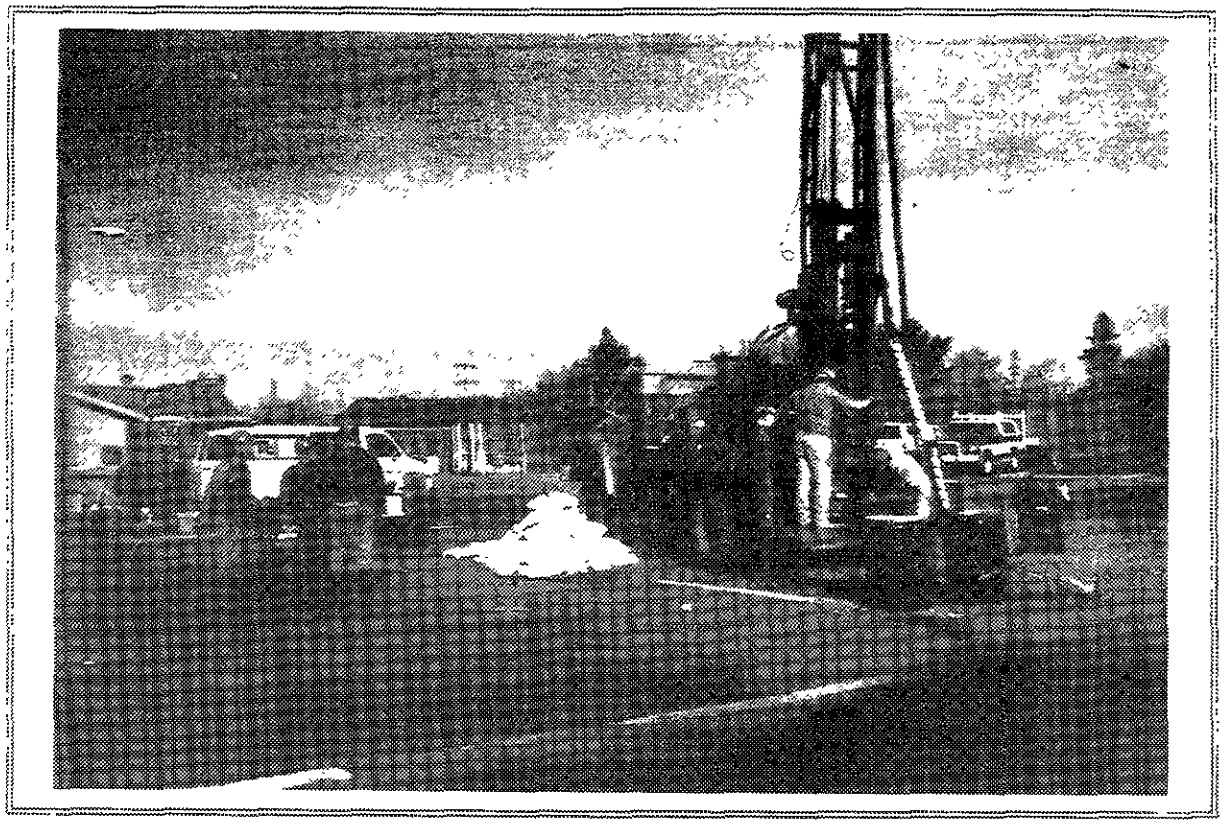
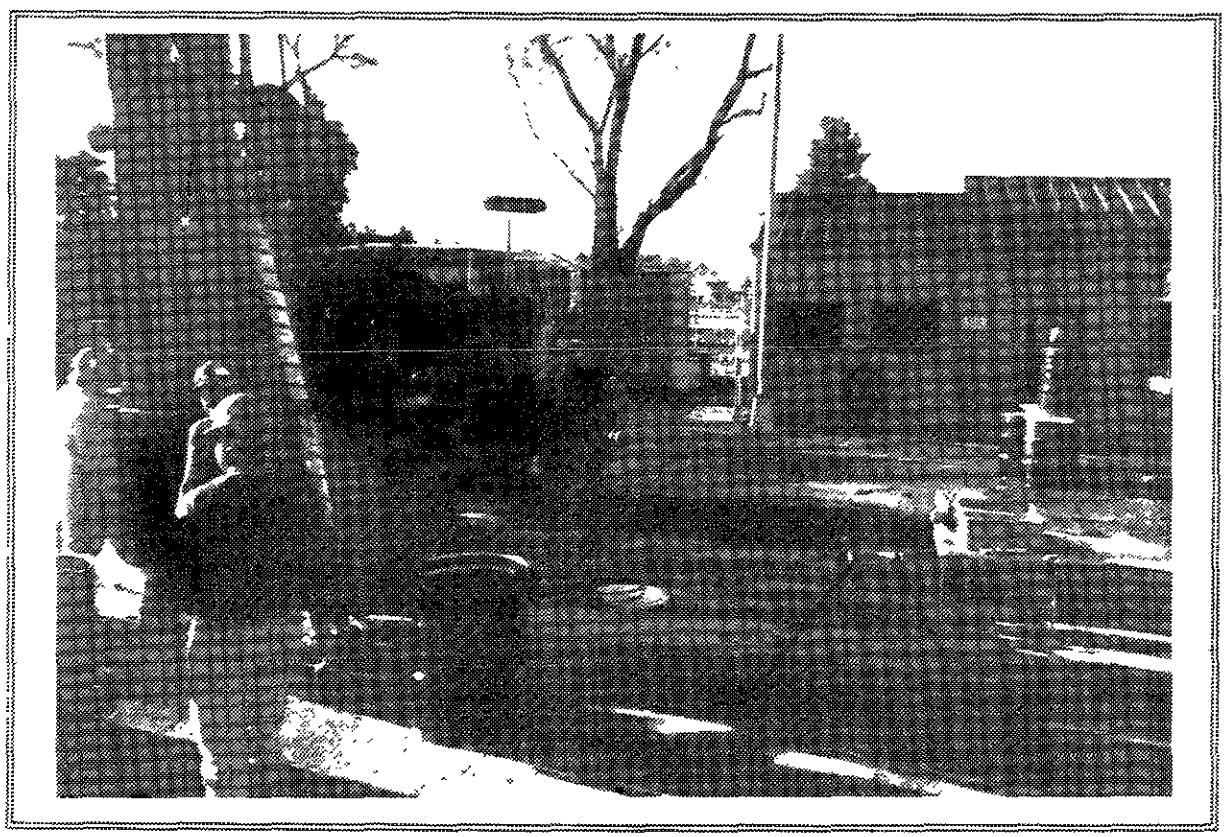
**FIGURE 3 BORING PROFILE AND SITE SECTION VIEW**



Photograph #1
Hayward Maintenance Station, Site Overview



Photograph #2
Hayward Maintenance Station, Boring Program

## 4.3 SOIL SAMPLING FOR CHEMICAL ANALYSIS

In order to evaluate the presence of contaminants (i.e., petroleum hydrocarbons and volatile organics), Tetra Tech collected soil samples at five foot intervals beginning at 5 bgs. Due to soil refusal and limited recovery, the final soil sample collected from each boring was used for on-site screening only. Each of the borings continued until no further visual or field screening evidence of contamination was observed. If evidence of contamination was observed, the boring was extended. The borings were continued to a minimum of 15 feet beyond the last indication of contamination.

Boring B-6 was drilled to a depth of 11.5 feet at which point saturated earth materials were encountered. The saturation appeared to be a result of leaking underground water lines in the vicinity of the boring. No water or saturation was encountered in any of the other borings. Samples were obtained from depths of 5 and 10 feet in boring B-6, with no detectable contamination. The soil sampling was conducted by a Tetra Tech project engineer and project geologist (California Registered Geologist). A total of 54 samples were collected from the eight borings. A copy of the boring logs are presented in Appendix B.

Each of the soil samples were collected using a modified California split spoon sampler fitted with brass liners. The sampler was driven into the soil in front of the drill bit to collect undisturbed samples. Three samples from each interval were collected; one for laboratory analysis, one for archiving, and one for field screening and soil description.

Preparation of the samples for laboratory analysis involved first covering both ends of the filled brass sleeve with aluminum foil, and then sealing with teflon end caps. The samples were then appropriately labelled and placed on blue ice. Sample identification numbers were recorded on a chain-of-custody form. A copy of the chain-of-custody forms are presented in Appendix C. The results of the chemical analysis results are discussed in Section 6.0, with a copy of the laboratory analysis results presented in Appendix D.

Several actions were taken to minimize the potential for cross contamination between sampling intervals. The hollow stem augers were steam cleaned prior to being delivered to the Hayward Maintenance Station. Tetra Tech set up a staging area for storing the clean brass sleeves used for collecting soil samples, and established a decontamination area to clean the split spoon sampler between each sampling drive. After each sample was obtained, the split spoon sampler was washed in a TSP solution, rinsed in clean tap water and finally rinsed in distilled water.

## 4.4 SOIL SAMPLING FOR ON-SITE SCREENING

As previously described, discrete soil samples were collected at each sampling interval for the purpose of on-site screening for volatile organic vapors (i.e. petroleum vapors). Field vapor monitoring was performed using a photoionization detector, Hnu Systems Model PI 101 with 10.3 eV lamp, and a flame ionization detector, Foxboro Model 128 with GC organic vapor analyzer. Prior to use, both instruments were calibrated according to manufacturer specifications, and bench tested. Field screening of soil samples was conducted according to the following procedure:

- The soil sample collected in brass liners were covered with aluminum foil and capped at one end, then emptied of half of the contents to provide a headspace. The open ends of the liners were then sealed with aluminum foil to prevent vapors from escaping.

- The sealed brass liners were then placed in the sun to allow the sample to heat and volatilize contaminants in the soil sample.

- When the sample had been sufficiently heated, the Hnu and OVA probes were used to pierce the aluminum foil sealing vapors in the head space. Readings obtained on the instruments were then recorded.

A summary of the field measurements are presented below in Table 4-1.

**TABLE 4-1**

**SUMMARY OF FIELD OVA READINGS**
**(ppm)**

| Depth (Ft) | Boring No. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-5 | B-6 | B-7 | B-8 |
| 5 | 0* | 0 | 9 | 0 | | 0 | 0 | 0 |
| 10 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 20 | 0 | 0 | 1 | 0 | 0 | | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 30 | 0 | 0 | 0 | 120 | 0 | | 0 | 0 |
| 35 | 0 | 0 | | 12 | 0 | | 0 | 0 |
| 40 | | 0 | | 0 | | | 0 | |
| 45 | | | | 0 | | | | |

**SUMMARY OF Hnu Readings**
**(ppm)**

| Depth (Ft) | Boring No. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-5 | B-6 | B-7 | B-8 |
| 5 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 30 | 0 | 0 | 0 | 100 | 0 | | 0 | 0 |
| 35 | 0 | 0 | | 0 | 0 | | 0 | 0 |
| 40 | | 0 | | 0 | | | 0 | |
| 45 | | | | 0 | | | | |

* 0 = Field screening detected no indication of volatile organics above 1 ppm.

## 4.5 SOIL BORING LOGS

Tetra Tech's staff geologists logged each boring by both continuous inspection of the drill cuttings and by examination of samples collected in brass liners at five foot sampling intervals. As outlined in Section 4.3, a discrete sample was collected at each sampling interval for the purpose of defining geotechnical parameters. Detailed logs were completed for each boring, and included a geotechnical description and Unified Soil Classification designation of soils encountered, blow counts required to collect samples, instrument readings, comments and any odor detected. Soil boring logs are presented in Appendix B.

# 5.0 GROUNDWATER INVESTIGATION PROGRAM

## 5.1 APPROACH

In an attempt to assess the presence of petroleum contaminants in the formation water entrained in the moist soil, a single groundwater monitoring well was installed adjacent to soil boring B-7. The monitoring well depth and screen interval was based on the best approximation of the formation wet zone that could potentially accumulate representative formation water.

## 5.2 DRILLING

Prior to installation of the monitoring well, Tetra Tech applied for, and received, a permit from the Alameda County Flood Control and Water Conservation District. A copy of the Well Construction Permit is presented in Appendix E. The monitoring well was installed on February 11, 1991.

The single monitoring well was constructed to a depth of 45 feet bsg. The monitoring well design, and drilling and installation procedures used by Tetra Tech, Inc. were based on standard groundwater monitoring well criteria. The well hole was drilled with an 8-inch diameter hollow stem rotary auger and converted into a permanent 4-inch diameter PVC cased well. The single monitoring well, MW-1, was installed adjacent to soil boring B-7 (*see Figure 2 for well location*).

## 5.3 WELL INSTALLATION

Upon completion of drilling, the hole was ready for well construction. The casing string, which consisted of a bottom plug set at 45 feet bgs, 20 feet of screened casing, and 25 feet of blank casing, was lowered into the hole. The auger string was then raised in five-foot increments and sand was poured into the auger. The sand filled the annulus (space between the casing and the wall of the borehole) and created a filter pack between the screened part of the casing and the wet zone of the formation. Centering devices were not installed, because the augers kept the casing centered while the sand pack was constructed. The sand pack was built two feet higher than the top of the screened section of the casing. The remainder of the drill string was removed and bentonite pellets were poured into the annulus and hydrated to form a seal between the screened zone below and the blank zone above. This was done to help keep water and contamination that might be above the seal from entering the producing zone. The final step was to fill the remainder of the annulus with a grout (cement and bentonite) slurry. A flush mounted protective metal cover was then placed over the top of the well casing. A copy of the well sealing forms are provided in Appendix E.

## 5.4 WELL COMPLETION AND DEVELOPMENT

The monitoring well was allowed to stand and stabilize for twenty-four hours. The well was then bailed in order to obtain a representative sample. Due to very poor recharge and the limited volume of water accumulation, the well was bailed dry. A water sample was however obtained, placed in a glass vial, sealed, placed in a cooler on blue ice, and transported under chain of custody to Eureka Laboratory. Results of laboratory analysis are provided in Appendix D.

## 6.0 LABORATORY ANALYSIS

As described in Section 4.3, a total of 54 soil samples were collected from the eight borings. All 54 of the samples were delivered under a chain-of-custody to Eureka Laboratories for analysis. Each of the soil samples were analyzed for Total Petroleum Hydrocarbons by EPA Method 8015 Purge and Trap (*for gasoline and diesel*) and Volatile Aromatic Organic Compounds by EPA Method 8020.

A total of one water samples was collected from the single monitoring well and submitted to Eureka Laboratories for analysis. In addition, a field blank was submitted for quality control purposes. The water sample was analyzed for Total Recoverable Hydrocarbons by EPA Method 418.1, Volatile Aromatic Organic Compounds by EPA Method 602, and Volatile Halogenated Organic Compounds by EPA Method 601.

A copy of the Laboratory Reports are presented in Appendix D and Chain-of-Custody records are presented in Appendix C. A summary of the laboratory analysis results for soil and groundwater are presented in Table 6-1 on the following page:

**Table 6-1**

**SUMMARY OF LABORATORY RESULTS**

**Total Petroleum Hydrocarbons (8015 M)***

| Depth | Borings | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-5 | B-6 | B-7 | B-8 | MW-1 |
| 5 | ND* | ND | ND | ND | ND | ND | ND | ND | N/A |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND | N/A |
| 15 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 20 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 25 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 30 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 35 | ND | ND | N/A | ND | ND | N/A | ND | ND | N/A |
| 40 | N/A | ND | N/A | ND | N/A | N/A | ND | N/A | N/A |
| 45 | N/A | N/A | N/A | ND | N/A | N/A | N/A | N/A | N/A |
| 50 | N/A | N/A | N/A | ND | N/A | N/A | N/A | N/A | N/A |

**Volatile Aromatic Organics (8020)****

| Depth | Borings | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-5 | B-6 | B-7 | B-8 | MW-1 |
| 5 | ND** | ND | ND | ND | ND | ND | ND | ND | N/A |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND | N/A |
| 15 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 20 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 25 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 30 | ND | ND | ND | ND | ND | N/A | ND | ND | N/A |
| 35 | ND | ND | N/A | ND | ND | N/A | ND | ND | N/A |
| 40 | N/A | ND | N/A | ND | N/A | N/A | ND | N/A | N/A |
| 45 | N/A | N/A | ND | Benzene-ND<br>Toluene-5<br>Xylene-5<br>Ethylbenzene-10 | N/A | N/A | N/A | N/A | N/A |
| 50 | N/A | N/A | N/A | Benzene-ND<br>Toluene-4<br>Xylene-13<br>Ethylbenzene-5 | N/A | N/A | N/A | N/A | N/A |

Notes: * Detection Limit of <10 parts per million (ppm)
**Detection Limit of 1 part per billion (ppb)
ND - Not Detected Above Detection Limits
N/A - Not Applicable

As shown in Table 6-1, TPH contamination was only detected in boring B-4 at a depth of 30 feet, and in boring B-8 at a depth of 5 feet bgs. Volatile organic compounds were only detected in boring B-4 at a depth of 45 and 50 feet bgs. The volatile aromatic organics detected in boring B-4 were limited to toluene, ethylbenzene, and xylenes. The concentration for each of the aromatic compounds were below California Drinking Water Standards, and were only detected at a maximum concentration of 5 ppb toluene, 13 ppb xylenes, and 10 ppb ethylbenzene.

No aromatic, halogenated, or petroleum hydrocarbon compounds were detected in the water sample collected from monitoring well MW-1. A quality control evaluation was performed on all of Tetra Tech's analytical laboratory reports (*See Appendix D*).

## 7.0 EVALUATION OF BORING AND LABORATORY ANALYSIS PROGRAM

Laboratory analysis results detected petroleum hydrocarbons in borings B-4 / 30 feet at 16 ppm, and in boring B-8 / 5 feet at 121 ppm at a depth of 5 feet bgs. The 16 ppm of petroleum hydrocarbons detected in boring B-4 at 30 feet was reported in the carbon range of C9 to C12 (gasoline range), and peaking at C10. Ethylbenzene, toluene, and xylene were detected in boring B-4 at concentrations of 13 ppb or less at depths of 45 and 50 feet.

Laboratory analysis also detected TPH compounds in the 5 foot sample from boring B-8. The petroleum hydrocarbons detected in the B-8 sample were characterized as motor oil, in the carbon range of C18 - C30. While 121 ppm of petroleum hydrocarbon compounds were detected in the 5 foot sample from boring B-8, this contamination does not appear associated with the leaking fuel tanks, and is anticipated to be localized.

## 8.0 CONCLUSIONS

The analytical results from this SI coupled with the results of the PSA have delineated the extent of the soil contamination at the Caltrans Hayward Maintenance Station. Soil borings previously completed by Geo/Resources delineated the lateral extent of the contamination

to the south, southwest and west. The additional borings completed by Tetra Tech have delineated the contamination to the north, northeast, east and southeast. As shown in Figure 2, the area of both gasoline and diesel contamination is confined to a circular shaped area centered around the southeast corner of the former fuel dispensing island, with an approximate diameter of 40 feet. Laboratory data presented in the PSA, and in this report indicate that the vertical extent of contamination extends to approximately 35 feet (*see Figure 3*). This estimated vertical extent of contamination coincides with the lithologic contact of the weathered siltstone bedrock and the gravely sandy formation.

The petroleum hydrocarbons detected in the soil have been characterized as both gasoline and diesel at varying depths. Both the PSA laboratory analysis, and the analytic results presented in this report, detected petroleum contamination at different depths with no detectable contamination between. These lenses of contamination appear to have been caused by irregular migration of the petroleum hydrocarbons through more permeable soils beneath the site.

While no "saturated water bearing formation" was encountered during the investigation, the soil was observed to be very moist from approximately 15 feet bgs to the depth where bedrock was encountered. In an attempt to sample accumulated water from the formation, a single groundwater monitoring well was installed near the southeast extent of the contaminant plume (*location where the highest moisture content was observed*). No petroleum contamination was detected in the water sample collected from the monitoring well.

The laboratory analysis results presented in this reported are consistent with Tetra Tech's field screening of the samples collected, including visual observations, instrument screening for volatile organics, and inspection of the bore hole cuttings.

## 9.0 RECOMMENDATIONS

Based on the detected levels of petroleum contamination in the area of the former fuel dispensing island and tank excavation, Tetra Tech recommends that the contamination be remediated. Generally, various remedial alternatives are available for remediating petroleum hydrocarbon contaminated soil.

The common remedial alternatives for addressing gasoline or diesel fuel spills are:

I. IN-SITU ALTERNATIVES

- In-situ vapor extraction,
- In-situ biological treatment,
- In-situ fixation/stabilization

II. ON-SITE ABOVEGROUND ALTERNATIVES

Excavation and;

- On-site vapor extraction,
- On-site biological treatment,
- On-site fixation/stabilization

III. EXCAVATION AND OFF-SITE DISPOSAL

- Class I Landfill, RCRA Hazardous Waste,
- Class III Landfill, California Regulated Waste

Due to the high moisture content in the soil, in-situ vapor extraction would not appear to be an effective remedial alternative. The effectiveness, and area of influence of a vapor extraction system is directly related to the moisture content in the soil. In-situ biological treatment generally requires the injection of biological cultures into the area of contamination. Flushing of the contaminants down toward groundwater is often a side effect during the injection of biological cultures into the contaminant plume. This flushing of the contaminants is not considered a difficulty if hydraulic control of the local groundwater can be maintained. Unfortunately, no defined groundwater is currently present beneath the

Hayward Maintenance Station, therefore in-situ biological treatment would not be recommended.

Since this site does not appear to lend itself to an effective in-situ remediation alternative, Tetra Tech recommends a limited excavation program. Based on the completed site characterization, it appears that the highest levels of petroleum hydrocarbons and volatile aromatic compounds are set within the upper 20 feet of the areal extent outlined in Figure 2. Excavation of this area will allow for the expedient and verifiable removal of the identified contaminants. After excavation, the stockpiled soils can be treated on-site to remove or degrade the petroleum contamination.

As described in Section 8.0, isolated migration of portions of petroleum contamination appears to have occurred to deeper depths. Both Tetra Tech and Geo/Resource's detected petroleum compounds down to 35 feet bgs in the area of the former dispenser island. Laboratory results from both investigations reported isolated lenses of petroleum set between layers of no detectable contamination. While these lenses of contamination do have the potential to impact the groundwater in the future, it may not be feasible to include these isolated areas of contamination with the limited excavation program. Rather, Tetra Tech recommends that a series of three groundwater monitoring wells be installed at the site to monitor the future presence, or fluctuation, of groundwater at the site. These series of monitoring wells could be used to determine the presence of groundwater at the site, and evaluate the groundwater quality through quarterly sampling.

Details of the selected remediation alternative would be prepared in a formal Remedial Action Work Plan that will address the precise excavation technique, protocol, and proposal for long term monitoring.

# PRELIMINARY ASSESSMENT REPORT

# CALIFORNIA DEPARTMENT OF TRANSPORTATION

# HAYWARD MAINTENANCE STATION

# CASTRO VALLEY, CALIFORNIA

PREPARED FOR

OFFICE OF STATE ARCHITECT

400 P STREET, 5TH FLOOR

SACRAMENTO, CALIFORNIA

PREPARED BY

GEO/RESOURCE CONSULTANTS, INC.

851 HARRISON STREET

SAN FRANCISCO, CALIFORNIA

JOB NUMBER: 1516-00-0

MARCH, 1990

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# 1.0 INTRODUCTION

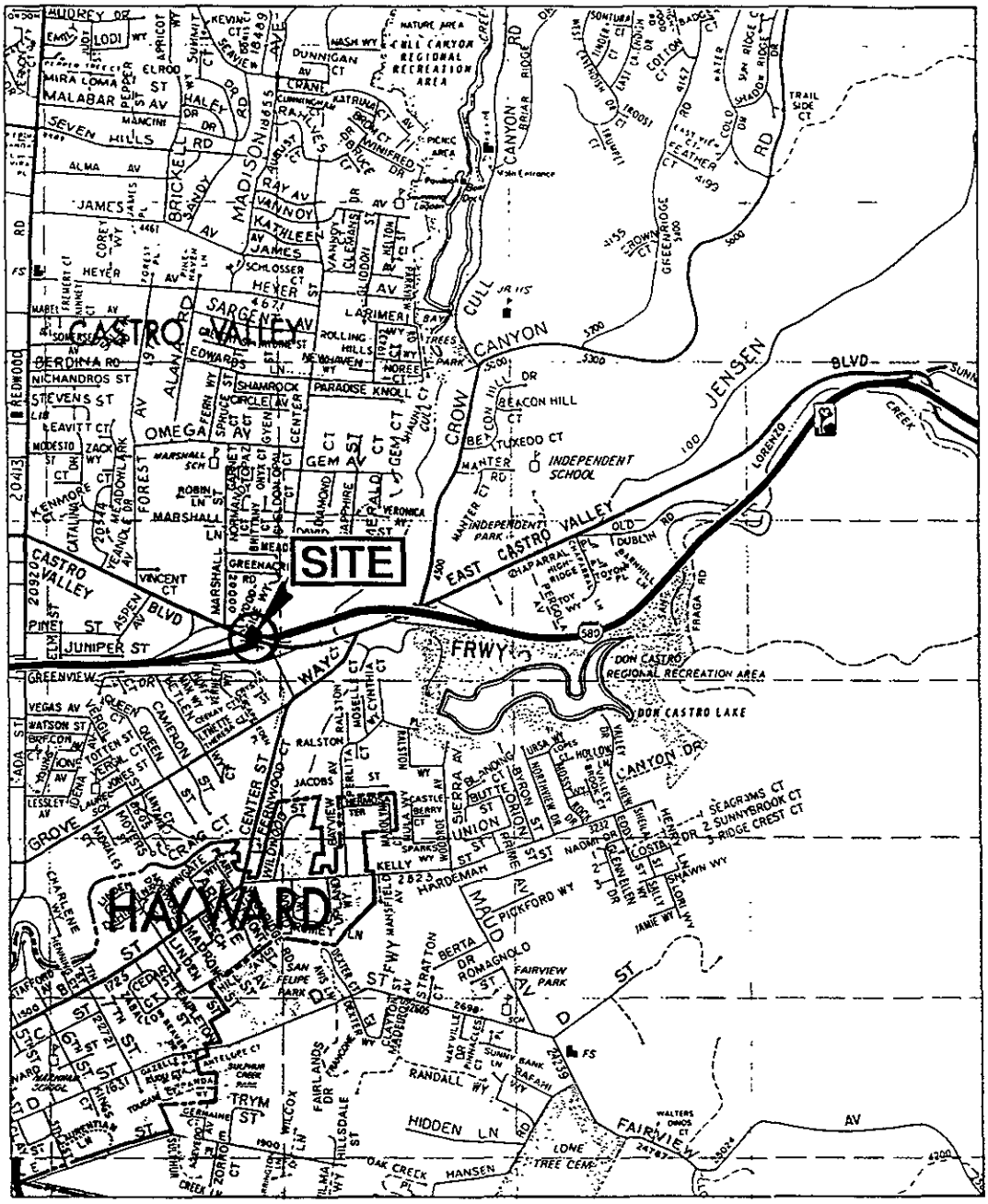
This report describes the results of the Preliminary Site Assessment (PSA) conducted at the California Department of Transportation (CALTRANS), Hayward Maintenance Station in Castro Valley, California (See Figure 1) by Geo/Resource Consultants, Inc. (GRC) in January, 1990 for the Office of the State Architect (OSA). The Hayward Maintenance Station is located at the northwest corner of Center Street and Castro Valley Boulevard.

The PSA consisted of a subsurface investigation of potentially contaminated soil in the vicinity of two previously existing underground storage tanks (USTs) and a pump service island (See Figure 2). These investigations were conducted in accordance with the Workplan and Addendum to the Workplan prepared by GRC in November, 1989 and January, 1990, respectively. These documents were approved by the OSA and Alameda County Department of Environmental Health (DEH) prior to initiating field studies.

## 1.1 Project Background

According to information submitted by the OSA to GRC, one 260-gallon diesel UST and one 1,000-gallon leaded gasoline UST were removed from adjoining excavations on January 18, 1989 (See Figure 2). During the tank removal, representatives of Placer Tractor Service, under the auspices of the DEH, collected three soil samples from the UST excavation for chemical testing. The laboratory testing was performed by Alpha Analytical Laboratories Inc, of Ukiah, California (See Appendix A).

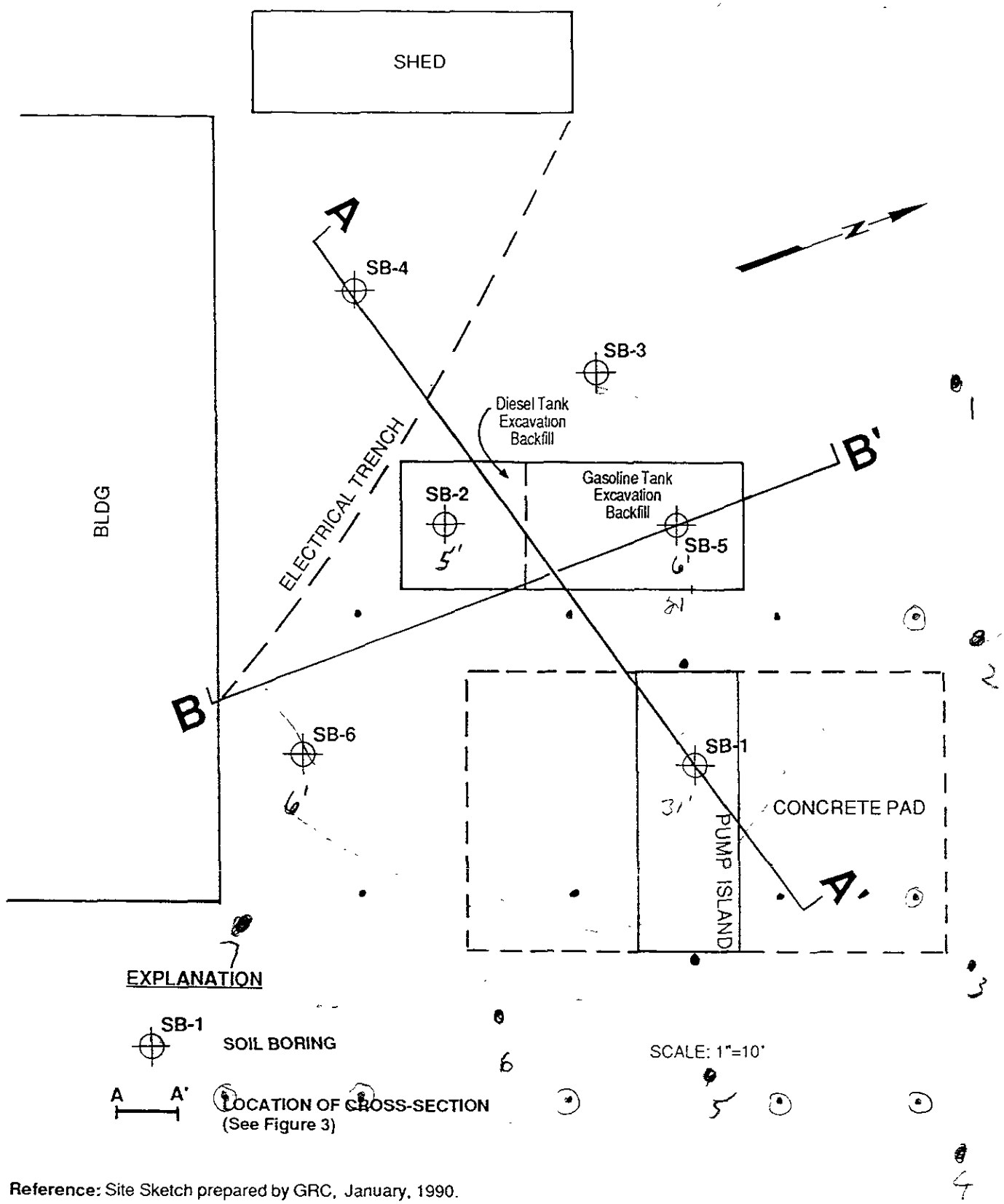
The chemical test results indicated the presence of 2,100 micrograms per gram (ug/g) total petroleum hydrocarbons as diesel




Reference: Thomas Brothers Map, 1979.

| | | |
|---|---|---|
| **Geo/ Resource Consultants, Inc.**<br>GEOLOGISTS / ENGINEERS / ENVIRONMENTAL SCIENTISTS<br>851 HARRISON STREET, SAN FRANCISCO, CALIFORNIA 94107 | **SITE LOCATION MAP**<br>HAYWARD MAINTENANCE STATION<br>CASTRO VALLEY, CALIFORNIA | FIGURE<br>1 |
| Job No. 1516-000 Appr. ADT Date 3/9/90 | | |

DATAPRINT N09994




**Reference:** Site Sketch prepared by GRC, January, 1990.

| | | |
|---|---|---|
| **Geo/ Resource Consultants, Inc.**<br>GEOLOGISTS / ENGINEERS / ENVIRONMENTAL SCIENTISTS<br>851 HARRISON STREET SAN FRANCISCO, CALIFORNIA 94107 | **SITE PLAN**<br>SHOWING BORING LOCATIONS<br>HAYWARD MAINTENANCE STATION<br>HAYWARD, CALIFORNIA | FIGURE<br>2 |
| Job No. 1516-00 Appr. [illegible] Date 3/7/90 | | |

DATAPRINT N39028

(TPH - diesel) in the one soil sample collected from the diesel tank excavation. Total petroleum hydrocarbons as gasoline (TPH - gasoline) were detected at 1.7 ug/g in one of the two soil samples collected from the gasoline tank excavation. The other sample did not contain gasoline above laboratory detection limits (0.3 ug/g). Benzene, toluene, xylene and ethylbenzene (BTXE) were not present above laboratory detection limits (0.3 ug/g) in either of the three soil samples submitted for analyses.

A letter addressed to Mr. Jack Giolitti of the California Department of Transportation (CalTrans) from Mr. Rafat Shahid of the DEH on February 28, 1989, indicated that the TPH level of 2,100 ppm had exceeded the action level of 100 ppm for a "confirmed release" (See Appendix A). The letter also states that "any soil containing greater than 1,000 parts/million-ppm (roughly converts to ug/g) must be excavated."

## 1.2 Project Purpose

The purpose of this PSA is to 1) develop a preliminary characterization of the geologic and hydrogeologic conditions at the site, 2) to determine the presence of hydrocarbons in the soil and/or ground water within the tank excavation area, and 3) to provide recommendations for further activities, if necessary. The following tasks were implemented at the project site:

1. Drilling and soil sampling of six soil borings to characterize geologic conditions;

2. Installation and sampling of three monitoring wells to characterize hydrogeologic conditions;

2. Submittal of soil and groundwater samples for TPH as gasoline and diesel in accordance with EPA Method 8015 (modified), and BTXE in accordance with EPA Method 8020.

4. Report preparation that describes the field investigation methodology, findings, interpretations, and recommendations for additional activities and/or remedial alternative actions, if appropriate.

## 2.0 METHODOLOGY

### 2.1 Pre-Field Activities

Prior to the implementation of the field investigation portion of this project, a Workplan for the site investigation was prepared under the direction of a California Registered Geologist and subsequently approved by the OSA and DEH. The Workplan included proposed field investigation procedures, proposed laboratory analyses, and a site Health and Safety Plan.

Following Workplan approval, GRC personnel conducted a site visit to ascertain the presence of underground utilities in and around proposed boring locations. Mr. Terry Costa, of Caltrans, was interviewed regarding underground utilities and pertinent information regarding the removed USTs. Additionally, a Permit to drill soil borings and install monitoring wells was obtained (See Appendix B) from the Alameda County Flood Control and Water Conservation District - Zone 7 (Zone 7).

### 2.2 Soil Borings

A total of six, 6-inch to 10-inch-diameter soil borings were drilled in the vicinity of the previously existing USTs and the pump island area (See Figure 2). The borings were drilled with a hollow stem, continuous flight auger drill rig. The six borings ranged in depth from 31.5 feet to 40.5 feet below ground surface. With the exception of SB-6, which was drilled to 31.5 feet, all of the borings were drilled until bedrock was encountered.

The six soil borings were lithologically logged based on drill cuttings and recovered soil samples. The borings were logged by a professional geologist under the supervision of a California Registered Geologist in accordance with the Unified Soil Classification System. Soil cuttings are presently stored on-site in 55-gallon Department of Transportation (DOT), 17H drums. No ground water was encountered during the investigation, and all of the boreholes were grouted up to the ground surface following the soil sampling phase.

## 2.3 Soil Sampling

Soil samples were collected from each boring at approximate 5-foot intervals from approximately 5 feet to 35 feet below ground surface. The samples were collected in 6-inch-long brass tubes inserted within a modified California drive sampler (2.5-inch diameter I.D.). After obtaining the samples, the sample tubes were appropriately labeled, capped with aluminum foil and plastic caps, sealed, and placed in an ice chest for storage. The samples were logged on a Chain-of-Custody Record in accordance with United States Environmental Protection Agency (EPA) publication Test Methods for Evaluation of Solid Waste (SW-846) and transported to a certified analytical laboratory. Soil samples were qualitatively tested for hydrocarbons using a HnU photoionization detector.

## 2.4 Laboratory Analyses

A total of 35 soil samples were selected for chemical testing at American Environmental Laboratories Corporation (AEL), a State certified laboratory in Rancho Cordova, California. Based on the evidence of potential diesel and gasoline leakage, soil samples were submitted for the following laboratory analyses:

Total volatile hydrocarbons (TVH), modified EPA Method 8015 (EPA extraction method 5030).

Total extractable hydrocarbons (TEH), modified EPA Method 8015 (EPA extraction method 5030).

Benzene, toluene, xylene, and ethylbenzene (BTXE), EPA Method 8020.

### 2.5 Decontamination Procedures

All hollow stem augers were steam cleaned prior to drilling each borehole to prevent potential cross-contamination between borings. Additionally, the soil sampling barrel and all sampling equipment and utensils were cleaned with Liquinox and rinsed with distilled water prior to obtaining each soil sample.

## 3.0 FINDINGS

### 3.1 Regional and Local Geology

Castro Valley is located within an "intermontane valley" formed by uplifting, faulting and folding of continental sedimentary rocks. The valley is bordered by hills of the Diablo Range to the north, east and south, and by the Hayward fault to the west. Based on regional studies, Castro Valley is underlain by "older alluvium" which is reported to be up to 80 feet thick (California Department of Water Resources, 1963, and Alameda County Flood Control District, June, 1988). In Castro Valley, older alluvium is underlain and surrounded by rocks of the undifferentiated Pliocene, Knoxville and/or Franciscan Formations (California DWR, 1963).

Local geologic conditions at the Hayward Maintenance Station were interpreted from lithologic logging during drilling (See Appendix C) and are depicted in Figure 3. These data indicate that the site is underlain by alluvial and/or colluvial deposits of clay,

silt, sand and gravel. The sediments probably represent slope-wash sediments (colluvium) from the Diablo Range and/or river sediments (alluvium) derived from the San Lorenzo Creek.

In general, subsurface materials at the Hayward Maintenance Station consist of 10 to 15 feet of yellow brown to olive grey silty, sandy clay overlying 15 to 20 feet of yellow brown clayey sand and gravel. Discontinuous lenses of yellow brown silt and olive to blue grey sand are also present. The hardness of the silt lenses located between 5 and 15 feet below ground surface and presence of associated caliche suggests that these deposits may represent a shallow, discontinuous hardpan layer across the site. Bedrock was generally encountered at depths of 32 to 35 feet below ground surface. In the site area, bedrock consists of siltstone, possibly of the Knoxville Formation.

The tank excavation backfill consists of surficial gravel (drain rock) and clay, silt and sand similar in composition to the natural materials described above. The backfill was primarily differentiated from the surrounding alluvial deposits by its mottled appearance.

With the exception of SB-6, the soil was generally moist at approximately 5 feet below ground surface to the bottom of the borings (30 to 40 feet below ground surface). In SB-6, soil between approximately 15 to 32 feet was moist to wet. Soil above five feet in most of the borings was generally wet, probably due to recent precipitation. Blowcounts generally increased with depth in all of the borings, reflecting an increase in density and/or stiffness with depth. Blowcounts indicated "refusal" conditions when bedrock was encountered.

## 3.2 Regional and Local Hydrogeology

The Hayward Maintenance Station is located within the Castro Valley Groundwater Basin, a sub-basin of the East Bay Plain (Zone 7, 1988). The older alluvial deposits within the Basin are known to contain some ground water and the few existing wells in Castro

Valley are principally domestic (California DWR, 1963). However, neither ground water nor significantly wet conditions were encountered at the site at the time of drilling.

Conversations with Mr. Scott Seery of Alameda DEH (March 2, 1990) and Mr. Andreas Godfrey of Zone 7 (March 2, 1990) confirmed that ground water is generally present in Castro Valley. For instance, driller's logs (on file at Zone 7) for three monitoring wells installed approximately 450 feet to the west of Hayward Maintenance Station indicate that ground water was measured at 21 to 23 feet below ground surface in alluvial soils (June, 1988). Bedrock was not encountered in any of the borings which were drilled to depths of 38 to 45 feet below ground surface. These data suggest that groundwater flow in the area of the Hayward Maintenance Station may be inhibited due to a bedrock high.

Other data indicate that a water well drilled at 4267 Veronica Street in 1982-1983 (approximately 1,800 feet to the north of the Hayward site) encountered bedrock at 32 feet and ground water at 28 feet below ground surface. The location of this well relative to the nearby hills is very similar to that of the Hayward site, suggesting that ground water may also occur at the Hayward site at approximately 28 feet below ground surface. However, recent water level data for the Veronica Street well are not available, thus it is not known whether water levels are currently as high as 28 feet.

Recharge to the Castro Valley Groundwater Basin occurs primarily from streams that flow from the adjacent foothills (California DWR, 1963). Because streams within the adjacent foothills are recharged primarily from precipitation, a decrease in precipitation would result in a decrease in recharge and groundwater storage in Castro Valley. Due to the drought conditions experienced in the last several years, it is probable that drainage waters have lessened, evidenced by limited, seasonal flow in San Lorenzo Creek, and that ground water is not currently as prevalent as it might have been.

Based on the discussions above, the absence of ground water at the Hayward Maintenance site may be related to the occurrence of a local, bedrock "high" and the decrease in precipitation over recent years.

### 3.3 Laboratory Results

As listed in Table 1 and included in Appendix D, soil analytical results indicate TPH (gasoline) at 860 milligram/kilogram (mg/kg) in the sample collected from SB-5 at 6 feet below ground surface (referred to as SB-5-6'). Samples collected from SB-1 also contained TPH (gasoline) at 310 mg/kg and 790 mg/kg at 4.0 and 21.5 feet below ground surface, respectively. Minor amounts (up to 15 mg/kg) of TPH (gasoline) were also detected in other samples collected from SB-1 and SB-5.

Gasoline constituents, benzene, toluene, xylene and ethylbenzene (BTXE) were also detected in samples collected from SB-1 and SB-5. BTXE concentrations were highest in the sample collected from SB-5-6'. In this sample, benzene was detected at 640 micrograms/kilogram (ug/kg), toluene was detected at 700 ug/kg, xylene was detected at 110,000 ug/kg and ethylbenzene was detected at 9,700 ug/kg. Xylene and ethylbenzene were also detected at 42,000 ug/kg and 5,300 ug/kg in SB-1-21.5'. Lesser amounts of BTXE were detected in other samples from SB-1.

TPH (diesel) was present in samples collected from SB-1, SB-2, SB-5 and SB-6. Diesel concentrations were highest in SB-1 where samples collected from 8.0, 16.5 and 31.0 feet were found to contain 260 mg/kg, 950 mg/kg and 2,400 mg/kg, respectively. Diesel was also detected at 1,300 mg/kg in SB-2-5.5', 400 mg/kg in SB-5-6.0', 100 mg/kg in SB-5-21.5', 400 mg/kg in SB-6-6.5' and at 19 mg/kg in SB-6-11.5' A correspondence from AEL indicate that the chromatograms for most of the samples containing diesel were "not consistent with the expected diesel Chromatographc pattern" (See Appendix D). Conversations with laboratory personnel indicate that the chromatograms may be suggestive of

TABLE 1
SOIL SAMPLING RESULTS
HAYWARD MAINTENANCE STATION, CASTRO VALLEY, CALIFORNIA
CASTRO VALLEY, CALIFORNIA

| Sample (Depth) | TPH as Gasoline (mg/kg) | TPH as Diesel (mg/kg) | Benzene (ug/kg) | Toluene (ug/kg) | Ethyl Benzene (ug/kg) | Total Xylenes (ug/kg) |
|---|---|---|---|---|---|---|
| SB-1 @ 4.0' | 310 | ND | 210 | 360 | 5,100 | 8,100 |
| SB-1 @ 8.0' | NT | 260 | NT | NT | NT | NT |
| SB-1 @ 11.5 | 3.7 | ND | ND | ND | 50 | 90 |
| SB-1 @ 16.5' | NT | 950 | NT | NT | NT | NT |
| SB-1 @ 21.5' | 790 | ND | ND (100) | ND (100) | 5,300 | 42,000 |
| SB-1 @ 31.0' | NT | 2,400 | NT | NT | NT | NT |
| SB-2 @ 5.5' | ND (10) | 1,300 | ND | ND | 40 | 150 |
| SB-2 @ 10.5' | NT | ND | NT | NT | NT | NT |
| SB-2 @ 16.5' | ND | ND | ND | ND | ND | ND |
| SB-2 @ 26.0' | ND | ND | ND | ND | ND | ND |
| SB-2 @ 30.5' | NT | ND | NT | NT | NT | NT |
| SB-2 @ 36.5' | ND | ND | ND | ND | ND | ND |
| SB-3 @ 5.5' | ND | ND | ND | ND | ND | ND |
| SB-3 @ 11.5' | NT | ND | NT | NT | NT | NT |
| SB-3 @ 16.5' | ND | ND | ND | ND | ND | ND |
| SB-3 @ 21.5' | NT | ND | NT | NT | NT | NT |
| SB-3 @ 25.5' | ND | ND | ND | ND | ND | ND |
| SB-3 @ 36.2' | NT | ND | NT | NT | NT | NT |
| SB-4 @ 6.0' | ND | ND | ND | ND | ND | ND |
| SB-4 @ 11.0' | NT | ND | NT | NT | NT | NT |
| SB-4 @ 16.0' | ND | ND | ND | ND | ND | ND |
| SB-4 @ 21.0' | NT | ND | NT | NT | NT | NT |
| SB-4 @ 26.0' | ND | ND | ND | ND | ND | ND |
| SB-4 @ 36.0' | NT | ND | NT | NT | NT | NT |
| SB-5 @ 6.0' | 860 | 400 | 640 | 700 | 9,700 | 110,000 |
| SB-5 @ 11.0' | NT | ND | NT | NT | NT | NT |
| SB-5 @ 16.5' | 15 | ND | ND | 20 | 150 | 360 |
| SB-5 @ 21.5' | NT | 100 | NT | NT | NT | NT |
| SB-5 @ 26.5' | 1.0 | ND | ND | ND | ND | 110 |
| SB-5 @ 36.0' | NT | ND | NT | NT | NT | NT |
| SB-6 @ 6.5' | ND (2.0) | 400 | ND | ND | ND | ND |
| SB-6 @ 11.5' | NT | 19 | NT | NT | NT | NT |
| SB-6 @ 16.0' | ND | ND | ND | ND | ND | ND |
| SB-6 @ 21.5' | NT | ND | NT | NT | NT | NT |
| SB-6 @ 31.5' | ND | ND | ND | ND | ND | ND |
| Reporting Limit | (1.0) | (10) | (10) | (10) | (10) | (20) |

ND = Not Detected at or above indicated Reporting Limit.
NT = Not Submitted to a Laboratory for Chemical Testing.

Note: SB-4, SB-5 and SB-6 are referred to as MW-1, MW-2 and MW-3, respectively in original laboratory data included in Appendix C.

244w : 1516-4.wk1

"aged" diesel, suggesting that the diesel has been in the subsurface for a long time (Personal communication, Mr. John Arnt, AEL, March, 1990).

The known vertical extent of hydrocarbons present in soil is depicted in the cross-sections presented in Figure 3. Due to the wide variations in hydrocarbon concentrations at different depths, the lateral extent of hydrocarbons in soil is not depicted in this report. In general, the most extensive hydrocarbon concentrations are found in soil in the area of SB-1, SB-2 and SB-5.

## 4.0 REGULATORY FRAMEWORK

The California Regional Water Quality Control Board (RWQCB) has set forth guidelines that pertain to underground storage tank investigations in Tri-Regional Guidelines - "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks", June 2, 1988, and "Leaking Underground Fuel Tank Field Manual (LUFT)", May, 1988. These guidelines present worksheets to derive risk appraisals and leaching potential of gasoline, diesel and BTXE in soil. The purpose of these worksheets is to provide a means to evaluate the impact of hydrocarbon contamination in soil on underlying ground water. In response to the Porter Cologne Water Quality Control Act (Water Code), it is the State Regional Water Quality Board's policy to "protect the high quality of waters, set the goal of the removal of all contamination from the soil, surface water, and groundwater affiliated with the site where feasible" (Leaking Underground Fuel Tank Field Manual, May, 1988).

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Conversations with Hayward Maintenance Station personnel indicate that the previously existing fuel lines extending from the pump island to the USTs had leaked (Personal communication, Mr. Ted Costa of Hayward Maintenance Station, January, 1990). Based on findings presented in the Sections above, hydrocarbon in soil is most extensive in the area of the pump island (SB-1). Thus, it appears that hydrocarbons may have leaked from the pump island fuel lines and have migrated vertically downward. High concentrations of diesel at the bottom of the boring in SB-1 suggest that diesel may have "ponded" above the bedrock surface. TPH (gasoline) data available for SB-1 also suggest that hydrocarbons may have migrated downward. The presence of samples collected from SB-1 that do not contain diesel above detection limits interspersed with samples containing hydrocarbons, suggests that diesel may have also migrated laterally, resulting from variations in soil permeability, as it moved downward.

The presence of hydrocarbons within the shallow soil at SB-1, SB-2 and SB-5 suggests that previous hydrocarbon leakage or overspillage from tanks may have occurred and that the soil containing hydrocarbons was used to backfill the excavations following tank removal. Some leakage of hydrocarbons into the underlying native material is suggested by the presence of diesel at 100 mg/kg in SB-5-21.5' and gasoline at 15 mg/kg in SB-5-16.5'. There does not appear to be evidence of hydrocarbon leakage into the underlying native soil in SB-2.

Hydrocarbons were not detected in soil samples collected from SB-3 and SB-4, suggesting that hydrocarbon leakage has not reached soil west of the UST excavation and pump island. However, the presence of diesel in shallow soil at SB-6 suggests that fuel line leakage from the general area of the pump island has impacted soil to the south of the pump island. The extent of hydrocarbons in soil to the south and east of SB-6, to the north and east of SB-1 and to the north of SB-5 is not currently known.

At Hayward Maintenance Station, ground water was not encountered at the time of the investigation and there are no specific guidelines addressing allowable hydrocarbon concentrations in soil when ground water is not present (See Tri-Regional Guidelines and LUFT Manual). However, based on regional and local studies, ground water has been reported in the general site area. Thus, the possibility exists that ground water could be present in the future within the site area, thus presenting a potential for hydrocarbon migration off-site. Additionally, hydrocarbon vapor migration within man-made conduits, such as utility trenches, may pose a threat of explosion or fire if concentrations reach explosive levels and an ignition source is present.

Based on the presence of hydrocarbons in the soil, and the potential for groundwater flow through the soil, GRC recommends that the soil be remediated. Possible remedial measures may include one, or a combination of the following methods:

- o excavation and removal,
- o excavation and aeration,
- o bio-remediation, or
- o soil venting.

If an in-situ method of remediation is selected, GRC recommends that further soil investigations be implemented to define that lateral and vertical extent of contamination to the north and east of the tank excavation and pump island areas. If remediation is accomplished by excavation, it may be possible to determine the extent of contamination during the excavation process.

# TETRA TECH BORING LOG

SB 1 PAGE 1 OF 1

CLIENT OSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/6/91

PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| 5 | | 0/0 | | | CL | MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY WITH $CaCO_3$ ALONG FRACTURES | |
| 10 | | 0/0 | | | | | |
| 15 | | 0/0 | | | SW | MODERATE YELLOWISH BROWN, MOIST, VERY POORLY SORTED, PEBBLY, CLAYEY FINE- TO COARSE-GRAINED SAND. | |
| 20 | | 0/0 | | | SC | YELLOWISH BROWN, MOIST, VERY POORLY SORTED, CLAYEY, PEBBLY, FINE- TO COARSE-GRAINED SAND WITH SOME $CaCO_3$ DEPOSITS | |
| 25 | | 0/0 | | | | | |
| 30 | | 0/0 | | | | (WET, INCREASING PEBBLE AND COBBLE CONTENT) | |
| 35 | | 0/0 | | | ML | MODERATELY YELLOWISH BROWN, MOIST, SILTSTONE BEDROCK. | |
| | | | | | | BOTTOM OF BOREHOLE 36 FEET | |

# TETRA TECH BORING LOG

SB 2 — PAGE 1 OF 2

CLIENT: OSA — DRILL CONTRACTOR: WEST HAZMAT DRILLING — DATE: 2/6/91

PROJECT #: TC-8380-01 — Geologist: D. THOR

BORE HOLE DIAMETER: 8 in. — DRILL RIG: ROTARY AUGER — Signature:

SAMPLE METHOD: SPLIT SPOON — LOCATION: HAYWARD — Registration: # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu ( ppm ) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| 5 | | 0/0 | | | CL | MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY WITH RARE PEBBLES. | |
| 10 | | 0/0 | | | CL | | |
| 15 | | 0/0 | | | SW | MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, PEBBLY, FINE- TO COARSE-GRAINED SAND (INCREASING PEBBLES WITH DEPTH). | |
| 20 | | 0/0 | | | GW | NO RECOVERY<br>MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, FINE- TO COARSE-GRAINED SANDY GRAVEL. | |
| 25 | | 0/0 | | | SW | MODERATE YELLOWISH BROWN, WET, VERY POORLY SORTED, CLAYEY, PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| 30 | | 0/0 | | | SW | | |
| 35 | | 0/0 | | | ML | MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, PEBBLY, FINE-GRAINED SANDY SILT. | |

# TETRA TECH BORING LOG

SB 2 — PAGE 2 OF 2

CLIENT: OSA
DRILL CONTRACTOR: WEST HAZMAT DRILLING
DATE: 2/6/91
PROJECT #: TC-8380-01
Geologist: D. THOR
BORE HOLE DIAMETER: 8 in.
DRILL RIG: ROTARY AUGER
Signature:
SAMPLE METHOD: SPLIT SPOON
LOCATION: HAYWARD
Registration: # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu ( ppm ) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | 0/0 | | | ML | GRAYISH BLACK SILTSTONE WITH SOME $CaCO_3$ DEPOSITS IN FRACTURES (BEDROCK). | |
| | | | | | | BOTTOM OF BOREHOLE 41 FEET | |
| 45 | | | | | | | |
| 50 | | | | | | | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |

# TETRA TECH BORING LOG

SB 3 — PAGE 1 OF 1

CLIENT: OSA — DRILL CONTRACTOR: WEST HAZMAT DRILLING — DATE: 2/6/91

PROJECT #: TC-8380-01 — Geologist: D. THOR

BORE HOLE DIAMETER: 8 in. — DRILL RIG: ROTARY AUGER — Signature:

SAMPLE METHOD: SPLIT SPOON — LOCATION: HAYWARD — Registration: # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| | | | | | CL | DARK GRAY TO PALE BROWN, MOIST, VERY POORLY SORTED, PEBBLY CLAY. | |
| 5 | | 9/0 | | | ML | MODERATE YELLOWISH BROWN, MOIST, POORLY SORTED, CLAYEY, LOCALLY VERY FINE-GRAINED SANDY SILT, $CaCO_3$ IN FRACTURES. | |
| | | | | | | THIN BEDS OF FINE-GRAINED SAND AND PEBBLY MEDIUM-GRAINED SAND. | |
| 10 | | 2/0 | | | | | |
| 15 | | 0/ | | | SP | DARK YELLOWISH ORANGE, MOIST, POORLY SORTED, PEBBLY VERY FINE- TO MEDIUM-GRAINED SAND. | |
| | | | | | | VERY POORLY SORTED PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| | | | | | | THIN BED OF BROWN WELL SORTED FINE SAND (ORGANIC STAIN ?) | |
| 20 | | 1/0 | | | | | |
| 25 | | 0/0 | | | SW | YELLOWISH ORANGE, MOIST, VERY POORLY SORTED, GRAVELLY, MEDIUM- TO COARSE-GRAINED SAND WITH SOME COBBLES. | |
| | | | | | ML | SILT | |
| | | | | | SP | WELL SORTED, FINE- TO MEDIUM-GRAINED SAND. | |
| 30 | | 0/0 | | | SW | POORLY SORTED, GRAVELLY, COARSE- TO VERY COARSE-GEAINED SAND. | |
| 35 | | 0/0 | | | SP | DARK YELLOW ORANGE, DRY, MODERATELY SORTED, MEDIUM-GRAINED SANDSTONE (FRACTURED BEDROCK) | |
| | | | | | | BORING TERMINATED AT 36.5 FEET PER REFUSAL | |

# TETRA TECH BORING LOG

SB 4 PAGE 1 OF 2

CLIENT OSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/7/91

PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| 5 | | 9/0 | | | CL | DARK YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY SILT, WITH $CaCO_3$ DEPOSITS AND SPARSE PEBBLES. | |
| 10 | | 2/0 | | | | | |
| 15 | | 0/0 | | | SP | DARK YELLOWISH BROWN, MOIST, VERY POORLY SORTED, CLAYEY, PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| 20 | | 0/0 | | | SP | | |
| 25 | | 0/0 | | | SP | WET, ODOR | |
| 30 | | 120/100 | | | ML | DARK YELLOWISH BROWN TO GRAYISH OLIVE SILTSTONE (BEDROCK) (STRONGER ODOR) | |
| 35 | | 12/0 | | | ML | | |

# TETRA TECH BORING LOG

SB 4 PAGE 2 OF 2

CLIENT OSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/7/91

PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu ( ppm ) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | 0/0 | | | ML | GRAYISH BLACK SILTSTONE (BEDROCK) (ODOR). | CLAY BACKFILL |
| 45 | | 0/0 | | | ML | | |
| 50 | | 0/0 | | | ML | | |
| | | | | | | BOTTOM OF BOREHOLE 51.5 FEET (REFUSAL DRILL AND SAMPLER TOO DENSE) | |
| 55 | | | | | | | |
| 60 | | | | | | | |
| 65 | | | | | | | |
| 70 | | | | | | | |
| 75 | | | | | | | |

# TETRA TECH BORING LOG

SB 5 — PAGE 1 OF 1

CLIENT: OSA — DRILL CONTRACTOR: WEST HAZMAT DRILLING — DATE: 2/7/91

PROJECT #: TC-8380-01 — Geologist: D. THOR

BORE HOLE DIAMETER: 8 in. — DRILL RIG: ROTARY AUGER — Signature:

SAMPLE METHOD: SPLIT SPOON — LOCATION: HAYWARD — Registration: # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| 5 | | 0/0 | | | CL | DARK YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY, WITH SPARSE PEBBLES. | |
| 10 | | 0/0 | | | | | |
| 15 | | 0/0 | | | SW | DARK YELLOWISH BROWN, MOIST, VERY POORLY SORTED, CLAYEY, PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| 20 | | 0/0 | | | GW | DARK YELLOWISH BROWN, WET BUT UNDERSATURATED, VERY POORLY SORTED, CLAYEY, FINE-GRAINED SANDY GRAVEL. | |
| 25 | | 0/0 | | | SP | DARK YELLOWISH BROWN, WET, SILTY VERY FINE- TO FINE-GRAINED SAND. | |
| 30 | | 0/0 | | | ML | DARK YELLOWISH BROWN, MOIST, SILTSTONE (BEDROCK) | |
| 35 | | 0/0 | | | ML | GRAYISH BLACK, SILTSTONE (BEDROCK). | |
| | | | | | | BOTTOM OF BOREHOLE 36.5 FEET. | |

# TETRA TECH BORING LOG

SB 6 PAGE 1 OF 1

CLIENT OSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/7/91

PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT<br>(SATURATION OF SOILS OBSERVED AT 5' DURING HAND AUGERING; POSSIBLE LEAKING WATER LINE). | CLAY BACKFILL |
| 5 | | 0/0 | | | CL | DARK YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY WITH SOME $CaCO_3$ DEPOSITS. | |
| 10 | | 0/0 | | | CL | | |
| | | | | | | BOREHOLE TERMINATED AT 11.5 FEET PER SATURATION WHICH MAY BE ATTRIBUTED TO A LEAKING WATER LINE THAT SEEPS THROUGH A SHALLOW SAND LAYER. | |
| 15 | | | | | | | |
| 20 | | | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |

# TETRA TECH BORING LOG

SB 7 PAGE 1 OF 1

CLIENT OSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/6/91

PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu ( ppm ) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | ASPHALT | CLAY BACKFILL |
| 5 | | 0/0 | | | CL | DARK YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY, WITH SPARSE PEBBLES. | |
| 10 | | 0/0 | | | | | |
| 15 | | 0/0 | | | SP | DARK YELLOWISH BROWN, MOIST, VERY POORLY SORTED, CLAYEY, PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| 20 | | 0/0 | | | SW | DARK YELLOWISH BROWN, WET BUT UNDERSATURATED, VERY POORLY SORTED, CLAYEY, FINE-GRAINED SANDY GRAVEL. | |
| 25 | | 0/0 | | | SP | DARK YELLOWISH BROWN, WET, SILTY VERY FINE- TO FINE-GRAINED SAND. | |
| 30 | | 0/0 | | | ML | DARK YELLOWISH BROWN, MOIST, SILTSTONE (BEDROCK) | |
| 35 | | 0/0 | | | ML | GRAYISH BLACK, SILTSTONE (BEDROCK). | |
| | | 0/0 | | | ML | BOTTOM OF BOREHOLE 41 FEET. | |

# TETRA TECH BORING LOG

SB 8 PAGE 1 OF 1

CLIENT QSA DRILL CONTRACTOR WEST HAZMAT DRILLING DATE 2/7/91

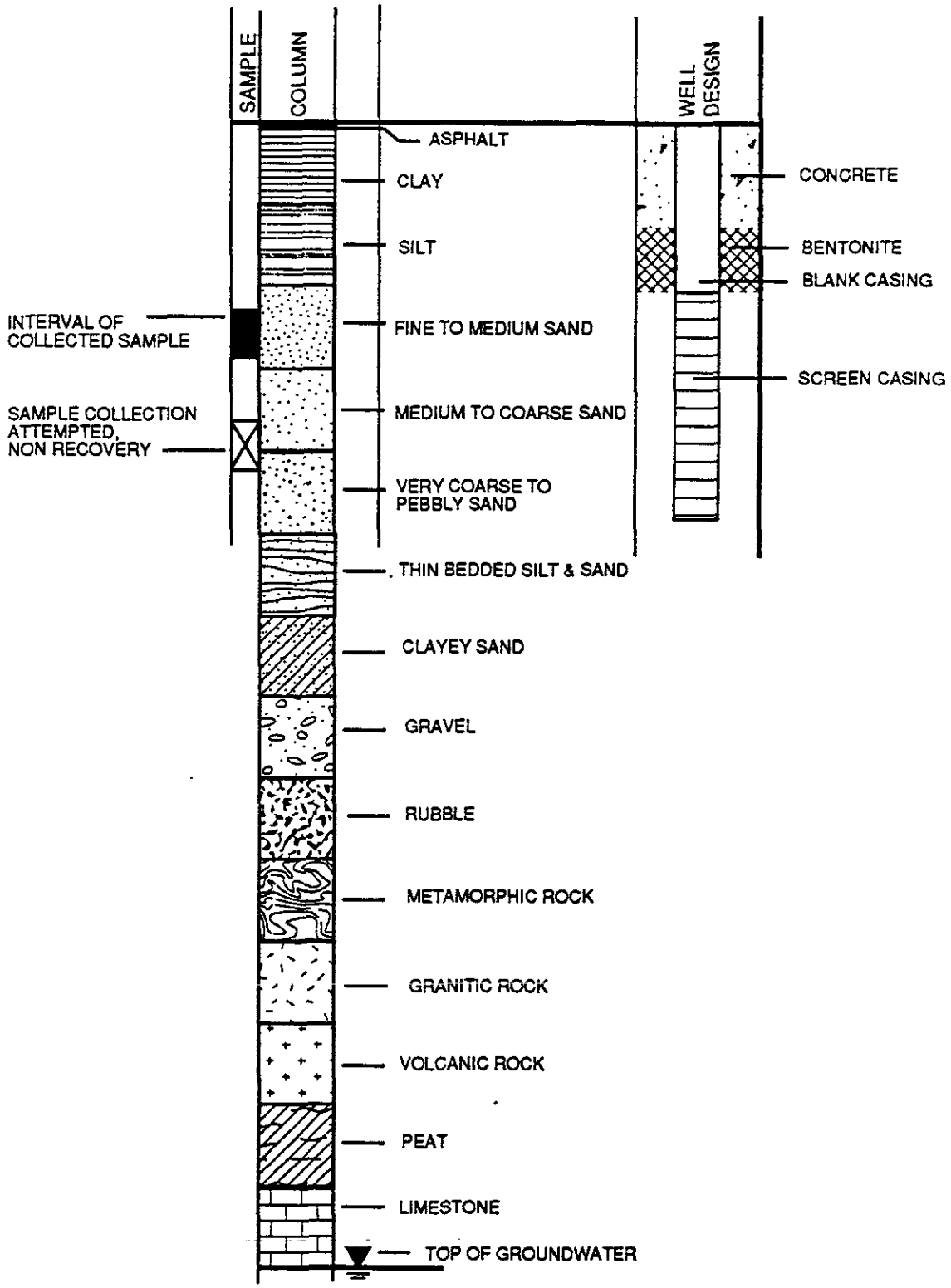
PROJECT # TC-8380-01 Geologist D. THOR

BORE HOLE DIAMETER 8 in. DRILL RIG ROTARY AUGER Signature

SAMPLE METHOD SPLIT SPOON LOCATION HAYWARD Registration # 4080

| DEPTH, ft | BLOW COUNTS/ft | OVA/HNu (ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | | CLAY BEDROCK |
| 5 | | 0/0 | | | ML | DARK YELLOWISH BROWN, MOIST, CLAYEY, VERY FINE-GRAINED SANDY SILT. | |
| 10 | | 0/0 | | | CL | DARK YELLOWISH BROWN, MOIST, POORLY SORTED, FINE-GRAINED SANDY CLAY WITH RARE TADECTE PEBBLES AND SOME $CaCO_3$ DEPOSITS. | |
| 15 | | 0/0 | | | SP | DARK YELLOWISH BROWN, MOIST, VERY POORLY SORTED, SILTY, PEBBLY, FINE- TO COARSE-GRAINED SAND. | |
| 20 | | 0/0 | | | GW | DARK YELLOWISH BROWN, WET BUT UNDERSATURATED, VERY POORLY SORTED,CLAYEY, FINE-GRAINED SANDY GRAVEL. | |
| 25 | | 0/0 | | | GW | | |
| 30 | | 0/0 | | | ML | DARK YELLOWISH BROWN, MOIST, SILTSTONE (BEDROCK) | |
| 35 | | 0/0 | | | | | |
| | | | | | | BOTTOM OF BOREHOLE 36.5 FEET. | |

# TETRA TECH BORING LOG SYMBOLS EXPLANATION



TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD
PASADENA, CALIFORNIA 91107
TELEPHONE (818)449-6400
TELEFAX (818)351-8126

# CHAIN OF CUSTODY RECORD

DATE 2/6-91 PAGE 1 OF 4

CLIENT STATE OF CALIFORNIA

ADDRESS HAYWARD CAL TRANS MAINTENANCE CENTER - CASTRO VALLEY BLVD. & CENTER ST.

FC-8380-01 1

SAMPLERS (SIGNATURES)

PROJECT MANAGER: DAN BATRACK

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PR. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEU/ACIDS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TOC | GASOLINE (8015)m & DIESEL | AROMATICS (8020) | GC/MS (8240) | | | | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PARAMETERS | | | | | | | | | | | | | OTHER | | | | |
| SB3-5 | 2-6-91 | 9:10 | MAINTENANCE CENTER | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB3-10 | | 9:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB3-15 | | 9:30 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB3-20 | | 9:40 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB3-25 | | 9:55 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB3-30 | | 10:10 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-5 | | 11:45 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-10 | | 11:47 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-15 | | 11:50 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-20 | | 12:05 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-25 | | 12:15 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-30 | | 12:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-35 | | 12:30 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB2-40 | | 12:40 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB1-5 | | 13:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB1-10 | | 13:25 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |

| | | | | | |
|---|---|---|---|---|---|
| RELINQUISHED BY: PHIL SVORGLE | SIGNATURE | TETRA TECH, INC. | DATE 2-7-91 | TIME | 16 TOTAL NUMBER OF CONTAINERS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | METHOD OF SHIPMENT |
| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | |

TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD.
PASADENA, CALIFORNIA 91107
TELEPHONE (818) 449-6400
TELEFAX (818) 351-8126

# CHAIN OF CUSTODY RECORD

DATE 2-6-91 PAGE 1 OF 4

CLIENT STATE OF CALIFORNIA
ADDRESS CASTRO VALLEY BLVD. & CENTER ST.
HAYWARD, CA
TS-8380-01
SAMPLERS (SIGNATURES) PROJECT MANAGER: DAN BATRACK

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PR. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEU/ACIDS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TDC | GASOLINE (8015) + DIESEL | AROMATICS (8020) | GC/MS (8240) | | | | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB1-15 | 2-6-91 | 13:30 | MAINTENANCE CENTER | | | | | ✓ | | | | | | ✓ | ✓ | | ✓ | | | 1 | |
| SB1-20 | | 13:40 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB1-25 | | 14:15 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB1-30 | | 14:25 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB1-35 | | 14:35 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-5 | | 15:55 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-10 | | 16:00 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-15 | | 16:05 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-20 | | 16:10 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-25 | | 16:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-30 | | 16:30 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-35 | | 16:40 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB7-40 | | 16:50 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB6-5 | 2/7 | 8:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB6-10 | | 8:35 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-5 | | 9:15 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |

| | | | | | |
|---|---|---|---|---|---|
| RELINQUISHED BY: Phil Stanley | SIGNATURE | TETRA TECH, INC. | DATE 2-7-91 | TIME | TOTAL NUMBER OF CONTAINERS: 16 |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | METHOD OF SHIPMENT |
| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | |

TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD.
PASADENA, CALIFORNIA 91107
TELEPHONE (818)449-6400
TELEFAX (818)351-8126

# CHAIN OF CUSTODY RECORD

DATE 2-7-91 PAGE 3 OF 4

CLIENT STATE OF CALIFORNIA
ADDRESS CASTRO VALLEY BLVD. & CENTER ST, HAYWARD, CA
TC-8380-01
SAMPLER(S) (SIGNATURE) PROJECT MANAGER: DAN BATARSE

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PR. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEU/ACIDS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TOC | GASOLINE (8015) & DIESEL | AROMATICS (8020) | GCMS (8240) | | | | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB5-10 | 2-7-91 | 9:15 | MAINTENANCE CENTER | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-15 | | 9:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-20 | | 9:25 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-25 | | 9:35 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-30 | | 9:45 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB5-35 | | 10:00 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-5 | | 10:45 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-10 | | 10:50 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-15 | | 10:53 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-20 | | 10:55 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-25 | | 11:00 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-30 | | 11:10 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-35 | | 11:20 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-40 | | 11:50 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-45 | | 12:10 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB4-50 | | 12:30 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |

| | | | | | |
|---|---|---|---|---|---|
| RELINQUISHED BY: PHIL SKORGO | SIGNATURE | TETRA TECH, INC. | DATE 2-7-91 | TIME | 16 TOTAL NUMBER OF CONTAINERS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | METHOD OF SHIPMENT |
| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | |

TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD
PASADENA, CALIFORNIA 91107
TELEPHONE (818) 449-6400
TELEFAX (818) 351-8126

# CHAIN OF CUSTODY RECORD

DATE 2-8-91 PAGE 4 OF 4

CLIENT STATE OF CALIFORNIA
ADDRESS CASTRO VALLEY BLVD. & CENTER ST.
TC-8380-01
SAMPLERS (SIGNATURES) PROJECT MANAGER
DAN BATRACK

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PRI. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEU/ACIDS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TOC | GASOLINE (8015) + Diesel | AROMATICS (8020) | GCMS (8240) | | | | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB8-5 | 2-8-91 | 14:05 | MAINTENANCE CENTER | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB8-10 | ↓ | 14:10 | ↓ | | | | | ✓ | | | | | | ✓ | ✓ | | ✓ | | | 1 | |
| SB8-15 | | 14:15 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB8-20 | | 14:25 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB8-30 | | 14:40 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |
| SB8-35 | | 14:50 | | | | | | ✓ | | | | | | ✓ | ✓ | | | | | 1 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| RELINQUISHED BY PHIL SKORGE | SIGNATURE | TETRA TECH, INC. | DATE 2-9-91 | TIME | 6 | TOTAL NUMBER OF CONTAINERS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | METHOD OF SHIPMENT | |
| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS | |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | | |

TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD
PASADENA, CALIFORNIA 91107
TELEPHONE (818) 449 6400
TELEFAX (818) 351 8126

# CHAIN OF CUSTODY RECORD

DATE 2-15-91 PAGE 1 OF 1

CLIENT STATE OF CALIFORNIA
ADDRESS HAYWARD MAINTENANCE CENTER
TC - 8580 - 01
SAMPLERS (SIGNATURES) PROJECT MANAGER: DAN BATRACK

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PR. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEUTRALS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TOC | GASOLINE (8015) | AROMATICS (8020) | GC/MS (8240) | | | | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW1-TC1 | 2-15-91 | 16:10 | CAL TRANS YARD | | | | | ✓ | | | ✓ | | | | | | | | | 5 | |

PARAMETERS / OTHER

| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | TOTAL NUMBER OF CONTAINERS |
|---|---|---|---|---|---|
| PHIL SKORCE | | TETRA TECH, INC. | 2-15-91 | 1700 | 5 |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | METHOD OF SHIPMENT |
| RELINQUISHED BY | SIGNATURE | COMPANY | DATE | TIME | SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS |
| RECEIVED BY | SIGNATURE | COMPANY | DATE | TIME | |

# TAILGATE SAFETY MEETING

DIVISION Environmental FACILITY

DATE 2/7/91 TIME JOB NUMBER IC 8380-01

CUSTOMER Col OSA ADDRESS

SPECIFIC LOCATION Hayward Maintenance Station Caltrans

TYPE OF WORK drill borholes, collect soil samples

CHEMICALS USED

## SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Level "D"

CHEMICAL HAZARDS gasoline, diesel

PHYSICAL HAZARDS drill rig

EMERGENCY PROCEDURES contact site manager

HOSPITAL/CLINIC PHONE ( ) PARAMEDIC PHONE ( ) 911

HOSPITAL ADDRESS

SPECIAL EQUIPMENT OVA/HNU

OTHER

## ATTENDEES

| PRINTED NAME | SIGNATURE |
|---|---|
| Gene Reighart | |
| THOMAS WRIGHT | |
| Alan Rosenauer | |
| Phil Skaggs | |
| Ken Chapin | |

MEETING CONDUCTED BY:

PRINTED NAME Devin Thor SIGNATURE

SITE SUPERVISOR Devin Thor PROJECT MANAGER Dan BgTrack

# TAILGATE SAFETY MEETING

DIVISION Environmental FACILITY
DATE 2/6/91 TIME JOB NUMBER TC 8380-01
CUSTOMER Cal OSA ADDRESS
SPECIFIC LOCATION Hayward Maintenance Station Cal Trans
TYPE OF WORK drill boreholes, collect soil samples
CHEMICALS USED

## SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT level "D"
CHEMICAL HAZARDS gasoline, diesel
PHYSICAL HAZARDS drill rig
EMERGENCY PROCEDURES contact site manager
HOSPITAL/CLINIC PHONE ( ) PARAMEDIC PHONE ( ) 911
HOSPITAL ADDRESS
SPECIAL EQUIPMENT OVA/HNU
OTHER

## ATTENDEES

| PRINTED NAME | SIGNATURE |
|---|---|
| Gene Reinhart | |
| Arow Rosevark | |
| Thomas Wright | |
| Ken Chapin | |
| Phil Skorge | |

MEETING CONDUCTED BY:
PRINTED NAME Devin Thor SIGNATURE
SITE SUPERVISOR Devin Thor PROJECT MANAGER Dan Botrack

LUFT

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-01A
FILE ID: NA
SAMPLE ID: SB5-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

LUFT

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-02A
FILE ID: NA
SAMPLE ID: SB5-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-03A
FILE ID: NA
SAMPLE ID: SB5-20

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-04A
FILE ID: NA
SAMPLE ID: SB5-25

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-05A
FILE ID: NA
SAMPLE ID: SB5-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/07/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: CASTRO VALLEY BLVD | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/16/91 |
| P.O.#: NA | INSTRUMENT ID: AB |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102089-06A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB5-35 | SAMPLE VOL./WT.: 40g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-07A
FILE ID: NA
SAMPLE ID: SB4-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/22/91

Mark Shih, Ph.D. Date

LUFT

TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102089-08A<br>FILE ID: NA<br>SAMPLE ID: SB4-10 | DATE SAMPLED: 02/07/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-09A
FILE ID: NA
SAMPLE ID: SB4-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

LUFT

TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/07/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: CASTRO VALLEY BLVD | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/16/91 |
| P.O.#: NA | INSTRUMENT ID: AB |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102089-10A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB4-20 | SAMPLE VOL./WT.: 40g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

LUFT

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-11A
FILE ID: NA
SAMPLE ID: SB4-25

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/22/91
Date

LUFT

TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102089-12A<br>FILE ID: NA<br>SAMPLE ID: SB4-30 | DATE SAMPLED: 02/07/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-13A
FILE ID: NA
SAMPLE ID: SB4-35

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

LUFT

TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102089-14A<br>FILE ID: NA<br>SAMPLE ID: SB4-40 | DATE SAMPLED: 02/07/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-15A
FILE ID: NA
SAMPLE ID: SB4-45

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/22/91

Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102089-16A<br>FILE ID: NA<br>SAMPLE ID: SB4-50 | DATE SAMPLED: 02/07/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-17A
FILE ID: NA
SAMPLE ID: SB8-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/22/91
Mark Shih, Ph.D. Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-18A
FILE ID: NA
SAMPLE ID: SB8-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

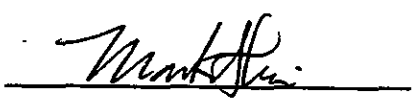
EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-19A
FILE ID: NA
SAMPLE ID: SB8-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/22/91
Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102089-20A<br>FILE ID: NA<br>SAMPLE ID: SB8-20 | DATE SAMPLED: 02/07/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-21A
FILE ID: NA
SAMPLE ID: SB8-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-22A
FILE ID: NA
SAMPLE ID: SB8-35

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/22/91
Date

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TOTAL PETROLEUM HYDROCARBONS

Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: CASTRO VALLEY BLVD<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION:<br>ELI SAMPLE ID: 9102089-23A<br>FILE ID: NA<br>SAMPLE ID: METHOD BLANK | DATE SAMPLED: NA<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/16/91<br>INSTRUMENT ID: AB<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/22/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/07/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: CASTRO VALLEY BLVD | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/16/91 |
| P.O.#: NA | INSTRUMENT ID: AB |
| SAMPLE LOCATION: | MATRIX: SOIL |
| ELI SAMPLE ID: 9102089-24A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SPIKE RECOVERY SB5-30 | SAMPLE VOL./WT.: 40g |

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 111% |
| Diesel Range | NA |
| Motor Oil Range | 110% |
| Total Petroleum Hydrocarbons | NA |
| **CARBON NO. RANGE** | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| **PEAK CARBON NO.** | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih · 02/22/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS

## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-25A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB5-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 118% |
| Diesel Range | NA |
| Motor Oil Range | 129% |
| Total Petroleum Hydrocarbons | NA |
| **CARBON NO. RANGE** | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| **PEAK CARBON NO.** | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: NA |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: CASTRO VALLEY BLVD | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/16/91 |
| P.O.#: NA | INSTRUMENT ID: AB |
| SAMPLE LOCATION: | MATRIX: SOIL |
| ELI SAMPLE ID: 9102089-26A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: METHOD BLANK | SAMPLE VOL./WT.: 40g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-27A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB8-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 121% |
| Diesel Range | NA |
| Motor Oil Range | 126% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-089<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: NA |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: CASTRO VALLEY BLVD | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/16/91 |
| P.O.#: NA | INSTRUMENT ID: AB |
| SAMPLE LOCATION: | MATRIX: SOIL |
| ELI SAMPLE ID: 9102089-28A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SPIKE RECOVERY DUPLICATE SB8-30 | SAMPLE VOL./WT.: 40g |

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 118% |
| Diesel Range | NA |
| Motor Oil Range | 130% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91

Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED : 02/15/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-10

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-15

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-20

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB5-25 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-30

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-35

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

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## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB4-5 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-10

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-15

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB4-20 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB4-25 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride — February 28, 1991
Lisa Kirkbride, Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-30

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-35

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-40

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB4-45 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | 10 | 1 |
| V7 | Toluene | 5 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | 5 | 1 |

Note:
All positively identified compounds were second column confirmed.

Lisa Kirkbride — February 28, 1991
Lisa Kirkbride, Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB4-50

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | 5 | 1 |
| V7 | Toluene | 4 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | 13 | 1 |

Note:
All positively identified compounds were second column confirmed.

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB8-5

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB8-10 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

ORGANIC ANALYSIS REPORT
Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB8-15 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB8-20

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB8-30

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB8-35

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED: 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB5-30 MATRIX SPIKE RECOVERY | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 96% |
| V2 | Chlorobenzene | 106% |
| V3 | 1,2-Dichlorobenzene | 105% |
| V4 | 1,3-Dichlorobenzene | - |
| V5 | 1,4-Dichlorobenzene | 90% |
| V6 | Ethyl benzene | 106% |
| V7 | Toluene | 103% |
| V8 | Xylenes (Dimethyl benzenes) | 106% |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB5-30 MATRIX SPIKE RECOVERY DUPLICATE | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 96% |
| V2 | Chlorobenzene | 105% |
| V3 | 1,2-Dichlorobenzene | 107% |
| V4 | 1,3-Dichlorobenzene | - |
| V5 | 1,4-Dichlorobenzene | 82% |
| V6 | Ethyl benzene | 101% |
| V7 | Toluene | 100% |
| V8 | Xylenes (Dimethyl benzenes) | 103% |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB8-5 MATRIX SPIKE RECOVERY | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 76% |
| V2 | Chlorobenzene | 90% |
| V3 | 1,2-Dichlorobenzene | - |
| V4 | 1,3-Dichlorobenzene | 73% |
| V5 | 1,4-Dichlorobenzene | 85% |
| V6 | Ethyl benzene | 94% |
| V7 | Toluene | 81% |
| V8 | Xylenes (Dimethyl benzenes) | 98% |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED: | 02/15/1991 |
| SAMPLE ID: | SB8-5 MATRIX SPIKE RECOVERY DUPLICATE | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 102% |
| V2 | Chlorobenzene | 102% |
| V3 | 1,2-Dichlorobenzene | - |
| V4 | 1,3-Dichlorobenzene | 88% |
| V5 | 1,4-Dichlorobenzene | 103% |
| V6 | Ethyl benzene | 112% |
| V7 | Toluene | 91% |
| V8 | Xylenes (Dimethyl benzenes) | 115% |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-089
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED : 02/15/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

February 28, 1991
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-01A
FILE ID: NA
SAMPLE ID: SB5-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-02A
FILE ID: NA
SAMPLE ID: SB5-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-03A
FILE ID: NA
SAMPLE ID: SB5-20

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-04A
FILE ID: NA
SAMPLE ID: SB5-25

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-05A
FILE ID: NA
SAMPLE ID: SB5-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-06A
FILE ID: NA
SAMPLE ID: SB5-35

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-07A
FILE ID: NA
SAMPLE ID: SB4-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-08A
FILE ID: NA
SAMPLE ID: SB4-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

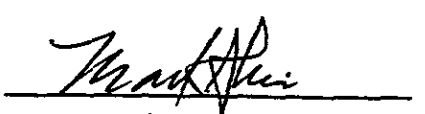
EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-09A
FILE ID: NA
SAMPLE ID: SB4-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-10A
FILE ID: NA
SAMPLE ID: SB4-20

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-11A
FILE ID: NA
SAMPLE ID: SB4-25

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-12A
FILE ID: NA
SAMPLE ID: SB4-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | 16 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | 16 | |
| CARBON NO. RANGE | | |
| Gasoline Range | C9-C12 | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | C10 | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-13A
FILE ID: NA
SAMPLE ID: SB4-35

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-14A
FILE ID: NA
SAMPLE ID: SB4-40

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-15A
FILE ID: NA
SAMPLE ID: SB4-45

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-16A
FILE ID: NA
SAMPLE ID: SB4-50

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-17A
FILE ID: NA
SAMPLE ID: SB8-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | 121 | 25 |
| Total Petroleum Hydrocarbons | 121 | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | C18-C30 | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | C24 | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-18A
FILE ID: NA
SAMPLE ID: SB8-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-19A
FILE ID: NA
SAMPLE ID: SB8-15

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-20A
FILE ID: NA
SAMPLE ID: SB8-20

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-21A
FILE ID: NA
SAMPLE ID: SB8-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102089-22A
FILE ID: NA
SAMPLE ID: SB8-35

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-23A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/22/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-24A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB5-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 111% |
| Diesel Range | NA |
| Motor Oil Range | 110% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist _____ 02/22/91
Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-25A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE
SB5-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 118% |
| Diesel Range | NA |
| Motor Oil Range | 129% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist _____
Mark Shih, Ph.D.

02/22/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-26A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/22/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-27A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB8-30

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 121% |
| Diesel Range | NA |
| Motor Oil Range | 126% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/22/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-089
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: CASTRO VALLEY BLVD
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102089-28A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB8-30

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/16/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 118% |
| Diesel Range | NA |
| Motor Oil Range | 130% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist 

Mark Shih, Ph.D.

02/22/91
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED : 02/15/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Wei for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-5 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride for March 1, 1991
Lisa Kirkbride Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-10 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-15 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-20 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Stein for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-25 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Stelle for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-30 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-5 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-10 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Thi for
Lisa Kirkbride
Chemist

March 1, 1991
Date

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## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-15 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Thi for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-20 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Rei for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-25 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-30 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Shiver for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-35 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB2-40 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-5 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED : 02/15/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-10 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Stec for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-15 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Thi for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-20 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

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6790 Florin-Perkins Road
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(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-25 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Skinner for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-30 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-35 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-5 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride for — March 1, 1991
Lisa Kirkbride, Chemist — Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-10 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-15 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Hinton for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-20 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

for March 1, 1991
Lisa Kirkbride Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-25 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mak Li for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-30 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

for March 1, 1991
Lisa Kirkbride — Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-35 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Ji for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB7-40 | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB6-5 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Ellis for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | MAINTENANCE CENTER | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB6-10 | DATE SAMPLED: | 02/07/1991 |

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Mark Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA-TECH
PROJECT #: TC-8380-01
LOCATION: MAINTENANCE CENTER
SAMPLE ID: SB5-5

DATE RECEIVED: 02/08/1991
DATE EXTRACTED: 02/14/1991
DATE ANALYZED : 02/15/1991
DATE SAMPLED: 02/07/1991

| COMP. NO. | COMPOUND | ug/Kg (ppb) | DETECTION LIMIT ug/Kg (ppb) |
|---|---|---|---|
| V1 | Benzene | <1 | 1 |
| V2 | Chlorobenzene | <1 | 1 |
| V3 | 1,2-Dichlorobenzene | <1 | 1 |
| V4 | 1,3-Dichlorobenzene | <1 | 1 |
| V5 | 1,4-Dichlorobenzene | <1 | 1 |
| V6 | Ethyl benzene | <1 | 1 |
| V7 | Toluene | <1 | 1 |
| V8 | Xylenes (Dimethyl benzenes) | <1 | 1 |

Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | ALMADEN FIRE STATION | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-5 MATRIX SPIKE RECOVERY | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 99% |
| V2 | Chlorobenzene | 101% |
| V3 | 1,2-Dichlorobenzene | 105% |
| V4 | 1,3-Dichlorobenzene | 89% |
| V5 | 1,4-Dichlorobenzene | 87% |
| V6 | Ethyl benzene | 102% |
| V7 | Toluene | 107% |
| V8 | Xylenes (Dimethyl benzenes) | 105% |

Mark Thi for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | ALMADEN FIRE STATION | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB3-5 MATRIX SPIKE RECOVERY DUPLICATE | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 112% |
| V2 | Chlorobenzene | 112% |
| V3 | 1,2-Dichlorobenzene | 106% |
| V4 | 1,3-Dichlorobenzene | 117% |
| V5 | 1,4-Dichlorobenzene | 107% |
| V6 | Ethyl benzene | 113% |
| V7 | Toluene | 116% |
| V8 | Xylenes (Dimethyl benzenes) | 124% |

Mark Shinfor
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | ALMADEN FIRE STATION | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-35 MATRIX SPIKE RECOVERY | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 90% |
| V2 | Chlorobenzene | 87% |
| V3 | 1,2-Dichlorobenzene | - |
| V4 | 1,3-Dichlorobenzene | - |
| V5 | 1,4-Dichlorobenzene | 86% |
| V6 | Ethyl benzene | 93% |
| V7 | Toluene | 93% |
| V8 | Xylenes (Dimethyl benzenes) | 96% |

Mark Kirkbride for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-088
Hazardous Waste Testing
Certification: E765

| | | | |
|---|---|---|---|
| CLIENT: | TETRA-TECH | DATE RECEIVED: | 02/08/1991 |
| PROJECT #: | TC-8380-01 | DATE EXTRACTED: | 02/14/1991 |
| LOCATION: | ALMADEN FIRE STATION | DATE ANALYZED : | 02/15/1991 |
| SAMPLE ID: | SB1-35 MATRIX SPIKE RECOVERY DUPLICATE | DATE SAMPLED: | 02/06/1991 |

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 80% |
| V2 | Chlorobenzene | 77% |
| V3 | 1,2-Dichlorobenzene | - |
| V4 | 1,3-Dichlorobenzene | - |
| V5 | 1,4-Dichlorobenzene | 81% |
| V6 | Ethyl benzene | 86% |
| V7 | Toluene | 76% |
| V8 | Xylenes (Dimethyl benzenes) | 91% |

Mark Hu for
Lisa Kirkbride
Chemist

March 1, 1991
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-01A
FILE ID: NA
SAMPLE ID: SB3-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-02A
FILE ID: NA
SAMPLE ID: SB3-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-03A
FILE ID: NA
SAMPLE ID: SB3-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-04A
FILE ID: NA
SAMPLE ID: SB3-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-05A
FILE ID: NA
SAMPLE ID: SB3-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-06A
FILE ID: NA
SAMPLE ID: SB3-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-07A
FILE ID: NA
SAMPLE ID: SB2-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-08A
FILE ID: NA
SAMPLE ID: SB2-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-09A
FILE ID: NA
SAMPLE ID: SB2-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-10A
FILE ID: NA
SAMPLE ID: SB2-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-11A
FILE ID: NA
SAMPLE ID: SB2-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-12A
FILE ID: NA
SAMPLE ID: SB2-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-13A
FILE ID: NA
SAMPLE ID: SB2-35

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-14A
FILE ID: NA
SAMPLE ID: SB2-40

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-15A
FILE ID: NA
SAMPLE ID: SB1-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-16A
FILE ID: NA
SAMPLE ID: SB1-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-17A
FILE ID: NA
SAMPLE ID: SB1-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-18A
FILE ID: NA
SAMPLE ID: SB1-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-19A
FILE ID: NA
SAMPLE ID: SB1-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-20A
FILE ID: NA
SAMPLE ID: SB1-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-21A
FILE ID: NA
SAMPLE ID: SB1-35

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

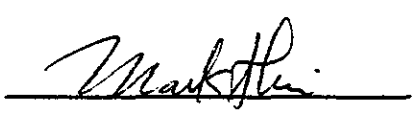
EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-22A
FILE ID: NA
SAMPLE ID: SB7-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-23A
FILE ID: NA
SAMPLE ID: SB7-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91
Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-24A
FILE ID: NA
SAMPLE ID: SB7-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

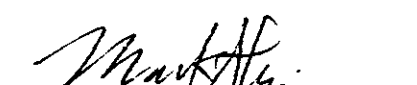
EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-25A
FILE ID: NA
SAMPLE ID: SB7-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-26A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB7-25 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-27A
FILE ID: NA
SAMPLE ID: SB7-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-28A
FILE ID: NA
SAMPLE ID: SB7-35

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-29A
FILE ID: NA
SAMPLE ID: SB7-40

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-30A
FILE ID: NA
SAMPLE ID: SB6-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-31A
FILE ID: NA
SAMPLE ID: SB6-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-32A
FILE ID: NA
SAMPLE ID: SB5-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-33A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-34A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB3-25

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 99% |
| Diesel Range | NA |
| Motor Oil Range | 98% |
| Total Petroleum Hydrocarbons | |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-35A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB3-25

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | **107%** |
| Diesel Range | **NA** |
| Motor Oil Range | **106%** |
| Total Petroleum Hydrocarbons | |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-36A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | <5 | 5 |
| Diesel Range | <10 | 10 |
| Motor Oil Range | <25 | 25 |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-37A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB2-30

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 108% |
| Diesel Range | NA |
| Motor Oil Range | 110% |
| Total Petroleum Hydrocarbons | |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

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Mark Shih, Ph.D. Date

# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-38A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB2-30

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: NA
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | **110%** |
| Diesel Range | **NA** |
| Motor Oil Range | **102%** |
| Total Petroleum Hydrocarbons | |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS

## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-01A
FILE ID: NA
SAMPLE ID: SB3-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

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Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-02A
FILE ID: NA
SAMPLE ID: SB3-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

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Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-03A
FILE ID: NA
SAMPLE ID: SB3-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-04A
FILE ID: NA
SAMPLE ID: SB3-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-05A
FILE ID: NA
SAMPLE ID: SB3-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: HAYWARD CALTRAN MAINTENANCE<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102088-06A<br>FILE ID: NA<br>SAMPLE ID: SB3-30 | DATE SAMPLED: 02/06/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/14/91<br>INSTRUMENT ID:<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40 g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-07A
FILE ID: NA
SAMPLE ID: SB2-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-08A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB2-10 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-09A
FILE ID: NA
SAMPLE ID: SB2-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-10A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB2-20 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | **NA** | NA |
| Diesel Range | **<10** | 10 |
| Motor Oil Range | **NA** | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist  02/20/91

Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: HAYWARD CALTRAN MAINTENANCE<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102088-11A<br>FILE ID: NA<br>SAMPLE ID: SB2-25 | DATE SAMPLED: 02/06/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/14/91<br>INSTRUMENT ID:<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40 g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-12A
FILE ID: NA
SAMPLE ID: SB2-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-13A
FILE ID: NA
SAMPLE ID: SB2-35

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-14A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB2-40 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |
| CLIENT: TETRA TECH, INC.<br>CONTRACT #: TC #: 8380-03<br>PROJECT: HAYWARD CALTRAN MAINTENANCE<br>TASK #: NA<br>P.O.#: NA<br>SAMPLE LOCATION: MAINTENANCE CEN<br>ELI SAMPLE ID: 9102088-15A<br>FILE ID: NA<br>SAMPLE ID: SB1-5 | DATE SAMPLED: 02/06/91<br>DATE RECEIVED: 02/08/91<br>DATE EXTRACTED: 02/14/91<br>DATE ANALYZED: 02/14/91<br>INSTRUMENT ID:<br>MATRIX: SOIL<br>% MOISTURE: NA<br>REPORT WT: WET<br>SAMPLE VOL./WT.: 40 g<br>DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-16A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB1-10 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-17A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB1-15 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist - Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-18A
FILE ID: NA
SAMPLE ID: SB1-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91
Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-19A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB1-25 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | **NA** | NA |
| Diesel Range | **<10** | 10 |
| Motor Oil Range | **NA** | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist  02/20/91

Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-20A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB1-30 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | **NA** | NA |
| Diesel Range | **<10** | 10 |
| Motor Oil Range | **NA** | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist  02/20/91

Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-21A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB1-35 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-22A
FILE ID: NA
SAMPLE ID: SB7-5

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____
Mark Shih, Ph.D.

02/20/91
Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-23A
FILE ID: NA
SAMPLE ID: SB7-10

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-24A
FILE ID: NA
SAMPLE ID: SB7-15

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-25A
FILE ID: NA
SAMPLE ID: SB7-20

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-26A
FILE ID: NA
SAMPLE ID: SB7-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/20/91
Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-27A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB7-30 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih
Mark Shih, Ph.D.

02/20/91
Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-28A
FILE ID: NA
SAMPLE ID: SB7-35

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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TOTAL PETROLEUM HYDROCARBONS
Modified EPA Method 8015(GC-FID) for soil

| | |
|---|---|
| EUREKA LABORATORIES, INC.<br>6790 Florin Perkins Road<br>Sacramento, CA 95828<br>(916)381-7953 | Order No.: 91-02-088<br>Hazardous Waste Testing<br>Certification No.: E765 |

| | |
|---|---|
| CLIENT: TETRA TECH, INC. | DATE SAMPLED: 02/06/91 |
| CONTRACT #: TC #: 8380-03 | DATE RECEIVED: 02/08/91 |
| PROJECT: HAYWARD CALTRAN MAINTENANCE | DATE EXTRACTED: 02/14/91 |
| TASK #: NA | DATE ANALYZED: 02/14/91 |
| P.O.#: NA | INSTRUMENT ID: |
| SAMPLE LOCATION: MAINTENANCE CEN | MATRIX: SOIL |
| ELI SAMPLE ID: 9102088-29A | % MOISTURE: NA |
| FILE ID: NA | REPORT WT: WET |
| SAMPLE ID: SB7-40 | SAMPLE VOL./WT.: 40 g |
| | DILUTION FACTOR: 1.00 |

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-30A
FILE ID: NA
SAMPLE ID: SB6-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91

Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-31A
FILE ID: NA
SAMPLE ID: SB6-10

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist Mark Shih

Mark Shih, Ph.D.

02/20/91
Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION: MAINTENANCE CEN
ELI SAMPLE ID: 9102088-32A
FILE ID: NA
SAMPLE ID: SB5-5

DATE SAMPLED: 02/07/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID:
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40 g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/20/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-33A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist _____ 02/22/91
Mark Shih, Ph.D. Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-34A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB3-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 99% |
| Diesel Range | NA |
| Motor Oil Range | 98% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist 
Mark Shih, Ph.D.

02/22/91
Date

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## TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-35A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB3-25

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | **107%** |
| Diesel Range | **NA** |
| Motor Oil Range | **106%** |
| Total Petroleum Hydrocarbons | **NA** |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist _____ 02/22/91

Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-36A
FILE ID: NA
SAMPLE ID: METHOD BLANK

DATE SAMPLED: NA
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g
DILUTION FACTOR: 1.00

| PETROLEUM HYDROCARBONS | CONCENTRATION ppm (mg/Kg) | DETECTION LIMIT ppm (mg/Kg) |
|---|---|---|
| Gasoline Range | NA | NA |
| Diesel Range | <10 | 10 |
| Motor Oil Range | NA | NA |
| Total Petroleum Hydrocarbons | | |
| CARBON NO. RANGE | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |
| PEAK CARBON NO. | | |
| Gasoline Range | - | |
| Diesel Range | - | |
| Motor Oil Range | - | |

Chemist 
Mark Shih, Ph.D.

02/22/91
Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-37A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY
SB2-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | 108% |
| Diesel Range | NA |
| Motor Oil Range | 110% |
| Total Petroleum Hydrocarbons | NA |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist _____ 02/22/91
Mark Shih, Ph.D. Date

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# TOTAL PETROLEUM HYDROCARBONS
## Modified EPA Method 8015(GC-FID) for soil

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-02-088
Hazardous Waste Testing
Certification No.: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC #: 8380-03
PROJECT: HAYWARD CALTRAN MAINTENANCE
TASK #: NA
P.O.#: NA
SAMPLE LOCATION:
ELI SAMPLE ID: 9102088-38A
FILE ID: NA
SAMPLE ID: SPIKE RECOVERY DUPLICATE SB2-30

DATE SAMPLED: 02/06/91
DATE RECEIVED: 02/08/91
DATE EXTRACTED: 02/14/91
DATE ANALYZED: 02/14/91
INSTRUMENT ID: AB
MATRIX: SOIL
% MOISTURE: NA
REPORT WT: WET
SAMPLE VOL./WT.: 40g

| PETROLEUM HYDROCARBONS | CONCENTRATION % |
|---|---|
| Gasoline Range | **110%** |
| Diesel Range | **NA** |
| Motor Oil Range | **102%** |
| Total Petroleum Hydrocarbons | **NA** |
| CARBON NO. RANGE | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |
| PEAK CARBON NO. | |
| Gasoline Range | - |
| Diesel Range | - |
| Motor Oil Range | - |

Chemist 

Mark Shih, Ph.D.

02/22/91
Date

# TOTAL RECOVERY PETROLEUM HYDROCARBONS
## EPA 418.1

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
LOCATION: CAL TRANS YARD

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: 02/19/1991
DATE ANALYZED: 02/21/1991
DATE SAMPLED: 02/15/1991

| SAMPLE ID. | CONCENTRATION [mg/L (ppm)] | DETECTION LIMIT [mg/L (ppm)] |
|---|---|---|
| MW1-Tt1 | <0.5 | 0.5 |
| BLANK | <0.5 | 0.5 |
| REAGENT SPIKE RECOVERY * | 88% | |
| REAGENT SPIKE RECOVERY DUPLICATE * | 92% | |

* Reagent spike set is used due to insufficient sample provided.

Mitra Rafiei
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Halogenated Volatile Organics, EPA 601

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

| COMP. No. | COMPOUND | ug/L | DETECTION LIMIT ug/L (ppb) |
|---|---|---|---|
| V1 | Bromodichloromethane | <0.5 | 0.5 |
| V2 | Bromoform | <0.5 | 0.5 |
| V3 | Bromomethane | <0.5 | 0.5 |
| V4 | Carbon tetrachloride | <0.5 | 0.5 |
| V5 | Chlorobenzene | <0.5 | 0.5 |
| V6 | Chloroethane | <0.5 | 0.5 |
| V7 | Chloroform | <0.5 | 0.5 |
| V8 | Chloromethane | <0.5 | 0.5 |
| V9 | Dibromochloromethane | <0.5 | 0.5 |
| V10 | Dibromomethane | <0.5 | 0.5 |
| V11 | 1,2-Dichlorobenzene | <0.5 | 0.5 |
| V12 | 1,3-Dichlorobenzene | <0.5 | 0.5 |
| V13 | 1,4-Dichlorobenzene | <0.5 | 0.5 |
| V14 | 1,1-Dichloroethane | <0.5 | 0.5 |
| V15 | 1,2-Dichloroethane | <0.5 | 0.5 |
| V16 | 1,1-Dichloroethylene (Vinylidene chloride) | <0.5 | 0.5 |
| V17 | trans-1,2-Dichloroethylene | <0.5 | 0.5 |
| V18 | Dichloromethane | <0.5 | 0.5 |
| V19 | 1,2-Dichloropropane | <0.5 | 0.5 |
| V20 | cis-1,3-Dichloropropylene | <0.5 | 0.5 |
| V21 | trans-1,3-Dichloropropylene | <0.5 | 0.5 |
| V22 | 1,1,2,2-Tetrachloroethane | <0.5 | 0.5 |
| V23 | 1,1,1,2-Tetrachloroethane | <0.5 | 0.5 |
| V24 | Tetrachloroethylene | <0.5 | 0.5 |
| V25 | 1,1,1-Trichloroethane | <0.5 | 0.5 |
| V26 | 1,1,2-Trichloroethane | <0.5 | 0.5 |
| V27 | Trichloroethylene | <0.5 | 0.5 |
| V28 | Vinyl chloride | <0.5 | 0.5 |
| V29 | Dichlorodifluoromethane | <0.5 | 0.5 |
| V30 | Trichlorofluoromethane | <0.5 | 0.5 |
| V31 | 2-chloroethyl vinyl ether | <0.5 | 0.5 |

Mark Alei for
Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Halogenated Volatile Organics, EPA 601

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MW1-Tt1
LOCATION: CAL TRANS YARD

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991
DATE SAMPLED: 02/15/1991

| COMP. No. | COMPOUND | ug/L | DETECTION LIMIT ug/L (ppb) |
|---|---|---|---|
| V1 | Bromodichloromethane | <0.5 | 0.5 |
| V2 | Bromoform | <0.5 | 0.5 |
| V3 | Bromomethane | <0.5 | 0.5 |
| V4 | Carbon tetrachloride | <0.5 | 0.5 |
| V5 | Chlorobenzene | <0.5 | 0.5 |
| V6 | Chloroethane | <0.5 | 0.5 |
| V7 | Chloroform | <0.5 | 0.5 |
| V8 | Chloromethane | <0.5 | 0.5 |
| V9 | Dibromochloromethane | <0.5 | 0.5 |
| V10 | Dibromomethane | <0.5 | 0.5 |
| V11 | 1,2-Dichlorobenzene | <0.5 | 0.5 |
| V12 | 1,3-Dichlorobenzene | <0.5 | 0.5 |
| V13 | 1,4-Dichlorobenzene | <0.5 | 0.5 |
| V14 | 1,1-Dichloroethane | <0.5 | 0.5 |
| V15 | 1,2-Dichloroethane | <0.5 | 0.5 |
| V16 | 1,1-Dichloroethylene (Vinylidene chloride) | <0.5 | 0.5 |
| V17 | trans-1,2-Dichloroethylene | <0.5 | 0.5 |
| V18 | Dichloromethane | <0.5 | 0.5 |
| V19 | 1,2-Dichloropropane | <0.5 | 0.5 |
| V20 | cis-1,3-Dichloropropylene | <0.5 | 0.5 |
| V21 | trans-1,3-Dichloropropylene | <0.5 | 0.5 |
| V22 | 1,1,2,2-Tetrachloroethane | <0.5 | 0.5 |
| V23 | 1,1,1,2-Tetrachloroethane | <0.5 | 0.5 |
| V24 | Tetrachloroethylene | <0.5 | 0.5 |
| V25 | 1,1,1-Trichloroethane | <0.5 | 0.5 |
| V26 | 1,1,2-Trichloroethane | <0.5 | 0.5 |
| V27 | Trichloroethylene | <0.5 | 0.5 |
| V28 | Vinyl chloride | <0.5 | 0.5 |
| V29 | Dichlorodifluoromethane | <0.5 | 0.5 |
| V30 | Trichlorofluoromethane | <0.5 | 0.5 |
| V31 | 2-chloroethyl vinyl ether | <0.5 | 0.5 |

Mark Ahn for
Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Halogenated Volatile Organics, EPA 601

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MATRIX SPIKE RECOVERY *

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

| COMP. No. | COMPOUND | SPIKE RECOVERY | COMP No. | COMPOUND | |
|---|---|---|---|---|---|
| V1 | Bromodichloromethane | 102% | V16 | 1,1-Dichloroethylene (Vinylidene chloride) | - |
| V2 | Bromoform | 104% | V17 | trans-1,2-Dichloroethylene | 86% |
| V3 | Bromomethane | - | V18 | Dichloromethane | - |
| V4 | Carbon tetrachloride | 98% | V19 | 1,2-Dichloropropane | 99% |
| V5 | Chlorobenzene | 109% | V20 | cis-1,3-Dichloropropylene | 99% |
| V6 | Chloroethane | 81% | V21 | trans-1,3-Dichloropropylene | 95% |
| V7 | Chloroform | 110% | V22 | 1,1,2,2-Tetrachloroethane | 103% |
| V8 | Chloromethane | - | V23 | 1,1,1,2-Tetrachloroethane | - |
| V9 | Dibromochloromethane | 102% | V24 | Tetrachloroethylene | 97% |
| V10 | Dibromomethane | - | V25 | 1,1,1-Trichloroethane | 94% |
| V11 | 1,2-Dichlorobenzene | 101% | V26 | 1,1,2-Trichloroethane | 100% |
| V12 | 1,3-Dichlorobenzene | 102% | V27 | Trichloroethylene | 103% |
| V13 | 1,4-Dichlorobenzene | 92% | V28 | Vinyl chloride | - |
| V14 | 1,1-Dichloroethane | 99% | V29 | Dichlorodifluoromethane | - |
| V15 | 1,2-Dichloroethane | 92% | V30 | Trichlorofluoromethane | 82% |
| | | | V31 | 2-chloroethyl vinyl ether | 82% |

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Halogenated Volatile Organics, EPA 601

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MATRIX SPIKE RECOVERY DUPLICATE *

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

COMP. NO. COMPOUND SPIKE RECOVERY

| COMP. No. | COMPOUND | | COMP No. | COMPOUND | |
|---|---|---|---|---|---|
| V1 | Bromodichloromethane | 107% | V16 | 1,1-Dichloroethylene (Vinylidene chloride) | - |
| V2 | Bromoform | 110% | | | |
| V3 | Bromomethane | - | V17 | trans-1,2-Dichloroethylene | 96% |
| V4 | Carbon tetrachloride | 100% | V18 | Dichloromethane | - |
| V5 | Chlorobenzene | 117% | V19 | 1,2-Dichloropropane | 101% |
| V6 | Chloroethane | 81% | V20 | cis-1,3-Dichloropropylene | 108% |
| V7 | Chloroform | 115% | V21 | trans-1,3-Dichloropropylene | 103% |
| V8 | Chloromethane | - | V22 | 1,1,2,2-Tetrachloroethane | 111% |
| V9 | Dibromochloromethane | 106% | V23 | 1,1,1,2-Tetrachloroethane | - |
| V10 | Dibromomethane | - | V24 | Tetrachloroethylene | 102% |
| V11 | 1,2-Dichlorobenzene | 114% | V25 | 1,1,1-Trichloroethane | 97% |
| V12 | 1,3-Dichlorobenzene | 113% | V26 | 1,1,2-Trichloroethane | 104% |
| V13 | 1,4-Dichlorobenzene | 103% | V27 | Trichloroethylene | 112% |
| V14 | 1,1-Dichloroethane | 103% | V28 | Vinyl chloride | - |
| V15 | 1,2-Dichloroethane | 96% | V29 | Dichlorodifluoromethane | - |
| | | | V30 | Trichlorofluoromethane | 84% |
| | | | V31 | 2-chloroethyl vinyl ether | 91% |

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Mark the for
Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 602

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: BLANK

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

| COMP. NO. | COMPOUND | ug/L (ppb) | DETECTION LIMIT ug/L (ppb) |
|---|---|---|---|
| V1 | Benzene | <0.5 | 0.5 |
| V2 | Chlorobenzene | <0.5 | 0.5 |
| V3 | 1,2-Dichlorobenzene | <0.5 | 0.5 |
| V4 | 1,3-Dichlorobenzene | <0.5 | 0.5 |
| V5 | 1,4-Dichlorobenzene | <0.5 | 0.5 |
| V6 | Ethyl benzene | <0.5 | 0.5 |
| V7 | Toluene | <0.5 | 0.5 |
| V8 | Xylenes (Dimethyl benzenes) | <0.5 | 0.5 |

Mark Hall for
Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 602

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MW1-Tt1
LOCATION: CAL TRANS YARD

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991
DATE SAMPLED: 02/15/1991

| COMP. NO. | COMPOUND | ug/L (ppb) | DETECTION LIMIT ug/L (ppb) |
|---|---|---|---|
| V1 | Benzene | <0.5 | 0.5 |
| V2 | Chlorobenzene | <0.5 | 0.5 |
| V3 | 1,2-Dichlorobenzene | <0.5 | 0.5 |
| V4 | 1,3-Dichlorobenzene | <0.5 | 0.5 |
| V5 | 1,4-Dichlorobenzene | <0.5 | 0.5 |
| V6 | Ethyl benzene | <0.5 | 0.5 |
| V7 | Toluene | <0.5 | 0.5 |
| V8 | Xylenes (Dimethyl benzenes) | <0.5 | 0.5 |

Mark Hein for
Lisa Kirkbride
Chemist

March 5, 1991
Date

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 602

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MATRIX SPIKE RECOVERY *

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 83% |
| V2 | Chlorobenzene | 85% |
| V3 | 1,2-Dichlorobenzene | 84% |
| V4 | 1,3-Dichlorobenzene | 83% |
| V5 | 1,4-Dichlorobenzene | 88% |
| V6 | Ethyl benzene | 85% |
| V7 | Toluene | 83% |
| V8 | Xylenes (Dimethyl benzenes) | 92% |

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Lisa Kirkbride for March 5, 1991
Lisa Kirkbride — Date
Chemist

# ORGANIC ANALYSIS REPORT
## Aromatic Volatile Organics, EPA Method 602

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-02-168
Hazardous Waste Testing
Certification: E765

CLIENT: TETRA TECH, INC.
CONTRACT #: TC 8380-01
PROJECT: HAYWARD MAINTENANCE CENTER
SAMPLE ID: MATRIX SPIKE RECOVERY DUPLICATE *

DATE RECEIVED: 02/16/1991
DATE EXTRACTED: N/A
DATE ANALYZED: 02/20/1991

| COMP. NO. | COMPOUND | SPIKE RECOVERY |
|---|---|---|
| V1 | Benzene | 83% |
| V2 | Chlorobenzene | 85% |
| V3 | 1,2-Dichlorobenzene | 87% |
| V4 | 1,3-Dichlorobenzene | 86% |
| V5 | 1,4-Dichlorobenzene | 96% |
| V6 | Ethyl benzene | 85% |
| V7 | Toluene | 86% |
| V8 | Xylenes (Dimethyl benzenes) | 93% |

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Marc Hunt for
Lisa Kirkbride
Chemist

March 5, 1991
Date

TETRA TECH, INC.
630 NORTH ROSEMEAD BLVD.
PASADENA, CALIFORNIA 91107
TELEPHONE (818) 449 6400
TELEFAX (818) 351 8126

F-28
91-02-.68

# CHAIN OF CUSTODY RECORD

DATE 2-15-91 PAGE 1 OF 1

CLIENT STATE OF CALIFORNIA
ADDRESS HAYWARD MAINTENANCE CENTER
TC 8360-01
SAMPLERS (SIGNATURES) PROJECT MANAGER: DAN BATRACK

| SAMPLE NO | DATE | TIME | LOCATION | CAM METALS (17) | PR. POLLUTANT METALS (13) | GENERAL MINERALS | OIL & GREASE (413.2) | PETROLEUM HYDROCARBONS (418.1) | BASE/NEU/ACIDS (ORGANICS) | PESTICIDES | VOLATILE ORGANICS (601/602) | VOLATILE ORGANICS (624) | TDC | GASOLINE (8015) | AROMATICS (8020) | GC/MS (8240) | OTHER | OTHER | OTHER | NUMBER OF CONTAINERS | OBSERVATIONS/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW1-TC1 | 2-15-91 | 16:10 | CAL TRANS YARD | | | | | ✓ | | | ✓ | | | | | | | | | 5 | |

RELINQUISHED BY: PHIL SKORCE — SIGNATURE: [signature] — COMPANY: TETRA TECH, INC. — DATE: 2-15-91 — TIME: 1700
RECEIVED BY — SIGNATURE — COMPANY — DATE — TIME
RELINQUISHED BY — SIGNATURE — COMPANY — DATE — TIME
RECEIVED BY — SIGNATURE: [signature] — COMPANY — DATE: 2/16 — TIME: 1030

TOTAL NUMBER OF CONTAINERS: 5
METHOD OF SHIPMENT:
SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS:

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94566 ♦

6 February 1991

Tetra Tech, Inc.
670 North Rosemead Boulevard
Pasadena, CA 91107

Gentlemen:

Enclosed is Groundwater Protection Ordinance permit 91064 for a contamination investigation at 21195 Center Street in Castro Valley for the Office of the State Architect.

If you have any questions, please contact Wyman Hong or Craig Mayfield at 484-2600.

Very truly yours,

J. Kiillingstad, Chief
Water Resources Engineering

WH:mm
Enc.

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94588 ♦ (415) 484-2600

# GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT CALTRANS HAYWARD MAINT. STATION
21195 CENTER STREET
CASTRO VALLEY, CALIFORNIA

CLIENT
Name OFFICE OF THE STATE ARCHITECT
Address 400 - P Street Phone 916-323-5819
City SACRAMENTO Zip 95814

APPLICANT
Name TETRA TECH, INC.
c/o Dan Batrack
Address 670 N. Rosemead Blvd Phone 818-449-6400
City PASADENA Zip 91107

TYPE OF PROJECT
Well Construction
Cathodic Protection ___
Water Supply ___
Monitoring ___
Geotechnical Investigation
General XXX Soil Borings
Contamination XXX Petroleum
Well Destruction ___

PROPOSED WATER SUPPLY WELL USE - No Well to be Installed
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger XXX 8" Hollow Stem
Cable ___ Other ___

DRILLER'S LICENSE NO. C-57 #554979

WELL PROJECTS
Drill Hole Diameter ___ in. Maximum
Casing Diameter ___ in. Est. Depth ___ ft.
Surface Seal Depth ___ ft. Number ___

GEOTECHNICAL PROJECTS
Number of Borings 10 Max. Maximum
Hole Diameter 8 in. Depth 40 ft.

ESTIMATED STARTING DATE 2/7/91
ESTIMATED COMPLETION DATE 2/8/91

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

APPLICANT'S SIGNATURE [signature] Date 2-4-91

FOR OFFICE USE

PERMIT NUMBER 91064
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

B. WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal industrial wells or 20 feet for domestic an irrigation wells unless a lesser depth specially approved. Minimum seal depth monitoring wells is the maximum depth practica or 20 feet.

(C.) GEOTECHNICAL. Backfill bore hole with compacted cu tings or heavy bentonite and upper two feet with co pacted material. In areas of known or suspect contamination, tremied cement grout shall be used place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concre placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 4 Feb 91
Wyman Hong

12/9