

Report on the Removal of Two Underground Fuel Storage Tanks and Soil Remediation Activities Beach Street Area Yerba Buena/East Baybridge Project Site Oakland, California

> October 20, 1993 1649.00-016

Prepared for Catellus Development Corporation 201 Mission Street, 30th Floor San Francisco, California 94105



**LEVINE-FRICKE** 



ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

October 28, 1993

LF 1649.00-016

Ms. Susan Hugo Hazardous Materials Specialist Department of Environmental Health Alameda County Health Care Services 80 Swan Way, Room 200 Oakland, California 94621

Subject: Report on the Removal of Two Underground Fuel Storage Tanks and Soil Remediation Activities, Beach Street

Area, Yerba Buena/East Baybridge Project Site

Dear Ms. Hugo:

Enclosed is the subject report, detailing tank removal and disposal, soil sampling procedures, laboratory analysis results, soil excavation, and backfilling activities at the subject site.

If you have any questions or comments, please do not hesitate to call me or Michael Stoll.

Sincerely,

Jenifer Beatty

Janifu Beatty

Project Hydrogeologist

Enclosure

cc: Mr. Richard Hiett, Regional Water Quality Control Board

Ms. Kimberly Brandt, Catellus Development Corporation

Mr. Pat Cashman, Catellus Development Corporation

1900 Powell Street, 12th Floor Emeryville, California 94608 (510) 652-4500 Fax (510) 652-2246

## CONTENTS

		PAGE
LIST	OF FIGURES	iii
LIST	OF TABLES	iii
CERT I	IFICATION	iv
1.0	INTRODUCTION	1 1 3 3
2.0	REMEDIAL ACTIVITIES	3 4 4
	2.1.3 UST Disposal	5 5 6 6
	Analysis	7 7 8
3.0	CHARACTERIZATION AND MANAGEMENT OF EXCAVATED SOIL AND PURGED GROUND WATER	9 9 10
4.0	SUMMARY AND RECOMMENDATIONS	10 10 11
5.0	REFERENCES	12
RTCIII	TDFQ	

#### **CONTENTS** (continued)

#### APPENDICES

- A HAZARDOUS WASTE MANIFESTS AND CERTIFICATE OF TANK DISPOSAL
- B LABORATORY CERTIFICATES FOR SOIL SAMPLES
- C FIELD PROCEDURES FOR SOIL AERATION, WELL ABANDONMENT, AND EXCAVATION DEWATERING, BACKFILLING, AND COMPACTION
- D LABORATORY CERTIFICATES FOR GROUND-WATER SAMPLES

#### LIST OF FIGURES

Number	Title
1	Site Vicinity
2	Site Map Showing Soil Boring and Test Pit Locations, and Chemical Analysis Results
3	Site Map Showing Former UST Locations, Final Soil Sample Locations, and Chemical Analysis Results

## LIST OF TABLES

Number	Title
1	Analytical Results for Soil Samples Collected Prior to Excavation
2	Analytical Results for Soil Samples Collected During Excavation
3	Analytical Results for Final Excavation Soil Samples
4	Analytical Results for Composite Soil Samples Collected from On-Site Backfill Material
5	Results of Field Density Tests

#### CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations have been prepared under the supervision of and reviewed by a Levine-Fricke California Registered Geologist.

Andrew L. Wright

Senior Associate Geologist

California Registered Geologist (4592)

10/28/93

Date

October 28, 1993

LF 1649.16

REPORT ON THE REMOVAL OF TWO UNDERGROUND FUEL STORAGE TANKS
AND SOIL REMEDIATION ACTIVITIES, BEACH STREET AREA,
YERBA BUENA/EAST BAYBRIDGE PROJECT SITE
OAKLAND, CALIFORNIA

#### 1.0 INTRODUCTION

The Yerba Buena/East Baybridge Project Site is located in Emeryville and Oakland, California. Within the Oakland portion of this site is the Beach Street area ("the Site"; Figure 1).

This report describes remediation conducted in the area of the Site, including the removal of two fuel underground storage tanks (USTs) and the remediation of petroleum-affected soil. Levine-Fricke conducted the work on behalf of the Catellus Development Corporation, the property owner.

UST removal was conducted in accordance with applicable guidelines of the Alameda County Health Care Services Agency (ACHA) and the Oakland Fire Department (OFD). The scope of work for soil remediation was presented in Levine-Fricke's "Work Plan to Conduct Soil Remediation Activities in the Beach Street Area, Yerba Buena/East Baybridge Project Site," dated August 17, 1993. The scope of work presented in the work plan was verbally approved by Ms. Susan Hugo of ACHA and Mr. Richard Hiett of the Regional Water Quality Control Board (RWQCB) in a meeting on August 4, 1993.

#### 1.1 Previous Investigations

Between September 1989 and May 1990, Levine Fricke performed a Phase I and Phase II investigation at the Yerba Buena Project Site. As part of the investigation, ground-water monitoring well LF-12 was installed at the Site in the vicinity of a suspected former oil underground storage tank (UST). The UST location was recorded on a 1911 Sanborne Fire Insurance ("Sanborne") map.

Results of the soil sample collected at 4.5 feet below ground surface (bgs) during installation of well LF-12 indicated concentrations of total petroleum hydrocarbons (TPH) as gasoline (TPHg; 0.8 parts per million [ppm]), TPH (620 ppm), and toluene (0.068 ppm). No TPH as diesel (TPHd) or benzene, ethylbenzene, or xylenes were detected.

Results for ground-water samples collected from well LF-12 in 1990 indicated TPHd at a concentration of 0.5 ppm. No TPHg, TPH as motor oil (TPHmo) or benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) were detected.

In March 1992, a Levine-Fricke field engineer observed what appeared to be oil in soil samples collected in this portion of the Site during geotechnical drilling, which was being conducted as a part of the East Baybridge Project development. To assess the concentration of oil in soil near the geotechnical boring, soil boring SB-1A was drilled at the Site in May 1993 (Figure 2). Analytical results for soil samples collected from soil boring SB-1A at 5 and 7.5 feet bgs indicated TPHd and total oil and grease (TOG) at concentrations up to 2,600 ppm and 8,500 ppm, respectively.

A grab ground-water sample collected from soil boring SB-1A was submitted to an analytical laboratory and analyzed for TPHg, TPHd, TOG, and fuel constituents (BTEX compounds). None of these compounds were detected in the sample, except for TPHd, which was detected at a concentration of 0.3 ppm.

In June 1993, Levine Fricke drilled nine additional soil borings (SB-2 through SB-10) in the vicinity of boring SB-1A. Results of the soil samples collected from depths ranging from 4.5 to 11 feet bgs indicated concentrations of petroleum hydrocarbons in excess of the cleanup criteria approved by ACHA for the Site (Levine Fricke 1992). Analytical results are presented in Table 1 and in Figure 2.

Ground-water samples were collected from monitoring well LF-12 in July 1993. Analytical results of these samples did not indicate the presence of TPHg, TPHd, TOG, or BTEX above laboratory detection limits. TPHd was detected at a concentration of 0.170 ppm.

During August and September of 1993, Levine Fricke excavated four test pits (TP-1 through TP-4) to provide supplementary data regarding the extent of petroleum-affected soils at the Site. Analytical results are included in Table 1 and test pit locations are shown in Figure 2. Levine Fricke submitted two samples of the petroleum-affected soil to Friedman & Bruya, Inc., of Seattle, Washington, for fuel characterization analysis. Friedman & Bruya characterized the petroleum to be crude oil.

#### 1.2 Objectives and Scope of Work

The objectives of the remediation at the Site were to investigate the presence of a suspected UST, remove the UST if found, and remediate petroleum-affected soil near the UST to below the cleanup goals previously established for the Site. These cleanup goals for Site soils are as follows:

TPHd less than 100 ppm

TOG less than 1000 ppm

TPHg less than 10 ppm

BTEX combined concentration less than 1 ppm

To reduce concentrations of petroleum hydrocarbons in soil levels below cleanup goals, Levine-Fricke recommended that soil be excavated from the Site until analytical results indicated that cleanup goals had been met.

#### 1.3 Organization of this Report

Remedial activities and results are described in Section 2.0. Section 3.0 describes the characterization and management of excavated soil, and Section 4.0 which presents a summary of the investigation and a discussion of recommendations for additional work.

#### 2.0 REMEDIAL ACTIVITIES

Remedial work at the Site included the removal of two USTs and remediation of petroleum-affected soil near the USTs. UST removal, soil excavation, and backfilling were performed by Trumpp Bros. Inc. of San Jose, California, a licensed general engineering and hazardous waste contractor, under the observation of a Levine. Fricke geologist or engineer. Field activities were conducted from August 1993 through October 1993.

## 2.1 UST Removal and Disposal

During excavation of petroleum-affected soil identified during previous investigations (Section 1.1), two 12,000-gallon fuel USTs were encountered in the northwestern portion of the Site (Figure 3). The USTs were removed from the Site on August 31, 1993 under permits from the ACHA and the OFD. Ms. Susan Hugo of the ACHA and Mr. Gary Collins of the OFD were at the Site to observe tank removal.

#### 2.1.1 UST Contents Disposal and Stabilization

When the USTs were uncovered, they were found to be partially filled with a fluid consisting of water and hydrocarbons. The floating hydrocarbons in the USTs were pumped into vacuum trucks operated by Evergreen Environmental Services of Newark, California for transportation to their recycling facility on August 27 and 31, 1993. Copies of the manifest forms for the transportation of the fluid to the Evergreen recycling facility are presented in Appendix A. The water contained in the USTs was then pumped into on-site temporary water storage tanks for temporary storage pending laboratory analysis. Management of this water is discussed in Section 3.2.

The empty tanks were then rendered inert by inserting dry ice to remove organic vapors and oxygen. Explosivity meter readings were taken from both tanks. After the combustible gas concentration had been reduced to below 15 percent of the lower explosive limit by the dry ice, the tanks were removed.

#### 2.1.2 Field Observations and UST Inspection

Visual observations of sediment types encountered in the excavation were made by a Levine-Fricke field engineer or geologist during tank removal. The soil lithology encountered in the UST location consisted of a tan gravelly silt fill layer from 0 to 4 feet bgs, a black silty clay from 4 to 10 feet bgs, and green gravelly clay from 10 to 11 feet bgs. The tops of the tanks were approximately 4 feet bgs, and the bottoms of the tanks were approximately 10.5 feet bgs. The tanks were placed end to end in a northeast-southwest orientation and separated approximately 6 to 12 inches. Imported tank backfill material was not encountered in the excavation. Heating elements were observed in both tanks, and the product removed from the tanks was observed to be black and viscous.

The piping attached to the USTs consisted of two fill pipes (6 inches in diameter), one connected to each tank, and one product pipe (2 inches in diameter), which was connected to both tanks with a "Y" valve fitting. One of the 6-inch fill pipes led from the northern tank to the northern property line, where it had been capped. The other 6-inch fill pipe led from the southern tank southeast under the former railroad tracks, ended on the opposite side, and was uncapped. The 2-inch product pipe led southeast to the vicinity of the former warehouse building at the Site. All of the associated piping encountered was removed and placed in the area already designated for soil remediation.

After the tanks were removed, they were visually inspected. Both tanks were constructed of steel with riveted seams and were approximately 6.5 feet in diameter and 40 feet in length. The northern tank was observed to have five to six 1- to 2-inch holes in the bottom of the tank and a 3/4-inch hole in the top of the tank, all at its southern end. The southern tank had four 1/2- to 4-inch holes along the bottom half of the tank on its southern end and a 3/4-inch hole in the top of the tank on its northern end. The holes on the tops of the tanks may have resulted during the uncovering of the USTs.

Visual observations and field photoionization detector (PID) measurements indicated the presence of petroleum-affected soil on the bottom and on the east and west sides of the tank excavation. The soil on the north and south ends of the excavation did not appear to be affected by petroleum products. Soil remediation activities are discussed in Section 2.2.

#### 2.1.3 UST Disposal

The USTs and associated piping were removed on August 31, 1993 and transported for processing and disposal to Erickson Environmental in Richmond, California. Copies of the transportation manifests and the certificates of disposal are included in Appendix A.

### 2.1.4 Soil Sampling and Analytical Results

Soil samples were collected by driving clean brass tubes into soil in the bucket of the excavator. The soil samples were labeled and capped with aluminum foil and plastic caps. Samples were stored in a chilled container and transported for analysis to Anametrix Inc. of San Jose, California ("Anametrix"), a state-certified analytical laboratory. Samples were transported under chain-of-custody protocols.

Three soil samples (STANKB1-11.5, NSTANKB2-12, NTANKB3-11.5) were collected for chemical analysis from beneath the USTs at the direction of Ms. Hugo. One sample was collected from beneath the end of each tank and one was collected from beneath the area between the tanks at depths of approximately 11.5 to 12 feet bgs. No sidewall samples were collected, because of soil remediation previously planned for the area based on previous investigations.

The soil samples collected from beneath the USTs were submitted for chemical analysis of TPHd, TPHmo, TOG, TPHg, BTEX, volatile organic compounds (VOCs) using EPA Method 8010,

and for cadmium, chromium, lead, zinc, and nickel. Analytical results are presented in Tables 2 and 3. Laboratory certificates are contained in Appendix B.

Concentrations reported for two of the samples were below cleanup goals for petroleum hydrocarbons. Analytical results for sample NSTANKB2 indicated TPHd, TPHmo, TOG, and TPHg at concentrations of 200 ppm, 540 ppm, 2,200 ppm, and 31 ppm, respectively (Table 2). The laboratory QA/QC summary indicated that concentrations reported as TPHg were primarily the result of the presence of a heavier petroleum product, possibly diesel.

Results of VOC analysis indicated a concentration of 0.0044 ppm cis-1,2-dichloroethene and 0.0049 ppm trichloroethene in sample NSTANKB2-12. This sample was collected near the soil/ground-water interface. The suite of VOCs detected in the soil sample is similar to the suite detected in shallow ground-water samples collected from former well LF-12. It is likely that the low concentrations of VOCs detected in the soil sample are attributable to VOC-affected ground water in the area and not related to the USTs.

Results of metals analysis indicated chromium, nickel, lead, zinc, and cadmium at concentrations up to 24.6 ppm, 48.0 ppm, 4.8 ppm, 38.8 ppm, and 0.49 ppm, respectively. These results are well within ranges commonly observed in soils in the San Francisco Bay Area (Shacklette 1984).

#### 2.2 Soil Remediation

#### 2.2.1 Soil Excavation

Approximately 6,000 cubic yards (cy) of petroleum-affected soil was excavated from the area of the USTs and stockpiled on site using an excavator. During excavation, soil was screened for the presence of VOCs using a PID, to identify soil that might contain TPHg. Soil suspected of containing TPHg based on PID readings or visual or olfactory observations was placed on the aeration bed constructed on the Site (Appendix C). Soil with PID readings of less than 30 ppm was placed on plastic sheeting in a stockpile adjacent to the excavation, to be further screened (by sampling and chemical analysis) to verify that it was unaffected by TPHg or BTEX.

During the course of excavation, between September 16 and 23, 1993, ground-water monitoring well LF-12 and a former steel-cased water supply well were abandoned. Well abandonment procedures are described in Appendix C.

Soil was generally excavated to depths ranging from 9 to 16 feet bgs. Ground water was encountered in the excavation at a depth of approximately 10 feet bgs. To enable the removal of petroleum-affected soils at and below the ground-water/soil interface, the excavation was dewatered as described in Appendix C.

#### 2.2.2 Soil Sample Collection and Laboratory Analysis

Soil samples were collected at selected locations on the excavation sidewalls and floor to assess the presence of residual petroleum hydrocarbon concentrations, if any. In general, sidewall samples were collected every 25 lineal feet and floor samples were collected every 400 square feet.

Soil samples were submitted to Anametrix Inc. for analysis of TPHd and TPHmo using EPA Method 3550, TOG using Standard Method 5520 EF, TPHg using EPA Method 5030, and BTEX using EPA Method 8020. If laboratory results indicated petroleum concentrations above the cleanup goals, soils near the sample location were further excavated. Excavation and resampling was conducted in accessible areas until the laboratory analytical results indicated petroleum product concentrations were below site cleanup levels.

After petroleum-affected soils appeared to have been removed, final soil samples were collected. A total of 26 sidewall and 19 floor samples were collected from the final excavation limits. Some inaccessible petroleum-affected soil was left in place along the western excavation wall because of the proximity of the adjacent street and power poles. The excavation extended as close to the structures and power pole as safety/stability concerns permitted.

#### 2.2.3 Analytical Results for Soil Samples

Analytical results for soil samples collected during soil remediation are presented in Table 2. Table 3 presents analytical results for final or confirmation samples collected from the completed excavation to verify that cleanup goals had been reached. Figure 3 presents final soil sample locations and results.

As presented in Table 2, concentrations of TPHd and TOG in soil excavated from the Site ranged from 15 ppm to 1,700 ppm and from 33 ppm to 9,700 ppm, respectively. Concentrations of TPHg ranged from 0.39 ppm to 420 ppm. It should be noted that the laboratory QA/QC summaries generally indicate that concentrations of TPHg detected are likely attributable to the

presence of a heavier compound, possibly diesel. BTEX compounds were generally detected at levels below the cleanup goal of 1 ppm combined.

With the exception of the western sidewall (along the property line near Beach Street; Figure 3), analytical results for final soil samples indicate that cleanup goals were achieved. As presented in Table 3, the concentrations of TPHd and TOG in final samples ranged from 18 ppm to 73 ppm and from 30 ppm to 430 ppm, respectively. Concentrations of TPHg ranged from 0.6 ppm to 8.7 ppm. Concentrations of BTEX were below the cleanup goal of 1 ppm combined.

Results for two of the excavation soil samples (SW41-10 and SW43-10) collected along the western excavation boundary at depth of 10 feet bgs indicated concentrations of TPHd at 290 ppm and 710 ppm, which exceeds the cleanup goal of 100 ppm for this compound (Table 3). Concentrations of TPHg, TOG, and combined BTEX compounds detected in sample SW43-10 also exceeded cleanup goals for those compounds. Analytical results for soil samples collected at 5 feet bgs (SW-40-5, SW-42-5) in these locations also indicated elevated concentrations of petroleum hydrocarbons (Table 2).

Based on the locations of these samples and the proximity of the property line to the adjacent sidewalk and street, the deeper soil (at depths of 7.5 feet to 15 feet bgs) could not be excavated further for safety reasons. Once the excavation had been backfilled and compacted to the surrounding grade, the shallow (0 to 7.5 feet bgs) affected soil along the property line was removed by trenching along and slightly west of the property line.

Final sidewall samples were collected from the western trench wall for laboratory analysis. Results of these samples (SW-40-5R, SW-42-5R) indicated elevated concetrations of petroleum hydrocarbons, which exceeded cleanup goals for the Site (Table 3).

#### 2.2.4 Excavation Backfilling and Compaction

To evaluate whether the on-site material was suitable for fill material, five composite soil samples (FS-1 through FS-5) of the proposed backfill material were submitted to Anametrix for analysis of TPHd, TPHg, BTEX, and TOG. Analytical results are presented in Table 4. With the exception of TOG, no petroleum hydrocarbons were reported above laboratory detection limits for any of the samples collected. Concentrations of TOG detected in the samples were 60 ppm or less, well below the

backfill criteria established for the Yerba Buena Project Site of 500 ppm for TOG (Levine-Fricke 1992).

Backfilling and compaction was conducted in accordance with procedures described in Appendix C. Fill was placed in loose lifts not exceeding 8 inches and tested to meet 90 percent minimum relative compaction beneath 5 feet bgs and to meet 95 percent minimum relative compaction in the upper 5 feet. Results of field density tests conducted during backfilling activities are presented in Table 5. The completed excavation was backfilled during October 1993.

## 3.0 CHARACTERIZATION AND MANAGEMENT OF EXCAVATED SOIL AND PURGED GROUND WATER

Approximately 1,700 cy of gasoline-affected soil are currently being aerated at the Site. Approximately 4,300 cy of oil- and diesel-affected soil are stockpiled at the Site. Following the completion of aeration activities, a separate report describing the characterization and management of excavated soil will be prepared for submittal to the ACHA and RWQCB.

#### 3.1 Excavated Soil

Gasoline-affected soil is currently being remediated on site. As discussed in Section 2.2.1, soil suspected of containing TPHg was placed directly onto aeration beds constructed on site. The soil has been turned periodically during soil remediation activities. The soil will continue to be mixed using a rototiller until sampling and analysis indicate that the soil has been successfully aerated. Aeration criteria for the Site are less than 10 ppm TPHg, less than 1 ppm combined BTEX compounds, and below laboratory detection limits for benzene.

Soil that contains elevated concentrations of TPHd and/or ToG is currently stockpiled adjacent to the excavation. Twelve composite soil samples were collected from this pile and analyzed for TPHg and BTEX to confirm the absence of these compounds. The results to date generally do not indicate the presence of TPHg or BTEX above aeration criteria. These results, in addition to results in Table 3, indicate that while the soil contains elevated concentrations of heavier compounds, the soil has not been affected by TPHg or BTEX. Once all of the excavated soil has been aerated and/or characterized, the soil will likely be contained on-site (east of Hollis Street) in accordance with verbal approval from the ACHA and RWQCB in a meeting on August 4, 1993, and with the

Containment Plan for TPH-Affected Soil, Yerba Buena Project Site, dated March 10, 1992.

#### 3.2 Ground Water

As discussed in Section 2.2.1, ground water entering the excavation was pumped into a temporary holding tank located on site for storage pending laboratory analysis. Ground water pumped from the two USTs was also stored in this tank (Section 2.1.1).

A ground-water sample (BTANK-W) was collected from 20,000 gallons of water in the storage tank on August 31, 1993 and submitted to Anametrix Inc. for analysis of TPHd, TPHmo, TPHg, BTEX and TOG. Analytical results indicated TPHd and TPHmo at concentrations of 970 and 890 parts per billion (ppb) and TPHg at a concentration of 90 ppb. The water was allowed to aerate in the open top tank for approximately two weeks and then sampled again on September 13, 1993. The sample (BTANK-WR) was submitted for TPHg and BTEX analysis. Analytical results indicated that the concentration of TPHg and BTEX were below laboratory detection limits of 50 and 0.5 ppb, respectively. Laboratory certificates are contained in Appendix D.

After verbal approval from the RWQCB (September 8, 1993), and in accordance with a management plan for reuse of site water (prepared by Levine-Fricke and submitted to the RWQCB on September 15, 1993), the water was reused on site to moisture-condition soil and for dust control within the project area.

#### 4.0 SUMMARY AND RECOMMENDATIONS

#### 4.1 Summary

Based upon our review of excavation, sampling, and analysis procedures and of analytical results obtained, it is our opinion that the USTs were removed in compliance with applicable tank closure regulations.

Two 12,000-gallon fuel USTs were removed and disposed of by a licensed hazardous waste transportation company under a hazardous waste manifest. Inspection of the tanks after removal indicated that both USTs had several holes located at the bottom and top of each tank.

Approximately 6,000 cy of petroleum-affected soil was removed from the tank excavation and in the vicinity of the tanks.

The soil is currently stockpiled on-site or on aeration beds and will likely be contained on-site once the soil has been successfully aerated.

Soil samples collected from the final excavation bottom and sidewalls indicated that concentrations of petroleum hydrocarbons were reduced to cleanup goals for the Site with the exception of approximately 90 cy of soil along the western property boundary. This material was left in place due to geotechnical considerations concerning stability of the excavation sidewalls and the adjacent sidewalk and street. The area of on-site affected soil is located at a depth of 7.5 to 15 feet bgs, and extends from the western property line approximately 5.5 feet east. The excavation was backfilled in October 1993.

#### 4.2 Recommendations

We do not recommend any additional remedial work at this time. However, we do recommend that the potential impact of petroleum hydrocarbons on shallow ground-water quality be further assessed downgradient of the former tanks. To conduct this work, at least one shallow monitoring well should be installed downgradient from the former tank locations. The montoring well should be sampled and analyzed for petroleum hydrocarbons on a quarterly basis for at least one year.

#### 5.0 REFERENCES

- Shacklette and Boerngen, 1984. "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States." U.S. Geological Survey Professional Paper 1270.
- Levine Fricke, Inc. 1992. Soil Remediation Activities Report, Former Ransome Property, Yerba Buena Project Site, Emeryville, California. December 21.

# ANALYTICAL RESULTS FOR SOIL SAMPLES COLLECTED PRIOR TO SOIL EXCAVATION BEACH STREET AREA, OAKLAND, CALIFORNIA

(concentrations reported in milligrams per kilogram [mg/kg])

Sample ID	Date	Depth	TPHd	Oil & Grease	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes
Test Pits										
TP1-7.5	20-Aug-93	7.5	<10	53	<10	<0.5	<0.005	<0.005	<0.005	<0.005
TP2-7.5	20-Aug-93	7.5	<10	57	<10	<0.5	<0.005	<0.005	<0.005	<0.005
TP3-10.5	26-Aug-93	10.5	15	190	23	<0.5	<0.005	<0.005	<0.005	<0.005
TP4-4.5	21-Sep-93	4.5	<10	83	<10	<0.5	<0.005	<0.005	<0.005	<0.005
Soil Borings										
SB-2-4.5	17-Jun-93	4.5	<200	8300	1400	NA	NA	NA	NA	NA
SB2-11.0	17-Jun-93	11.0	200	1500	450	26	<0.005	0.25	0.23	0.86
SB-3-7.5	17-Jun-93	7.5	<10	110	<10	NA	NA	NA	NA	NA
SB-5-4.5	17-Jun-93	4.5	<200	6200	1100	NA	NA	NA	NA	NA
SB-5-7.5	17-Jun-93	7.5	300	3300	900	NA	NA	NA	NA	NA
SB5-10.0	17-Jun-93	10.0	40	270	96	NA	NA	NA	NA	NA
SB-6-4.5	17-Jun-93	4.5	250	12000	2000	NA	NA	NA	NA	NA
SB-6-7.5	17-Jun-93	7.5	250	1600	850	110	<0.005	0.94	0.8	2.8
SB-7-4.5	17-Jun-93	4.5	12	610	66	NA	NA	NA	NA	NA
SB-7-7.5	17-Jun-93	7.5	<10	680	32	NA	NA	NA	NA	NA
SB-8-7.5	17-Jun-93	7.5	<10	140	<10	NA	NA	NA	NA	NA
SB-9-7.5	17-Jun-93	7.5	22	350	48	NA	NA	NA	NA	NA
SB9-10.5	17-Jun-93	10.5	340	2800	850	240	0.35	2.0	2.0	8.2
SB10-7.5	17-Jun-93	7.5	35	1700	97	NA	NA	NA	NA	NA

Data entered by MEK/11,12,19 Oct 93 Data proofed by MEK/11,12,19

NA - sample not analyzed for that particular compound

TPHd - Total petroleum hydrocarbons as diesel by EPA Method 3550 TPHg - Total petroleum hydrocarbons as gasoline by EPA Method 5030 TPHmo - Total petroleum hydrocarbons as motor oil by EPA Method 3550 Oil and grease by Standard Method 5520 E, F Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020

One milligram per kilogram is equivalent to one part per million.

Analyses performed by Anametrix Laboratories, San Jose, California.

#### TABLE 2 ANALYTICAL RESULTS FOR SOIL SAMPLES COLLECTED DURING EXCAVATION BEACH STREET AREA, OAKLAND, CALIFORNIA

(concentrations reported in milligrams per kilogram [mg/kg]) 

Sample ID	Date	Depth	Notes	TPHđ	Oil & Grease	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes
STANKB1-11.5	31-Aug-93	11.5	(1)	<10	190	<10	3	<0.005	<0.005	<0.005	0.033
NSTANKB2-12	31-Aug-93	12.0	(1,2)	200	2200	540	31	<0.005	<0.005	<0.005	0.16
B4-9.0	01-Sep-93	9.0	(1)	150	1300	290	35	<0.005	0.062	0.056	0.63
B5-8.5	01-Sep-93	8.5	```	<10	33	<10	(300) <sup>2</sup>	<0.005	<0.005	<0.005	<0.005
B19-13.0	10-Sep-93	13.0		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B23-14	16-Sep-93	14.0		150	730	220	<0.5	<0.005	<0.005	0.015	0.046
SW1-6	01-Sep-93	6.0	(1)	630	6700	980	120	<0.005	0.34	0.39	3.2
SW2-7.5	01-Sep-93	7.5	(1)	<10	90	<10	300	<0.005	<0.005	<0.005	<0.005
SW6-7.5	02-Sep-93	7.5	(1)	720	2300	1200	73	<0.005	<0.005	<0.005	0.27
sw7-10.5	02-Sep-93	10.5	čίί	75	220	120	18	<0.005	<0.005	<0.005	<0.005
SW8-10-5	02-Sep-93	10.5	ζij	510	3000	1000	(300)		<0.005	<0.005	0.85
SW11-8	10-Sep-93	8.0	ίij	200	730	190	16	<0.005	0.013	<0.005	0.034
SW12-12	10-Sep-93	12.0	• • •	<10	63	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SS13-7.0	10-Sep-93	7.0		<10	67	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SS14-12	10-Sep-93	12.0		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
S\$15-8.0	10-Sep-93	8.0	(1)	100	2500	_190	0 <u>.39</u> _	<0.005	<0.005	<0.005	0.39
SW25-15	17-Sep-93	15.0	(1)	(1700)	9700>	(2200)	<b>420</b>	<0.005	<0.005	<0.005	<0.005
SW26-4.0	17-Sep-93	4.0	(1)	58	1000	170	23	0.08	0.12	<0.005	0.28
sw27-13	17-Sep-93	13.0		<10	190	<10	<0.5	<0.005	<0.005	<0.005	<0.005
ss29-4.0	17-Sep-93	4.0		110	2400	260	<0.5	<0.005	<0.005	<0.005	<0.005
ss28-13	17-Sep-93	13.0		<10	270	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SS32-4.0	20-Sep-93	4.0	(1)	36	220	48	5.2	<0.005	<0.005	<0.005	<0.005
ss33-4.0	20-Sep-93	4.0		<10	120	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW40-5	12-0ct-93	5.0		160	1100	340	1.4	<0.005	0.011	0.012	3.5
sw42-5	12-0ct-93	5.0		980	5000	1600	270	<0.50	<0.50	3.5	14

Data entered by MEK/11,12,18 Oct 93 Data proofed by WEN 14/18

TPHd - Total petroleum hydrocarbons as diesel by EPA Method 3550 TPHg - Total petroleum hydrocarbons as gasoline by EPA Method 5030 TPHmo - Total petroleum hydrocarbons as motor oil by EPA Method 3550 Oil and grease by Standard Method 5520 E, F Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020

One milligram per kilogram is equivalent to one part per million.

This table contains only samples that represent soils that were excavated as part of remedial activities at the site. They do not represent in-place soils. Please refer to Table 3 for results for soil left in place.

Analyses performed by Anametrix Laboratories, San Jose, California.

(1) The concentration reported as gasoline is primarily due to the presence of a heavier petroleum product of

hydrocarbon range C9-C14, possibly diesel fuel.

0.0044 mg/kg of cis-1,2-dichloroethene and 0.0049 mg/kg of trichloroethene detected using EPA Method 8010. Other 8010 compounds were not detected.

TABLE 3
ANALYTICAL RESULTS FOR FINAL EXCAVATION SOIL SAMPLES
BEACH STREET AREA, OAKLAND, CALIFORNIA
(concentrations reported in milligrams per kilogram [mg/kg])

******			========		=========		:======		.========	*********	=======
Sample					oil &					Ethyl-	Total
ID	Date	Depth	Notes	TPHd	Grease	TPHmo	TPHg	Benzene	Toluene	benzene	Xylenes
NTANK 83-11.5	31-Aug-93	11.5		<10	<30	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B6-8.5	01-Sep-93	8.5		<10	30	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B7-12	07-Sep-93	12.0		<10	<30	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B8-15	07-Sep-93	15.0		73	420	91	8.7	<0.005	<0.005	0.031	0.070
B9-17	07-Sep-93	17.0	(1)	31	190	63	5.6	0.12	0.16	0.18	0.19
B11-8	08-Sep-93	8.0		<10	40	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B12-13	08-Sep-93	13.0		<10`	53	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B10-9	08-Sep-93	9.0	•	<10	<30	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B13-12	09-Sep-93	12.0		<10	240	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B14-15	09-Sep-93	15.0		<10	90	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B15-16.5	09-Sep-93	16.5		40	140	98	<0.5	<0.005	<0.005	<0.005	<0.005
B17-14	10-Sep-93	14.0		<10	73 67	<b>₹10</b>	<0.5	<0.005	<0.005	<0.005	<0.005
B18-15.0	10-Sep-93	15.0		<10	67 43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
816-12	10-Sep-93	12.0		<10 <10	230	<10 <10	<0.5 <0.5	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
822-14 821-13	13-Sep-93	14.0 13.0		<10	220	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B24-14.5	13-Sep-93 16-Sep-93	14.5		<10	73	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B27-10.0	23-Sep-93	10.0		18	43	11	<0.5	<0.005	<0.005	<0.005	<0.005
B28-10.0	23-Sep-93	10.0		<10	67	31	<0.5	<0.005	<0.005	<0.005	<0.005
B20° 10.0	50-36b-33	10.0		110	01	<b>3</b> 1	10.5	10.005	10.003	10.003	10.005
SN4-7.5	01-Sep-93	7.5		<10	53	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SN3-7.0	01-Sep-93	7.0		<10	60	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW5-8.0	01-Sep-93	8.0		<10	67	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SN10-7	08-Sep-93	7.0		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SN9-7.5	08-Sep-93	7.5		<10	47	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE17-10.0	13-Sep-93	10.0		<10	63	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE18-8.0	13-Sep-93	8.0		<10	210	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE16-7.0	13-Sep-93	7.0		<10	210	<10	<0.5	<0.005	<0.005	<0.005	<0.005
\$\$-15-8.0R	13-Sep-93	8.0		<10	73	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE19-4.0	15-Sep-93	4.0		<10 <10	90	13	0.6	<0.005	<0.005	0.008	0.03
SE22-5.0	16-Sep-93	5.0		<10	160 87	<10 <10	<0.5 <0.5	<0.005	<0.005	<0.005	<0.005
SE21-6.5	16-Sep-93	6.5 7.5		<10	120	<10	<0.5	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
\$E23-7.5 \$N24-5.0	16-Sep-93 17-Sep-93	5.0		<10	220	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE30-4.5	17-Sep-93	4.5		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SS31-4.0	20-Sep-93	4.0		<10	120	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW37-4.0	23-Sep-93	4.0	(1)	44	430	86	3.1	<0.005	<0.005	0.022	0.081
SS35-5.0	23-Sep-93	5.0	(1)	<10	77	11	<0.5	<0.005	<0.005	<0.005	0.013
\$\$36-6.0	23-Sep-93	6.0		<10	150	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW38-5	12-0ct-93	5.0		<10	650	12	<0.5	<0.005	0.007	0.010	0.017
sw39-10	12-Oct-93	10.0		. <10	280	12	0.51	<0.005	<0.005	<0.005	0.036
SW41-10	12-0ct-93	10.0	(2)	/ 290	790	460	7.6	<0.012	<0.012	0.044	0.110
SW43-10	12-Oct-93	10.0	(2)	2710	1300	1400	100	\ \<0.5	<0.5	1.7	5.6
SW-40-5R)	18-Oct-93	5.0	(1,2,3)	710	74100	(1300)	7.38	<0.025	0.14	0.76	3.0
SW-42-5R	18-Oct-93	5.0	(1,2,3)	750	1700	1300	68/	<0.12	0.13	0.22	1.2
	,,		,.,.,	لِينِينِ	·		\			V	

Data entered by MEK/11,18,20 Oct 93

TPHd - Total petroleum hydrocarbons as diesel by EPA Method 3550 TPHg - Total petroleum hydrocarbons as gasoline by EPA Method 5030 TPHmo - Total petroleum hydrocarbons as motor oil by EPA Method 3550 Oil and grease by Standard Method 5520 E, F Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020

One milligram per kilogram is equivalent to one part per million.

Analyses performed by Anametrix Laboratories, San Jose, California.

- (1) The concentration reported as gasoline is primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.
- (2) Concentrations reported exceed Site Cleanup Goal.
- (3) Collected along property line.

# TABLE 4 ANALYTICAL RESULTS FOR SOIL SAMPLES COLLECTED FOR PROPOSED ON-SITE BACKFILL MATERIAL V BEACH STREET AREA, OAKLAND, CALIFORNIA

(concentrations reported in milligrams per kilogram [mg/kg])

Sample ID	Date	Depth	TPHd	Oil & Grease	TPHmo	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes
F\$1-1.5	24-Aug-93	1.5	<10	60	<10	<0.5	<0.005	<0.005	<0.005	<0.005
FS2-1.5	24-Aug-93	1.5	<10	47	<10	<0.5	<0.005	<0.005	<0.005	<0.005
FS3-1.5	24-Aug-93	1.5	<10	$(\widehat{n})$	<10	<0.5	<0.005	<0.005	<0.005	<0.005
FS4-1.5	24-Aug-93	1.5	<b>&lt;10</b>	57	<10	<0.5	<0.005	<0.005	<0.005	<0.005
F\$5-1.5	24-Aug-93	1.5	<10	40	<10	<0.5	<0.005	<0.005	<0.005	<0.005

#### Data entered by MEK/19 Oct 93 Data proofed by MEK 10/19/94

TPHd - Total petroleum hydrocarbons as diesel by EPA Method 3550

TPHg - Total petroleum hydrocarbons as gasoline by EPA Method 5030

TPHmo - Total petroleum hydrocarbons as motor oil by EPA Method 3550

Oil and grease by Standard Method 5520 E, F

Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020

One milligram per kilogram is equivalent to one part per million.

Analyses performed by Anametrix Laboratories, San Jose, California.

TABLE 5
RESULTS OF FIELD DENSITY TESTS
BEACH STREET AREA, OAKLAND, CALIFORNIA

Date	Test Number	Location	Approximate Elevation below Final Grade (feet)	Dry Density (pct)	Moisture Content (% dry wt.)	Percent Relative Compaction (% of max. dry density	Specified Percent Relative ) Compaction	Comments
30-Sep-93	1	Excavation	11.0	117.8	11.3	93	90	
04-0ct-93	2	Excavation	9.5	118.5	9.2	94	90	
	3	Excavation	10.0	114.4	12.2	90	90	
	4	Excavation	7.0	120.4	10.2	95	90	
	5	Excavation	7.5	114.2	11.6	90	90	
	6	Excavation	8.0	117.0	11.9	92	90	
05-0ct-93	7	Excavation	3.5	117.1	10.9	92 95 93	<b>95</b> .	
	8	Excavation	5.0	120.5	12.2	95	90	
	9	Excavation	4.5	117.7	12.8	93	95 95	
	10	Excavation	3.5	121.0	12.7	95	95	retest of #7
	11	Excavation	4.5	120.2	9.5	95	95	retest of #9
12-0ct-93	12	West Wall 1	12.0	115.3	11.9	91	90	
	13	West Wall 1	10.0	114.2	11.3	90	90	
	14	West Wall 1	8.0	121.2	12.8	96	90	
	15	West Wall 1	7.0	115.3	13.6	91	90	
	16	West Wall 1	6.5	115.8	13.0	91	90	
	17	West Wall 1	6.0	117.1	11.2	92	90	
13-0ct-93	18	West Wall 1	5.0	112.5	11.5	89	90	
	19	West Wall 1	5.0	121.5	11.5	96	<b>9</b> 0	
	20	West Wall 1	5.0	114.7	13.0	<u>91</u>	90	retest of #18
	21	Excavation	3.0	119.9	11.4	95	95	
	22	Excavation	3.5	122.3	11.1	97	95	
14-0ct-93	23 24	Excavation	2.0	122.1	12.4	96	95	
	24	Excavation	1.5	119.8	10.2	95	95	
	25	Excavation	1.5	128.2	8.6 11.3	100	<del>9</del> 5	
	26	Excavation	1.0	122.6	11.3	97	95	
	27	Excavation	0.0	116.5	11.8	92	95 95 95 95 95 95	
	28	Excavation	0.0	116.3	12.5	92	95	
	29	Excavation	0.0	121.2	9.5	96	95 95	retest of #27
	30 31	Excavation	0.0	124.3	10.1	98 92	95 95	#20
	31	Excavation	0.0	116.1	10.6	ΥZ	95	retest of #28
18-0ct-93	32	West Wall 2	5.0	119.1	12.9	94	90	
	33	West Wall 2	2.0	116.8	11.8	92	95 95	
	34	West Wall 2	2.0	120.0	11.6	95	95	retest of #33
19-0ct-93	35	Excavation	0.0	123.3	11.1	97	95	retest of #31
	36	West Wall 2	0.0	114.9	12.7	<u>91</u>	95	<u>.</u>
	37	West Wall 2	0.0	123.1	11.0	97	95	retest of #36

#### NOTES:

Test locations were chosen at random.

West Wall 1 refers to the backfill placed in the west wall reexcavation 15 feet below ground (fbg) to 5 fbg. From 5 fbg to grade the fill was placed and worked over the full excavation area.

West Wall 2 refers to backfill placed in the west wall second reexcavation (7.5 fbg to grade).

The excavation was backfilled with onsite light brown sandy silty clay with gravel (maximum density by ASTM DI557-78: 126.7 pcf and optimum moisture content: 9.4%).

Data input by MEK/19 Oct 93

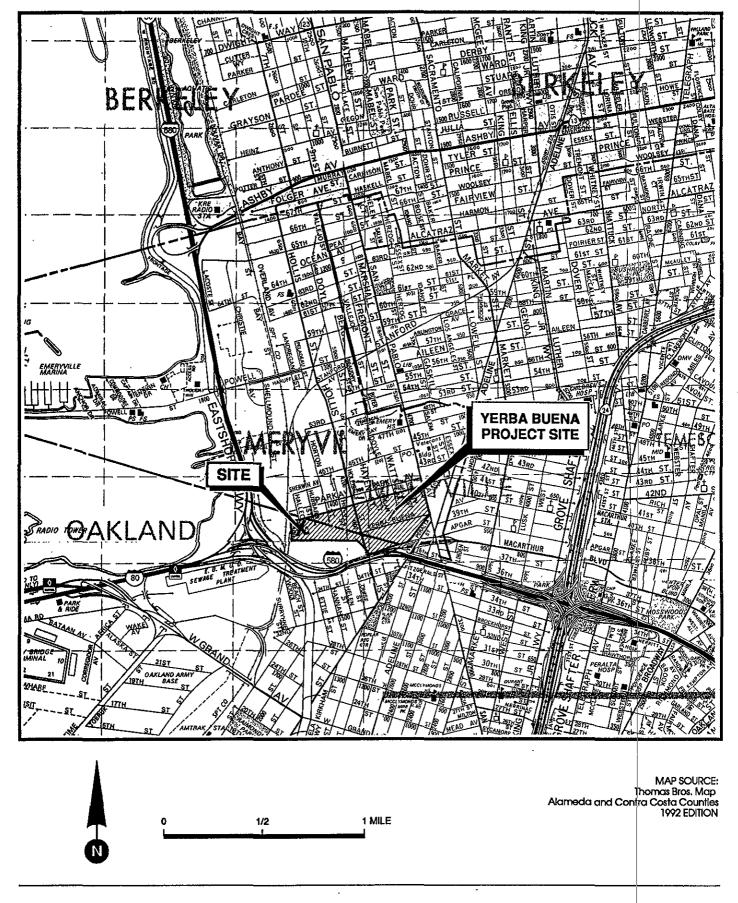
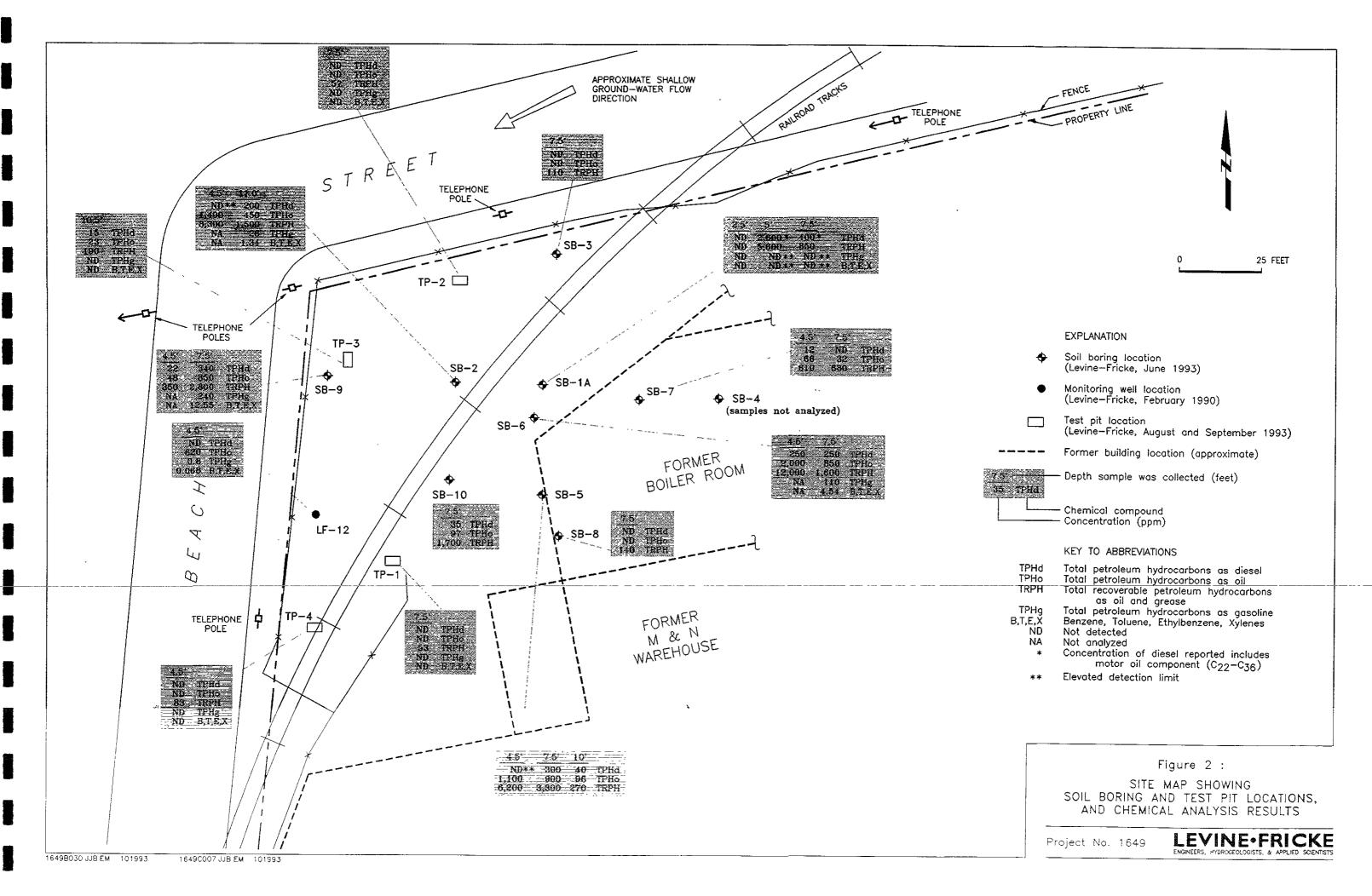
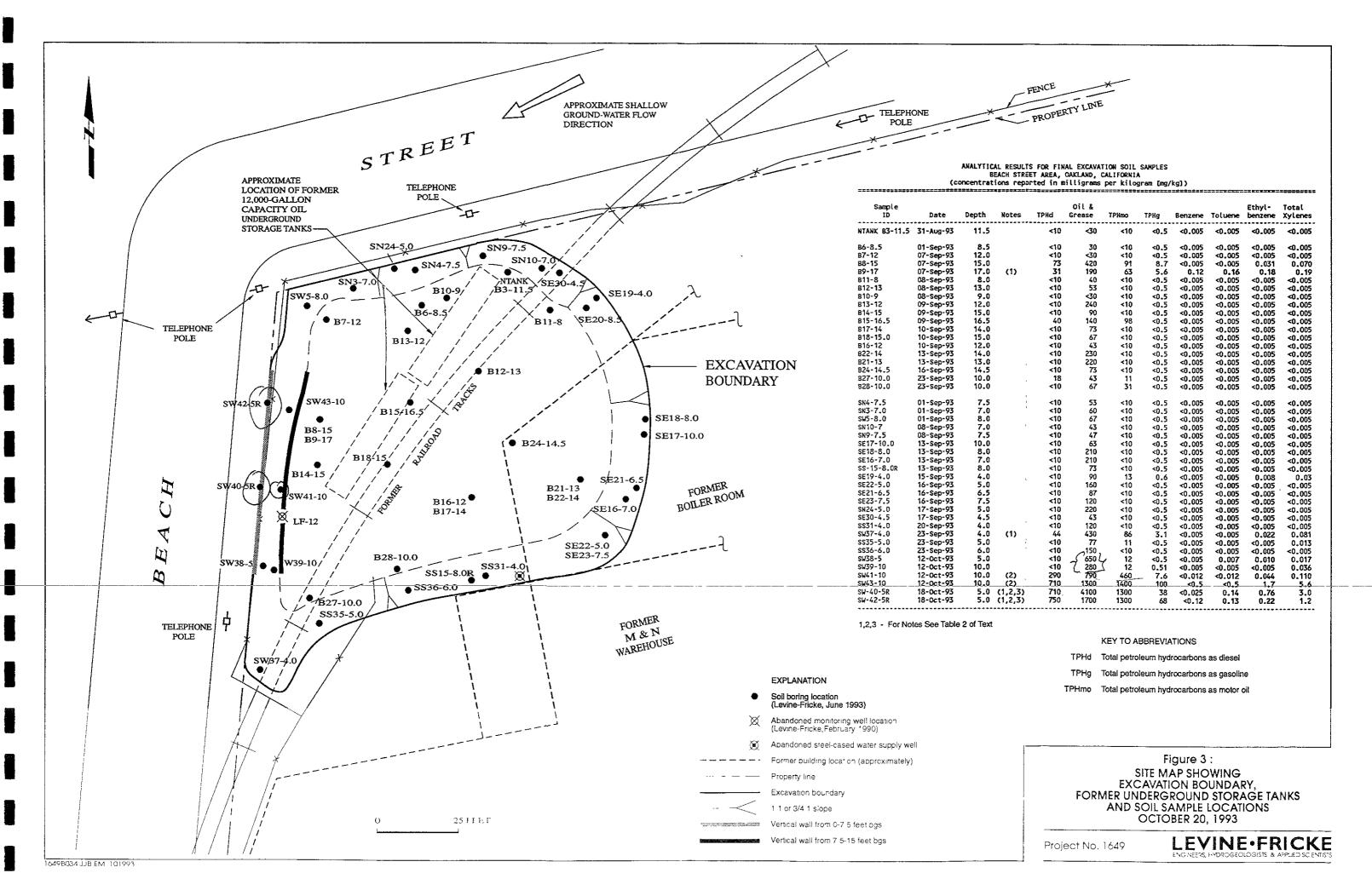


Figure 1: SITE LOCATION MAP

Project No. 1649.16

LEVINE-FRICKE ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS





#### APPENDIX A

HAZARDOUS WASTE MANIFESTS
AND CERTIFICATE OF TANK DISPOSAL

Signature

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Day

Year

Month

#### See Instructions on back of page 6.

Department of Toxic Substances Contro

print or type. Form designed for	or use on elite (12-pite	th) typewriter.					Sac	tramento, Calif	ornia
UNIFORM HA	ZARDOUS	1. Generator's l	JS EPA ID No.	Manifest Docume	nt No.	2. Page 1		n the shaded ad by Federal	
WASTE MA	NIFEST	CIAID 1918	3356574	6 341	1911	[of]	1	, , , , , , , , , , , , , , , , , , , ,	
3. Generator's Name and	Mailing Address	~ · · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,	<u> </u>	A Strile	Manifest Excument	Comber		
Cate !!!! De	18/30 WELL	איניו ווגקונט							
201 M155101 4. Generator's Phone (4)	Street, S	an trainers	(0,CA 94/05)			Generalor (10 m)			3 5 5
		<u>4500                                   </u>							Landing
5. Transporter 1 Company		and name	6. US EPA ID Number		Sicilate	Transporters (U.)			
EVERGREEN EN	TEL MANGEMENT	"ENVIORS	leraini 9181618	3 19 15 17 16 14	D Trans	orlands a grade of			
7. Transporter 2 Company	Name		8. US EPA ID Number	- IV IV IV IV	E Sale	Fairsporter (LID)			
				1 1 1 1 1 1	fire Trains	oner Distant			
9. Designated Facility Nam	ne and Site Address	····	10. US EPA ID Number			Foreign (D)			
Evantate fault					12.46				
6000 Smith Aver	He	•			H. Focili	Million (Control	V2-12-5-13	W 578	79.48 P. X.
Newark, CA 945	<del>3</del> 0		C A D 9 8 0 1			202.15.25.25.2	a se se se se se se se		
11. US DOT Description (in	cluding Proper Ship	ping Name, Hazar	d Class, and ID Number)	12. Co	ntainers Type	13. Total Quantity	14. Unit	West No	
a					1.77			ileita (* 1	
X Williams	ASAMARON-IN	<del>nUUUU WA S</del> TE	1		ŀ				
	ELIOUID, HA-12			0 0 11			G		
b.	17 10000110 14k	OTE LIQUID						ijaji	i.
NON-ISONA A	AZARDOUS WA	STE CIUCID		0.0.4	7.7	. ا فبند دوس		PA7Omates	(6)(15)
				0 0 1	111	2114/00	G		
с.									40000
				1 1	1			PA/Offer	
d.			· · ·	·	<del> </del> -				100
`				1   1	1			PA/Oher	dici areas
TACCION ESCRICT	Magas Isl	likvi i i i			Kallend	ng Codes for Was	17.77		Me di com
Section of the Section									
						Sold sold service and service			1000000
15. Special Handling Instru	ctions and Addition	al Information			T COMPANY OF THE PARTY OF THE P				C. 36 (12)
Wear Rubber Gloves	: 24 hour emer	isu <b>ch te</b> zbouse	510- <b>795-4400</b> Eme	rgency contact-Ki	rk Haywa	rd DOT Guide	s <b>#</b> 27		
							į		
J. 6 5,	K. Beach	Street	Energy, lle						
16. GENERATOR'S CERT	FICATION: I hereb	y declare that the c	ontents of the consignment	are fully and accurate	ly described	above by proper	shipping name	and are clas	sified,
packed, marked, and	abeled, and are in a	all respects in prop	er condition for transport by	highway according to	applicable	e tederal, state and	international I	aws.	
If I am a large quant	ty generator, I cert	ify that I have a p	rogram in place to reduce	the volume and toxi	city of was	te generated to the	e degree I hav	e determined	to be
economically practical threat to human health	le and that I have : and the environme	elected the practic int: OR, if I am a	able method of treatment, small quantity generator, I	storage, or disposal o have made a good f	urrently av aith effort	ailable to me which to minimize my wa	n minimizes the iste generation	present and and select th	tuture ie best
waste management me			can afford.						
Printed/Typed Name	. 1		Signature /	In the day	, * T	1 19/1	Month	Day	Year
17. Tronsporter 1 Acknowle	化しくこへ edgement of Receip	of Materials	1 000	111 11V477513500		( 19 1 - 4 1	1 7 1		<u>.l</u>
Printed/Typed Name	ı		Signature		ş		Month		Year
E. Land			.3		-	y a.—	_ ( `		
18. Transporter 2 Acknowl Printed/Typed Name	edgement of Receipt	of Materials	Signature				Month	Day	Year
rimed/typed Name			Signatore					1 1	
19. Discrepancy Indication	Space								<del></del>
							i		
							İ		!
00 5 28 0		and a Character		to	nead to be	w 10			
20. Facility Owner or Open Printed/Typed Name	aror Cerniication of	receipt of hozard	Signature	is manifest except as r	roled in Itel	<u>,, 17</u>	Month	Day	Year
								1	l 1

DO NOT WRITE BELOW THIS LINE.

CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802:

#### See Instructions on back of page 6.

Department of Toxic Substances Con Sacramento, California

~ р.	in or type term designed to test on this (12 pitch) type in inter-				000	differito, Car	ornia
↟	' UNIFORM HAZARDOUS	Ys US EPA ID No.	Manifest Document No.		information in s not required		
1	WASTE MANIFEST	783585746	82585	of /		•	
l	3. Generator's Name and Mailing Address Late III., Development Corporation 201 M. Sound Street, San France	cation	Apstone	Mentes Designants			
	201 Missey Charles San Error	14 94100	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	1.00			
	4. Generator's Phone (1/3) 774 4 3	Column 1 314 v	B. State	Cenergions ID 4 - 196-		4.5	
	5. Transporter 1 Company Name	6. US EPA ID Number		Transporters ID 506			
li	3. Transporter i Company Name	o. US EPA ID Number	(6,2).016	Urane one (U		500	
	TRIDENT TRUCK LINE, INC.	-CIAID191812141	8 4 3 7 0 D Trons	conter s Phone Transporter al De			
	7. Transporter 2 Company Name	C A D 9 8 2 4 8. US EPA ID Number	Fichique	iranoponera (Dr): 33			
		1111111	l I I I Estions				
	9. Designated Facility Name and Site Address	10. US EPA ID Number	G&State	serie danca Lealing (P		(2)	
-	ERICKSON, INC.			अध्यक्षिता स्वार्थक			
į	255 PARR BBVD.		/ Hy Focili	gratine in			
	KICHMOND, CA 94801	C A D 0 0 9 4	6 6 3 9 2				
	11. US DOT Description (including Proper Shipping Name, Ha	zard Class, and ID Number)	12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol		
	α						12000
	WASTE EMPTY TANK NON-RCRA HA	ZARDOUS WASTE SO			818		776
			OOITP	1171000	P	(ye.i.t.)	
١	b. ·	•	-		180	306	
					13.	(V/GHPI-DI)	
١		· · · · · · · · · · · · · · · · · · ·					MENDEL
	c.						
						/AV/Giller/Str	
	d.			<del>├──┴──┴──┆</del>	··-		6.5
٠	-					i de la companya da	
				1	E	AV/Orleans	
1	ii dilineri (Ciripire (Cidine i pinetre Arm		an a said and a said and	ng Codes for Wases	(fision /albace		
						使分析	
1							
			Contract of the Contract				
	15. Special Handling Instructions and Additional Information		i versione de la company d	K venade St. 1911 St. Kerkerika Li			and the late
	KEEP AWAY FROM BOURCES OF IGNIT	ION. ALWAYS WEAR	HARDHATS AND	GLASSES WH	EN WORR	TNA	
1	AROUND UNDERGROUND STORAGE TANK	S. 24 HR. CONTAC	IT MAKE: Trum	on Brothe		****	
١	AND PHONE:	JOD Marshy	Peach Street	Eurosy 11th			
Ì	16. GENERATOR'S CERTIFICATION: I hereby declare that the	e contents of the consignment are	fully and accurately described	l above by proper ship	pping name c		ified,
ı	packed, marked, and labeled, and are in all respects in pr	oper condition for transport by hig	hway according to applicable	e federal, state and in	ternational lav	ws.	
	If I am a large quantity generator, I certify that I have						
١	economically practicable and that I have selected the pro- threat to human health and the environment; OR, if I am						
ļ	waste management method that is available to me and that	t I can afford.	<u> </u>		3		
ı	Printed/Typed Name Williams Address and Ad	Signature	CK & King AT	1. 1 9. 11 L	Month	Day	Year LØ ∟ ∃
+	17. Transporter 1 Acknowledgement of Receipt of Materials	(11 (347))	2 2 1	( Mar 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 *2	1,000	11 1
t	Printed/Typed Name	Signature		F.	Month	Day	Year
	FLOYD NUILA	- I want to	and That	er	0 8	311	5 3
1	18. Transporter 2 Acknowledgement of Receipt of Materials	(6)			<b></b>		
l	Printed/Typed Name	Signature	4		Month	Dary 1 i	Year I ı
1	19. Discrepancy Indication Space				<u>_l</u>	1. 1	<u> </u>
	, , ,				İ		
			•				
			-				
ŀ	<ol> <li>Facility Owner or Operator Certification of receipt of haza Printed/Typed Name</li> </ol>	rdous materials covered by this ma Signature	anifest except as noted in Item	n 19.	Monelé	D~.	V
	· ····································	Signatore			Month	Dany i .	Year ı :
1							

## See Instructions on back of page 6.

Department of Toxic Substances Co

- P	and or type:						oacro	mento, Cal	itornia
1	UNIFORM HAZARDOUS WASTE MANIFEST	PAID NO. / 5151815171416	Manifest Documen		2. Page 1			the shaded by Federa	
	3. Generator's Name and Mailing Address  Cata for Development Cap Co  201 March 19 Year Strategy Co  4. Generator's Phone (4.) 974-477	ration A 9410s			Aufter Commission Substitution In 1881 1981				
	5. Transporter 1 Compony Name 6.	US EPA ID Number		C Sign	Transporter (10 th)	100		1600	7/
	TRIDENT TRUCK 1.INE, INC. C	A D 9 8 2 4 8 US EPA IO Number	3 4 3 70	2) ((P)()				ál.	
	S.		1 1 1 1						
	•	US EPA ID Number		20 92 30 30	gallová (B)				
	ERICKSON, INC. 255 PARR BLVD. RICHMOND. CA 94801	l N D d d d d s	ાં લેવ લેટ						
	11. US DOT Description (including Proper Shipping Name, Hazard Cla		12. Cont No.	tainers Type	13. Total Quantity	14 11	# BUS	de la Ciri	) (1:1)
G	o. EMPTY TANK NON-RCRA HAZARDOUS	WASTE SOLID	الصام	ק ויי	117101010			//o.j/:	
7 E R	ь.						(4)	<b>7(•</b> )]}.	
A T D	c.						Signatura GRZ	/office	
	d.						1840		
	the designation of the control of the first of the first of the control of the co			ke Atomeni	or Cata (Caves)				
	15. Special Handling Instructions and Additional Information KEEP AWAY FROM SOURCES OF IGNITION AROUND UNDERGROUND STORAGE TANKS.	24 HR. CONT	ACT NAME	:/_	1890 D/ 1	MHEN	VO!	KING	
	AND PHONE: 48	ts of the consignment are ful	by Site	described	above by proper st	hipping	rame an	d are clas	sified,
	packed, marked, and labeled, and are in all respects in proper con- lf I am a large quantity generator, I certify that I have a progra- economically practicable and that I have selected the practicable in threat to human health and the environment; OR, if I am a small waste management method that is available to me and that I can a	im in place to reduce the v method of treatment, storag quantity generator, I have:	olume and toxicit	y of waste	generated to the	degree minimize	I have o	determined	future
	Printed Typed Name William III ad Lon	Signature No.	Scary A.	Punt.	Tr.		ionth	Day	Year
	17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature				^	onth	Day	Year   3
	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature					onth	Day	Year
	19. Discrepancy Indication Space			· · · · · · · · · · · · · · · · · · ·					
	20. Facility Owner or Operator Certification of receipt of hazardous me		fest except as not	ted in Item	19.				
	Printed/Typed Name	Signature				"	onth	Day 	Year

DO NOT WRITE BELOW THIS LINE.

m,0	or type. Form designed for use on elite (12-p		US EPA ID No.	Monite	st Document	No.	2. Page 1	Information	in the shaded a	
	UNIFORM HAZARDOUS			*					ed by Federal I	
	. WASTE MANIFEST		835857	14/0/8/	215 1		of	e (14 ke bioléo) je	VAYA SAME	Mary S
3	Generator's Name and Mailing Address Latelly & Developmen	it Corpon	a tion		ĺ			(e) // p		
	201 Mission Street	San France	isco, CA 9410	05						1
4	I. Generator's Phone (4/5) 974-	4500								1
	. Transporter 1 Company Name	. / <u>V</u>	6. US EPA ID Num	iber			and the second	Cox	94 ( S. 30)	
	DETERM TRUCK ITHE IN	IC .	ICIAIDI9181	21418141	31710	A			The Court of	
	TRIDENT TRUCK LINE, IN 7. Transporter 2 Company Name		C   A   D   9   8   8. US EPA ID Num	nber	91.1.	eswarer a				
	•									
	P. Designated Facility Name and Site Address ERICKSON, INC.	oss	10. US EPA ID Num	MD <del>a</del> t				OU ALS	arana.	
	255 PARR BLVD.	•			_					
ľ	RICHMOND, CA 94801		[C[A]D[0]0]	9 4 6 6			Company of the second second	14. Unit		
	1. US DOT Description (including Proper S	hipping Name, Haz	zard Class, and ID Numb	ber)	12. Cont	Type	13. Total Quantity	Wt/Vol		
·	a.									a t
	WASTE EMPTY TANK NO	N-RCRA HA	AZARDOUS WAST	re solid		m . D	عاستمالا الا	,		7) 1
					dal	1   1	lizidok	P		187
	b.									1 (21) 1 (23)
					1 1		+111			
-	<u> </u>								Sp. 0	
1	-								3///6	
								<del>- </del>		120
_	d.									
					11	ı	1111			
	The second of the second of the second			N. / YE /						
								23.5	Contract States	
		Links	1.000 (0.0)		6-5		3-14-16-18-18-18-18-18-18-18-18-18-18-18-18-18-		100	e.
	Samuel Control of the Control of the	Willy Vary	A Company of the Company							
The same of the	richina (n. ) Santania (n. ) 1970: USBN Hardenski (n. ) 1887: USBN Hardenski (n. )	Willy Vary	A Company of the Company		( ) ( ) ( ) ( ) ( )	(caravy				
	and the street of		A Company of the Company			(carayy	oden (*)			
I	15. Special Hondling Instructions and Addit KEEP AWAY FROM SOURCE	ional Information S OF IGNIT	ARY TGEORE	1990) (CA S WEAR H	ARDHA'T	s and	GLASSES	WHEN WO	ORKING	1 1 1 1
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE AROUND UNDERGROUND ST	ional Information S OF IGNIT DRAGE TANK	ARY TGEORE	GOOD CA S WEAR H	ARDHA'T	s and	GLASSES PP Brot	when wo	ORKING	
	15. Special Hondling Instructions and Addit KEEP AWAY FROM SOURCE AROUND UNDERGROUND ST AND PHONE:	ional Information S OF IGNIT DRAGE TANK	FION. ALWAYS	S WEAR H. CONTACT I	ARDHAT NAME:	s AND Trum Street	Emery 1	hers ille	· · · · · · · · · · · · · · · · · · ·	ssifi
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND ST AND PHONE:	ional Information S OF IGNIT DRAGE TANK	FION. ALWAY:	S WEAR H. CONTACT	ARDHAT NAME:	S AND Thum STreet	EMERY I	hers lille er shipping no	me and are clas	ssifi
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE:  AROUND UNDERGROUND STOME TO THE T	ional Information SOF IGNIT ORAGE TANK 9-4801 Interpretation of the property of the property in proper	TION. ALWAY  KS. 24 HR.  the contents of the consignation for trans	S WEAR H. CONTACT Verme! for	ARDHAT NAME: DEACA	S AND Thum STreet ly described applicable	Emery L d above by prope e federal, state or	K-LCS W/ke or shipping na and international	me and are classal laws.	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STO AND PHONE: 40 77  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are  If I am a large quantity generator, I	ional Information S OF IGNIT ORAGE TANK 9-4801 Interpretation all respects in proceedings of the process of the	FION. ALWAY  KS. 24 HR.  The contents of the consignation for trans  a program in place to	S WEAR H. CONTACT Johnson are fully of sport by highway reduce the volu	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	Emery L d above by prope e federal, state are te generated to the	ALCS  MIR  or shipping na  nd internation  the degree the minimizes	me and are class at laws.	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STOM AND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are  If I am a large quantity generator, I economically practicable and that I had the burgen health and the environment to human health and the environment.	ional Information S OF IGNIT ORAGE TANK 1 TA	TION. ALWAY:  KS. 24 HR. Job/  the contents of the consignoper condition for trans a program in place to acticable method of treating or small guantity generation or small guantity generation.	S WEAR H. CONTACT Johnson are fully of sport by highway reduce the volu	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	Emery L d above by prope e federal, state are te generated to the	hers Mile or shipping na nd internation the degree t ich minimizes waste generat	me and are class al laws. have determined the present and ion and select t	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STO AND PHONE: 40 77  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are  If I am a large quantity generator, I	ional Information S OF IGNIT ORAGE TANK 1 TA	TION. ALWAY:  KS. 24 HR. Job/  the contents of the consignoper condition for trans a program in place to acticable method of treating or small guantity generation or small guantity generation.	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	Ners  (I)  (I)  (I)  (I)  (I)  (I)  (I)  (I	me and are class al laws. thave determined the present and tion and select t	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of th	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF TANK  OF	TION. ALWAY:  KS. 24 HR.  The contents of the consignoper condition for trans a program in place to acticable method of treat in a small quantity generat I can afford.	S WEAR H. CONTACT Johnson are fully of sport by highway reduce the volu	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	Emery L d above by prope e federal, state are te generated to the	Ners  (I)  (I)  (I)  (I)  (I)  (I)  (I)  (I	me and are class al laws. have determined the present and ion and select t	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE:  AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of t	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF TANK  OF	TION. ALWAY:  KS. 24 HR.  The contents of the consignoper condition for trans a program in place to acticable method of treat in a small quantity generat I can afford.	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS  IN THE PROPERTY OF THE P	me and are class at laws.  have determined the present and ion and select the property of the property of the present and ion and select the property of the present and the p	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of th	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY:  KS. 24 HR.  Job  The contents of the consignation of trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS  IN THE PROPERTY OF THE P	me and are class of laws.  thave determines the present and select the mith Day	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of the management method that is availy and management method that is availy and management of the printed/Typed Name  17. Transporter 1 Acknowledgement of Refinted/Typed Name  18. Transporter 2 Acknowledgement of Refined/Typed Name	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY  KS. 24 HR.  Job  the contents of the consignroper condition for trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and ion and select the property of the property of the present and ion and select the property of the present and the p	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of th	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY:  KS. 24 HR.  Job  The contents of the consignation of trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and solect th	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of the management method that is availy management method that is availy management of the printed/Typed Name  17. Transporter 1 Acknowledgement of Reprinted/Typed Name  18. Transporter 2 Acknowledgement of Reprinted/Typed Name	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY  KS. 24 HR.  Job  the contents of the consignroper condition for trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and solect th	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of the management method that is availy and management method that is availy and management of the printed/Typed Name  17. Transporter 1 Acknowledgement of Refinted/Typed Name  18. Transporter 2 Acknowledgement of Refined/Typed Name	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY  KS. 24 HR.  Job  the contents of the consignroper condition for trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and solect th	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of the management method that is availy management method that is availy management of the printed/Typed Name  17. Transporter 1 Acknowledgement of Reprinted/Typed Name  18. Transporter 2 Acknowledgement of Reprinted/Typed Name	ional information  S OF IGNIT  DRAGE TANK  1 A CONTROL OF A CONTROL  TO THE STANK  TO	TION. ALWAY  KS. 24 HR.  Job  the contents of the consignroper condition for trans a program in place to acticable method of treat a small quantity generat I can afford.  Signature  Signature	S WEAR H. CONTACT Verme! Inment are fully coport by highway reduce the volustment, storage, orator, I have ma	ARDHAT NAME: DOCA and accurate according to	S AND Thum STreet ly described applicable city of was	pp \$10+.  Emery 1  doove by prope sederal, state an te generated to to allable to me wh to minimize my  extended.	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and solect th	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE: 40 Printed/Typed Name  Printed/Typed Name  18. Transporter 2 Acknowledgement of Re Printed/Typed Name  19. Discrepancy Indication Space	ional information S OF IGNIT DRAGE TANK Q-480 I breby declare that to in all respects in p certify that I have save selected the pro- sament, OR, if I an ilable to me and the ceipt of Materials ceipt of Materials	PROPERTY OF THE PROPERTY OF TH	S WEAR H. CONTACT   Wunne !   Inment are fully of port by highway reduce the voluntment, storage, orator, i have ma	ARDHAT NAME: DEACh and accurate according to me and toxi or disposal of de a good	S AND Thum STreet In described applicable city of was currently averaged and the effort  Ag-	pp \$10to	ALCS INCOME  TO SHIPPING IT  THE DEGREE  THE DEGREE  THE COME  THE	me and are class at laws.  have determined the present and select to mith.  Day.  S. 3.1.  onth. Day.	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are if I am a large quantity generator, I economically practicable and that I he threat to human health and the environment of the management method that is availy management method that is availy management of the printed/Typed Name  17. Transporter 1 Acknowledgement of Reprinted/Typed Name  18. Transporter 2 Acknowledgement of Reprinted/Typed Name	ional information S OF IGNIT DRAGE TANK Q-480 I breby declare that to in all respects in p certify that I have save selected the pro- sament, OR, if I an ilable to me and the ceipt of Materials ceipt of Materials	PROPERTY OF THE PROPERTY OF TH	S WEAR H. CONTACT   Wunne !   Inment are fully of port by highway reduce the voluntment, storage, orator, i have ma	ARDHAT NAME: DEACh and accurate according to me and toxi or disposal of de a good	S AND Thum STreet In described applicable city of was currently averaged and the effort  Ag-	pp \$10to	ALCS  ILL  or shipping na dinternation the degree ich minimizes waste generat  Ma	me and are class at laws.  have determined the present and solect th	d to
	15. Special Handling Instructions and Addit KEEP AWAY FROM SOURCE: AROUND UNDERGROUND STAND PHONE:  16. GENERATOR'S CERTIFICATION: I he packed, marked, and labeled, and are seconomically practicable and that I has threat to human health and the environment of the threat to human health and the environment of the threat to human health and the environment of the printed Typed Name  17. Transporter 1 Acknowledgement of Re Printed Typed Name  18. Transporter 2 Acknowledgement of Re Printed Typed Name  19. Discrepancy Indication Space	ional information S OF IGNIT DRAGE TANK Q-480 I breby declare that to in all respects in p certify that I have save selected the pro- sament, OR, if I an ilable to me and the ceipt of Materials ceipt of Materials	PION. ALWAY  KS. 24 HR.  Job  The contents of the consignation for trans a program in place to acticable method of trea in a small quantity generat I can afford.  Signature  Signature	S WEAR H. CONTACT   Wunne !   Inment are fully of port by highway reduce the voluntment, storage, orator, i have ma	ARDHAT NAME: DEACh and accurate according to me and toxi or disposal of de a good	S AND Thum STreet In described applicable city of was currently averaged and the effort  Ag-	pp \$10to	ALCS  ILL  or shipping na dinternation the degree ich minimizes waste generat  Ma	me and are class at laws.  have determined the present and select to mith Day SI SI Donth Day	d to

A.	int or type. Form designed for use on elite (12-pitch) typewriter.  1. Generator's US EP	PAID No. Manifest Document			2. Page 1	Inform	Sacramento, Ca ation in the shade			
ſ	I INIECIPAL HAZADIOLIS				_		equired by Feder			
١.	WASIE MAINTEST CADITION	5185714168	121	8 >	of	o sono vese de de	rango o presidente do Pola de Labara de Caral de			
	3. Generator's Name and Mailing Address Contailing Development Corpor 201 Mission Street, San Francisco, C	ration		16 (30)			Since Control			
	2014 Visia Street Co Francisco C	A 04105				1	dia in C.			
	~ INISSIM BUXELSES, C	11 7 100								
	4. Generator's Phone (415) 974-4500									
	5. Transporter 1 Company Name 6.	US EPA ID Number				V	113 7/39			
	TRIDENT TRUCK LINE, INC.	A D 9 8 2 4 8	4 3 70				Variable (			
		US EPA ID Number	_1							
	, manapatra a sampany vienna				er og skallen er en br>De skallen er en er en er en en er en en en er en en en er en en en er en en en en en en en en en en en en en	5. 2.1				
							$+1$ $\sim 2$			
	.,	US EPA JD Number	•							
	ERICKSON, INC.				8 1 1 1 1 1 1 1 1	, t.	.a. 9.34 st.			
	255 PARR BLVD.	***********	(1 ) (1 )				va krije ve s			
	RICHMOND, CA 94801   C	<u> </u>	6 3 9 2 12. Con		13. Total	14. U				
	11. US DOT Description (including Proper Shipping Name, Hazard Cla	ss, and ID Number)	No.	Type	Quantity	Wi/V				
	a.									
	EMPTY TANK NON-RCRA HAZARDOUS	WASTE SOLID				]				
			001	TP	112000	P				
	ь.									
						,				
	с.									
						1	STEEN VEN			
							1387334734			
	d.									
	•									
							1, 13, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			
		AND CAN PROPERTY			类类的					
	titing a second of the second									
ì		Also to lead to the second				المستعدلة				
				the West						
i	15. Special Handling Instructions and Additional Information	and Black to act of the six of th	Appell Grant Control		The property of the stage of the					
	KEEP AWAY FROM SOURCES OF IGNITION	N. ALWAYS WEAR	HARDHA	TS AN	D GLASSES	WHE	N. WORKING			
	AROUND UNDERGROUND STORAGE TANKS.	24 HR. CONTA	CT NAME	: [	HIMPD.	1500	HOLS			
	AND PHONE: 408 779-480	Tel	Side:	Racc	h St. Eme		10			
	16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are clar packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.									
i	If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and									
1	threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the waste management method that is available to me and that I can afford.									
	Printed/Typed Name 4 t	Sanktur / /	1. 1	GEA +	for	<del></del>	Month Day			
,	William Madison	All Men West	yw "	· čot	ellus		118131			
_	17. Transporter 1 Acknowledgement of Receipt of Materials		1	7,	· • • • • · • · · · · · · · · · · · · ·					
	Printed/Typed Name	Signature	C. 1. ()				Month Day			
	RON DELLONS	I VI		10 ·		4	1181711			
	18. Transporter 2 Acknowledgement of Receipt of Materials	Signature					Month Day			
	Printed/Typed Name	orginatione				[ ]	I I I			
	19. Discrepancy Indication Space	<u> </u>								
	17. Sistispolicy indication apace					ļ				
						į				
		1								
	20. Facility Owner or Operator Certification of receipt of hazardous m	aterials covered by this manife	st except as n	oted in Ite	n 19.					
	warmen and American  7					Month Day				
	Printed/Typed Name	Signature				1 1	Monin Day			

DAY OR NIGHT TELEPHONE

## CERTIFICATE

**NO.** 17378

- (510) 235-1393	CERTIFIED SERV		IY cr	ISTOMER RUMPP BROS					
	200 Parr Boulevard • Ric	chmond, California 94801	JC	82585					
LOCATION	FOR:			10					
•	l Gastech/1314 SMPN								
Petroleum Institute au This certificate is ba	I have personally determine nd have found the condition ased on conditions existing ed subject to compliance with a	to be in accordance with at the time the inspec	h its assig tion herei	ned designation.					
	Gallon Tank		FE FOR F						
OXYGEN : REMARKS: LOWER EXI		N 0.1%							
"ERICKSON INC. HI	EREBY CERTIFIES THAT T	HE ABOVE NUMBERED T	ANK HAS	BEEN					
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS									
WASTE FACILITY.	II								
	al or atmospheric changes affecting work and contact the undersigned.								
STANDARD SAF	ETY DESIGNATION								
19.5 percent by volume; a judgment of the Inspector	nat in the compartment or space so nd that (b) Toxic materials in the at r, the residues are not capable of p ed on the Inspector's certificate.	tmosphere are within permissat	le concentra	tions; and (c) In the					
atmosphere is below 10 p not capable of producing and while maintained as o	that in the compartment so designercent of the lower explosive limit; a higher concentration that permitted directed on the Inspector's certificat spread of fire, are satisfactorily ined.	and that (b) In the judgment of ed under existing atmospheric of e, and further, (c) All adjacent	of the Inspect conditions in spaces have	tor, the residues are the presence of fire either been cleaned					
which it was issued	ative acknowledges receipt of this c	pertificate and understands the	conditions ar	nd limitations under					
REPRESENTATIVE	TITLE	ÎMSPE	CTOR						

DAY OR NIGHT TELEPHONE (510) 235-1393

### CERTIFICATE

### **CERTIFIED SERVICES COMPANY**

255 Parr Boulevard • Richmond, California 94801

**NO.** 17379

82585

CP59

CUSTOMER TRUMPP BROS

JOB NO

FOR:Erickson, IncTANK NO	
This is to certify that I have personally determined that this tank is in accordance with Petroleum Institute and have found the condition to be in accordance with its assigned. This certificate is based on conditions existing at the time the inspection herein s completed and is issued subject to compliance with all qualifications and instructions.	designation.
12000 Gallon Tank CONDITIONSAFE FOR FIR	E
OXYGEN 20.9%  REMARKS:  LOWER EXPLOSIVE LIMIT LESS THAN 0.1%	
"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BE CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZA WASTE FACILITY."	
In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical changes occur.  STANDARD SAFETY DESIGNATION  SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmost 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentration judgment of the inspector, the residues are not capable of producing toxic materials under existing atmosphere maintained as directed on the Inspector's certificate.  SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, not capable of producing a higher concentration that permitted under existing atmospheric conditions in the and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either the stop of the spector of the inspector's certificate, and further, (c) All adjacent spaces have either the stop of the spector of the inspector's certificate, and further, (c) All adjacent spaces have either the stop of the spector of the spector of the spector of the spector's certificate, and further, (c) All adjacent spaces have either the spector of the spec	or atmospheric sphere is at least s; and (c) In the heric conditions materials in the the residues are presence of fire ter been cleaned
sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been to necessary by the Inspector.  The undersigned representative acknowledges receipt of this certificate and understands the conditions and I which it was issued.  REPRESENTATIVE  TITLE  INSPECTOR	

#### APPENDIX B

#### LABORATORY CERTIFICATES FOR SOIL SAMPLES



# Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308324 Date Received : 08/20/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9308324- 1	TP1-7.5
9308324- 2	TP2-7.5

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.

Laboratory Director

Date

Me 3 0 1883

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9308324 Date Received : 08/20/93 Project ID : 1649.16 Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9308324- 1	TP1-7.5	SOIL	08/20/93	трна
9308324- 2	TP2-7.5	SOIL	08/20/93	TPHd
9308324- 1	TP1-7.5	SOIL	08/20/93	TPHgBTEX
9308324- 2	TP2-7.5	SOIL	08/20/93	TPHgBTEX

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308324 Date Received: 08/20/93 Project ID: 1649.16

Purchase Order: N/A Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Church Balmen Department Supervisor

GC/TPH- PAGE 2

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9308324
Matrix : SOIL
Date Sampled : 08/20/93

Project Number: 1649.16
Date Released: 08/25/93

	Reporting Limit	Sample I.D.# TP1-7.5	Sample I.D.# TP2-7.5	Sample I.D.# BG2301E2
COMPOUNDS	(mg/Kg)	-01	-02	BLANK
		~		

		~			 
COMPOUNDS	(mg/Kg)	-01	-02	BLANK	
		~			 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>	overy O.	96% HP12 08/23/93	110% HP12 08/23/93 1	96% HP12 08/23/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Peggle Davison 9/25/93 Analyst Davison 9/25/93 Cheurl Bulmen 5/25/25
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308324 : SOIL

Project Number: 1649.16
Date Released: 08/25/93

Matrix Date Sampled : 08/20/93

Instrument I.D.: HP9

Date Extracted: 08/23/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308324-01	TP1-7.5	08/23/93	10	ND	81%
9308324-02	TP2-7.5	08/23/93	10	ND	82%
BG23H1F1	METHOD BLANK	08/23/93	10	ND	87%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by \$CFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggle Dawson 8/26/ Analyst Davison 8/26/

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308324 Matrix : SOIL Project Number: 1649.16 Date Released: 08/25/93 Instrument I.D.: HP9

Date Sampled: 08/20/93 Date Extracted: 08/23/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308324-01	TP1-7.5	08/23/93	10	ND	81%
9308324-02	TP2-7.5	08/23/93	10	ND	82%
BG23H1F1	METHOD BLANK	08/23/93	10	ND	87%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Regale Dawson 8/26/93
Anglyst Date

Chengl Bulmer 8/26/53 Supervisor Date

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL

Anametrix I.D.: MG2301E1

Matrix Date Sampled : N/A Analyst : ED Supervisor

Date Analyzed: 08/23/93

Date Released |: 08/24/93

Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.020 0.022 0.023 0.023	100% 110% 115% 115%	52-133 57-136 56-139 56-141	
P-BFB			97%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : N/A

Matrix : SOIL
Date Sampled : N/A
Date Extracted: 08/23/93
Date Analyzed : 08/24/93

Anametrix I.D.: 08321-03

Analyst : RD Supervisor : 08/24/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
DIESEL	125	0	135	108%	126	101%	-7%	32-143
SURROGATE				93%		85%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308324
Date Received : 08/20/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD	
9308324- 1	TP1-7.5	SOIL	08/20/93	5520EF	
9308324- 2	TP2-7.5	SOIL	08/20/93	5520EF	

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308324 Date Received: 08/20/93 Project ID : 1649.16

Purchase Order: N/A Department : PREP Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16

Matrix : SOIL Date sampled : 08/20/93 Date extracted: 08/23/93 Date analyzed: 08/24/93

Anametrix I.D. : 9308324

Analyst : W Supervisor : 08/24/93 Supervisor Date To

				_
                                   	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	
9308324-01	TP1-7.5	30	53	1
9308324-02	TP2-7.5	30	57	ļ
BG23H1W9	METHOD BLANK	30	ND	1
,		- <b></b>		

ND

Matrix

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<sup>-</sup> Not detected above the reporting limit for the method. TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, TP2-7.5MS, MD
Matrix : SOIL
Date sampled : 08/20/93
Date extracted : 08/23/93

Anametrix I.D.: 9308324-02

Analyst : FK Supervisor : CM Date Released : 08/24/93

Date analyzed : 08/24/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	67	320	84%	330	888	5%	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL Date sampled : N/A

Anametrix I.D.: MG23H1W9

Analyst : Ex Supervisor : Ch

Date extracted: 08/23/93

Date analyzed : 08/24/93

Date Released: 08/24/93

	SPI.
•	AM'
COMPOUND	(mg/

SPIKE LCS IT. (mg/Kg)

%REC %REC LIMITS

\* Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

## 9308324 (2) 9.4 (1.2)

## CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No	.: 1	649	2.76		Field	Logi	ook	No.:				Date:	8/	20/93	Serial		
	Project Na	me:	M+	N		Projec	t Lo	catio	n: (	Dak	lau			-0/	<u> </u>		991	0
	Sampler (Si	gnature)		lan On	aslini				_		NAL			$\overline{}$		Samr	olers:	
				AMPLES '				10.8	fer!	1/25	EVA	W.XX		101	RIST /	/	WER	7
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE	X.			Se se se se se se se se se se se se se se	(5) (6) (6)			40/			REMARKS	<u> </u>
	TP1-7.5	8/2019	<u> </u>		1	Soil	入	ス	人	次	次			X	1.			
2)	TP2-7,5	14/29/9	3 —		1	Soil	X	人	大	X	大			$\chi$	4	8-40	SUF TA	7
<b>~</b>		<del> </del>			ļ											<u>,                                     </u>	1 1	1
-		<u> </u>														Kesu	1 ts to	
-	<u> </u>	<u> </u>														1	Tenifor	Beath
ŀ		<u> </u>						<u> </u>										
F		<u> </u>																
ŀ		<u> </u>	<u> </u>												<u> </u>			
ŀ		<del>                                     </del>	ļ		_													:
r		<u> </u>					<del>-</del>					<u>.                                    </u>						
			<del> </del>															
																<del></del>	·	
															<del> </del>			
L														1	<del> </del>			
L			4-1	<b>΄</b> Λ								$\overline{}$					<del></del>	
	RELINQUISHED (Signature)	BY:	Mille	entrada	/AN	872d	73 71	13:2	R	ECEIVE Signat	0 BY-	2000			100		PAJE 153	TIME /220
	RELINQUISHED (Signature)	BY: J N	and I						R	ECEIVE	D BY:		<u>ng 2</u>	<del>ب</del> ب	DA	<u> </u>	DATE / 8/20/93	TIME
┝	RELINQUISHED	BY:	<u>ny 87</u>	anyone		DATE		ME.		Signat <sup>,</sup> ECEIVE		ose	phen	ب	Dela	ul,	8/20/93 DATE	TIME 16:20
┟	(Signature) METHOD OF SHI					DATE			(:	Signat	ure)i/						DATE	ITME
L			-			DATE	'	ME.		AB COM	MEN15:	: 						
	Sample Col	lector:		LEVINE-FRIC 1900 Powell		10th Ela	٥-		A	malyt	tical	Labo	orator	y:				
				Emeryville, C			ΟI					An	/1 h	.0+	rix			-
Ļ	nipping	(White)		(415) 652-4		Conv. (V.				. C	/D:-1	1.30,	u M	<u>ve </u>	V ( )			



# Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9308419
Date Received : 08/26/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9308419- 1	TP3-10.5

This report consists of 13 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director

en, PM.D.

Date

SEP - 7 1993



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308419
Date Received : 08/26/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9308419- 1	TP3-10.5	SOIL	08/26/93	TPHd
9308419- 1	TP3-10.5	SOIL	08/26/93	TPHgBTEX

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308419
Date Received : 08/26/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Charl Bod Department Supervisor

Icea Shor 9/2/93 Chemist

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9308419
Matrix : SOIL
Date Sampled : 08/26/93

Project Number: 1649.16
Date Released: 09/01/93

	Sample	Sample
Reporting	I.D.#	I.D.#
Limit	TP3-10.5	BG3101E2

	Limit	TP3-10.5	BG3101E2		 	
COMPOUNDS	(mg/Kg)	-01	BLANK		 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rece Instrument I.I Date Analyzed RLMF		ND ND ND ND ND 98% HP12 08/31/93	ND ND ND ND ND 104% HP12 08/30/93	•••		

- ND Not detected at or above the practical quantitation limit for the method.
- TPHg Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Icua Shor 9/2/93 Analyst Date

Charge Bulma 9/2/53
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308419 : SOIL Matrix

Project Number: 1649.16
Date Released: 09/01/93

Date Sampled: 08/26/93

Instrument I.D.: HP9

Date	Extracted:	08/27/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308419	TP3-10.5	08/27/93	10	15	87%
BG27H1F1	METHOD BLANK	08/27/93	10	ND	97%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Iceca Shar a/2/43 Analyst Date

9/2/93 Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308419
Matrix : SOIL
Date Sampled : 08/26/93
Date Extracted: 08/27/93

Project Number: 1649.16
Date Released: 09/01/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308419	TP3-10.5	08/27/93	10	23	87%
BG27H1F1	METHOD BLANK	08/27/93	10	ND	97%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Sher 9/2/93

Analyst Date

Chaul Barner 9/2/93
Supervisor Date

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 08419-01

Sample I.D. : 1649.16 TP3-10.5
Matrix : SOIL
Date Sampled : 08/26/93
Date Analyzed : 08/31/93 Analyst : Is Supervisor : Is Date Released : 09/01/93 Instrument I.D.: HP12

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% F LIMI	REC TS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.038 0.039 0.040 0.038	95% 98% 100% 95%	0.037 0.038 0.040 0.039	93% 95% 100% 98%	-3% -3% 0% 3%	51- 48-	-139 -138 -146 -139
p-BFB				93%		86%		53	-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MG3001E3 Analyst 275

: SOIL Matrix

Supervisor : ca Date Released : 09/01/93

Date Sampled : N/A
Date Analyzed : 08/31/93

Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	•
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.018 0.019 0.020 0.020	90% 95% 100% 100%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MG27H1F1 Sample I.D. : LAB CONTROL SAMPLE

Analyst : IS Supervisor : ab Matrix : SOIL Date Sampled : N/A

Supervisor : ab Date Released : 09/01/93 Date Extracted: 08/27/93 Instrument I.D.: HP23 Date Analyzed: 08/27/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	95	76%	48-113
SURROGATE			86%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308419 Date Received: 08/26/93 Project ID : 1649.16

Purchase Order: N/A
Department: PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID			DATE SAMPLED	METHOD	
9308419- 1	TP3-10.5	SOIL	08/26/93	5520EF	

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9308419 Date Received : 08/26/93 Project ID : 1649.16

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

-Relative percent difference exceeded the quality control limits due to the heterogeneity of the sample.

(Sthis Mulling 4/3/9)
Department Supervisor

Date

Chemist

25/63/9 Date

PREP/PREP- PAGE 2

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	mount Found (mg/Kg)
9308419-01	TP3-10.5	30	190
BG30H1W9	METHOD BLANK	30	ND

ND TRPH

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<sup>-</sup> Not detected above the reporting limit for the method.

<sup>-</sup> Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, TP3-10.5MS, MD Anametrix I.D.: 9308419-01

atrix : SOIL

Analyst Supervisor CONDATE Released : 09/01/93 ate sampled : 08/26/93

Date extracted: 08/30/93 Pate analyzed: 08/31/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS
otor Oil	300	190	380	63%	450	87%	32%	48-114%

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

## LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D. : MG30H1W9

Matrix : SOIL Analyst : 46
Date sampled : N/A Supervisor : cm
Date extracted : 08/30/93 Date Released : 09/01/93

Date analyzed : 08/31/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	270	90%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

## 5.01

# 9308 419 (Z) CHAIN OF CUSTODY / ANALYSES REQUEST FORM

F	Project No.	.:	649.	16		Field	Logb	ook	No.:		<del></del>		Date:	8/	2/0/93	Serial	No.:	4.0
	Project Nam		M+	N Woreh	ouse	Projec	ct Lo	catio	n: /	Dal	clar	ral lar		<del>-7</del>	<u> </u>		111	18
15	Sampler (Sig	gnature)		lui Mad					/ (	Α	NAL	YSES	}			Sam	plers:	
$\vdash$		<del></del>	, SA	MPLES	Tue	·		O Hall	AST	_/_		/cf		YOU	RIST /		WERA	
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON - TAINERS		/2		A ST	<b>*</b>	3						REMARKS	
)[	P3-10.5	3/24/	3 1013	)	1	Soil	X	k	上次	と	<b>*</b>			X	4-	Day	9 AT	
	·															<u> </u>		
L																1230	lt to J	eufer
L						,										T.	Blath.	
																	-,,,	
L				·		<u></u>												
L																		
L																		
-															- <del></del>			
$\downarrow$					<u> </u>										····			
$\perp$			<u> </u>		<u> </u>													
-									_			<u> </u>						
-		<u> </u>			<u> </u>										··			
$\perp$																		
		/	Y - U	1-0-								_						
	ELINQUISHED E (Signature)		frel	en Mod	lán	8/26	93 1	JME 45	R!	ECEIVE Signat	D BY:	n	W D		MUS		DAJE 8/26/9	TIME 1095
RI	LINQUISHED E (Signature)	BY &		Pain	7 - 7	DATE 1	1 1	IME	R	ECEIVE	D BY		1	<u> </u>		22.	8/26/9	TIME 14:05
R	LINQUISHED E		ny a	Carreyoo		DATE		<u>∕</u> σ.° ΙΜΕ		Signat ECEIVE		22	9	2			DATE DATE	74.05 TIME
M	(Signature) ETHOD OF SHIF	PMFNT.				DATE		IME.	(5	Signat	ure)				<u></u>			
L	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		DATE		1 1°1E.		AR COM	IMENTS:	<b>:</b> 						
S	ample Coll	ector:		LEVINE-FRIC					Α	Analytical Laboratory:								
	1900 Powell Street, 12th Floor						Anametrix											
L	Emeryville, Ca 94608 (415) 652-4500							MUMERIX										

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



1961 Concourse Drive Suite E San Jose, CA 95131

Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309268 Date Received: 09/21/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309268- 1	TP4-4.5
9309268- 2	SW34-6.5
9309268- 3	B26-8

This report consists of 13 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.

Laboratory Director

SEP 28 1993



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309268
Date Received : 09/21/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309268- 1	TP4-4.5	SOIL	09/21/93	TPHd
9309268- 1	TP4-4.5	SOIL	09/21/93	TPHgBTEX

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309268
Date Received : 09/21/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309268 Project Number: 1649.16
Matrix : SOIL Date Released: 09/23/93

Date Sampled: 09/21/93

	Reporting Limit	•	Sample I.D.# BS2201E2	 	
COMPOUNDS	(mg/Kg)	-01	BLANK		
Benzene	0.005	ND	ND		
Toluene	0.005	ND	ND		
Ethylbenzene	0.005	ND	ND		
Total Xylenes	0.005	ND	ND		
TPH as Ĝasoline	0.5	ND	ND		
% Surrogate Reco	overy	96%	108%		
Instrument I.		HP4	HP4		
Date Analyzed		09/22/93	09/22/93		
RLMF		1	1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggle Deuson 9/23/93 Analyst Date Cheyl Balmer 9/23/43 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309268
Matrix : SOIL

Project Number: 1649.16 Date Released: 09/23/93 Instrument I.D.: HP19

Date Sampled: 09/21/93 Date Extracted: 09/21/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309269-01	TP4-4.5	09/21/93	10	ИD	78%
BS21H1F1	METHOD BLANK	09/21/93	10		81%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dawson 9/23/93 Anglyst Dave Cheul Boamer 9/23/53 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309268
Matrix : SOIL
Date Sampled : 09/21/93
Date Extracted: 09/21/93

Project Number: 1649.16 Date Released: 09/23/93 Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309269-01	TP4-4.5	09/21/93	10	ND	78%
BS21H1F1	METHOD BLANK	09/21/93	10	ND	81%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Peggle Tauson 9/23/93 Analyst Date Cheurl Balmo 9/23/50 Supervisor Date

### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09268-01

Sample I.D. : 1649.16 TP4-4.5
Matrix : SOIL
Date Sampled : 09/21/93
Date Extracted: 09/21/93 Analyst : RD Supervisor : CD Date Released : 09/23/93

Instrument I.D.: HP19 Date Analyzed: 09/21/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC Ms (mg/Kg)	% REC MS	REC MD (mg/Kg)	REC MD	RPD	% REC LIMITS
DIESEL	125	0	98	78%	105	84%	7%	32-143
SURROGATE				81%		81%	<del>-</del>	30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/22/93

Anametrix I.D. : MS2201E1

Analyst
Supervisor
Date Released
Instrument ID

HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.020 0.020 0.021 0.020	100% 100% 105% 100%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS21H1F1

Matrix : SOIL

Analyst : 00 Supervisor : 05

Date Sampled : N/A

Supervisor : 25
Date Released : 09/23/93

Date Extracted: 09/21/93 Date Analyzed: 09/21/93

Instrument I.D.: HP19

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	97	78%	48-113
SURROGATE			83%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309268 Date Received: 09/21/93 Project ID: 1649.16 Purchase Order: N/A

Department : PREP

Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309268- 1	TP4-4.5	SOIL	09/21/93	5520EF

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309268
Date Received : 09/21/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Othy Mutaness 9/23/93
Department Supervisor Date

Chemist Museum 8/22/93

PREP/PREP- PAGE 2

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

#### ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649	_ * -	I.D. :	9309268 <i>H∈</i>
pate sampled : 09/21	1/93 Supervisor		on
Date extracted: 09/21		ased :	09/22/93
Date analyzed : 09/22	2/93		

l I	  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	
•	9309268-01	TP4-4.5	30	83	-
	BS21H1W9	METHOD BLANK	30	ND	Ī

- Not detected above the reporting limit for the method.
  Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, TP4-4.5MS, MD Anametrix I.D. : 9309268-01

Matrix : SOIL Analyst : HE

Date sampled : 09/21/93 Supervisor : M Date extracted : 09/21/93 Date Released : 09/22/93

Date analyzed: 09/22/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	83	340	86%	350	898	3%	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE SAMPLE SOIL SAMPLE SO Anametrix I.D.: MS21H1W9

Analyst : HE
Supervisor : CM
Date Released : 09/22/93

&REC SPIKE %REC LCS LCS AMT. LIMITS (mg/Kg) COMPOUND (mg/Kg) 97% 71-119% 300 290 Motor Oil

Quality control established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

4309268 (2)

CHAIN OF CUSTODY / ANALYSES REQUEST FORM Project No.: Field Logbook No.: Date: Serial No.: 11165 Project Name: ! Project Location: Samplers: WEM Sampler (Signature) 1 **ANALYSES** SAMPLES NO. OF CON-LAB SAMPLE SAMPLE SAMPLE NO. DATE **REMARKS** TIME NO. TYPE **TAINERS** <0/ SX 5011 RELINQUISHED BY: RECEIVED KY (Signature) (Signature) RELINQUISHED BY: RECEIVED BY (Signature) (Signature) RELINQUISHED BY: RECEIVED BY: TIME (Signature) (Signature) METHOD OF SHIPMENT: DATE TIME LAB COMMENTS: Sample Collector: Analytical Laboratory: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500



# Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive Suite E San Jose, CA 95151 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9306257 Date Received : 06/18/93 Project ID : 1649.16 Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

This report consists of 11 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamourix.

Sarah Schoen, Ph.D. Laboratory Director 07-06-93

Date

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9306257
Date Received : 06/18/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306257- 1	SB-2-4.5	SOIL	06/17/93	TPHd
9306257- 4	SB2-11.0	SOIL	06/17/93	TPHd
9306257- 8	SB-3-7.5	SOIL	06/17/93	TPHd
9306257-14	SB-5-4.5	SOIL	06/17/93	TPHd
9306257-15	SB-5-7.5	SOIL	06/17/93	TPHd
9306257-16	SB5-10.0	SOIL	06/17/93	TPHd
9306257- 4	SB2-11.0	SOIL	06/17/93	TPHgBTEX

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9306257 Date Received: 06/18/93
Project ID: 1649.16
Purchase Order: N/A
Department: GC

Sub-Department: TPH

QA/QC SUMMARY :

- The concentrations reported as the C22-C36 range hydrocarbons were calculated using a diesel initial calibration.

Oband Balman Department Supervisor

halest Buch 7.6.93

GC/TPH- PAGE 2

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS C4-C12 (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9306257 Matrix : SOIL Date Sampled: 06/17/93

Project Number: 1649.16 Date Released : 07/02/93

	Reporting Limit	Sample I.D.# SB2-11.0	Sample I.D.# BU2401E3		
COMPOUNDS	(mg/Kg)	-04	BLANK	 	
			<u></u>		
Benzene	0.005	ND	ND		
Toluene	0.005	0.25	ND		
Ethylbenzene	0.005	0.23	ИD		
Total Xylenes	0.005	0.86	ND		
TPH as Gasoline	0.5	26	ND		
% Surrogate Rec	overv	81%	77%		·
Instrument I.		HP4	HP4		
Date Analyzed		06/24/93	06/24/93		
RLMF		5	1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

lesh Burch 7.2.93

RESULTS - TPH - PAGE 3

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9306257
Matrix : SOIL
Date Sampled : 06/17/93
Date Extracted: 06/21/93

Project Number: 1649.16
Date Released: 07/02/93

Instrument I.D.: HP4

,   _	Anametrix I.D.	Client I.D.	Date Analyzed:	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
ŀ					
	9306257-01	SB-2-4.5	07/01/93	200	ND
1	9306257-04	SB2-11.0	07/01/93	50	200
	9306257-08	SB-3-7.5	06/30/93	10	ND
•	9306257-14	SB-5-4.5	07/01/93	200	ND
	9306257-15	SB-5-7.5	07/01/93	200	300
È	9306257-16	SB5-10.0	06/30/93	10	40
ŀ	BU21H1F1	METHOD BLANK	06/30/93	10	ND
					1

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles Burch 7.6.93
Analyst Date

Charles 7/0/93 Supervisor Date

RESULTS - TPH - PAGE 4

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9306257 Matrix : SOIL
Date Sampled : 06/17/93
Date Extracted: 06/21/93 Project Number: 1649.16 Date Released: 07/02/93

Instrument I.D.: HP4

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9306257-01	SB-2-4.5	07/01/93	200	1400
9306257-04	SB2-11.0	07/01/93	50	450
9306257-08	SB-3-7.5	06/30/93	10	ND
9306257-14	SB-5-4.5	07/01/93	200	1100
9306257-15	SB-5-7.5	07/01/93	200	900
9306257-16	SB5-10.0	06/30/93	10	96
BU21H1F1	METHOD BLANK	06/30/93	10	ND

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

railed Burch 7.6.43

RESULTS - TPH - PAGE 5

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 06/24/93

Anametrix I.D.: MU2401E1
Analyst: CmB
Supervisor: CmB

Supervisor : cm Date Released : 06/29/93

Instrument I.D.: HP4

ļ _	COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
	GASOLINE	0.50	0.50	100%	58-130
	SURROGATE			66%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL Date Sampled : N/A

Date Extracted: 06/21/93

Date Analyzed: 06/30/93

Anametrix I.D.: MU21H1F1

Analyst : CmB : 04 Supervisor

Date Released: 07/02/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
Diesel	125	96	77%	72-143

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9306257
Date Received : 06/18/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

					<u> </u>
ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METH	IOD
9306257- 1	SB-2-4.5	SOIL	06/17/93	5520	EF
9306257- 4	SB2-11.0	SOIL	06/17/93	5520	EF
9306257- 8	SB-3-7.5	SOIL	06/17/93	5520	EF
9306257-14	SB-5-4.5	SOIL	06/17/93	5520	EF
9306257-15	SB-5-7.5	SOIL	06/17/93	5520	EF
9306257-16	SB5-10.0	SOIL	06/17/93	5520	EF

MS. JENIFER BEATTY LEVINE - FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9306257 Date Received : 06/18/93 Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

PREP/PREP- PAGE 2

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

roject # : 1649.16 atrix : SOIL Date sampled : 06/17/93 Date extracted: 06/21/93 ate analyzed : 06/22/93

Anametrix I.D. : 9306257 Analyst : Supervisor : Date released : 06/25/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9306257-01	SB-2-4.5	30 🖟	8,300
9306257-04	SB2-11.0	30	1,500
9306257-08	SB-3-7.5	30	110
9306257-14	SB-5-4.5	30	6,200
9306257-15	SB-5-7.5	30	3,300
9306257-16	SB5-10.0	30	270
BU21H1W9	METHOD BLANK	30	ND

RPH

Not detected above the reporting limit for the method.
 Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: MU21H1W9

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 06/21/93
Date analyzed : 06/22/93 Analyst : M.P Supervisor : W Date Released : 06/25/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	310	103%	68-113%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# 9306 257 CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.	: /	64	19	16		Fie	ld L	ogb	ook	No.:			I	Date:	6	ドンボ	Serial No.	.:	
	Project Nam	ne: 🗸	erline	Bis	en - Mtx je	to relieve	Pro	ject	Lo	cation	า:	En	1 1 1 b	41/12		<u> </u>			11649	
	Sampler (Sig	nature	) : ,	()	ellin Du	بزيلاء كاست	<u> </u>					A	NAL	YSES				Sampler	's: WE	
				1SA	MPLES					<i>7</i> \$	لان /	//	(13) (13)	\$/.£.		101/2 1/2/2	257/			Ϋ́
	SAMPLE NO.	DATE	TI	ME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMI	PLE PE	/1							× /			MARKS	
$\mathcal{O}$	5/3-2-4.5	6/7/0	73	1		1	[5	oi I			X	X			W	TO THE		TPHH-	-TRPH r	esc1/5
(2)	56-2-75	/ j													X		L''	Tribble 1958 1	evertic	ŽS
(2)	SB-2-9.0														X		+ 7		<u></u>	- : :
	56-2-11.0										入	×	X				11	<u>/&gt; - C -</u>	os die	<u>s(')</u>
	SB-2-160														×			1		
	SP-2-195											_			٠, ٢-		(	<u> </u>	Col mo	toroil
	SB-2-24								,			<u> </u>			\^			<del>* 10 '</del> 7 '	2	
	SB-3-75										X	$\mathcal{X}$					<u></u>	<i>;</i>	717	<u> </u>
(4)	56-3-100														X			tanjar	1 /+ 1	
(6)	56-3-135														X					
	56-4-75														$\chi$					
(12)	56-4-10.0														X				··	
(3)	SB-4-13.0							TT	,			Ţ			X					
(14)	56-5-45										λ	Х								
(3)	36-5-75										次	入								
	56-5-100	V	ŀ				1				X	X			1					
0	RELINQUISHED (Signature)	BY	PAL	ر کرد	alisi		DAI	E//4/	/ Ti	1ME 4.08		RECEIV (Signa	ture)	1//	W.	· NC	M 13	2	DATE 03	TIME 41,05
	RELINQUISHED (Signature)	DI • / /	u hit		VOM 132	-	DAT	18/0	7	IS. R	7	RECEIV	ED BY:			,	DeCo	.0	DATE	TIME
	RELINQUISHED		4				DAT	E'	+	IME	- 1	RECEIV	FD BY:	:/}	John	<u>~ie</u>	<u>~20</u>	uu	DATE	TIME
	(Signature)						DAT		٠,	TIME		(Signa LAB CO			<del> </del>	<del></del>		<del></del>	DATE TIME 6/18/93 17:10	
	METHOD OF SHI	PMENI:				4	ואט	L-		r (PIG	$\perp$	LAD CU	mini Livi i						<u></u>	
	Sample Col	lecto	r:		LEVINE-FRI				_			Analy	/tical	Lab	orato	ry:				
					1900 Powel Emeryville,			Floo	r								id me	tori V.		
,					(415) 652-											<i>1 T ¥</i>	m Mr	14 r'K		

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-452-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9306258
Date Received : 06/18/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE: ID
9306258- 1	SB5-13.5
9306258- 2	SB-6-4.5
9306258- 3	SB-6-7.5
9306258- 4	SB6-10.0
9306258- 5	SB6-13.5
9306258- 6	SB6-15.0
9306258- 7	SB-7-4.5
9306258- 8	SB-7-7.5
9306258- 9	SB7-10.0
9306258-10	SB-8-7.5
9306258-11	SB8-10.0
9306258-12	SB-9-7.5
9306258-13	SB9-10.5
9306258-14	SB9-13.0
9306258-15	SB10-7.5
9306258-16	SB-10-10

This report consists of 11 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director 07-06-93

Date

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9306258 Date Received: 06/18/93
Project ID: 1649.16
Purchase Order: N/A
Department: GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

	ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
	9306258- 2	SB-6-4.5	SOIL	06/17/93	ТРНО
	9306258- 3	SB-6-7.5	SOIL	06/17/93	TPHd
	9306258- 7	SB-7-4.5	SOIL	06/17/93	TPHd
l	9306258- 8	SB-7-7.5	SOIL	06/17/93	TPHd
	9306258-10	SB-8-7.5	SOIL	06/17/93	TPHd
	9306258-12	SB-9-7.5	SOIL	06/17/93	трна
	9306258-13	SB9-10.5	SOIL	06/17/93	TPHd
	9306258-15	SB10-7.5	SOIL	06/17/93	TPHd
	9306258- 3	SB-6-7.5	SOIL	06/17/93	TPHgBTEX
	9306258-13	SB9-10.5	SOIL	06/17/93	TPHgBTEX

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9306258 Date Received: 06/18/93 Project ID: 1649.16

Purchase Order: N/A Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as the C22-C36 range hydrocarbons were calculated using a diesel initial calibration.

leson Burch 7.6.43

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS C4-C12 (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9306258 Project Number: 1649.16
Matrix : SOIL Date Released: 07/02/93

Date Sampled : 06/17/93

	Reporting Limit		Sample I.D.# SB9-10.5		
COMPOUNDS	(mg/Kg)	-03	-13	BLANK	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND 0.94 0.80 2.8 110	0.35 2.0 2.0 8.2 240	ND ND ND ND ND	
<pre>% Surrogate Reco Instrument I.D Date Analyzed RLMF</pre>		73% HP4 06/30/93 25	99% HP4 06/30/93 50	80% HP4 06/30/93 1	1

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

harlen Burch 7.6.93 Analyst Date

Cheryl Barener 7/6/7 Supervisor Dat

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Project Number: 1649.16 Date Released: 07/02/93 Instrument I.D.: HP9 Anametrix W.O.: 9306258 Matrix : SOIL

Date Sampled : 06/17/93

Date Extracted: 06/21/93

Anametrix I.D.	Client I.D.	Date Analyzed:	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9306258-02	SB-6-4.5	07/01/93	200	250
9306258-03	SB-6-7.5	07/01/93	200	250
9306258-07	SB-7-4.5	07/01/93	10	12
9306258-08	SB-7-7.5	06/30/93	10	ND
9306258-10	SB-8-7.5	06/30/93	10	ND
9306258-12	SB-9-7.5	06/30/93	10	22
9306258-13	SB9-10.5	07/01/93	200	340
9306258-15	SB10-7.5	07/01/93	10	35
BU21H1F1	METHOD BLANK	06/30/93	10	ND
		·		

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3550.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

rlesh Buch 7.6.93
Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9306258

Project Number: 1649.16
Date Released: 07/02/93

Matrix : SOIL
Date Sampled : 06/17/93

Instrument I.D.: HP9

			,	,
Date	Extracted:	06	/21	/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9306258-02 9306258-03 9306258-07 9306258-08 9306258-10 9306258-12 9306258-13 9306258-15 BU21H1F1	SB-6-4.5 SB-6-7.5 SB-7-4.5 SB-7-7.5 SB-8-7.5 SB-9-7.5 SB9-10.5 SB10-7.5 METHOD BLANK	07/01/93 07/01/93 07/01/93 06/30/93 06/30/93 06/30/93 07/01/93 07/01/93 06/30/93	200 200 10 10 10 200 10	2000 850 66 32 ND 48 850 97 ND

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by &CFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

harlesm Buril 7.6.93
Date

Date

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 06/30/93

Anametrix I.D. : MU3001E1

Analyst : (mB

Supervisor : Date Released : 07/02/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.53	106%	58-130
p-BFB			62%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MU21H1F1
Analyst : CMB
Supervisor : CA Matrix : SOIL Date Sampled : N/A

Supervisor : 07/02/93 Date Extracted: 06/21/93 Date Analyzed: 06/30/93 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
Diesel	125	96	77%	72-143

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9306258
Date Received : 06/18/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306258- 2	SB-6-4.5	SOIL	06/17/93	5520EF
9306258- 3	SB-6-7.5	SOIL	06/17/93	5520EF
9306258- 7	SB-7-4.5	SOIL	06/17/93	5520EF
9306258- 8	SB-7-7.5	SOIL	06/17/93	5520EF
9306258-10	SB-8-7.5	SOIL	06/17/93	5520EF
9306258-12	SB-9-7.5	SOIL	06/17/93	5520EF
9306258-13	SB9-10.5	SOIL	06/17/93	5520EF
9306258-15	SB10-7.5	SOIL	06/17/93	5520EF

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9306258
Date Received : 06/18/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor Date

Mosalitrol 06.28.93

PREP/PREP- PAGE 2

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GEASE ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16
Matrix : SOIL
Date sampled : 06/17/93
Date extracted: 06/21/93
Date analyzed : 06/22/93

    Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9306258-02	SB-6-4.5	30 🐺	12,000
9306258-03	SB-6-7.5	30	1,600
9306258-07	SB-7-4.5	30	610
9306258-08	SB-7-7.5	30	680
9306258-10	SB-8-7.5	30	140
9306258-12	SB-9-7.5	30	350
9306258-13	SB9-10.5	30	2,800
9306258-15	SB10-7.5	30	1,700
BU21H1W9	METHOD BLANK	30	ND

ID - Not detected above the reporting limit for the method.
 Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

mple I.D. : LAB CONTROL SAMPLE latrix : SOIL late sampled : N/A late extracted : 06/21/93

Anametrix I.D.: MU21H1W9

Analyst : MP Supervisor : MP

Date Released: 06/25/93

te analyzed : 06/22/93

OMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
ltor Oil	300	310	103%	68-113%

 ${f Q}$ uality control established by Anametrix Laboratories.

PH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No	Project No.: 1649/6							1						Date: 6/18/93 Serial No.:					
	Project Nar	Pr	Project Location: Early mil						mili	1/				11650	)					
	Project Name: Vierta Briga - M + N Ward Project Location: Entry il Sampler (Signature): ANALYSES										YSES	<del></del>			/ Samr	olers:		—		
					/6 <sup>1</sup> /	/3º		Octor		$\overline{}$	10)	9/5/	,	olers:	<u> </u>					
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. O CON- TAINER	SAM	IPLE PE	/ &	34	Sur					/x/	9/33°/		REMARKS		
1	56-5-135	6/17/43			1	So								入		201		* '		
2	Sf3-6-4,5									X	X					Plea	'Se rea	port TPH	el +TRP	>H
3)	36-6-75			<u> </u>						X	×	X				T00	1.1 45	95		
4	56-6-100	<u> </u>								<del>```</del>				X		11	<u> </u>			
3	SC-6-B5													χ		1 "	12 ~ (	-22 die:	ser	
$\tilde{a}$	56-6-150													×		ľ				_
7	SB-7-45				1	_		1		×	×		ļ			+ (	22 -	C36 M	stercit	-
多)	SE-7-75	-								x	X		<u> </u>			-				_
à)	SG-7-10.0	2								/	-		-	X		<del> </del>			<del></del>	_
(ما	SB -8-75									$\lambda$	X			, ,		57	ANT	)ARD	- /A/	
(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)	SG-8-160										1			Х			<u> </u>		17	_
12)	SG-9-7.5									X	X		-		<u> </u>	<del> </del>				
么)	56-9-105							1		$\frac{1}{\lambda}$		Υ				<del>                                     </del>				
12 11)	55-9-13										1	^		X		<del> </del>				
6	(3.0									X	Х					<del>                                     </del>				
		<b>V</b>			V	7				_/:_				M	1					_
	RELINQUISHED E (Signature)	1/14	lellery	Modern	••••••••••••••••••••••••••••••••••••••	DAI	E / 3/4	TI	ME 7:00	, R	RECEIVE (Signat			hat	7	NCM 1	32	DATE 06/8 9	7 4 155	-
	RELINQUISHED E (Signature)	BY: ///	fit.	NO4 13	2	PAY	10/03	Ţ	ME .(O				1000					DATE 6/18/2	TIME	_
-		RELINQUISHED BY:				DATE / TIME				RECEIVED BY:		// V	rephine De Ca		M( ai	K.	0/18/43 DATE	3 /7:/0 TIME	<u>ン</u>	
	METHOD OF SHIP	METHOD OF SHIPMENT:				DAT	Ē	TI	ME		AB COM									
	Sample Coll	Sample Collector: LEVINE-FRICKE 1900 Powell Street, Emeryville, Ca 94608 (415) 652-4500					Floor				Analytical Laboratory:  Analytical Laboratory:									
Shipping Copy (White)   tab Copy (Coppe)   File																				



# Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309001- 1	STANKB1
9309001- 2	NSTANKB2
9309001- 3	NTANKB3
9309001- 4	BTANK-W

This report consists of 38 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametria.

Sarah Schoen, Ph.D.

Laboratory Director

SED / 3 1893

09-10-93

COPY

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: VOA

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	8010
9309001- 2	NSTANKB2	SOIL	08/31/93	8010
9309001- 3	NTANKB3	SOIL	08/31/93	8010

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- Recovery of 1,1-Dichloroethane in the 9-1-93 laboratory control spike is outside of Anametrix control limits for EPA Method 8010.

Taghi Memorzadeh Department Supervisor

9/10/93 Date Chemist Walida

9/10/93 Date

roject ID ample ID atrix : 1649.16 : STANKB1 : SOIL

ate Sampled : 8/31/93 ate Analyzed : 9/ 7/93 nstrument ID : AD15

: 9309001-01 Anametrix ID

TM Analyst Supervisor

Dilution Factor :

Conc. Units : ug/Kg

1.0

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	  ប
74-87-3	Chloromethane	1.0	ND	į, <b>u</b>
75-01-4	Vinyl chloride	.50	ND	Ŭ
74-83-9	Bromomethane	.50	ND	Įΰ
75-00-3	Chloroethane	.50	ND	Ū
75-69-4	Trichlorofluoromethane	.50	ND	Įΰ
76-13-1	Trichlorotrifluoroethane	.50	ND	ĮŪ
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	Ŭ
75-34-3	1.1-Dichloroethane	.50	ИD	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56 <b>-23-5</b>	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	Ū
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	<u>ַ</u> ַ עַ
10061-02-6	trans-1,3-Dichloropropene	.50	ND	ĮŪ
79-00-5	1,1,2-Trichloroethane	.50	ND ,	U
127-18-4	Tetrachloroethene	.50	ND	ប្រ
124-48-1	Dibromochloromethane	.50	ND	ĺū
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	Ū
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	ļŪ
106-46-7	1,4-Dichlorobenzene	1.0	I ND	ប្រ
95-50-1	1,2-Dichlorobenzene	1.0	ИD	ָ <b>บ</b>

oject ID : 1649.16
ample ID : NSTANKB:
atrix : SOIL : NSTANKB2 atrix : SOIL

Ite Sampled : 8/31/93

Ite Analyzed : 9/ 1/93

nstrument ID : AD15

Anametrix ID : 93 09001-02

Analyst Supervisor

1.0 Dilution Factor:

: ug/Kg Conc. Units

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTE	
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	Į Ų
75-01-4	Vinyl chloride	.50	ND	ĮΨ
74-83-9	Bromomethane	.50	ND	ļΨ
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U   U   U   U
76-13-1	Trichlorotrifluoroethane	.50	ND	ĮΨ
75-35-4	1,1-Dichloroethene	.50	ND	ļΨ
75-09-2	Methylene chloride	1.0	ND	ĮΨ
156-60-5	trans-1,2-Dichloroethene	.50	ND	
75-34-3	1,1-Dichloroethane	.50	ND	Ų
156-59-2	cis-1,2-Dichloroethene	.50	4.	* I
67-66-3	Chloroform	.50	ИD	ប
71-55-6	1,1,1-Trichloroethane	.50	ND	• 1
56-23-5	Carbon tetrachloride	.50	ND	ប្រ
107-06-2	1,2-Dichloroethane	.50	ND	1 10
79-01-6	Trichloroethene	.50	4.	
78-87-5	1,2-Dichloropropane	.50	ND	Ιñ
75-27-4	Bromodichloromethane	.50	ND	įυ
110-75-8	2-Chloroethylvinylether	1.0	ND	įυ
10061-01-5	cis-1,3-Dichloropropene	.50	I ND	ĺΩ
10061-02-6	trans-1,3-Dichloropropene	.50	ND	jū
79-00-5	1,1,2-Trichloroethane	.50	ND	ប ប
127-18-4	Tetrachloroethene	.50	ND	l U
124-48-1	Dibromochloromethane	.50	ND	
108-90-7	Chlorobenzene	.50	ND	įυ
75-25-2	Bromoform	.50	ND	ប្រ
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	ĮŪ
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	ļŪ
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

: 9309001-03 Anametrix ID : 1649.16 roject ID : 24 Analyst : NTANKB3 ample ID Supervisor : 7 M : SOIL atrix

: 8/31/93 ate Sampled 1.0 Dilution Factor: : 9/ 1/93 ate Analyzed Conc. Units : ug/Kg nstrument ID : AD15

REPORTING THUOMA Q DETECTED LIMIT COMPOUND NAME CAS No. U ND 1.0 Dichlorodifluoromethane \_ 75-71-8 U ND 1.0 Chloromethane 74-87-3 ND U .50 Vinyl chloride 75-01-4 U .50 ND Bromomethane 74-83-9 U .50 ND Chloroethane -75-00-3 U .50 ND Trichlorofluoromethane 75-69-4 U .50 ND Trichlorotrifluoroethane 76-13-1 U ND .50 1,1-Dichloroethene 75-35-4 U ND 1.0 Methylene chloride 75-09-2 U .50 ND trans-1,2-Dichloroethene 156-60-5 U ND .50 1,1-Dichloroethane 75-34-3 U .50 ND cis-1,2-Dichloroethene 156-59-2 U ND .50 Chloroform 67-66-3 .50 ND U 1,1,1-Trichloroethane 71-55-6 ND U .50 Carbon tetrachloride 56-23-5 U ND .50 1,2-Dichloroethane 107-06-2 U ND .50 Trichloroethene 79-01-6 U ND .50 1,2-Dichloropropane 78-87-5 U ND .50 Bromodichloromethane 75-27-4 U ND 1.0 2-Chloroethylvinylether 110-75-8 U ND cis-1,3-Dichloropropene .50 10061-01-5 U .50 ND · trans-1,3-Dichloropropene 10061-02-6 U .50 ND 1,1,2-Trichloroethane 79-00-5 U ND .50 Tetrachloroethene 127-18-4 U ND .50 Dibromochloromethane 124-48-1 U .50 ND Chlorobenzene 108-90-7 U .50 ND Bromoform 75-25-2 U .50 1,1,2,2-Tetrachloroethane ND 79-34-5 U

1,3-Dichlorobenzene \_\_\_\_

1,4-Dichlorobenzene

1,2-Dichlorobenzene

541-73-1

106-46-7

95-50-1

ND

ND

ND

U

U

1.0

1.0

1.0

roject ID : 1649.1 Anametrix ID : 1580901H01

ample ID : BLK901 Analyst : 50 atrix : SOIL Supervisor

te Sampled : 0/ 0/ 0

te Analyzed : 9/ 1/93

nstrument ID : AD15

Dilution Factor: 1.0

Conc. Units : ug/Kg

REPORTING TRUOMA DETECTED Q LIMIT COMPOUND NAME CAS No. ND 1.0 Dichlorodifluoromethane 75-71-8 U ND 1.0 Chloromethane 74-87-3 U ND .50 Vinyl chloride 75-01-4 U ND .50 Bromomethane 74-83-9 .50 U ND Chloroethane 75-00-3 ND U .50 Trichlorofluoromethane 75-69-4 U .50 ND Trichlorotrifluoroethane 76-13-1 U .50 ND 1,1-Dichloroethene 75-35-4 U ND 1.0 Methylene chloride 75-09-2 U .50 ND trans-1,2-Dichloroethene 156-60-5 U 1,1-Dichloroethane .50 ND 75-34-3 U .50 ND cis-1,2-Dichloroethene 156-59-2 U .50 ND Chloroform 67-66-3 Ú .50 ND 1,1,1-Trichloroethane 71-55-6 ND U .50 Carbon tetrachloride 56-23-5 U ND .50 1,2-Dichloroethane 107-06-2 Ú ND .50 Trichloroethene 79-01-6 U .50 ND 1,2-Dichloropropane 78-87-5 U .50 ND Bromodichloromethane 75-27-4 U ND 1.0 2-Chloroethylvinylether 110-75-8 cis-1,3-Dichloropropene Ù .50 ND 10061-01-5 U ND .50 trans-1,3-Dichloropropene 10061-02-6 ND , Ù .50 1,1,2-Trichloroethane 79-00-5 U .50 ND Tetrachloroethene 127-18-4 IJ ND .50 Dibromochloromethane 124-48-1 U .50 ND Chlorobenzene 108-90-7 U .50 ND Bromoform 75-25-2 U 1,1,2,2-Tetrachloroethane .50 ND 79-34-5 U ND 1,3-Dichlorobenzene 1.0 541-73-1 U ND 1,4-Dichlorobenzene 1.0 106-46-7 U ND 1.0 1,2-Dichlorobenzene 95-50-1

: 1649.1 roject ID ample ID : BLK907 atrix : SOIL

: 0/ 0/ 0 : 9/ 7/93 : AD15 ate Sampled ate Analyzed

nstrument ID

: 15B0907H01 Anametrix ID

: 7 Analyst Supervisor :TM

Dilution Factor':

Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	ĬΩ
74-83-9	Bromomethane	.50	ND	ט
75-00-3	Chloroethane	.50	ИD	ן ו
75-69-4	Trichlorofluoromethane	.50	ND	וֹת וֹ
76-13-1	Trichlorotrifluoroethane	.50	ND	įυ
75-35-4	1,1-Dichloroethene	.50	ИD	\u
75-09-2	Methylene chloride	1.0	ND	<u>  u</u>
156-60-5	trans-1,2-Dichloroethene	.50	ND	Ĭ <u>ū</u> į
75-34-3	1 1-Dichloroethane	.50	ND	l n
156-59-2	cis-1,2-Dichloroethene	.50	ND	ן ט
67-66-3	Chloroform	.50	ND	ן טן
71-55-6	1,1,1-Trichloroethane	.50		ן ט
56-23-5	Carbon tetrachloride	.50		ט
107-06-2	1,2-Dichloroethane	.50	ND	ן ט
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	ָּט
110-75-8	2-Chloroethylvinylether	1.0	ND	ן ט
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	ן ען
79-00-5	1,1,2-Trichloroethane	j .50	ND ·	ן ען
127-18-4	Tetrachloroethene	j .50	ND	ָּט
124-48-1	Dibromochloromethane	<b>.</b> 50	) ND	U
108-90-7	Chlorobenzene	.50	ND I	ן ט
75-25-2	Bromoform	.50	ND	jυ (
79-34 <b>-</b> 5	1,1,2,2-Tetrachloroethane	.50	ND	ן די
541-73-1	1,3-Dichlorobenzene	j 1.0	ND	וֹט
106-46-7	1,4-Dichlorobenzene	1.0	ND	Įυ
95-50-1	1,2-Dichlorobenzene	1.0	j nd	U

#### SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

Anametrix ID: 9309001 Analyst: 9309001 Project ID : 1649.16 Matrix : SOLID

Supervisor :TM

		····		
1	SAMPLE ID	SU1	SU2	SU3
1	BLK901	109		
2	NSTANKB2	48		i
3	NTANKB3	40		į
4	BLK907	127		i
5 i	STANKB1	83 i		
5   6		İ		i
7 8				
8				
9				
10				
11				
12				<u> </u>
13				
14				
15				<u> </u>
16				
17				
18				
19				
20				ļ
21		<u> </u>		
22				
23		<u> </u>		
24		ļ		<u> </u>
25		ļ		
26		<u> </u>		!!
27		<u> </u>		
28		<u> </u>		<u> </u>
29			ļ	
30		l	l	l

QC LIMITS

SU1 = Chlorofluorobenzene

(33-134)

\* Values outside of Anametrix QC limits

### LABORATORY CONTROL SAMPLE EPA METHOD 601/8010 ANAMETRIX, INC. (408)432-8192

Project/Case : LABORATORY CONTROL SAMPLE

Anametrix I.D.: W0090193

Matrix : WATER SDG/Batch : N/A

Analyst Supervisor TM

Date analyzed: 09/01/93

Instrument I.D.: AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	*RECOVERY LIMITS
FREON 113 1,1-DICHLOROETHENE trans-1,2-DICHLOROETHENE 1,1-DICHLOROETHANE cis-1,2-DICHLOROETHENE 1,1,1-TRICHLOROETHANE TRICHLOROETHENE TETRACHLOROETHENE CHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE	10 10 10 10 10 10 10 10 10	11.7 11.9 11.9 13.4 12.9 13.1 13.0 12.6 12.5 13.1	117% 119% 119% 134% 129% 134% 131% 126% 125% 131% 141%	34 - 128 63 - 133 55 - 145 49 - 121 66 - 168 72 - 143 63 - 147 60 - 133 70 - 148 49 - 139 70 - 133 69 - 140

<sup>\*</sup> Limits based on data generated by Anametrix, Inc., August, 1992.

#### LABORATORY CONTROL SAMPLE EPA METHOD 601/8010 ANAMETRIX, INC. (408) 432-8192

Project/Case : LABORATORY CONTROL SAMPLE Anametrix I.D. : W0090793

: WATER Matrix : N/A

Analyst Supervisor

122%

140%

兴

70 - 133

69 - 140

SDG/Batch Date analyzed: 09/07/93

1,4-DICHLOROBENZENE

1,2-DICHLOROBENZENE

Instrument I.D.: AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	9.3	93%	34 - 128
1,1-DICHLOROETHENE	10	11.7	117%	63 - 133
trans-1,2-DICHLOROETHENE	10	10.7	107%	55 <b>-</b> 145
1,1-DICHLOROETHANE	10	12.1	121%	49 - 121
cis-1,2-DICHLOROETHENE	10	13.0	130%	66 - 168
1,1,1-TRICHLOROETHANE	10	12.3	123%	72 - 143
TRICHLOROETHENE	10	12.3	123%	63 - 147
TETRACHLOROETHENE	10	12.1	121%	60 - 133
CHLOROBENZENE	10	12.5	124%	70 - 148
1,3-DICHLOROBENZENE	10	10.0	100%	49 - 139

12.2

14.0

10

10

<sup>\*</sup> Limits based on data generated by Anametrix, Inc., August, 1992.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	TPHd
9309001- 2	NSTANKB2	SOIL	08/31/93	TPHd
9309001- 3	NTANKB3	SOIL	08/31/93	TPHd
9309001- 4	BTANK-W	WATER	09/01/93	TPHd
9309001- 1	STANKB1	SOIL	08/31/93	TPHgBTEX
9309001- 2	NSTANKB2	SOIL	08/31/93	TPHgBTEX
9309001- 3	NTANKB3	SOIL	08/31/93	TPHgBTEX
9309001- 4	BTANK-W	WATER	09/01/93	TPHgBTEX

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309001
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as gasoline for samples STANKB1, NSTANKB2 and BTANK-W are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Cheur Balmer 9/7/43
Department Supervisor Date

lucia Shar 9/7/93 Chemist

Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309001 Matrix : SOIL Date Sampled : 08/31/93 Project Number: 1649.16
Date Released: 09/07/93

	Reporting Limit	Sample I.D.# STANKB1	Sample I.D.# NSTANKB2	Sample I.D.# NTANKB3	Sample I.D.# BS0102E2	Sample I.D.# BS0201E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND 0.033 3.0	ND ND ND 0.16 31	ND ND ND ND	ND ND ND ND	ND ND ND ND ND
<pre>% Surrogate Reco Instrument I.1 Date Analyzed RLMF</pre>		102% HP21 09/02/93	101% HP21 09/02/93 10	101% HP21 09/02/93	117% HP21 09/01/93	122% HP21 09/02/93 1

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

lucia Shor 9/7/93
Analyst Date

Chaul Balma 9/7/93 Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309001
Matrix : WATER

Project Number: 1649.16
Date Released: 09/07/93

Date Sampled: 09/01/93

	Reporting Limit	Sample I.D.# BTANK-W	Sample I.D.# BS0201E2	 	
COMPOUNDS	(ug/L)	-04	BLANK		
Benzene	0.5	ND	ND		
Toluene	0.5	ND	ND		
Ethylbenzene	0.5	ND	ND		
Total Xylenes	0.5	ИD	ИD		
TPH as Gasoline	50	90	ND		
% Surrogate Reco	overv	97%	106%		
Instrument I.I		HP4	HP4		
Date Analyzed		09/02/93	09/02/93		
RLMF		1	1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Luna Sher 9/7/93 Analyst Date Cheryl Balme 9/7/53 Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001 Matrix : SOIL Date Sampled : 08/31/93 Project Number: 1649.16
Date Released: 09/07/93

Instrument I.D.: HP9

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309001-01	STANKB1	09/02/93	10	ND	109%
9309001-02	NSTANKB2	09/02/93	200	330	60%
9309001-03	NTANKB3	09/02/93	10	ND	112%
BS01H1F1	METHOD BLANK	09/02/93	10	ND	112%
		_			

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

luca Shan 9/7/43
Analyst Date

Cheny Bulma 9/7/53
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001 Matrix

: SOIL

Project Number: 1649.16
Date Released: 09/07/93

Date Sampled: 08/31/93

Instrument I.D.: HP9

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309001-01	STANKB1	09/02/93	10	ИD	109%
9309001-02	NSTANKB2	09/02/93	200	540	60%
9309001-03	NTANKB3	09/02/93	10	ND	112%
BS01H1F1	METHOD BLANK	09/02/93	10	ИD	112%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Luca Shor 9/7/93
Analyst Date

9/7/53 Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001
Matrix : WATER
Date Sampled : 09/01/93
Date Extracted: 09/01/93

Project Number: 1649.16
Date Released: 09/07/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9309001-04	BTANK-W	09/01/93	50	970	81%
BS0111F1	METHOD BLANK	09/01/93	50	ND	94%

Note: Reporting limit is obtained by multiplying the dilution factor times 500 ug/L.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Davison 9/10/93

Ohard Bedman 9/10/93 Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001
Matrix : WATER
Date Sampled : 09/01/93

Project Number: 1649.16
Date Released: 09/07/93

Instrument I.D.: HP9

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9309001-04	BTANK-W	09/01/93	50	890	81%
BS0111F1	METHOD BLANK	09/01/93	50	ND	94%

Note: Reporting limit is obtained by multiplying the dilution factor times 500 ug/L.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggle Dawson 9/10/93

Chuyl Balman 9/10/43
Supervisor Date

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D.: MS0102E1

Matrix : SOIL

: IS Analyst

Supervisor

Date Sampled : N/A
Date Analyzed : 09/02/93

Supervisor : 05
Date Released : 09/07/93

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	*REC LCS	% REC LIMITS
GASOLINE	0.50	0.43	86%	58-130
p-BFB		, ,	100%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3510 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 09/02/93

Anametrix I.D.: MS0202E1

Analyst : IS
Supervisor : 09/07/93

COMPOUND	SPIKE AMT (mg/Kg)	LCS REC (mg/Kg)	% REC LCS	LCSD REC (mg/Kg)	% REC LCSD	RPD .	% REC LIMITS
GASOLINE	500	430	86%	420	84%	-2%	58-130
SURROGATE			102%		105%		53-147

<sup>\*</sup>Quality control established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09001-03 Analyst: IS

Analyst 4 Supervisor

Sample I.D.: 1649.16 NTANKB3
Matrix: SOIL
Date Sampled: 08/31/93
Date Extracted: 09/01/93
Date Analyzed: 09/02/93 Date Released: 09/07/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
DIESEL	125	0	101	81%	92	74%	-9%	32-143
SURROGATE				130%		125%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS01H1F1 Analyst :  $\mathcal{I}^{S}$ 

Matrix : SOIL

Date Sampled : N/A

Supervisor : 57
Date Released : 09/07/93

Date Extracted: 09/01/93 Date Analyzed: 09/01/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE			124%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3510 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

: WATER

Date Sampled : N/A

Matrix

Date Extracted: 09/01/93 Date Analyzed: 09/01/93

Anametrix I.D.: MS0111F1

Analyst

: IS

Supervisor

Supervisor : cs Date Released : 09/07/93 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	880	70%	940	75%	 78	47-13
SURROGATE			53%		57%		30-13

<sup>\*</sup>Quality control established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93

Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 4	BTANK-W	WATER	09/01/93	5520BF
9309001- 1	STANKB1	SOIL	08/31/93	5520EF
9309001- 2	NSTANKB2	SOIL	08/31/93	5520EF
9309001- 3	NTANKB3	SOIL	08/31/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

: 9309001 Workorder # Date Received: 09/01/93

Project ID : 1649.16 Purchase Order: N/A Department : PREP Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

PREP/PREP- PAGE

## ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORY (408) 432-8192

Project I.D.: 1649.16

Matrix: WATER

Pate sampled: 09/01/93
Date extracted: 09/01/93
Date analyzed: 09/02/93

Anametrix I.D.: 9309001
Analyst: FIE
Supervisor: C/M
Date released: 09/03/93

  Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9309001-04	BTANK-W	5	ND
BS0111W4	METHOD BLANK	5	ND

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16
Matrix : SOIL
Date sampled : 08/31/93
Date extracted: 09/01/93
Date analyzed : 09/02/93

Anametrix I.D.: 9309001
Analyst: 4E

Supervisor : (\square\)
Date released : 09/03/93

     Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309001-01	STANKB1	30	190
9309001-02	NSTANKB2	30	2,200
9309001-03	NTANKB3	30	ND
BS01H1W9	METHOD BLANK	30	ND

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

# MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, NTANKB3MS, MD Anametrix I.D. : 9309001-03

Matrix : SOIL Analyst : 46 Date sampled : 08/31/93 Supervisor : Cr

Date extracted: 09/01/93 Date Released: 09/03/93

Date analyzed: 09/02/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	27	300	91%	280	84%	88	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

#### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D.

: LAB CONTROL SAMPLE

Anametrix I.D.: MS0111W4

Matrix

: WATER

Analyst :

HIE

Date sampled

: N/A

Supervisor Date Released

: 09/03/93

Date extracted: 09/01/93 Date analyzed: 09/02/93

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD .	%REC LIMITS
Motor Oil	50	41	82%	41	82%	0%	44-128%

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/01/93

Anametrix I.D.: MS01H1W9 Analyst : HE Supervisor : CM

Supervisor : C/M Date Released : 09/03/93 Supervisor

Date analyzed : 09/02/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	&REC LIMITS
Motor Oil	300	300	100%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

#### ANAMETRIX REPORT DESCRIPTION **TNORGANICS**

### Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

EPA Method 6010/7000/9000 series - "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition,

Method 100, 200, 300 series - "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd November 1986. Edition, 1983.

Toxicity Characteristic Leaching Procedure (EPA Method 1311) - 40 CFR, Part 268, Appendix 1, June 1990. Waste Extraction Test - Results are reported in mg/L of extract according to procedures of CCR Title 22, Section 66261, Appendix II.

Organic Lead - CCR Title 22, Section 66261, Appendix XI.

Standard Method 2340B - "Standard Methods for the Examination of Water and Wastewater," APHA, AWMA, WEF, 18th Edition, 1992.

#### Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits.

## Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

### Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

## Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 85-115%.

### Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

I - Sample was analyzed at the stated dilution due to spectral interferences.

U - Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.

B - Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.

H - Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.

L - Reporting limit was increased to compensate for background absorbances or matrix interferences.

#### Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP).
   C Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D Reported results are dissolved, not total, metals.

# Reporting Conventions

Analytical values reported are gross values, i.e., <u>not</u> corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise. Unless noted, all samples were prepared according to procedures in the EPA Contract Laboratory Program Statement of Work, ILM02.1, 1990.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received: 09/01/93 Project ID : 1649.16

Purchase Order: N/A Department : METALS

Sub-Department: METALS

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	6010
9309001- 2	NSTANKB2	SOIL	08/31/93	6010
9309001- 3	NTANKB3	SOIL	08/31/93	6010

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase Order: N/A

Purchase Order: N/A
Department : METALS
Sub-Department: METALS

### QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Department Supervisor Date

Mong Kame 9/9/9)

na+

# INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-01 Client I.D.: STANKB1
Project I.D.: 1649.16
Reporting Unit: mg/Kg
Matrix: SOIL

: 08/31/93 : MK Date Sampled Analyst

Supervisor : MN | Date Released : 09/08/93 | Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0	1 1 1 1	0.49 24.3 48.0 4.4 32.8	

COMMENT:

# INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-02 Anametrix
Client I.D.: NSTANA
Project I.D.: 1649.1
Reporting Unit: mg/Kg
"Trix SOIL : NSTANKB2 : 1649.16

: 08/31/93 Date Sampled

Analyst Supervisor Date Released : MK M) 09/08/93

Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0	1 1 1 1	ND 21.2 34.5 4.8 38.8	} *

COMMENT:

#### INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-03
Client I.D.: NTANKB3
Project I.D.: 1649.16
Reporting Unit: mg/Kg
Matrix: SOIL

Date Sampled : 08/31/93
Analyst : MK
Supervisor : 
Date Released : 09/08/93
Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0 1.0	1 1 1 1	ND 24.6 36.3 4.5 35.4	

COMMENT:

#### METHOD BLANK REPORT ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.# : 9309001 Method Blank I.D.: MB0903SA Project I.D. : 1649.16 Matrix : SOIL

Reporting Unit : mg/Kg

Analyst Supervisor Date Released

: MK,

: MN : 09/08/93

Instrument I.D.: ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORTING LIMIT	RESULT	<u>Q</u>
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0 1.0	ND ND ND ND ND	,

COMMENT:

#### LABORATORY CONTROL SAMPLE REPORT ANAMETRIX, INC. (408) 432-8192

:MK Anametrix W.O.# : 9309001 Analyst Spike I.D. : LCS903SA Supervisor

Date Released : 09/08/93 Project I.D. : 1649.16 Instrument I.D : ICP1

Matrix : SOIL Reporting Unit : mg/Kg

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	SPIKE AMT.	METHOD SPIKE	% REC.	Q
Cadmium-6010	09/03/93	09/08/93	2.5	2.5	100	
Chromium-6010	09/03/93	09/08/93	10.0	11.2	112	
Nickel-6010	09/03/93	09/08/93	25.0	29.7	119	
Lead-6010	09/03/93	09/08/93	25.0	27.2	109	
Zinc-6010	09/03/93	09/08/93	25.0	26.7	107	

COMMENT:



1961 Concourse Drive San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received: 09/13/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309144- 1	BTANK-WR
9309144- 2	SS158.OR
9309144- 3	SE167.O
9309144- 4	SE1710.O
9309144- 5	SE188.O

This report consists of 17 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director 9/16/93

SEP 2 0 1993



## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309144
Date Received : 09/13/93
Project ID : 1649.16
Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	метнор
9309144- 2	SS158.0R	SOIL	09/13/93	трна
9309144- 3	SE167.0	SOIL	09/13/93	трна
9309144- 4	SE1710.0	SOIL	09/13/93	трна
9309144- 5	SE188.0	SOIL	09/13/93	TPHd
9309144- 1	BTANK-WR	WATER	09/13/93	TPHgBTEX
9309144- 2	SS158.0R	SOIL	09/13/93	TPHgBTEX
9309144- 3	SE167.0	SOIL	09/13/93	TPHgBTEX
9309144- 4	SE1710.0	SOIL	09/13/93	TPHgBTEX
9309144- 5	SE188.0	SOIL	09/13/93	TPHgBTEX

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309144
Date Received : 09/13/93
Project ID : 1649.16
Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheigh Bremen 9/15/93
Department Supervisor Date

Chemist Dawson 9/15/93 Dat

GC/TPH- PAGE 2

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144 Matrix : WATER

Project Number: 1649.16
Date Released: 09/15/93

Date Sampled : 09/13/93

	Reporting Limit	Sample I.D.# BTANK-WR		 	
COMPOUNDS	(ug/L)	-01	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  * Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND ND ND ND 97% HP4 09/14/93	ND ND ND ND ND 97% HP4 09/14/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by

EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

9911 Trumm 4/15/93

9/15/43 Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144 Project Number: 1649.16
Matrix: SOIL Date Released: 09/15/93

Date Sampled : 09/13/93

	Reporting Limit	Sample I.D.# SS158.OR	Sample I.D.# SE167.0	Sample I.D.# SE1710.0	Sample I.D.# SE188.0	Sample I.D.# BS1401E2
COMPOUNDS	(mg/Kg)	-02	-03	-04	-05 	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline		ND ND ND ND ND	ND ND ND ND ND 74% HP4	ND ND ND ND ND 101% HP21	ND ND ND ND ND 81% HP21	ND ND ND ND ND 97% HP4
Instrument I.1 Date Analyzed RLMF		HP4 09/14/93 1			09/14/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Danison 9/15/93 Analyst Danison 9/15/93 Oliver Brown Bate

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144
Matrix : SOIL

Project Number: 1649.16
Date Released: 09/15/93

Date Sampled : N/A

Sample

	Reporting Limit	I.D.# BS1401E2	 	 . ]
COMPOUNDS	(mg/Kg)	BLANK	 	 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND ND		
<pre>% Surrogate Rec Instrument I. Date Analyzed RLMF</pre>	D.	101% HP21 09/14/93 1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Davison 9/15/93

Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309144
Matrix : SOIL
Date Sampled : 09/13/93
Date Extracted: 09/13/93

Project Number: 1649.16
Date Released: 09/15/93
Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
	22150 00	00/14/02	10	ND	80%
9309144-02	SS158.0R	09/14/93	<del></del>		
9309144-03	SE167.0	09/13/93	10	ND	82%
9309144-04	SE1710.0	09/13/93	10	ND	85%
		09/13/93	10	ИД	85%
9309144-05	SE188.0				84%
BS13H2F1	METHOD BLANK	09/13/93	10	ND	040

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reache Danson 9/15/93
Analyst Date

Cheurl Balma 1/1/93 Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309144
Matrix : SOIL
Date Sampled : 09/13/93

Project Number: 1649.16
Date Released: 09/15/93
Instrument I.D.: HP19

Date Extracted: 09/13/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate *Rec
9309144-02	SS158.0R	09/14/93	10	ND	80%
9309144-03	SE167.0	09/13/93	10	ND	82%
9309144-04	SE1710.0	09/13/93	10	ND	85%
9309144-05	SE188.0	09/13/93	10	ND	85%
BS13H2F1	METHOD BLANK	09/13/93	10	ИD	84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Davison 9/15/175

Supervisor Supervisor

Date

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SE167.0

Anametrix I.D.: 09144-03

: SOIL Matrix

Date Sampled: 09/13/93 Date Analyzed: 09/14/93

Analyst : ky
Supervisor : //
Date Released : 09/15/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC S MS- (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.020 0.020 0.020 0.020	0.000 0.000 0.000 0.000	0.017 0.020 0.019 0.018	85% 100% 95% 90%	0.017 0.020 0.019 0.018	85% 100% 95% 90%	0% 0% 0% 0%	45-139 51-138 48-146 50-139
p-BFB				72%		69%		53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09144-05

Sample I.D. : 1649.16 SE188.0

Matrix : SOIL

Date Sampled : 09/13/93

Date Extracted: 09/13/93

Analyst : pp Supervisor : 67 Date Released : 09/15/93

Instrument I.D.: HP19 Date Analyzed: 09/13/93

COMPOUND	(mg/Kg) SPIKE	SAMPLE CONC (mg/Kg)	REC S MS (mg/Kg)	≹ REC MS	REC % MD (mg/Kg)	REC MD	RPD	%·RI LIMI	
DIESEL	125	0	83	66%	80	64%	-4%	32-	143
SURROGATE				84%		79%		30-	130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS1401E1

Matrix : SOIL

Analyst : Ro Supervisor : 0

Date Sampled : N/A
Date Analyzed : 09/14/93

Date Released: 09/15/93

Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC' LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020 0.020	0.018 0.022 0.022 0.020	90% 110% 110% 100%	52-133 57-136 56-139 56-141 53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MS1401E3

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/14/93

Analyst

RD

Supervisor Date Released

09/15/93 HP21

Instrument ID

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.019 0.019 0.019 0.020	95% 95% 95% 100%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS13H2F1

Matrix : SOIL

Date Sampled : N/A

Date Extracted: 09/13/93 Date Analyzed: 09/13/93 Analyst : £7
Supervisor : Ø
Date Released : 09/15/93
Instrument I.D.: HP19

COMPOUND	SPIKE (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	86	69%	48-113
SURROGATE			87%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received : 09/13/93 Project ID : 1649.16

Project ID : 1649.1 Purchase Order: N/A

Department : PREP Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309144- 2	SS158.0R	SOIL	09/13/93	5520EF
9309144- 3	SE167.0	SOIL	09/13/93	5520EF
9309144- 4	SE1710.0	SOIL	09/13/93	5520EF
9309144- 5	SE188.0	SOIL	09/13/93	5520EF

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309144
Date Received : 09/13/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Outhy Miltonleign 9/15/93
Department Supervisor Date

9/15/93

Chemist

Date

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 : SOIL Matrix Date sampled: 09/13/93 Date extracted: 09/13/93 Date analyzed: 09/14/93

Analyst : EK Supervisor : CM

Anametrix I.D. : 9309144

Date released : 09/16/93

                                   	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309144-02	SS158.0R	30	73
9309144-03	SE167.0	30	210
9309144-04	SE1710.0	30	63
9309144-05	SE188.0	30	210
BS13H1W9	METHOD BLANK	30	ND

- Not detected above the reporting limit for the method. ND - Total Recoverable Petroleum Hydrocarbons are determined by TRPH Standard Method 5520EF, 18th edition.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309144-02 Sample I.D. : 1649.16, SS158.0RMS, MD

: EK Analyst : SOIL Matrix : cm Supervisor

Date sampled : 09/13/93 Date extracted : 09/13/93 Date Released : 09/15/93

Date analyzed : 09/14/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	73	370	99%	350	92%	78°	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

ample I.D. : LAB CONTROL SAMPLE atrix : SOIL : N/A

Anametrix I.D.: MS13H1W9

Analyst : CK Supervisor : CW

Date Released : 09/14/93

Date extracted: 09/13/93 ate analyzed: 09/14/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Notor Oil	300	300	100%	71-119%
		~ ~ ~	. <b></b>	

<sup>\*</sup> Quality control established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# (8) (2) 9309144 (2) CHAIN OF CUSTODY / ANALYSES REQUEST FORM

,						J			\			- T-	<u> </u>	. 1		C+!	1 1 2	<del></del>	
	Project No.	: [(	149.	[6		Field I	_					Į į	Date:	9/1.	3 <i> 93</i>	Seria	ı No.	1102	5
	Project Nam	ne:	Pear	LiSt.		Projec	t Lo	catio	): /	() a	Kla	ind		- ; ;		1			
	Sampler (Sig	nature)		their Duced	liper			/		Α	NÀL'	YSES	···-	_/		Sar	nplers	WE	<i>r</i>
			/ SA	MPLES	· 1			- (g) ~	(Designation)	/5			$\langle \langle \rangle \rangle$	YOU	25t/			VE	M
_	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE		4° X			40/1	100		<u>×</u>	<u>~</u> /		REM	MARKS	
	BTANK-WR	9/13/93	8:00		3	<i>1</i> 20		X	Х					X		741	1	TA	<del>7</del>
1)	SS/5-8,0R				l	Soil		K	X	X	ダ	x		\tau_{\tau}		_ ' ' / ,	JUUI	//T	/
(5)	SE/6-7.0				(			<u>م</u>	X	入	x	と		入	/	Jesu/	15	to Jei	ufer_
$\left( \right)$	SĖ17-100		_		į			\$	$\sim$	幺	٧	1		人	,	Bea	Hy	· 	
$\langle \rangle$	SE16-80	$\Psi$	_		[	V		X	ス	火	大	火		X		P	/		
													<u></u>						· · · · · · · · · · · · · · · · · · ·
																	,		<u></u>
																			· · · · · · · · · · · · · · · · · · ·
3					-						<u> </u>								
								<del> </del>		-							<del></del>		
		<u> </u>		<u> </u>	1												···-		
					<del>                                     </del>			-					<u>-</u>						
					<del> </del>			+											
			- 1/2					<u> </u>											, , , , , , , , , , , , , , , , , , ,
	RELINQUISHED H	3Y: ()	1111	Charles das		91/5/9	2 1	MEOC		ECEIVE				7	//		5	DATE 7/13/93	TIME //OO
	(Signature) RELINQUISHED A	<u>₹</u>	U TO	Warner.		1111		rime		Signat ECEIVE			ny s	$\mathbf{c}_{\gamma}$	700	100	<u></u>	DATE 1	TIME
	(Signaturę)	torci	uyS,	Carrio	<u></u>	DAJE /	<u>3 l</u>	<u> 1200</u>	2   (	Signat	ure	oses	hen	e L	le (art	<u></u>		DATE /93	
	RELINQUISHED' (Signature)	BY:		0		DATE	(7	IME	R	ECE I VE Signat	ure)	, ,						DATE	TIME
	METHOD OF SHII					DATE		TIME		AB COM		:	<del></del>						*
	Sample Col	lector:	<del> </del>	LEVINE-FRICK 1900 Powell S Emeryville, Co (415) 652-4500	treet, 12 3 94608	h Floor	1_		P	Analy	tical	Labo		-	ne tri	Χ			***************************************



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309132
Date Received : 09/10/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9309132-1	SW11-8
9309132-2	SW12-12
9309132-3	SS13-7.0
9309132-4	SS14-12
9309132-5	SS15-8.0
9309132-6	B16-12
9309132-7	B17-14
9309132-8	B18-15.0
9309132-9	B19-13.0
9309132-10	B8-15

This report consists of 18 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director 09-17-93 Date

RECEIVED

RECEIVED

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309132 Date Received : 09/10/93

Project ID : 1649.16
Purchase Order: N/A
Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

	T		T	
ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309132- 1	SW11-8	SOIL	09/10/93	TPHd
9309132- 2	SW12-12	SOIL	09/10/93	TPHd
9309132- 3	SS13-7.0	SOIL	09/10/93	TPHd
9309132- 4	SS14-12	SOIL	09/10/93	TPHd
9309132- 5	SS15-8.0	SOIL	09/10/93	TPHd
9309132- 6	B16-12	SOIL	09/10/93	TPHd
9309132- 7	B17-14	SOIL	09/10/93	TPHd
9309132- 8	B18-15.0	SOIL	09/10/93	TPHd
9309132- 9	B19-13.0	SOIL	09/10/93	TPHd
9309132-10	B8-15	SOIL	09/10/93	TPHd
9309132- 1	SW11-8	SOIL	09/10/93	TPHgBTEX
9309132- 2	SW12-12	SOIL	09/10/93	TPHgBTEX
9309132- 3	SS13-7.0	SOIL	09/10/93	TPHgBTEX
9309132- 4	SS14-12	SOIL	09/10/93	TPHgBTEX
9309132- 5	SS15-8.0	SOIL	09/10/93	TPHgBTEX
9309132- 6	B16-12	SOIL	09/10/93	TPHgBTEX
9309132- 7	B17-14	SOIL	09/10/93	TPHgBTEX
9309132- 8	B18-15.0	SOIL	09/10/93	TPHgBTEX
9309132- 9	B19-13.0	SOIL	09/10/93	TPHgBTEX
9309132-10	B8-15	SOIL	09/10/93	трндвтех

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309132
Date Received : 09/10/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as gasoline for samples SW11-8 and SS15-8.0 are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

- The diesel matrix spike and matrix spike duplicate on sample B8-15 are outside of quality control limits possibly due to sample nonhomogeneity.

Cheugh Beelmen 9/10/93
Department Supervisor Date

Kamel G. Kumel 9116143
Chemist

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309132
Matrix : SOIL

Project Number: 1649.16
Date Released: 09/14/93

Date Sampled : 09/10/93

	Reporting Limit	Sample I.D.# SW11-8	Sample I.D.# SW12-12	Sample I.D.# SS13-7.0	Sample I.D.# SS14-12	Sample I.D.# SS15-8.0
COMPOUNDS	(mg/Kg)	-01	-02 	-03	-04	-05 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec		ND 0.013 ND 0.034 16	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND 0.39 31
Instrument I.  Date Analyzed  RLMF	D.	HP4 09/13/93 2.5	HP4	HP4 09/13/93 1	HP4 09/13/93 1	HP4 09/13/93 1

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

Cheryl Balma 9/14/93 Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309132 Matrix : SOIL Date Sampled : 09/10/93 Project Number: 1649.16
Date Released: 09/14/93

	Reporting Limit	Sample I.D.# B16-12	Sample I.D.# B17-14	Sample I.D.# B18-15.0	Sample I.D.# B19-13.0	Sample I.D.# B8-15
COMPOUNDS	(mg/Kg)	-06	-07	-08	-09	-10
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND	0.031
Total Xylenes	0.005	ND	ND	ND	ND	0.070
TPH as Gasoline	0.5	ND	ND	ND	ND	8.7
% Surrogate Reco	overv	105%	109%	109%	108%	107%
Instrument I.I		HP21	HP21	HP21	HP21	HP21
Date Analyzed		09/13/93	09/13/93	09/13/93	09/13/93	09/13/93
RLMF		1	1	1	1	2.5

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Penete Tauson 9/15/93 Analyst Date Cheus Brens 9/15/5)
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309132 : SOIL Matrix

Project Number: 1649.16
Date Released: 09/14/93

Date Sampled : N/A

Sample Sample

	Reporting Limit	I.D.# BS1301E2	BS1301E2	 	uu ale ap up ay ay ay a
COMPOUNDS	(mg/Kg)	BLANK	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed	overy D.	ND ND ND ND ND 111% HP4 09/13/93	ND ND ND ND ND 98% HP21 09/13/93		
RLMF		1	1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ge Dawson 9/1.

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309132
Matrix : SOIL
Date Sampled : 09/10/93

Project Number: 1649.16
Date Released: 09/14/93
Instrument I.D.: HP19

Date Extracted: 09/10/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309132-01 9309132-02 9309132-03 9309132-04 9309132-05 9309132-06 9309132-07 9309132-08 9309132-09 9309132-10 BS10H1F1	SW11-8 SW12-12 SS13-7.0 SS14-12 SS15-8.0 B16-12 B17-14 B18-15.0 B19-13.0 B8-15 METHOD BLANK	09/11/93 09/10/93 09/10/93 09/10/93 09/11/93 09/11/93 09/11/93 09/11/93 09/11/93	50 10 10 10 50 10 10 10	200 ND ND 100 ND ND ND ND ND ND	348 728 748 648 738 728 718 708 718 708
9309132-04 9309132-05 9309132-06 9309132-07 9309132-08 9309132-09 9309132-10	SS14-12 SS15-8.0 B16-12 B17-14 B18-15.0 B19-13.0 B8-15	09/10/93 09/11/93 09/11/93 09/11/93 09/11/93 09/11/93	10 50 10 10 10 10	ND 100 ND ND ND ND ND	64% 73% 72% 71% 70% 71%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 9/15/93 Analyst Davis Cheus Balmer 9/11 Supervisor Da

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309132
Matrix : SOIL
Date Sampled : 09/10/93

Project Number: 1649.16
Date Released: 09/14/93
Instrument I.D.: HP19

Date Extracted: 09/10/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309132-01 9309132-02 9309132-03 9309132-04 9309132-05 9309132-06 9309132-07 9309132-08 9309132-09 9309132-10 BS10H1F1	SW11-8 SW12-12 SS13-7.0 SS14-12 SS15-8.0 B16-12 B17-14 B18-15.0 B19-13.0 B8-15 METHOD BLANK	09/11/93 09/10/93 09/10/93 09/10/93 09/11/93 09/11/93 09/11/93 09/11/93 09/11/93	50 10 10 10 50 10 10 10	190 ND ND 190 ND ND ND ND ND ND	84% 72% 74% 64% 73% 71% 71% 76%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Tourson 9/15/83
Analyst Date

Charles Cylin Cylin Supervisor Date

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B19-13.0 Matrix : SOIL Date Sampled : 09/10/93 Date Analyzed : 09/13/93

Anametrix I.D.: 09132-09

Analyst : AT Supervisor : C5

Date Released : 09/14/93 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	REC MS	REC MD (mg/Kg)	REC MD	RPD	% REC LIMITS
GASOLINE	1.00	0	0.84	84%	0.87	87%	4%	48-149
P-BFB				98%		89%		53-147

<sup>\*</sup> Limits established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SS13-7.0

Anametrix I.D.: 09132-03

Matrix : SOIL

Date Sampled: 09/10/93 Date Analyzed: 09/13/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.034 0.040 0.037 0.037	85% 100% 93% 93%	0.034 0.039 0.039 0.037	85% 98% 98% 98% 93%	0% -3% 5% 0%	45-139 51-138 48-146 50-139
p-BFB		, 		80% 		86% 		53-147 

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B8-15
Matrix : SOIL
Date Sampled : 09/10/93
Date Extracted: 09/10/93

Anametrix I.D.: 09132-10
Analyst : RO
Supervisor : OP
Date Released : 09/14/93
Instrument I.D.: HP19

Date Analyzed: 09/11/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD		REC MITS
DIESEL	625	164	980	131%	1400	198%	35%	32	-143
SURROGATE				73%		76%		30	-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A

Anametrix I.D. : MS1301E1

Analyst : RD

Date Analyzed: 09/13/93

Supervisor : 5 Date Released : 09/14/93 Instrument I.D.: HP21

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
			•	
GASOLINE	0.50	0.45	90%	58-130
			101%	53-147
p-BFB				

<sup>\*</sup> Quality control established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D. : MS1301E3

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/13/93

Analyst
Supervisor
Date Released
Instrument ID

Released
109/14/93
HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.017 0.021 0.019 0.019	85% 105% 95% 95%	52-133 57-136 56-139 56-141	
P-BFB			93%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS10H1F1

Matrix : SOIL

Analyst Supervisor

Date Sampled : N/A

Supervisor : 09/14/93
Date Released : 09/14/93

Date Extracted: 09/10/93 Date Analyzed: 09/10/93

Instrument I.D.: HP19

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS	
DIESEL	125	104	83%	48-113	
SURROGATE			74%	30-130	

<sup>\*</sup>Limits established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309132 Date Received : 09/10/93 Project ID : 1649.16 Purchase Order: N/A Department : PREP Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309132- 1	SW11-8	SOIL	09/10/93	5520EF
9309132- 2	SW12-12	SOIL	09/10/93	5520EF
9309132- 3	SS13-7.0	SOIL	09/10/93	5520EF
9309132- 4	SS14-12	SOIL	09/10/93	5520EF
9309132- 5	SS15-8.0	SOIL	09/10/93	5520EF
9309132- 6	B16-12	SOIL	09/10/93	5520EF
9309132- 7	B17-14	SOIL	09/10/93	5520EF
9309132- 8	B18-15.0	SOIL	09/10/93	5520EF
9309132- 9	B19-13.0	SOIL	09/10/93	5520EF
9309132-10	B8-15	SOIL	09/10/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

: 9309132 Workorder # Date Received: 09/10/93 Project ID : 1649.16

Purchase Order: N/A : PREP Department

Sub-Department: PREP

### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Chemist

9/13/93

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 Anametrix I.D. : 9309132

Matrix : SOIL Date sampled : 09/10/93 Date extracted: 09/10/93 Date analyzed : 09/13/93

Analyst : EK
Supervisor : (W
Date released : 09/13/93

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309132-01	SW11-8 -	30	730
9309132-02	SW12-12	30	63
9309132-03	SS13-7.0	30	67
9309132-04	SS14-12	30	43
9309132-05	SS15-8.0	30	2,500
9309132-06	B16-12	30	43
9309132-07	B17-14	30	73
9309132-08	B18-15.0	30	67
9309132-09	B19-13.0	30	43
9309132-10	B8-15	30	420
BS10H1W9	METHOD BLANK	30	ND

- Not detected above the reporting limit for the method.
- Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309132-10 Analyst: EK

Sample I.D. : 1649.16, B8-15MS, MD
Matrix : SOIL
Date sampled : 09/10/93
Date extracted : 09/10/93
Date analyzed : 09/13/93

Supervisor : 0/Date Released : 09/13/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	420	640	73%	590	57%	25%	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MS10H1W9

: SOIL *d*atrix

Analyst

: EK

ate sampled

: N/A

Supervisor

: ch

Date extracted: 09/10/93 Date analyzed: 09/13/93

Date Released : 09/13/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	300	100%	71-119%

Quality control established by Anametrix Laboratories.

FRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.



### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

1001106

}	Project No	·: /	649	1./6		Field	Log	book	No.:			E	)ate	7/10	43	Serial No.	1114	
	Project Na	me:	Bear	In Street		Proje	ct Lo	ocatio	n:	09	101	avo	1	<del>                                     </del>		1		
	Sampler (Si	gnature)	: (7)	illui /W	selin	·		/		A	NAL'	YSES	'	/		Sampler	s: lety	
			U51	AMPLES				~(g);	A	· /s	/	$\boldsymbol{\lambda}$	/		/&/_		WHY	<u> </u>
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE		47° X			N N	OU A	J.	XOL)	215t/	RE	MARKS	
(1)	SWII-8	9/0/8	1		1	Soil		X	ス	*	<u> </u>	太		X	71	<i>f</i> //	TAT	
(2)	Su 12-12	11			1			x	X	k	x	人		x	1	1-Hour	1 /71	
(3)	SS/3-7,0				1			k	x	大	4	$\lambda$		X				
(4)	55/4-12				ı			K	大	k	X	x		大		Results	to Te	who
(5)	55/5-80				1			入	×	$\lambda$	X	x		大		y	KALL	۰۹۱ <i>۹</i> گ
(d)	B/6-12				1		<del> </del>	x	x	X	x x	上		x	-		pea 11	7
3	B17-14				1	<del>                                     </del>		1 2	×	) k	x	x		オ			_	
(B)	1 <del>5 1 / 1   1</del>	$\Box$	<del>- [</del>			<del>   </del>	╂	入	<del>                                     </del>	~   ×	<u> </u>	人		$\hat{\chi}$				
*	1318-15.0 1319-13.0		<del>                                     </del>		'	<del>                                     </del>	<del> </del>		X	*	オ	×		入				
(1)	<u>  DIY                                   </u>	1	1		1	<del>  '</del> -	-	X	X	+~		-^-		$\sim$				
		<u> </u>			ļ		<del>                                     </del>	_	<del> </del>									
					ļ		-	<u> </u>	<u> </u>	<u> </u>								
		ļ			ļ			<u> </u>	<u> </u>									
									<u> </u>									
					<u>]</u>		<u> </u>											
	<u>,</u>		İ			ł												
			- 1	2														
	RELINQUISHED (Signature)	BY: //	Illy!	In adam		DATE 9/10/	103	71ME 273	Λ	RECEIVI (Signa			(		300 15 0	~~/	9/10/93	742
	RELINQUISHED	BY:)	0	7000 000	<u> </u>	DATE	72	<i>سه عمل</i> TIME		RECEIV	ED BY:	PHY!	y 🕏	<u> </u>	Yuza		BATY /	TIME _
	(Signatur <b>a</b> )	Bun	48,6	empora	<u> </u>	DATE			O	(Signar	ture)	[[		1				TIME 15:50
	RELINQUISHED (Signature)	BY:	/	0 3		DATE		TIME		RECEIVI (Signa					1		DATE /	TIME
	METHOD OF SH					DATE		TIME	<del></del>	LAB CO		5:						
	Sample Co	llector:		LEVINE-FRIC	CKE	1			-	Analy	/tical	Labe	orato			<u>,, , , , , , , , , , , , , , , , , , ,</u>		,
	] Sample Co			1900 Powell		12th F	loor		Ī	y		,		-				
	1			Emeryville,	Ca 9460		-		}			AM	am	ette	11			
				(415) 652-4							•	7 J -	•	0	. /(			

Shipping Copy (White)

Lab Corv (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309071
Date Received : 09/07/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309071- 1	B7-12
9309071- 2	B8-15
9309071- 3	B9-17

This report consists of 13 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.
Laboratory Director

<u>09/13</u> Date

SEP 1 5 1000



# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309071
Date Received : 09/07/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309071- 1	B7-12	SOIL	09/07/93	TPHd
9309071- 3	B9-17	SOIL	09/07/93	TPHd
9309071- 1	B7-12	SOIL	09/07/93	TPHgBTEX
9309071- 3	B9-17	SOIL	09/07/93	TPHgBTEX

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309071
Date Received : 09/07/93
Project ID : 1649.16

Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentration reported as gasoline for sample B9-17 is primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Department Supervisor

9/10/13

Chemist 7c

10 Scol 93

GC/TPH- PAGE 2

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309071
Matrix : SOIL

Project Number: 1649.16
Date Released: 09/10/93

Date Sampled: 09/07/93

	Reporting Limit	Sample I.D.# B7-12	Sample I.D.# B9-17	Sample I.D.# BS0802E2	 
COMPOUNDS	(mg/Kg)	-01	-03	BLANK	 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  * Surrogate Rec Instrument I. Date Analyzed RLMF	D	ND ND ND ND ND 97% HP4 09/08/93	0.12 0.16 0.18 0.19 5.6 101% HP4 09/08/93 2.5	ND ND ND ND ND 104% HP4 09/08/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

Cheul Baimes a 10/13
Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309071 Matrix : SOIL Project Number: 1649.16
Date Released: 09/10/93

Date Sampled: 09/07/93
Date Extracted: 09/07/93

Instrument	I.D.:	HP9
------------	-------	-----

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309071-01	B7 <b>-1</b> 2	09/08/93	10	ND	73%
9309071-03	B9-17	09/08/93	10	31	76%
BS07H1F1	METHOD BLANK	09/07/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 10 Sept 93
Date

Cheurl Bruener 4/10/93 Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309071 Matrix : SOIL

'93

Project Number: 1649.16
Date Released: 09/10/93

Instrument I.D.: HP9

Date Sampled: 09/07/93 Date Extracted: 09/07/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309071~01	B7-12	09/08/93	10	ND	73%
9309071-03	B9-17	09/08/93	10	63	76%
BS07H1F1	METHOD BLANK	09/07/93	10	ND	78%
•					

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

Choul Balman 4/10/93 Supervisor Date

### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B7-12

Anametrix I.D.: 09071-01

Analyst : 5 Supervisor : 00

Matrix : SOIL Date Sampled : 09/07/93 Date Extracted: 09/07/93

Date Released : 09/10/93 Instrument I.D.: HP9

Date Analyzed: 09/08/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC % MD (mg/Kg)	REC MD	RPD	% REC LIMITS
DIESEL	125	0	79	63%	82	66%	4%	32-143
SURROGATE				76%		78% - <b></b>		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS0801E3

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/08/93

Analyst : 🖘 Supervisor : 03

Date Released : 09/10/93 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.013 0.017 0.018 0.018	65% 85% 90% 90%  95%	52-133 57-136 56-139 56-141

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB	CONTROL	SAMPLE	Anametrix I.D.	•	MSO7H1E1
COMPAC TACA	•	CONTINUE		MIGURE CLIM IND.	•	LICOLITIE

Matrix : SOIL
Date Sampled : N/A
Date Extracted: 09/07/93
Date Analyzed : 09/07/93 : OF. Analyst : Cs Supervisor

Date Released : 09/10/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE			79%	30-130

\*Limits established by Anametrix, Inc.

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309071 Date Received : 09/07/93 Project ID : 1649.16

Purchase Order: N/A
Department: PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309071- 1	B7-12	SOIL	09/07/93	5520EF
9309071- 3	B9-17	SOIL	09/07/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309071 Date Received: 09/07/93

Project ID : 1649.16

Purchase Order: N/A Department : PREP Sub-Department: PREP

#### QA/QC SUMMARY:

- No QA/QC problems encountered for these samples.

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309071 Project : 1649.16 : 448 Analyst Matrix : SOIL cm Supervisor Date sampled : 09/07/93 Date released: 09/08/93 Date extracted: 09/07/93 Date analyzed: 09/08/93

                                   	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309071-01	B7-12	30	ND
9309071-03	B9-17	30	190
BS07H1W9	METHOD BLANK	30	DM

- Not detected above the reporting limit for the method. ND - Total Recoverable Petroleum Hydrocarbons are determined by TRPH Standard Method 5520EF, 18th edition.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309071-01 Analyst: Expervisor: CMC Date Released: 09/08/93

Cample I.D. : 1649.16, B7-12MS, MD atrix : SOIL ate sampled : 09/07/93
Date extracted : 09/07/93

ate analyzed : 09/08/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS
Motor Oil	300	27	270	81%	280	84%	48	48-114%

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS07H1W9

Matrix

: SOIL

Analyst : 65

Date sampled : N/A

Supervisor

cm

Date extracted: 09/07/93

Date Released : 09/08/93

Date analyzed : 09/08/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	280	93%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

## CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Field Log	gbook No	• :		D	ate:/	7/9-	3	Serial 1	No.:	^
Project I	_ocation:	09	Kla	and	<del>-}-/-</del>	<del>[                                    </del>			1114	2
		Al	NALY	SES			/\$/	Samp	lers:	
SAMPLE TYPE	St. St.	6 <sup>12</sup> /2019	(Z)(6)		X/	*0), \$	55/_	`	REMARKS	
501				XĬ		X	71	r 11		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
					X	置	7	Ho	W A	<u>.                                    </u>
	x x		ح	ᆚ		X	-D	<u> </u>	1 / 7	
					_			ટકવા	15 70 14	aiter
								B <u>-</u>	eafty	
							<del></del>			
										<u></u>
										<u></u>
	1-1-				$\overline{}$	,		·		
DATE /OR	TIME			<del>?</del> -	- /			<u> </u>	DAT2	TJME
917.193 BATE 7	375()					. (M)	ujose		97/93	TIME TIME
9/7/93				osep	hin	2 ]	<u> </u>	ali		TIME 16:55
		(Signat	ure)/				······································	<del></del>	DAVE	TIME
DATE	I I ME	LAB COM	MENTS:	<u> </u>						
1 40th Ct		Analyt	tical			•			· · · · · · · · · · · · · · · · · · ·	<u> </u>
				A	\ <i>G</i> !!	ue f	rίV			
			10-		۳,	* \\				
	Project I	Project Location:  OF SAMPLE TYPE SOLL X  INTERPORT TIME DATE TIME  DATE TIME  101  102  103  104  105  105  105  105  105  105  105	OF SAMPLE TYPE  SOL	Project Location:  OF SAMPLE TYPE  SOLUTION  DATE TIME RECEIVED BY:  (Signature)  DATE TIME RECEIVED BY:  (Signature)  DATE TIME RECEIVED BY:  (Signature)  DATE TIME LAB COMMENTS:  et, 12th Floor  608	Project Location:  OF SAMPLE TIME RECEIVED BY: (Signature)  DATE TIME RECEIVED BY: (Signature)  DATE TIME RECEIVED BY: (Signature)  DATE TIME LAB COMMENTS:  Analytical Labor  Analytical Labor	Project Location:  OF SAMPLE TIME  Project Location:  OAK QUAC  ANALYSES  ANALYSES  ANALYSES  ANALYSES  ANALYSES  ANALYSES  ANALYSES  ANALYSES  RECEIVED BY  (Signature)	Project Location: Oak and ANALYSES  OF SAMPLE TYPE TYPE TYPE TYPE TYPE TYPE TYPE TYPE	Project Location:  OR QNA  ANALYSES  OF SAMPLE TYPE  T	Project Location:  OAK ANALYSES  Samp  OF SAMPLE TYPE  TYPE  SOIL RECEIVED BY  (Signature)  OAK ANALYSES  Samp  RECEIVED BY  (Signature)  Analytical Laboratory:  at, 12th Floor  1608	Project Location:  OR QUAL  ANALYSES  Samplers:  VEM  REMARKS  Soll R R R R R R R R R R R R R R R R R R



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309244 Date Received : 09/20/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309244- 1	SS31-4.0
9309244- 2	SS32-4.0
9309244- 3	SS33-4.0

This report consists of 14 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.

Laboratory Director

09-24-93

Dato

COPY

RECEIVED

SEP 2.7

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309244
Date Received : 09/20/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309244- 1	SS31-4.0	SOIL	09/20/93	TPHd
9309244- 2	SS32-4.0	SOIL	09/20/93	трна
9309244- 3	SS33-4.0	SOIL	09/20/93	трна
9309244- 1	SS31-4.0	SOIL	09/20/93	TPHgBTEX
9309244- 2	SS32-4.0	SOIL	09/20/93	ТРНЭВТЕХ
9309244- 3	SS33-4.0	SOIL	09/20/93	трндвтех

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309244 Date Received: 09/20/93 Project ID: 1649.16

Purchase Order: N/A Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentration reported as gasoline for sample SS-32-4.0 is primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Department Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309244 Project Number: 1649.16
Matrix : SOIL Date Released: 09/21/93

Date Sampled: 09/20/93

	Reporting Limit	Sample I.D.# SS31-4.0	Sample I.D.# SS32-4.0	Sample I.D.# SS33-4.0		
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  * Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND ND ND ND 85% HP8 09/21/93	ND ND ND S.2 120% HP8 09/21/93 2.5	ND ND ND ND ND 85% HP8 09/21/93	ND ND ND ND 103% HP8 09/21/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dauson 9/22/93 Analyst Date Cheul Balmer 9/21/93 Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309244
Matrix : SOIL
Date Sampled : 09/20/93

Project Number: 1649.16
Date Released: 09/21/93
Instrument I.D.: HP19

Date Extracted: 09/20/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309244-01	SS31-4.0	09/21/93	10	ND	82%
9309244-02	SS32-4.0	09/21/93	10	36	84%
9309244-03	SS33-4.0	09/20/93	10	ND	81%
BS20H2F1	METHOD BLANK	09/20/93	10	ND	84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Regare Dawson 9/22/93 Analyst Date Charles 9/21/43 Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309244 Matrix : SOIL Project Number: 1649.16
Date Released: 09/21/93
Instrument I.D.: HP19

Date Sampled: 09/20/93 Date Extracted: 09/20/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309244-01	SS31-4.0	09/21/93	10	ND	82%
9309244-02	SS32-4.0	09/21/93	10	48	84%
9309244-03	SS33-4.0	09/20/93	10	ND	81%
BS20H2F1	METHOD BLANK	09/20/93	10	ND	84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 9/22/93
Analyst Davison 9/22/93

Cheul Balma 9/31/9: Supervisor Date

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SS33-4.0

Anametrix I.D.: 09244-03

Analyst : Ry Supervisor : By

Supervisor

Date Released : 09/21/93

Matrix : SOIL
Date Sampled : 09/20/93
Date Analyzed : 09/21/93

Instrument I.D.: HP8

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000	0.032 0.035 0.037 0.038	80% 88% 93% 95%	0.036 0.038 0.040 0.041	90% 95% 100% 102%	12% 8% 8% 8%	45-139 51-138 48-146 50-139
p-BFB				98%		91%		53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SS31-4.0 Matrix : SOIL

Anametrix I.D. : 09244-01

Date Sampled: 09/20/93
Date Extracted: 09/20/93

Analyst : RS Supervisor : CB Date Released : 09/21/93 Instrument I.D.: HP19

Date	EXCLUCECU.	00/20/00
Date	Analyzed:	09/20/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC & MD (mg/Kg)	REC MD	RPD	% REC LIMIT	
DIESEL	125	0	78	62%	108	86%	32%	32-14	.3
SURROGATE				55%		84%		30-13	0

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

: SOIL Matrix

Date Sampled : N/A
Date Analyzed : 09/21/93

Anametrix I.D. : MS2101E3

Analyst

Supervisor

69/21/93

Date Released : HP8 Instrument ID

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.040 0.040 0.040 0.040	0.032 0.035 0.037 0.038	80% 88% 93% 95%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D. : MS20H2F1 Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL Date Sampled : N/A

Analyst : RD : MSZONZFI
Supervisor : C5
Date Released : 09/21/93
Instrument I.D.: HP19 Date Extracted: 09/20/93

Date Analyzed: 09/20/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	109	87%	48-113
SURROGATE			87%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309244 Date Received : 09/20/93

Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309244- 1	SS31-4.0	SOIL	09/20/93	5520EF
9309244- 2	SS32-4.0	SOIL	09/20/93	5520EF
9309244- 3	SS33-4.0	SOIL	09/20/93	5520EF

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309244
Date Received : 09/20/93

Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cothy Mutenberge 9/23/9
Department Supervisor Da

Chemist

Date

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 Anametrix I.D. : 9309244

Matrix : SOIL Analyst : FW

Date sampled : 09/20/93 Supervisor : FW

Date extracted: 09/20/93 Date released : 09/22/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309244-01	SS31-4.0	30	120
9309244-02	SS32-4.0	30	220
9309244-03	SS33-4.0	30	120
BS20H1W9	METHOD BLANK	30	ND

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, SS31-4.0MS, MD Anametrix I.D.: 9309244-01

Matrix : SOIL

Analyst Date sampled : 09/20/93 Date extracted : 09/20/93 Date analyzed : 09/21/93 Supervisor Date Released : 09/22/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	120	420	100%	390	90%	11%	48-114%	

Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: MS20H1W9 Sample I.D. : LAB CONTROL SAMPLE : 09/22/93 Analyst : SOIL Matrix Supervisor Date sampled : N/A Date extracted: 09/20/93 Date analyzed: 09/21/93 Date Released

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	280	93%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

SAMPLE NO. DATE TIME LAS SAMPLE TOPE STATES TO SAMPLE TOPE STATES TO SAMPLE TO SAMPLE TO SAMPLE TO SAMPLE TO SAMPLE TO SAMPLE TOPE STATES TO SAMPLE TO SAMPLE TOPE STATES TO SAMPLE TOPE STATES TO SAMPLE TOPE STATES TO SAMPLE TOPE STATES TO SAMPL	Project No.: 1649, 6	Field Logbook No.	: Date: 9/	20/93 Serial No.:
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  April 1 May 1 Ma	Project Name: Beach Street	Project Location:		
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  April 1 May 1 Ma	Sampler (Signature): Willew Woodlon		ANALYSES	Samplers:
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  April 1 May 1 Ma			10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/SE/ WLIM
RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)	SAMPLE NO. DATE TIME LAB SAMPLE NO. OF CON - NO. TAINERS	SAMPLE TYPE	(X) (X) (X) (X) (X)	$\alpha \star \prime$
RELINQUISHED BY:    Dea ty   Dea ty		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		74-HOUR TAT
RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)		<del>                                     </del>		2111
RELINQUISHED BY:  (Signature)  DATE  TIME  (Signature)  PATE  TIME  RECEIVED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)	5533-4.0	V   × ×	x   x   x   <del>1</del>	Results to Jenifer
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				Beatty
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY:  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  RELINQUISHED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  RECEIVED BY:  (Signature)  DATE  TIME  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY: (Signature)  RELINQUISHED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY: (Signature)  RELINQUISHED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  LAB COMMENTS:				
RELINQUISHED BY: (Signature)  RELINQUISHED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  RECEIVED BY: (Signature)  DATE  TIME  LAB COMMENTS:	RELINQUISHED BY: // William	8/12/93 T/ME,00	RECEIVED BY: (Signature)	MISS 8/20/93 1000
RELINQUISHED BY: (Signature)  METHOD OF SHIPMENT:  RECEIVED BY: (Signature)  DATE TIME LAB COMMENTS:	RELINOUISHED BY:	DATE TIME 9/20/93 1/02	(Signature) Corni Re	
METHOD OF SHIPMENT:  DATE TIME LAB COMMENTS:	RELINQUISHED BY:	DATE TIME	KECEIVED BY:	DATE TIME
Sample Collector: LEVINE EDICKE Analytical Laboratory:		DATE TIME	LAB COMMENTS:	
1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Emeryville, Ca 946 (415) 652-4500	, 12th Floor 08		FORM NO. 86/COC/AR



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309111
Date Received : 09/09/93
Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309111- 1	B13-12
9309111- 2	B14-15
9309111- 3	B15-16.5
9309111- 4	SAMPLE6C

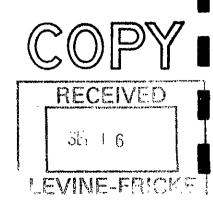
This report consists of 13 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director 09-15-93

Date



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309111 Date Received: 09/09/93

Project ID : 1649.16
Purchase Order: N/A
Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309111- 1	B13-12	SOIL	09/09/93	трна
9309111- 2	B14-15	SOIL	09/09/93	трна
9309111- 3	B15-16.5	SOIL	09/09/93	трна
9309111- 1	B13-12	SOIL	09/09/93	TPHgBTEX
9309111- 2	B14-15	SOIL	09/09/93	TPHgBTEX
9309111- 3	B15-16.5	SOIL	09/09/93	TPHgBTEX
9309111- 4	SAMPLE6C	SOIL	09/09/93	TPHGBTEX

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309111
Date Received : 09/09/93
Project ID : 1649.16
Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Charl Balmer 9/13/73

Department Supervisor Date

Chemist

9.13.93

Dat

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309111 Project Number Release

Date Sampled: 09/09/93

Project Number: 1649.16 Date Released: 09/13/93

	Reporting Limit	Sample I.D.# B13-12	Sample I.D.# B14-15	Sample I.D.# B15-16.5	Sample I.D.# SAMPLE6C	Sample I.D.# BS1001E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND 0.21 0.13 2.4 84	ND ND ND ND ND
<pre>% Surrogate Rec Instrument I.! Date Analyzed RLMF</pre>		93% HP4 09/10/93	92% HP4 09/10/93	93% HP4 09/10/93	92% HP4 09/10/93 25	96% HP4 09/10/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charledin Runh 9.13.43

Analyst Date

Cheryl Belman 9/13.1
Supervisor Da

RESULTS - TPH - PAGE 3

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309111
Matrix : SOIL
Date Sampled : 09/09/93
Date Extracted: 09/09/93

Project Number: 1649.16
Date Released: 09/13/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309111-01	B13-12	09/10/93	10	ИD	82%
9309111-02	B14-15	09/10/93	10	ND	80%
9309111-03	B15-16.5	09/10/93	10	40	85%
BS09H1F1	METHOD BLANK	09/10/93	10	ND	83%
				<b></b> _	

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles South 9,13.93
Analyst Date

Supervisor Date

RESULTS - TPH - PAGE 4

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309111 Matrix : SOIL Date Sampled : 09/09/93 Date Extracted: 09/09/93 Project Number: 1649.16 Date Released: 09/13/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309111-01	B13-12	09/10/93	10	ND	82%
9309111-02	B14-15	09/10/93	10	ND	
9309111-03	B15-16.5	09/10/93	10	98	80% 85%
BS09H1F1	METHOD BLANK	09/10/93	10	ИD	83%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charlesh Burg 9.13.93
Analyst Date

Chayl Balance Supervisor

Date

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

: 1649.16 B14-15 Sample I.D.

: SOIL

Matrix Date Sampled: 09/09/93 Date Extracted: 09/09/93 Date Analyzed: 09/10/93

Anametrix I.D. : 09111-02

Analyst

Supervisor Date Released: 09/13/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
DIESEL	125	0	75	60%	78	62%	4%	32-143
SURROGATE				83%		83%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE matrix : SOIL

Anametrix I.D.: MS1001E3
Analyst: CMB

Matrix : SOIL Date Sampled : N/A

Analyst : CMB
Supervisor : O9/13/93
Instrument ID : HP4

Date Analyzed: 09/10/93

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020 0.020	0.020 0.023 0.022 0.021	100% 115% 110% 105%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS09H1F1

Matrix : SOIL

: CMB Analyst

Date Sampled : N/A

Date Extracted: 09/09/93

Date Analyzed: 09/10/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	92	74%	48-113
SURROGATE			85%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309111 Date Received : 09/09/93

Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309111- 1	B13-12	SOIL	09/09/93	5520EF
9309111- 2	B14-15	SOIL	09/09/93	5520EF
9309111- 3	B15-16.5	SOIL	09/09/93	5520EF

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

: 9309111 Workorder # Date Received: 09/09/93 Project ID: 1649.16 Purchase Order: N/A

: PREP Department Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Chemist

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # Anametrix I.D. : 9309111 : 1649.16

Matrix : SOIL Date sampled : 09/09/93 Date extracted: 09/09/93 : EK Analyst Supervisor Supervisor : C/N Date released : 09/10/93

Date analyzed: 09/10/93

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309111-01	B13-12	30	240
9309111-02	B14-15	30	90
9309111-03	B15-16.5	30	140
BS09H1W9	METHOD BLANK	30	ND

- Not detected above the reporting limit for the method. - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, B14-15MS, MD Anametrix I.D. : 9309111-02

Matrix : SOIL Analyst : EK

Date sampled: 09/09/93 Supervisor: C/-Date extracted: 09/09/93 Date Released: 09/10/93

Date analyzed : 09/10/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	90	420	110%	400	103%	7%	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE ample I.D.

: SOIL

Anametrix I.D.: MS09H1W9

ntrix

Analyst

: EK

Sate sampled : N/A
Date extracted : 09/09/93
Tate analyzed : 09/10/93

Supervisor

Date Released: 09/10/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
otor Oil	300	290	97%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# 930911 (2) CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649,16	Field Logbook No.	Date: 9/9/93	Serial No.: 11144
Project Name: Beach Street	Project Location:	Opkland	11144
Sampler (Signature): William Mosliga		ANALYSES / /	Samplers: WEM
SAMPLES		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WEM
SAMPLE NO. DATE TIME LAB SAMPLE NO. OF CON - TAINERS	SAMPLE TYPE		REMARKS
B13-12 9/9/93 1	5011 × >		4-4000
B14-15		x x x + Z	4-Hour
B15-16.5	XX	$\langle x   x   x   x   x   \gamma \rangle$	O D+ + Tic
Sample-GC	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		squite 10 peniter
			Bealty
·			
10/1/06			
RELINQUISHED BY: (Signature)	DATE   TIME   9   9   9   9   9   9   9   9   9	RECEIVED BY: Commus. Communications of the communication of the communic	10 DATE TIME 9/9/43 16/0
RELINQUISHED BY: (Signature) Tannah, Canupa	PARE TIME	RECEIVED BY: (Signature)	D9/9/93 TIME 7.72
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: / (Signature)	DATE TIME
METHOD OF SHIPMENT:	DATE TIME	LAB COMMENTS:	
Sample Collector: LEVINE-FRICKE 1900 Powell Street, Emeryville, Ca 9460 (415) 652-4500		Analytical Laboratory: Anametrix	



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309039
Date Received : 09/02/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309039- 1	SW6-7.5
9309039- 2	SW7-10.5
9309039- 3	SW8-10.5

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by Calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director Date

SEP 1 3 1993



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309039
Date Received : 09/02/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309039- 1	SW6-7.5	SOIL	09/02/93	TPHd
9309039- 2	SW7-10.5	SOIL	09/02/93	TPHd
9309039- 3	SW8-10.5	SOIL	09/02/93	TPHd
9309039- 1	SW6-7.5	SOIL	09/02/93	TPHgBTEX
9309039- 2	SW7-10.5	SOIL	09/02/93	TPHGBTEX
9309039- 3	SW8-10.5	SOIL	09/02/93	TPHgBTEX

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309039 Date Received: 09/02/93 Project ID : 1649.16

Purchase Order: N/A Department : GC Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as gasoline for samples SW6-7.5, SW7-10.5 and SW8-10.5 are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Department Supervisor

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309039 Project Number: 1649.16
Matrix: SOIL Date Released: 09/08/93

Date Sampled: 09/02/93

	Reporting Limit	Sample I.D.# SW6-7.5	Sample I.D.# SW7-10.5	Sample I.D.# SW8-10.5		
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	,
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND ND 0.27 73 103% HP4 09/03/93	ND ND ND 18 106% HP4 09/03/93 2.5	ND ND ND 0.85 300 102% HP4 09/03/93	ND ND ND ND ND 117% HP4 09/03/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggli Tawson 9/9/93 Analyst Date Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309039
Matrix : SOIL
Date Sampled : 09/02/93
Date Extracted: 09/03/93

Project Number: 1649.16
Date Released: 09/08/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309039-01	SW6-7.5	09/04/93	200	720	73%
9309039-02	SW7-10.5	09/04/93	10	75	81%
9309039-03	SW8-10.5	09/04/93	200	510	86%
BS03H1F1	METHOD BLANK	09/04/93	10	ND	74%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Danson 9/9/93

Analyst

Cheupbolmer 9/9/93 Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309039

Project Number: 1649.16

Matrix : SOIL Date Released : 09/08/93 Instrument I.D.: HP9

Date Sampled: 09/02/93

Date Extracted: 09/03/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309039-01	SW6-7.5	09/04/93	200	1200	73%
9309039-02	SW7-10.5	09/04/93	10	120	81%
9309039-03	SW8-10.5	09/04/93	200	1000	86%
BS03H1F1	METHOD BLANK	09/04/93	10	ND	74%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

gle Dawson 9,

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL

Anametrix I.D. : MS0301E3

Date Sampled : N/A

Date Analyzed: 09/03/93

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.019 0.023 0.024 0.023	95% 115% 120% 115%	52-133 57-136 56-139 56-141	
P-BFB			93%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MS03H1F1 Sample I.D. : LAB CONTROL SAMPLE

: SOIL Analyst : VD Matrix Date Sampled : N/A Supervisor

Date Released: 09/09/93 Date Extracted: 09/03/93 Date Analyzed: 09/04/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	106	85%	48-113
SURROGATE			80%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309039 Date Received : 09/02/93

Project ID : 1649.16

Purchase Order: N/A
Department: PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309039- 1	SW6-7.5	SOIL	09/02/93	5520EF
9309039- 2	SW7-10.5	SOIL	09/02/93	5520EF
9309039- 3	SW8-10.5	SOIL	09/02/93	5520EF

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309039 Date Received: 09/02/93 Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

PREP/PREP- PAGE 2

## ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

#### ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16
Matrix : SOIL
Date sampled : 09/02/93
Date extracted: 09/02/93
Date analyzed : 09/03/93

Analyst : M·P Supervisor : On Date released : 09/03/93

Anametrix I.D.: 9309039

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309039-01	SW6-7.5	- 30	2,300
9309039-02	SW7-10.5	30	220
9309039-03	SW8-10.5	30	3,000
BS02H1W9	METHOD BLANK	30	ND

TRPH

- Not detected above the reporting limit for the method.
- Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, SW7-10.5MS, MD Matrix : SOIL

Anametrix I.D.: 9309039-02 Analyst: M.A. Supervisor: CA Matrix Date sampled : 09/02/93 Date extracted : 09/02/93 Date Released: 09/03/93

Date analyzed: 09/03/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	220	510	97%	460	80%	19%	48-114%	·

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

# LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS02H1W9

Matrix : SOIL Date sampled : N/A Matrix

Analyst Analyst : McP Supervisor : Ch

Date extracted: 09/02/93 Date analyzed : 09/03/93 Date Released : 09/03/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	300	100%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

ſ	Project No.	: // C	c9/C			Field						[	Date:	91	2/93	Serial	No.:		
Project No.: 1649, 16  Project Name: Beach Street					Project Location: Oakland					1	1	1502							
Ì	Sampler (Signature): Kully Wallow				<u></u>										Sam	plers	1.15	<del></del>	
	Sample: (or	9		AMPLES_				10		Z	joù	7	10 10 10 10 10 10 10 10 10 10 10 10 10 1			Samplers: WEM			
	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF CON- TAINERS	SAMPLE TYPE		the Mi			NAL Y	(T/8)		**/	<del>\</del>			ARKS	
	5146-7.5	9/2/93	1		l	Sul		1x	X	X	入	X		X		Q 11		TA7	
	5W7-145				l			X	2	7	x	*	ļ <u>.</u>	×	7	D-140	or	1/4/	
	SU18-10,5	1			ſ _	V	<u> </u>	1x	X	X	x	メ	<u> </u>	区	- A	<del>)                                    </del>	/ /	et 10	
							<u> </u>	<u> </u>		ļ					<i>K</i>	esul	<u>\$ 10</u>	Lear K-	er
					<u> </u>					<u> </u>		<u> </u>		<del> </del>			Bea	Hy	
		<u> </u>	<u></u>		<u> </u>		<del> </del>	_						-					
		<u> </u>	ļ		ļ	<del> </del>	<del> </del>		-				<u> </u>	<u> </u>					
					-	<u> </u>	<del> </del> -	_						-		- hui			
		<u> </u>			<del> </del> _	<del> </del>	-							<del>                                     </del>					
		<u> </u>			<u>,                                    </u>		†												
		<u> </u>				<u> </u>	†												
		<u> </u>	<u> </u>		<del>                                     </del>	<u> </u>	1 -				ļ	_							
		<u> </u>				<b></b>													
				-										<u> </u>					
			1		1						<u></u>	9		<u> </u>	<u> </u>				
	RELINQUISHED (Signature	BY:	100	un Road	1 4 4 -	9/2/9	r3	TIME OC		RECEIV (Signa	ED BY: ture)	A	01	id!				DATE 9-2-93	TIME 4:05
	RELINQUISHED	BY:	111	11	·	DATE 3-2-		TIME,		RECEIV (Signa	ED BY:	1	1 1 ×		$\overline{\mathcal{D}}$ .			9/2/93	TIME /7: <b>3</b> ⁄
	(Signature RELINQUISHED		W 12e	Musmin	<i>)</i>	DATE	75	TIME		RECEIV	ED BY:		<u> </u>			<u></u>		DATE	TIME
	(Signature	)				DATE		TIME		(Signa					<del></del>			<u> </u>	1
	METHOD OF SH	HTMENI:	<u> </u>			5,11	<u></u>						-		<del> </del>			<u></u>	
	Sample Co	ollector	•	LEVINE-FRI 1900 Powe Emeryville, (415) 652-	ll Street Ca 946		loor			Analy				etr	ix				
	<u></u>			(713) 032	7000				<del></del>	3.1.0	(D:							FORM NO	86/COC/A



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-452-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309016
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309016- 1	SW1-6
9309016- 2	SW2-7.5
9309016- 3	SN3-7.0
9309016- 4	SN4-7.5
9309016- 5	SW5-8.0
9309016- 6	B4-9.0
9309016- 7	B5-8.5
9309016- 8	B6-8.5

This report consists of 15 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen Ph.D. Laboratory Director Date



MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309016
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

<del></del>		1		
ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309016- 1	SW1-6	SOIL	09/01/93	TPHd
9309016- 2	SW2-7.5	SOIL	09/01/93	TPHd
9309016- 3	SN3-7.0	SOIL	09/01/93	TPHd
9309016- 4	SN4-7.5	SOIL	09/01/93	TPHd
9309016- 5	SW5-8.0	SOIL	09/01/93	TPHd
9309016- 6	B4-9.0	SOIL	09/01/93	TPHd
9309016- 7	B5-8.5	SOIL	09/01/93	TPHd
9309016- 8	B6-8.5	SOIL	09/01/93	TPHd
9309016- 1	SW1-6	SOIL	09/01/93	TPHgBTEX
9309016- 2	SW2-7.5	SOIL	09/01/93	ТРНЭВТЕХ
9309016- 3	SN3-7.0	SOIL	09/01/93	TPHgBTEX
9309016- 4	SN4-7.5	SOIL	09/01/93	TPHgBTEX
9309016- 5	SW5-8.0	SOIL	09/01/93	TPHgBTEX
9309016- 6	B4-9.0	SOIL	09/01/93	TPHgBTEX
9309016- 7	B5-8.5	SOIL	09/01/93	TPHgBTEX
9309016- 8	B6-8.5	SOIL	09/01/93	трндвтех

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309016
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC

Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as gasoline for samples SW1-6 and B4-9.0 are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

- The diesel surrogate recovery for sample B4-9.0 is outside of quality

control limits due to a dilution.

Chief Balmin 9/7/93
Department Supervisor Date

Luca Sher 9/7/93 Chemist Date

GC/TPH- PAGE :

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309016
Matrix : SOIL

Project Number: 1649.16
Date Released: 09/03/93

Date Sampled : 09/01/93

	Reporting Limit	Sample I.D.# SW1-6	Sample I.D.# SW2-7.5	Sample I.D.# SN3-7.0	Sample I.D.# SN4-7.5	Sample I.D.# SW5-8.0
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	-05 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND 0.34 0.39 3.2 190 104% HP21 09/02/93 25	ND ND ND ND ND 93% HP4 09/02/93	ND ND ND ND " 87% HP4 09/02/93	ND ND ND ND ND 101% HP4 09/02/93	ND ND ND ND ND 95% HP21 09/02/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charleson Burch 9.8.43
Analyst Date

Charles G/8/c3
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309016 Matrix : SOIL

Project Number: 1649.16
Date Released: 09/03/93

Date Sampled: 09/01/93

	Reporting Limit	Sample I.D.# B4-9.0	Sample I.D.# B5-8.5	Sample I.D.# B6-8.5	Sample I.D.# BS0201E1	Sample I.D.# BS0201E1
COMPOUNDS	(mg/Kg)	-06	-07	-08	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.05	ND 0.062 0.056 0.63 35	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		111% HP21 09/02/93 5	105% HP4 09/02/93 1	101% HP21 09/02/93	122% HP21 09/02/93	106% HP4 09/02/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<u>luna Stor 9/7/93</u>
Analyst Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Project Number: 1649.16 Date Released: 09/03/93 Instrument I.D.: HP9 Anametrix W.O.: 9309016 Matrix : SOIL
Date Sampled : 09/01/93

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309016-01	SW1-6	09/02/93	200	630	57%
9309016-02	SW2-7.5	09/02/93	10	ND	127%
9309016-03	SN3-7.0	09/02/93	10	ND	126%
9309016-04	SN4-7.5	09/02/93	10	ND	116%
9309016-05	SW5-8.0	09/02/93	10	ND	124%
9309016-06	B4-9.0	09/02/93	100	150	9%
9309016-07	B5-8.5	09/02/93	10 -	ND	130%
9309016-08	B6-8.5	09/02/93	10	ND	120%
BSO1H1F1	METHOD BLANK	09/02/93	10	ND	112%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

era Shor 9/7/93
Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309016
Matrix : SOIL
Date Sampled : 09/01/93

Project Number: 1649.16
Date Released: 09/03/93

Instrument I.D.: HP9

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309016-01	SW1-6	09/02/93	200	980	57 <b>%</b>
9309016-02	SW2-7.5	09/02/93	10	ND	127%
9309016-03	SN3-7.0	09/02/93	10	ND	126%
9309016-04	SN4-7.5	09/02/93	10	ND	116%
9309016-05	SW5-8.0	09/02/93	10	ND	124%
9309016-06	B4-9.0	09/02/93	100	290	9%
9309016-07	B5-8.5	09/02/93	10 -	ND	130%
9309016-08	B6-8.5	09/02/93	10	ND	120%
BSO1H1F1	METHOD BLANK	09/02/93	10	ИD	112%

Noce: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Shor 9/7/93 Analyst Date

Cheul Balmer Supervisor 7/93

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B6-8.5 Anametrix I.D.: 09016-08

Analyst : IS
Supervisor : co
Date Released : 09/07/93
Instrument I.D.: HP21 Matrix : SOIL
Date Sampled : 09/01/93
Date Analyzed : 09/02/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC S MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.031 0.034 0.036 0.039	78% 85% 90% 98%	0.030 0.034 0.035 0.038	75% 85% 88% 95%	-3% 0% -3% -3%	45-139 51-138 48-146 50-139
p-BFB				103%		107%		53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SN3-7.0
Matrix : SOIL
Date Sampled : 09/01/93
Date Analyzed : 09/02/93

Anametrix I.D.: 09016-03 Analyst: IS Supervisor: CB Date Released: 09/07/93 Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC S MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.030 0.037 0.037 0.036	75% 93% 93% 90%	0.032 0.038 0.039 0.037	80% 95% 98% 93%	6% 3% 5% 3%	45-139 51-138 48-146 50-139
p-BFB				92%		86%		53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS0201E3

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/02/93

Analyst : IS Supervisor : CB

Date Released: 09/07/93

Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.013 0.015 0.015 0.017	65% 75% 75% 85%	52-133 57-136 56-139 56-141	
P-BFB			108%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D. : MS0201E3 Analyst : IS

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/02/93

Supervisor : c/s
Date Released : 09/07/93
Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.016 0.020 0.020 0.020	80% 100% 100% 100%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MS01H1F1

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Extracted: 09/01/93
Date Analyzed : 09/01/93 : Is Analyst Supervisor ces

Supervisor : 09/07/93
Date Released : 09/07/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE			124%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309016
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309016- 1	SW1-6	SOIL	09/01/93	5520EF
9309016- 2	SW2-7.5	SOIL	09/01/93	5520EF
9309016- 3	SN3-7.0	SOIL	09/01/93	5520EF
9309016- 4	SN4-7.5	SOIL	09/01/93	5520EF
9309016- 5	SW5-8.0	SOIL	09/01/93	5520EF
9309016- 6	B4-9.0	SOIL	09/01/93	5520EF
9309016- 7	B5-8.5	SOIL	09/01/93	5520EF
9309016- 8	B6-8.5	SOIL	09/01/93	5520EF

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309016 Date Received : 09/01/93 Project ID : 1649.16

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Othy Mistarbuge 9/6/93
epartment Supervisor Date

SPOJZLIKOV Chemist

09.07.93

Date

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 Anametrix I.D. : 9309016
Matrix : SOIL Analyst : [U, [?]]
Tate sampled : 09/01/93 Supervisor : ([[...]])
Date extracted: 09/01/93 Date released : 09/03/93

Date analyzed : 09/02/93

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309016-01	SW1-6	30	6,700
9309016-02	SW2-7.5	30	90
9309016-03	SN3-7.0	30	60
9309016-04	SN4-7.5	30	53
9309016-05	SW5-8.0	30	67
9309016-06	B4-9.0	30	1,300
9309016-07	B5-8.5	30	33
9309016-08	B6-8.5	30	30
BS01H1W9	METHOD BLANK	30	ND

ND RPH

- Not detected above the reporting limit for the method.
- Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: MS01H1W9

Analyst : M.P. Supervisor : CM Supervisor : CM Date Released : 09/03/93

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/01/93
Date analyzed : 09/02/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	300	100%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.



### 9309014



## CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.: 1649./6					Field	Log	book	No.:	···			Date: 9/193   Serial No.: 11123				2	
	Project Nan		Beac	7		i	t L	ocation	n:	Dai	R/a	ind			1'		1112	J
-	Sampler (Sig	gnature)		AMPLES	raphy	m_		_/			NAL'	YSES		/		Sampi	<i>H</i>	
İ	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF CON-	SAMPLE TYPE		13h 161		HY ST	OF A	PH	koi/	HOL	415th/		WEM REMARKS	
	5W1-6	9/1/93		1102	TAINERS	Soil		12	<u>/</u>	X	次	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		×		1, 11		
2	SW2-75	14 11			1	Ĭ		X	<u> </u>	8	k	×		x	2	1-1100	IN TAT	
3	SN3-7.0				1			X	x	X	X	k		E		- P / I		
4	5/14-7.5				l	j ;		1	X	K	۶	と		$\alpha$		1e 134	-136 Sa	mples
<b>?</b> )	SW5-8.0				1			×	K	×	X	X		2	_ai	e mo	stimpo	ntant
3	B4-9.0 B5-8.5				1			7	×	×	Έ	Х		$ \alpha $	~	unples	to ha con	10. Notal
5078	B5- 8,5 B6- 8,5	$\forall$			[	<b>V</b>		X X	X	x	<u>×</u>	X		o X	<del></del> ;	700	to be co	mpleted
	DO OIJ		11		1	<u> </u>		^		~					-   t	A 24-	10013 ·	<del></del>
				71											<i>C</i> .	; h	14	<i></i>
}															> t	WP B	ifults 1	O
-																Zewif.	Ir Root	7 0
-																		1 7
	*														<del></del> -			
f		_		······································					· · · · · · · · · · · · · · · · · · ·									
Ī	RELINQUISHED (Signature)	BY PA	thic	Madein	<u> </u>	PATY 19	13	TIME 20	3 F	ECEIVE Signat		1/4	J K	a 0 D	onu	<	DATE Dary-93	TIME V. ZC
Ţ	RELINQUISHED (Signature)	BY://	3,000	7 0004 11	<del></del> -	DATE 9-1-9	22	TIME 5. 30		ECEIVE	D BY:		<u>4 1 %</u>	<u>exer</u>	).		DATE /93	TIME
ļ	RELINQUISHED E (Signature)	3Y:	UX GU	nn		DATE		TIME	R	Signat ECEIVE Signat	D BY:	<del>NV</del>	-		Y		DATE DATE	17:30 TIME
	METHOD OF SHIP	PMENT:				DATE	1	TIME		AB COM		:						
f	Sample Col	lector:	· · · · · · · · · · · · · · · · · · ·	LEVINE-FRIC	KE	1			-   /	Analy	tical	Labo	orato	·y:				
				1900 Powell Emeryville, (			or			•				-	frix			
L				(415) 652-4		·							Thai	MU	VIX			



San Jose, CA 95151 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309075 Date Received: 09/08/93 Project ID : 1649.16 Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9309075- 1	SN9-7.5
9309075- 2	SN10-7
9309075- 3	B10-9
9309075- 4	B11-8

This report consists of 16 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Laboratory Director

**SEP** 1 5 1993



#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309075
Date Received : 09/08/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC

Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309075- 1	SN9-7.5	SOIL	09/08/93	TPHd
9309075- 2	SN10-7	SOIL	09/08/93	TPHd
9309075- 3	B10-9	SOIL	09/08/93	трна
9309075- 4	B11-8	SOIL	09/08/93	TPHd
9309075- 1	SN9-7.5	SOIL	09/08/93	ТРНдВТЕХ
9309075- 2	SN10-7	SOIL	09/08/93	ТРНдВТЕХ
9309075- 3	B10-9	SOIL	09/08/93	TPHgBTEX
9309075- 4	B11-8	SOIL	09/08/93	TPHgBTEX

#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309075 Date Received: 09/08/93 Project ID: 1649.16 Purchase Order: N/A

Department : GC

Sub-Department: TPH

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Date

<u>Juna Shar 9/10/93</u> Chemist

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309075 Project Number: 1649.16
Matrix: SOIL Date Released: 09/10/93

Date Sampled: 09/08/93

	Reporting Limit	Sample I.D.# SN9-7.5	Sample I.D.# SN10-7	Sample I.D.# B10-9	Sample I.D.# B11-8	Sample I.D.# BS0901E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  % Surrogate Rec Instrument I. Date Analyzed RLMF	D	ND ND ND ND ND 101% HP4 09/09/93	ND ND ND ND ND 97% HP4 09/09/93	ND ND ND ND T 104% HP21 09/09/93	ND ND ND ND ND 105% HP21 09/09/93	ND ND ND ND ND 100% HP4 09/09/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<u>Juna Shor 9/10/93</u> Analyst Date Cheuf Balmer 4/10/45 Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309075

Instrument I.D.

Date Analyzed

RLMF

Project Number: 1649.16 Date Released : 09/10/93

Matrix : SOIL

Date Sampled : N/A

	Reporting Limit	Sample I.D.# BS0901E2	 	
COMPOUNDS	(mg/Kg)	BLANK	 	 
Benzene	0.005	ND		
Toluene	0.005	ND		
Ethylbenzene	0.005	ND		
Total Xylenes	0.005	ND		
TPH as Gasoline	0.5	ND	•••	
% Surrogate Rec	overv	104%		

- ND Not detected at or above the practical quantitation limit for the method.
- TPHg Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

HP21

-09/09/93

- BTEX Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

uua Shor 9/10/93 Date

l Balmer 9/10/93 Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309075 Matrix Matrix : SOIL
Date Sampled : 09/08/93 Project Number: 1649.16
Date Released: 09/10/93 Instrument I.D.: HP9

Date Extracted: 09/08/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309075-01	SN9-7.5	09/08/93	10	ND	73%
9309075-02	SN10-7	09/09/93	10	ND	74%
9309075-03	B10-9	09/09/93	10	ND	76%
9309075-04	B11-8	09/09/93	10	ND	76%
BS08H1F1	METHOD BLANK	09/08/93	10	ND	78%
			***		

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Shor 9/10/93

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309075 Project Number: 1649.16
Matrix : SOIL Date Released: 09/10/93
Date Sampled: 09/08/93 Instrument I.D.: HP9

Date Extracted: 09/08/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
			~~~~~		
9309075~01	SN9-7.5	09/08/93	10	ND	73%
9309075-02	SN10-7	09/09/93	10	ND	74%
9309075-03	B10-9	09/09/93	10	ND	76%
9309075-04	B11-8	09/09/93	10	ИD	76%
BS08H1F1	METHOD BLANK	09/08/93	10	ND	78%
		, ,			

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

Charles 9/10/23 Supervisor Date

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B11-8

Anametrix I.D.: 09075-04

Matrix : SOIL Date Sampled : 09/08/93

Analyst Supervisor

: Is : 03

Date Released: 09/10/93

Date Analyzed: 09/09/93

Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC S MS (mg/Kg)	REC MS	REC % MD (mg/Kg)	REC MD	RPD	% REC LIMIT	
GASOLINE	1.00	0	0.74	74%	0.80	80%	8%	48-14	9
P-BFB				96%	ag)	96%		53-14	7

<sup>\*</sup> Limits established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D. : MS0901E1

Matrix : SOIL Analyst : Is

Date Sampled : N/A
Date Analyzed : 09/09/93

Supervisor : 6 Date Released : 09/10/93 Instrument I.D.: HP21

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.45	90%	58-130
р-ВFВ			103%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

: SOIL Matrix

Date Sampled : N/A
Date Analyzed : 09/09/893

Anametrix I.D.: MS0901E1
Analyst: IIS
Supervisor: G
Date Released: 09/10/93
Instrument I.D.: HP4

-	COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
	GASOLINE	0.50	0.40	80%	58-130
	p-BFB			97%	53-147
~					

<sup>\*</sup> Quality control established by Anametrix, Inc:

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B10-9 Anametrix I.D.: 09075-03

Analyst : Is
Supervisor : 
Date Released : 09/10/93 Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Date Analyzed: 09/09/93 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC 8 MS (mg/Kg)	REC MS	REC %	REC MD	RPD	% REC LIMITS
DIESEL	125	0	98	78%	95	76%	<b>-</b> 3%	32-143
SURROGATE				89%		82%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D. :	MS08H1F1
-------------	----------------------	------------------	----------

Matrix : SOIL Analyst Date Sampled: N/A
Date Extracted: 09/08/93
Date Analyzed: 09/08/93

Supervisor : 55
Date Released : 09/10/93
Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	94	75%	48-113
SURROGATE			80%	30-130

\*Limits established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309075
Date Received : 09/08/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309075- 1	SN9-7.5	SOIL	09/08/93	5520EF
9309075- 2	SN10-7	SOIL	09/08/93	5520EF
9309075- 3	B10-9	soil	09/08/93	5520EF
9309075- 4	B11-8	soil	09/08/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309075

Date Received: 09/08/93 Project ID : 1649.16

Purchase Order: N/A

Department : PREP

Sub-Department: PREP

#### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16
Matrix : SOIL
Date sampled : 09/08/93
Date extracted: 09/08/93
Date analyzed : 09/09/93

Anametrix I.D.: 9309075 Analyst: Supervisor: Ch

Date released: 09/10/93

    Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309075-01	SN9-7.5	30	47
9309075-02	SN10-7	30	43
9309075-03	B10-9	30	ND
9309075-04	B11-8	30	40
BS08H1W9	METHOD BLANK	30	ND

ND TRPH - Not detected above the reporting limit for the method.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<sup>-</sup> Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: 1649.16, B10-9MS, MD Sample I.D.

: SOIL

atrix Date extracted: 09/08/93
Pate analyzed: 09/09/93

Anametrix I.D.: 9309075-03

Analyst :

Supervisor

Date Released: 09/10/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
lotor Oil	300	23	290	89%	290	89%	0%	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MS08H1W9

Matrix : SOIL Analyst

Date sampled

: N/A

Supervisor

Date extracted: 09/08/93

Date Released : 09/10/93

Date analyzed: 09/09/93

COMPOUND	AMT.	LCS	%REC	%REC
	(mg/Kg)	(mg/Kg)	LCS	LIMITS
Motor Oil	300	270	90%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.	.: //	049	16		Field	_					- 1	Date:	9/8	193	Serial	No.:	1114	(
	Project Nar			ach SI	Test	Projec	t Lo	cation	٦: ८	Pakl	cuel	ļ	•	· · · · · · · · · · · · · · · · · · ·		1		11141	
	Sampler (Si	gnature)	: // /4	Clien Oris	eleon					A	NAL'	YSES		_/_		Sam	plers	. برسر	
		, <u> </u>	Vrsi	AMPLES'	lua as			-/sì,		/5			$\mathcal{A}$	1017	(15th/	<u> </u>	<u></u> (,	JEM_	
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON - TAINERS	SAMPLE TYPE	$\angle$	4° 10°				O A		<u>*                                    </u>			REN	MARKS	
	SN9-75	9/4/93			1	Soil		r	入	メ	<b>×</b>	<u>ト</u>		X		<u> </u>		717	
(2)	SN10-7			·	1			X	次	X	X	ケ		X		1-14c	XIV	1A1_	
(3)	B10-9	V			1	V		K	X	上	X	大		欠					
4	B11-8	9/8/93	1		(	Sil		x	x	x	大	x		x		<del>lesu</del>	115	to	
								1		<del> </del>						To	. (	Rot	· · · · · · · · · · · · · · · · · · ·
								ļ		ļ <u>-</u>						2-401	T-RI	Deall	<del>}</del>
								-				-				<del></del>			
										-	<u></u>	1							
										<b></b>		<u> </u>		-					
															***			<u></u>	
		<del> </del>			<u> </u>											<u></u>		<del></del>	
								<u> </u>									· · · · · · · · · · · · · · · · · · ·		
				<u> </u>						<u> </u>								<del> </del>	
		_								<del>                                     </del>						, u			
	RELINQUISHED	BY /	1/1/	The 10		DATE		TIME		RECE I VE	D BY		<u> </u>		A	ţ	7	DATE /	TIME
	(Signature) RELINQUISHED		Klum	. Madra	<u>~</u>	9/8/9	3	295	5	(Signat	ure)	S21	my	11	an	efose	6	DATE / 9/8/93	TIME 0955
	(Signature)	NOOM	uis.	Carrino	$\supset$	7/2	3	TIME		(Signat	ure)	سع	un 1	ResCiq	ndo	J	_	9-8-43	1/200
;	RELINQUISHED (Signature)	BY:	/	0		DATE	7	ΓIME		RECETVE (Signat	ED BY:					-=		DATE	TIME
	METHOD OF SH					DATE		TIME	_	LAB CO	· · · · · · · · · · · · · · · · · · ·	·:						-	
	Sample Co	lloctore		LEVINE-FRIC	YE	<u> </u>			$\overline{+}$	Analy	tical	lah	orato	rv					
	Jampie Co	n <del>e</del> ctor .		1900 Powell		12th Flo	or			, vi ia i y	cicai	Lau				<i>f</i> \(			
İ				Emeryville, (	Ca 9460								A	in n	144.0	tri,	X		
				(415) 652-4	500								$\int \mathcal{A}$	<u>nu</u>	MA	.   ' ' /	<u> </u>	·	

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309090
Date Received : 09/08/93
Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309090- 1	B12-13

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director Date

SEP | 5 1993



# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309090
Date Received : 09/08/93

Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309090- 1	B12-13	SOIL	09/08/93	TPHd
9309090- 1	B12-13	SOIL	09/08/93	трндвтех

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309090
Date Received : 09/08/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Department Supervisor

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309090 Matrix : SOIL Project Number: 1649.16
Date Released: 09/13/93

Date Sampled: 09/08/93

	Reporting Limit	Sample I.D.# B12-13	Sample I.D.# BS0901E2	 	
COMPOUNDS	(mg/Kg)	-01	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	D. "	ND ND ND ND ND 101% HP4 09/09/93	ND ND ND ND 100% HP4 09/09/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Chulch Bung 9.13 43
Analyst Date

Claud Balmer 4/13/75 Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309090 : SOIL Matrix Date Sampled: 09/08/93 Date Extracted: 09/08/93 Project Number: 1649.16
Date Released: 09/13/93
Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309090-01	B12-13	09/09/93	10	ND	79%
BS08H1F1	METHOD BLANK	09/08/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

In Binch 9.13.93

RESULTS - TPH - PAGE 4

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309090

Project Number: 1649.16
Date Released: 09/13/93 Instrument I.D.: HP9

Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309090-01	B12-13	09/09/93	10	ND	79%
BS08H1F1	METHOD BLANK	09/08/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

James Bruch 9.13.93 Date

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B12-13

Anametrix I.D.: 09090-01

Analyst : Cms

Supervisor

: Os

Matrix : SOIL
Date Sampled : 09/08/93
Date Analyzed : 09/09/93

Date Released : 09/13/93 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
GASOLINE	1.00	0	0.70	70%	0.72	72%	3%	48-149
P-BFB				91%		95%		53-147

<sup>\*</sup> Limits established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/09/93

Anametrix I.D.: MS0901E1

Analyst : CMB

Supervisor : 09/10/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.40	80%	58 <b>-130</b>
p-BFB			97%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MS08H1F1 Sample I.D. : LAB CONTROL SAMPLE Analyst : CMB

Matrix : SOIL Date Sampled : N/A

Supervisor : 00 Date Released : 09/13/93 Instrument I.D.: HP9

Date Extracted: 09/08/93 Date Analyzed: 09/08/93

COMPOUND	SPIKE REC AMT LCS COMPOUND (mg/Kg) (mg/F		% REC LCS	% REC LIMITS	
DIESEL	125	. 102	82%	48-113	
SURROGATE			80%	30-130	

<sup>\*</sup>Limits established by Anametrix, Inc.

## REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309090 Date Received : 09/08/93 Project ID : 1649.16

Purchase Order: N/A
Department: PREP
Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309090- 1	B12-13	SOIL	09/08/93	5520EF

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309090
Date Received : 09/08/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

### QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Othy With buge 9/10/93 Department Supervisor Date Levitag in 9/10/83
Chemist Date

PREP/PREP- PAGE 2

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 Matrix

: SOIL

Date sampled : 09/08/93 Date extracted: 09/08/93 Date analyzed: 09/09/93 Anametrix I.D.: 9309090

Analyst

on ye Supervisor

Date released: 09/10/93

                       	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	
9309090-01	B12-13	30	53	
BS08H1W9	METHOD BLANK	30	ND	

- Not detected above the reporting limit for the method. TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MS08H1W9

: SOIL Matrix

Analyst

: N/A Date sampled

Supervisor

Date extracted: 09/08/93

Date analyzed : 09/09/93

Date Released: 09/10/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	270	90%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.	.: /	649	.16		Field	_					E	ate:	9/8/43	Serial No.:	11143	
Ī	Project Nar	ne: 1	Beach	5treet	a	Projec	t Lo	cation	n: <u> </u>	Dak							
ļ	Sampler (Si	gnature)	( Jul	hi The	disir			/	<i>/</i>		$\overline{}$	SES	7	19/8/	Samplers WE/M	<b>:</b>	
	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF CON - TAINERS	SAMPLE TYPE		St. V			A A		DH/	10/83/-		IARKS	
	B/2-13	9/4/93	_		I	Suil								X 2	4- Hou	r TA	7
														1	Results	to J	eviler
															Beat	Ry	
								-									
																<del></del>	
								<u> </u>									
			. 11		Λ .												
	RELINQUISHED (Signature	$\triangleright$	Tielle	w Proc	der	9/8/0	73	4°20		RECEIVE (Signat	ture)/	Mus	13	Music		DATE 9-8 93	TIME YIDJ
	RELINQUISHED (Signature	110	O 13	Bol Puras	nemā	DATE OF STATE	.3	TIME SI	37,	RECEIVE (Signat	ture)	ll V z		Bic		DATE /93	TIME 17:30
	RELINQUISHED (Signature		-5( -70			DATE				(Signat	ture)					DATE /	TIME
	METHOD OF SH	IPMENT:				DATE		TIME		LAB CO	MMENTS	·:					
-	Sample Co	llector		LEVINE-FF 1900 Pow Emeryville (415) 652	ell Street, , Ca 9460		loor			Analy			orato UM			_	
ì	Shipping Copy	(White)	Lab	Copy (Green)		е Сору (	Yello	w)	Fie	ld Copy	/ (Pin	k)				FORM NO.	86/C0C/AR



1961 Concourse Drive San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309296 Date Received: 09/23/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9309296- 1	B27-10.0

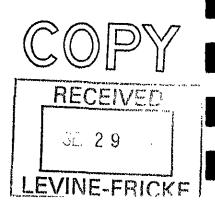
This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen.Ph.D.

Laboratory Director



### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309296 Date Received: 09/23/93 Project ID: 1649.16 Purchase Order: N/A

Department : GC

Sub-Department: TPH

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309296- 1	B27-10.0	SOIL	09/23/93	трна
9309296- 1	B27-10.0	SOIL	09/23/93	TPHgBTEX

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309296
Date Received : 09/23/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

69153193

Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309296 Matrix : SOIL Project Number: 1649.16
Date Released: 09/25/93

Date Sampled : 09/23/93

	Reporting Limit	Sample I.D.# B27-10.0		 	
COMPOUNDS	(mg/Kg)	-01	BLANK		
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	overy	ND ND ND ND 115% HP4 09/24/93	ND ND ND ND ND 101% HP4 09/24/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 09127193

Charge Balman (1/15)
Supervisor D

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309296 Matrix : SOIL

OIL Da

Date Sampled: 09/23/93

Date Extracted: 09/23/93

Project Number: 1649.16 Date Released: 09/25/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate Recovery
9309296-01	B27-10.0	09/23/93	10	18	74%
BS23H1F1	METHOD BLANK	09/23/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3550.

Anametrix control limits for recovery of surrogate C25 are 30-130%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Greenleiter

09/27/93

Analyst

Date

Supervisor

7/27/9

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309296 Matrix

: SOIL

Date Sampled : 09/23/93 Date Extracted: 09/23/93 Project Number: 1649.16 Date Released : 09/25/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate Recovery
9309296-01	B27-10.0	09/23/93	10	11	74%
BS23H1F1	METHOD BLANK	09/23/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3550.

Anametrix control limits for recovery of surrogate C25 are 30-130%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst

Date

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MS2401E3

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/24/93 Analyst : Apl.

Supervisor : 25 Date Released : 09/25/93

Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.042 0.044 0.045 0.045	105% 110% 113% 113%	52-133 57-136 56-139 56-141
P-BFB			114%	53-147

# TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.: MS23H1F1
-------------	----------------------	--------------------------

Matrix : SOIL
Date Sampled : N/A
Date Extracted: 09/23/93
Date Analyzed : 09/23/93 Analyst : Aff Supervisor : Cg Date Released : 09/25/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
Diesel	125	90	72%	48-113
Surrogate			79%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE - FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309296
Date Received : 09/23/93

Project ID : 1649.16 Purchase Order: N/A

Department: PREP Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID			DATE SAMPLED	METHOD
9309296- 1	B27-10.0	SOIL	09/23/93	5520EF

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309296 Date Received : 09/23/93

Project ID : 1649.16

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY:

- No QA/QC problems encountered for this sample.

Outhy Wilterless 9/24/33 Department Supervisor Date Le Enamife \$24
Chemist 1

Date

## ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309296-01	B27-10.0	30	43
BS23H1W9	METHOD BLANK	30	ND

ND - Not detected above the reporting limit for the method.
 TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, B27-10.0MS, MD atrix

: SOIL

Analyst

Anametrix I.D.: 9309296-01

: 09/23/93

Supervisor

HE

ate sampled Date extracted: 09/23/93

: 09/24/93 Date Released

Date analyzed : 09/24/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC	
otor Oil	300	43	310	89%	300	86%	3%	48-114	:8
<b>₹</b>									

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D.

: LAB CONTROL SAMPLE

Anametrix I.D.: MS23H1W9

Matrix

: SOIL

: 45 Analyst

Date sampled : N/A
Date extracted : 09/23/93

Supervisor : CM Date Released : 09/24/93

cm

Date analyzed : 09/24/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	270	90%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	17	AC										<u></u>				
Project No.:	1 pc	1.16		Field	Logbo	ok No	).:		I	ے:Date	7231	93	Serial	No.:	4440	2
Project Name: /	Beac	Mar. St.	Λ	Projec	t Loca	tion:		10/5	Man	0 1	/				1119	2
Sampler (Signature)		allisty	ellan'	·		$\angle$		NAL	YSES	/			Sam	plers:	/ / /	
	<b>/</b> SA	MPLES	NO. OF		/	(S) XX		£03		108/	10/83 10/83	sř <u>/</u>			NEV	<u> </u>
SAMPLE NO. DATE	TIME	LAB SAMPLE NO.	CON - TAINERS	SAMPLE TYPE	\\ \langle \rangle  M			HOL		×/ &	/		REMA	ARKS		
1327-100 9/249	<u> </u>		1	SOI		<b>/</b>	七大	大	C		7	7	4-14	rul 1	At	
1		<u> </u>											10	AA		
				!									100	ulto	100	
												(	Ten	iter !	Realt	<i>y</i>
			ļ					<u> </u>				,,				/ ···
				1				ļ					·		· <u> · · · · · · · · · · · · · · · ·</u>	
		<b>Y</b>						ļ							_ <del></del>	<u> </u>
											-		<del></del> .			
			<u> </u>					<del> </del>						· · · · · · · · · · · · · · · · · · ·	<del></del>	·
								-						<del>,_</del> .		
			<u> </u>					<del>                                     </del>								
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					_				-					
			<del> </del>									<u> </u>				
		•														
					-						_		<del></del>	<u></u>	,	
RELINQUISHED BY: (Signature	lew	Modern	<u> </u>	9/27/4	3 TIME	20	RECEIV (Signa		Ψ.	\$	1/2	1,16	7>>	D	AZE /	TIME 1000
RELINQUISHED BY:	ue (	1		9/23/5	TIME		RECEIV (Signa	ED BY:	() e (	10100	1/00	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa		Di	ATE	TIME
RELINQUISHED BY:	you.	<u>caruzos</u>		BATE	TIME		1 1/2/21			own	rust	<u> </u>	<u> </u>		7-23-97 ATE	11/1U TIME
(Signature) METHOD OF SHIPMENT:	······································			DATE	TIME	<u> </u>	(Signa LAB CO									
						-				<del></del>				·		
Sample Collector:		LEVINE-FRIC 1900 Powell		12th Flo	or		Analy	tical/	Labo Ann	ratory	/: <u>.</u>					·
		Emeryville, (415) 652-4	a 9460					ı	/ ) # W	imel	T(X					

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



## **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309309 Date Received: 09/23/93 Project ID : 1649.16 Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309309- 1	B28-10.0
9309309- 2	SS35-5.0
9309309- 3	SS36-6.0
9309309- 4	SW37-4.0

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Laboratory Director

SEP 28 1993



## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309309 Date Received : 09/23/93 Project ID : 1649.16 Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309309- 1	B28-10.0	SOIL	09/23/93	TPHd
9309309- 2	SS35-5.0	SOIL	09/23/93	TPHd
9309309- 3	SS36-6.0	SOIL	09/23/93	TPHd
9309309- 4	SW37-4.0	SOIL	09/23/93	TPHd
9309309- 1	B28-10.0	SOIL	09/23/93	TPHgBTEX
9309309- 2	SS35-5.0	SOIL	09/23/93	TPHgBTEX
9309309- 3	SS36-6.0	soil	09/23/93	TPHgBTEX
9309309- 4	SW37-4.0	SOIL	09/23/93	трндвтех

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309309 Date Received : 09/23/93 Project ID : 1649.16

Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentration reported as gasoline for sample SW37-4.0 is primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Charge Balman Department Supervisor

9/25/13 Date

Date

Chemist

09127193 Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309309 Project Number: 1649.16
Matrix: SOIL Date Released: 09/25/93

Date Sampled: 09/23/93

	Reporting Limit	Sample I.D.# B28-10.0	Sample I.D.# SS35-5.0	Sample I.D.# SS36-6.0	Sample I.D.# SW37-4.0	Sample I.D.# BS2401E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	BLANK
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	NĎ	. ND	ND
Ethylbenzene	0.005	ND	ND	ND	0.022	ND
Total Xylenes	0.005	ND	0.013	ND	0.081	ND
TPH as Ĝasoline	0.5	ND	ND	ND	3.1	ND
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		107% HP4 09/24/93	95% HP4 09/24/93 1	79% HP4 09/24/93	79% HP4 09/24/93 1	101% HP4 09/24/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Chrosel 09/27/93
Analyst Date

Cheur Balmer 7/25-/5>
Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309309 Matrix : SOIL

Project Number: 1649.16 Date Released: 09/25/93

Date Sampled: 09/23/93 Date Extracted: 09/23/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate Recovery
9309309-01	B28-10.0	09/24/93	10	ND	57%
9309309-02	SS35-5.0	09/24/93	10	ND	71%
9309309-03	SS36-6.0	09/24/93	10	ND	74%
9309309-04	SW37-4.0	09/24/93	10	44	75%
BS23H1F1	METHOD BLANK	09/23/93	10	ND	78%

Note: Reporting limit is obtained by multiplying the dilution factor

times 10 mg/Kg. ND - Not detected at or above the practical quantitation limit for

the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3550.

Anametrix control limits for recovery of surrogate C25 are 30-130%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dauson 9/27/9 Analyst Date

RESULTS - TPH - PAGE 4

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309309 Project Number: 1649.16
Matrix : SOIL Date Released: 09/25/93

Date Sampled: 09/23/93 Instrument I.D.: HP9

Date Extracted: 09/23/93

_	Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate Recovery
_						
	9309309-01	B28-10.0	09/24/93	10	31	57%
	9309309-02	SS35-5.0	09/24/93	10	11	71%
	9309309-03	SS36-6.0	09/24/93	10	ND	74%
	9309309-04	SW37-4.0		10	86	
	BS23H1F1	METHOD BLANK		10	ND	
	9309309-03 9309309-04	SS36-6.0 SW37-4.0	09/24/93 09/24/93 09/24/93 09/23/93	10 10	ND	718 748 758 788

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3550.

Anametrix control limits for recovery of surrogate C25 are 30-130%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dawson 9/27/93
Analyst Date

Chuyl Berener 9/27/2
Supervisor Date

RESULTS - TPH - PAGE 5

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SS36-6.0 Matrix

Anametrix I.D.: 09309-03MS

Matrix : SOIL
Date Sampled : 09/23/93
Date Analyzed : 09/24/93

Analyst : APP Supervisor : 🔗
Date Released : 09/25/93
Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% I	REC ITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.038 0.037 0.036 0.033	95% 93% 90% 83%	0.048 0.045 0.043 0.040	120% 113% 108% 100%	23% 20% 18% 19%	51 48	-139 -138 -146 -139
p-BFB				78%		72%		53*	-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D. : MS2401E3

Matrix : SOIL Analyst : Are

Date Sampled: N/A Supervisor: 09/25/93

Date Analyzed: 09/24/93

Date Released: 09/25/93

Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.042 0.044 0.045 0.045	105% 110% 113% 113%	52-133 57-136 56-139 56-141
P-BFB			114%	53-147

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D.: MS23H1F1

Matrix : SOIL
Date Sampled : N/A
Date Extracted: 09/23/93 Analyst : APP Supervisor

Supervisor : 3
Date Released : 09/25/93

Date Analyzed: 09/23/93 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
Diesel	125	90	72%	48-113
Surrogate			79%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309309
Date Received : 09/23/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309309- 1	B28-10.0	SOIL	09/23/93	5520EF
9309309- 2	SS35-5.0	SOIL	09/23/93	5520EF
9309309- 3	SS36-6.0	SOIL	09/23/93	5520EF
9309309- 4	SW37-4.0	SOIL	09/23/93	5520EF

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309309 Date Received : 09/23/93

Project ID : 1649.16

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cathy Multinlea 9/24/93 Department Supervisor Date

Chemiat

na+

## ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309309-01	B28-10.0	30	67
9309309-02	SS35-5.0	30	77
9309309-03	SS36-6.0	30	150
9309309-04	SW37-4.0	30	430
BS23H1W9	METHOD BLANK	30	ND

ND TRPH Not detected above the reporting limit for the method.
 Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE atrix : SOIL ate sampled : N/A

Date extracted: 09/23/93 Date analyzed : 09/24/93 Anametrix I.D.: MS23H1W9

Analyst : // Supervisor : // Date Released : 09/24/93

SPIKE &REC rcs %REC (mg/Kg) AMT. LCS LIMITS OMPOUND (mg/Kg) otor Oil 300 270 90% 71-119%

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

<sup>\*</sup> Quality control established by Anametrix Laboratories.



Environmental & Analytical Chemistry 1961 Concourse Drive, Suite E. San Jose, CA 95131 (408) 432-8192 • Fox (408) 432-8198

# 9309 309 CHAIN-OF-CUSTODY RECORD

	(400)	7-02 0172 -102	x (400) 402-017																<del></del>	
:	PROJECT NUMBER	6	PROJECT NA		<t< td=""><td><u>.                                      </u></td><td></td><td></td><td><u> </u></td><td></td><td>/pe o</td><td>f Ana</td><td>lysi</td><td>s  </td><td></td><td>į.</td><td>1</td><td><u> </u></td><td></td><td></td></t<>	<u>.                                      </u>			<u> </u>		/pe o	f Ana	lysi	s 		į.	1	<u> </u>		
	Sand Bassat Att	ention of		<u></u>	<u>الر</u>	Yerbal Due		mber	Туре		K						- [	ļ	Condition	·
	Send Report Att		). Il		oort Du	72		]		3	9		إن	4	ļ					Y===4==1
	U-CAY	-er	He IT	4171	12/10	13 1 1		of	of	$\tilde{\omega}$	3	P	$\widetilde{\Omega}$	2	į	İ	į		of	Initial
	Sample Number	Date	Time	Comp	Matrix	Station Location		tnrs	Containers	TPA	10			17					Samples	
	B28-10.0	9/23/4	3		Soil			l	Brass	1	X	χ.	Υ	4				İ		
2	5635-5,0								,	-	1							/////	um Madde	7
3	5536-60							ĵ							7	71			9/24/43	
4	SW3741	b 1			1					1	4	7	$\frac{1}{\sqrt{1}}$	V						
_														1						
			-														ļ ļ			
										_					1	   	1			
								_					-	1	<del>-  </del>	1	+			
			-											1	+	1	<del>-  </del>	1		
							-  -	-					<del>-                                    </del>		+					
					<u> </u>						-				+	+	-	-		
		(Signature)	Date/Time	35 3		(Signature)	Date/Ti	™ 83	Remarks:	<u> </u>	140	 u /		7	47					<b>!</b>
j	Relinquished by:	(Signature)	Date/Time	Recei	ved/by:	(Signa(dure)	Date/Ti	me	COMPANY:	7	0.1	)/ O^			<del>, .</del>			,		
``	Relinquished by:	(dignature)		Recei	ved by	Lab:	8/te/Ti	约	ADDRESS:	19	00	Pow	ell	Sis	E	me	ryi	Alle	94608	: :



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309205 Date Received : 09/16/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309205- 1	SE21-6.5
9309205- 2	SE22-5.0
9309205- 3	SE23-7.5

This report consists of 13 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director **5**50 ? ~ 11 ~ 3



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309205 Date Received : 09/16/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC

Sub-Department: TPH

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309205- 1	SE21-6.5	soir	09/16/93	TPHd
9309205- 2	SE22-5.0	SOIL	09/16/93	TPHd
9309205- 3	SE23-7.5	SOIL	09/16/93	TPHd
9309205- 1	SE21-6.5	SOIL	09/16/93	TPHgBTEX
9309205- 2	SE22-5.0	SOIL	09/16/93	TPHgBTEX
9309205- 3	SE23-7.5	SOIL	09/16/93	TPHgBTEX

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309205 Date Received : 09/16/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

halem Buch 9.20.93

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309205 Matrix : SOIL Project Number: 1649.16
Date Released: 09/20/93

Date Sampled : 09/16/93

	Reporting Limit	Sample I.D.# SE21-6.5	Sample I.D.# SE22-5.0	Sample I.D.# SE23-7.5	Sample I.D.# BS1601E2	Sample I.D.# BS1701E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND	ND ND ND ND ND	ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
<pre>% Surrogate Reco Instrument I.1 Date Analyzed RLMF</pre>		90% HP21 09/17/93 1	72% HP4 09/17/93 1	91% HP21 09/17/93	99% HP4 09/16/93 1	105% HP21 09/17/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charlesh Burch 9.20.93 Analyst Date

Cheyl Balmer 9/20/52 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309205 Matrix : SOIL
Date Sampled : 09/16/93 Project Number: 1649.16 Date Released: 09/20/93 Instrument I.D.: HP19

Date Extracted: 09/16/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309205-01	SE21-6.5	09/17/93	10	ND	89%
9309205-02	SE22-5.0	09/17/93	10	ND	88%
9309205-03	SE23-7.5	09/17/93	10	ND	84%
BS16H1F1	METHOD BLANK	09/16/93	10	ND	32%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ehn Buch 9 20.93 Date

Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309205 : SOIL Matrix

Project Number: 1649.16
Date Released: 09/20/93 Instrument I.D.: HP19

Date Sampled : 09/16/93

Date Extracted: 09/16/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec	
9309205-01	SE21-6.5	09/17/93	10	ND	89%	
9309205-02	SE22-5.0	09/17/93	10	ND	888	
9309205-03	SE23-7.5	09/17/93	10	ND	84%	
BS16H1F1	METHOD BLANK	09/16/93	10	ND	32%	
		• •				

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

enh Burch 9:20:43

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09205-01 Analyst: 0mg Supervisor: 05 Date Released: 09/20/93 Instrument I.D.: HP21 Sample I.D. : 1649.16 SE21-6.5
Matrix : SOIL
Date Sampled : 09/16/93
Date Analyzed : 09/17/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.043 0.044 0.044 0.044	108% 110% 110% 110%	0.042 0.041 0.040 0.041	105% 102% 100% 102%	-2% -7% -10% -7%	45-139 51-138 48-146 50-139	3
p-BFB				92%		81%		53-14	17

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS1701E3

Matrix : SOIL Analyst

: CMB

Supervisor

Date Released: 09/20/93

Instrument ID : HP21

Date Sampled : N/A
Date Analyzed : 09/17/93

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.040 0.040 0.040 0.040	0.038 0.039 0.039 0.041	95% 98% 98% 102%	52-133 57-136 56-139 56-141
P-BFB			105%	53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/16/93

Anametrix I.D. : MS1601E3

Analyst : Cuns Supervisor : 05

Date Released : 09/20/93

Instrument ID : HP4

COMPOUND	SPIKE (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.040 0.040 0.040 0.040	0.036 0.044 0.044 0.043	90% 110% 110% 108%	52-133 57-136 56-139 56-141	
P-BFB			96%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS16H1F1

Matrix : SOIL Analyst : CmB Supervisor : CmB Date Released : 09/20/93 Instrument I.D.: HP19

Date Sampled : N/A

Date Extracted: 09/16/93

Date Analyzed: 09/16/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	85	68%	48-113
SURROGATE			95%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309205
Date Received : 09/16/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309205- 1	SE21-6.5	SOIL	09/16/93	5520EF
9309205- 2	SE22-5.0	SOIL	09/16/93	5520EF
9309205- 3	SE23-7.5	SOIL	09/16/93	5520EF

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309205 Date Received : 09/16/93

Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

### QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

# ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

	Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
	9309205-01	SE21-6.5	30	87
	9309205-02	SE22-5.0	30	160
•	9309205-03	SE23-7.5	30	120
	BS16H1W9	METHOD BLANK	30	ND

P - Not detected above the reporting limit for the method.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Matrix : SOIL
Date sampled : N/A
Date extracted : 09/16/93

Anametrix I.D.: MS16H1W9
Analyst: CM
Supervisor: CM Date Released : 09/17/93

Date analyzed : 09/17/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	290	97%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.	: /(/	249.	76		Field	Logi	ook	No.:		*	1	Date:	9/	16/93	Serial	No.:	11151	
	Project Nam	ne:	Read	LSG.	^	Projec	t Lo	catio	7: <i>(</i>	Jak	[/qu	rd		<del>- '   -  </del>	1111			1115	
· [	Sampler (Sig	gnature)		illul for	bour	ANALYSE							/0	/*/	Samp	lers:	-(1.4		
ļ	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF	SAMPLE GRANT							MK KOLO SP			REMARKS			
<u> </u>		, 1	1	NO.	TAINERS	TYPE	_	<u> </u>	/ X				<b>5</b>	<u> </u>		<del>- 1</del> ;	REMA	- KKS	
$\frac{2}{2}$	SE21-65	9/1/93			<u> </u>	501		X	<u> </u>	*	<u> </u>	x		X	$-\frac{2}{2}$	4 - 1/2	rur	TA-7	
$\leq$	SE22-5.0 SE23-7.5			<u> </u>	-			と	×	<u>ネ</u> ケ	太	ア		X		Dece .	140	+172	Tea Cer
	JP2 11J	-			1		<u> </u>			/				$\wedge$		30017	<u> </u>	10	RUCHE
															<del>/</del> -	1 1	7-		
	, , , , , , , , , , , , , , , , , , , ,																		
}								-			<u> </u>				<u></u> -				
ŀ					<del> </del>														
ŀ								-											
ļ															<u> </u>	<u> </u>			,
																· · · · · · · · · · · · · · · · · · ·			
Ì				·									-		<del></del>			<u>-</u>	
Į			- A 4					-										<u> </u>	
ļ	RELINQUISHED I	BY: /	////	wilhoden		27/1/6/	<u> </u>	5.40	F	ECEIVE	D BK:	m			<del></del>		I DA	JÉ /	TIME
}	(Signature) RELINQUISHED 4	BY: )	Mu	wilhoden		9/16/		IME	R	ECEIVE	D BY:		ys.	· CA	rugo	The same	DA	16/73	TIME /5/0
-	(Signature) RELINQUISHED		nys	anyto	2	DATE	33/	65 IME	21	Signat ECEIVE	ure)	MX	<u>e</u>	#	<u> </u>	<u> </u>		1E/193 VIE	TIME /6:52
	(Signature) METHOD OF SHIPMENT:			<del></del>	DATE		IME	(	Signat	ure)				0	····			1 1141	
-						UA   E		· ME		AB COM									
	Sample Col.	lector:		LEVINE-FRIC 1900 Powell		12th Flo	or		1	Analy	tical		orator •		, ,				
				Emeryville, C	Ca 9460							A	nau	re1	rix				
Ĺ	(415) 652-4500																		

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309179 Date Received: 09/15/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9309179- 1	SE19-4.0
9309179- 2	SE20-8.5

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen.Ph.D.

Laboratory Director

SEP ? [ ISC)



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309179
Date Received : 09/15/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309179- 1	SE19-4.0	SOIL	09/15/93	TPHd
9309179- 1	SE19-4.0	SOIL	09/15/93	TPHgBTEX

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309179 Date Received: 09/15/93

Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: TPH

### QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Department Supervisor

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309179 Matrix : SOIL Project Number: 1649.16
Date Released: 09/17/93

Date Sampled : 09/15/93

	Reporting Limit	Sample I.D.# SE19-4.0		 	
COMPOUNDS	(mg/Kg)	-01	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND 0.008 0.030 0.6 75% HP4 09/15/93	ND ND ND ND ND 92% HP4 09/15/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Church Buch 9.17.93
Analyst Date

Original Bacomer Chi. 7/53
Supervisor Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309179
Matrix : SOIL

Project Number: 1649.16
Date Released: 09/17/93
Instrument I.D.: HP9

Matrix : SOIL
Date Sampled : 09/15/93

Date Extracted: 09/15/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309179-01	SE19-4.0	09/15/93	10	ND	75%
BS15H1F1	METHOD BLANK	09/15/93	10	ND	82%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles Mr. Buch 9.17.93
Analyst Date

Supervisor Date

RESULTS - TPH - PAGE 4

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309179 Matrix : SOIL
Date Sampled : 09/15/93 Date Extracted: 09/15/93

Project Number: 1649.16
Date Released: 09/17/93
Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309179-01	SE19-4.0	09/15/93	10	13	75%
BS15H1F1	METHOD BLANK	09/15/93	10	ND	82%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

In Buch 9.17 43

Chevyl Beckmen 4/17/13

Date

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/15/93

Anametrix I.D.: MS1502E1

: Cing Analyst Supervisor : 05 Date Released : 09/17/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.55	110%	58-130
p-BFB			92%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS15H1F1

Matrix : SOIL Date Sampled : N/A

Analyst

: Umis Supervisor : 609/17/93

Date Extracted: 09/15/93 Date Analyzed: 09/15/93

Instrument I.D.: HP9

COMPOUND	SPIKE R AMT L COMPOUND (mg/Kg) (mg		% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE	SURROGATE		82%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309179 Date Received : 09/15/93

Project ID : 1649.16 Purchase Order: N/A Department : PREP Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	IPLE ID SAMPLE ID		DATE SAMPLED	METHOD	
9309179- 1	SE19-4.0	SOIL	09/15/93	5520EF	

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309179 Date Received: 09/15/93

Project ID : 1649.16 Purchase Order: N/A Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Department Supervisor Date

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D. : 9309179 Project # : 1649.16 : SOIL Matrix Analyst Date sampled : 09/15/93 Supervisor Date extracted: 09/15/93 Date analyzed: 09/16/93 Date released

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309179-01	SE19-4.0	30	90
BS15H1W9	METHOD BLANK	30	QN

- Not detected above the reporting limit for the method. ND - Total Recoverable Petroleum Hydrocarbons are determined by TRPH Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309179-01 : 1649.16, SE19-4.0MS, MD <u>S</u>ample I.D.

atrix Analyst : SOIL Supervisor Date sampled : 09/15/93 Date extracted : 09/15/93 : Date Released : 09/17/93

Date analyzed : 09/16/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
otor Oil	300	90	440	117%	410	107%	9%	48-114%	 

\* Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/15/93

Anametrix I.D.: MS15H1W9

Analyst : 30 Supervisor : 77/93

Date analyzed : 09/16/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	290	97%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Pr	oject No.	: //	49.1	6		Field	Logb	ook	No.:			I	Date:	9/15	19.3	Serial	No.:	 11149	
Pr	oject Nan	ne:	Beach	Street		Projec	t Lo	cation	า:	Oq	Ka	nsl						11143	
Sa	ampler (Sig	nature)	·Oul	leia Woode	₩				-	A	NAL	/SES		_/		Samp	lers;	1/3	
			0.8	MPLES		ı — — — — — — — — — — — — — — — — — — —	·	/s`,	AND W	/ <del>(</del>	Λ,	/ ,		1017	2/5t/		L	NEM	
	AMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE	/					<b>%</b>		<u> </u>	<u>~</u>		REM.	ARKS	
) <u>S</u>	= 19-40	9/15/9	3		1	Soil		X	ح	太	$\propto$	ゃ		<u>\</u>	2	4-1400	vr	TAT	,
)(£	E 2085	1			1	Ü		×	x	X	حر	×	X	$\succ$	Resc	the to		10-10-11	
L															<u> </u>	Venit	er	Bestly	
														Jeri	Hillian	n Muds	07~		
							<del> </del>								4(19 (5	<del>17 (-×1</del>	<del>-</del>		- <del></del>
								<u> </u>							<del></del>				<del></del>
																<b></b>			
																			٠
<u></u>	. <u>.</u>						ļ												u
_					ļ			ļ											
-	·		! 				<del> </del>									·			
-					-		<u> </u>												<u></u>
-							<u> </u>												
P.	LINQUISHED	$\bigcap_{RY}$	<del>                                     </del>	Ma n	1	I DAT#	/	LMF	_	ECEIVE	D RV	9	1				T	DATE	TIME
	(Signature)	_ 'd	10/100	r Mode	<u>u</u>	Q <sup>T</sup> 15		3:53	) (	Signat	ure)	Den	ny	<b>S</b> .	lany	82	2	DATE /53	755-
	LINQUISHED ( (Signature	Tions	us.	Canus 2	>	DATE	3 .	IME 1709	> (	ECEIVE Signat	ure)	u U	1	(=	Too			DATE / 9/15/93	17:05
RE	LINQUISHED (Signature)	BY:	1			DATE	T	1 ME	R (	ECEIVE Signat	D BY∳ ure)	/ 🔾 - 6			- 0			DATE /	TIME
ME	THOD OF SHI	PMENT:				DATE	T	1ME	-	AB CON		:							
S	ample Col	lector:		LEVINE-FRIC	KE	.1		<del></del>	+	naly	tical	Lab	orato	ry:			·		····
	•			1900 Powell	Street,		oor			,				•	uetri	i.c			
				Emeryville, ( (415) 652-4		18							1+1	yu v	uelol	ኦ 	<u> </u>		

Shipping Copy (White)

Lab Copy (Green)

File Copy (Yellow)

Field Copy (Pink)

FORM NO. 86/COC/ARF



### **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309154 Date Received: 09/13/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309154- 1	B21-13
9309154- 2	B22-14

This report consists of 12 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.

Laboratory Director

09/16/93

**SEP 1** 7 1993



MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309154
Date Received : 09/13/93
Project ID : 1649.16

Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309154- 1	B21-13	SOIL	09/13/93	TPHd
9309154- 2	B22-14	SOIL	09/13/93	TPHd
9309154- 1	B21-13	SOIL	09/13/93	TPHgBTEX
9309154- 2	B22-14	SOIL	09/13/93	TPHgBTEX

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309154
Date Received : 09/13/93
Project ID : 1649.16
Purchase Order: N/A

Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

ma Shor 9/15/93

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309154 Matrix

: SOIL

Date Sampled: 09/13/93

Project Number: 1649.16 Date Released : 09/15/93

	Reporting Limit	Sample I.D.# B21-13	Sample I.D.# B22-14	Sample I.D.# BS1401E2	 w h -
COMPOUNDS	(mg/Kg)	-01	-02	BLANK	 
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  % Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND ND ND ND 112* HP21 09/14/93	ND ND ND ND ND 110% HP21 09/14/93	ND ND ND ND ND 101% HP21 09/14/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

in Sher 9/15/93

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309154

Project Number: 1649.16
Date Released: 09/15/93

Matrix : SOIL
Date Sampled : 09/13/93

Instrument I.D.: HP19

Date Extracted: 09/13/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309154-01	B21-13	09/13/93	10	ND	81%
9309154-02	B22-14	09/14/93	10	ND	77%
BS13H2F1	METHOD BLANK	09/13/93	10	ND	84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

new Shor 9/15/93

7/15-193

RESULTS - TPH - PAGE 4

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309154
Matrix : SOIL
Date Sampled : 09/13/93
Date Extracted: 09/13/93

Project Number: 1649.16
Date Released: 09/15/93
Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309154-01 9309154-02 BS13H2F1	B21-13 B22-14 METHOD BLANK	09/13/93 09/14/93 09/13/93	10 10 10	ND ND	81% 77% 84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

luua Sur 9/15/93 Analyst Date Ohough Balm 4/15/55 Supervisor Date

### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B21-13

Matrix : SOIL Date Sampled : 09/13/93

Date Analyzed: 09/14/93

Anametrix I.D.: 09154-01

Analyst : Is Supervisor : CS

Supervisor Date Released : 09/15/93 Instrument I.D.: HP21

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC & MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% R LIMI	EC TS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.035 0.037 0.036 0.038	88% 93% 90% 95%	0.035 0.036 0.036 0.038	88% 90% 90% 95%	0% -3% 0% 0%	51 <b>-</b> 48-	139 138 146 139
p-BFB				106%		109%		53	-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS1401E3

Analyst : IS Supervisor : CS Supervisor

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/14/93

Date Released : 09/15/93 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC. LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020 0.020	0.019 0.019 0.019 0.020	95% 95% 95% 100%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

	09/13/93	SAMPLE	Duper vibor .	工5 (必 09/15/93
COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	86	69%	48-113

87%

30-130

SURROGATE

<sup>\*</sup>Limits established by Anametrix, Inc.

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309154
Date Received : 09/13/93
Project ID : 1649.16
Purchase Order: N/A

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

# SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309154- 1	B21-13	SOIL	09/13/93	5520EF
9309154- 2	B22-14	SOIL	09/13/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309154
Date Received : 09/13/93
Project ID : 1649.16

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cathy Mutenberger 9/15/93
Department Supervisor Date

Chemist

9/15/93

Date

PREP/PREP- PAGE 2

# ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D. : 9309154 : 1649.16 Project # Analyst : SOIL Matrix Date sampled: 09/13/93 Date extracted: 09/13/93 Date analyzed: 09/14/93 Supervisor Date released : 09/15/93

                                   	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309154-01	B21-13	30	220
9309154-02	B22-14	30	230
BS13H1W9	METHOD BLANK	30	ND

ND TRPH Not detected above the reporting limit for the method.
Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Čal-DHS) approved methods.

# LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS13H1W9

: SOIL : EK Matrix Analyst

con Date sampled : N/A Supervisor Date extracted: 09/13/93 Date Released : 09/14/93

Date analyzed : 09/14/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	300	100%	71-119%

Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309217 Date Received : 09/17/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309217 1	SN24-5.0
9309217- 2	SW25-15
9309217- 3	SW26-4.0
9309217- 4	SW27-13
9309217- 5	SS28-13
9309217- 6	SS29-4.0
9309217- 7	SE30-4.5

This report consists of 16 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

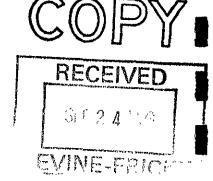
Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.

Laboratory Director

Date



# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309217
Date Received : 09/17/93
Project ID : 1649.16
Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

# SAMPLE INFORMATION:

			· · · · · · · · · · · · · · · · · · ·	
ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309217- 1	SN24-5.0	SOIL	09/17/93	TPHd
9309217- 2	SW25-15	SOIL	09/17/93	TPHd
9309217- 3	SW26-4.0	SOIL	09/17/93	TPHd
9309217- 4	SW27-13	SOIL	09/17/93	трна
9309217- 5	SS28-13	SOIL	09/17/93	TPHd
9309217- 6	SS29-4.0	SOIL	09/17/93	трна
9309217- 7	SE30-4.5	SOIL	09/17/93	трна
9309217- 1	SN24-5.0	SOIL	09/17/93	TPHgBTEX
9309217- 2	SW25-15	SOIL	09/17/93	TPHgBTEX
9309217- 3	SW26-4.0	SOIL	09/17/93	TPHgBTEX
9309217- 4	SW27-13	SOIL	09/17/93	TPHgBTEX
9309217- 5	SS28-13	SOIL	09/17/93	TPHgBTEX
9309217- 6	SS29-4.0	SOIL	09/17/93	TPHgBTEX
9309217- 7	SE30-4.5	SOIL	09/17/93	TPHgBTEX

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309217

Date Received: 09/17/93
Project ID: 1649.16
Purchase Order: N/A
Department: GC
Sub-Department: TPH

# QA/QC SUMMARY :

- The concentrations reported as gasoline for samples SW25-15 and SW26-4.0 are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Cheugh Beelman Date Department Supervisor

lesh Burch 9.22.93

GC/TPH- PAGE 2

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309217
Matrix : SOIL
Date Sampled : 09/17/93

Project Number: 1649.16
Date Released: 09/22/93

	Reporting Limit	Sample I.D.# SN24-5.0	Sample I.D.# SW25-15	Sample I.D.# SW26-4.0	Sample I.D.# SW27-13	Sample I.D.# SS28-13
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	-05
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline  * Surrogate Rec Instrument I. Date Analyzed RLMF	overy D.	ND ND ND ND ND P9% HP12 09/20/93	ND ND ND ND 420 107% HP12 09/20/93 250	0.080 0.12 ND 0.28 23 97% HP12 09/20/93	ND ND ND ND ND 106% HP4 09/20/93	ND ND ND ND ND 115% HP4 09/20/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

halesh Burl 9.22.93 analyst Date

Cherch Browner 4/2012 Supervisor Dat

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309217 Project Number: 1649.16
Matrix: SOIL Date Released: 09/22/93

Matrix : SOIL
Date Sampled : 09/17/93

	Reporting Limit	Sample I.D.# SS29-4.0	Sample I.D.# SE30-4.5	Sample I.D.# BS2001E2	Sample I.D.# BS2001E2	
COMPOUNDS	(mg/Kg)	-06	-07	BLANK	BLANK	
Benzene	0.005	ND	ND	ND	ND	
Toluene	0.005	ND	ND	ND	ND	
Ethylbenzene	0.005	ND	ND	ND	ИD	
Total Xylenes	0.005	ND	ND	ND	ND	
TPH as Gasoline	0.5	ND	ND	ND	ND	
<pre>% Surrogate Rec Instrument I.I Date Analyzed RLMF</pre>		104% HP4 09/20/93	85% HP4 09/20/93 1	97% HP4 09/20/93 1	94% HP12 09/20/93	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charleson Burch 9.22.93 Analyst Date

Supervisor Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309217

Project Number: 1649.16
Date Released: 09/22/93 Instrument I.D.: HP9

Matrix : SOIL
Date Sampled : 09/17/93
Date Extracted: 09/17/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309217-01	SN24-5.0	09/18/93	10	ND	77%
9309217-02	SW25-15	09/18/93	200	1700	1.06%
9309217-03	SW26-4.0	09/18/93	50	58	62%
9309217-04	SW27-13	09/18/93	10	ИД	75%
9309217-05	SS28-13	09/18/93	10	ND	76%
9309217-06	SS29-4.0	09/18/93	50	110	66%
9309217-07	SE30-4.5	09/18/93	10	ND	78%
BS17H1F1	METHOD BLANK	09/17/93	10	ND	73%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

railet Burch 9.22.93 Tost Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309217 Matrix : SOIL Date Sampled : 09/17/93

Date Extracted: 09/17/93

Project Number: 1649.16 Date Released : 09/22/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309217-01	SN24-5.0	09/18/93	10	ND	77%
9309217-02	SW25-15	09/18/93	200	2200	106%
9309217-03	SW26-4.0	09/18/93	50	170	62%
9309217-04	SW27-13	09/18/93	10	ND	75%
9309217-05	SS28-13	09/18/93	10	ND	76%
9309217-06	SS29-4.0	09/18/93	50	260	66%
9309217-07	SE30-4.5	09/18/93	10	ND	78%
BS17H1F1	METHOD BLANK	09/17/93	10	ND	73%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

RESULTS - TPH - PAGE 6

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09217-04

Analyst : CMB

Supervisor : 03

Sample I.D. : 1649.16 SW27-13
Matrix : SOIL
Date Sampled : 09/17/93
Date Analyzed : 09/20/93

Date Released : 09/22/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	LIMI % I	REC ITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.037 0.043 0.043 0.043	93% 108% 108% 108%	0.041 0.043 0.043 0.045	102% 108% 108% 113%	10% 0% 0% 5%	51· 48·	-139 -138 -146 -139
p-BFB				103%		100%		53	3-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SN24-5.0

Anametrix I.D.: 09217-01

Matrix : SOIL

Analyst : Omb Supervisor : 3

Date Sampled: 09/17/93 Date Analyzed: 09/20/93

Date Released: 09/22/93

Instrument I.D.: HP12

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000	0.045 0.043 0.046 0.041	113% 108% 115% 102%	0.040 0.038 0.038 0.037	95% 95%	-12% -12% -19% -10%	45-139 51-138 48-146 50-139
р-вгв			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	70%	·	83%		53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SE30-4.5

Anametrix I.D.: 09217-07

Analyst : CmB

Matrix : SOIL Date Sampled : 09/17/93

Supervisor : 09 Date Released : 09/22/93 Instrument I.D.: HP9

Date Extracted: 09/17/93

Date Analyzed: 09/18/93

COMPOUND	(mg/Kg) SPIKE	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC S MD (mg/Kg)	REC MD	RPD	% REC LIMITS	_
DIESEL	125	0	104	83%	96	77%	-8%	32~143	
SURROGATE				80%		79%		30-130	_

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

: SOIL Matrix

Date Sampled : N/A
Date Analyzed : 09/20/93

Anametrix I.D. : MS2001E3

: CmB Analyst

Supervisor Date Released : 4

: 09/22/93<sub>1</sub>

: HP4 Instrument ID

93% 113% 110% 110%	52-133 57-136 56-139 56-141	
	113% 110% 110%	113% 57-136 110% 56-139 110% 56-141

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS2001E3

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 09/20/93

Analyst Supervisor

: CMB : 05

Supervisor
Date Released: 09/22/93
Instrument ID: HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC' LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.040 0.040 0.040 0.040	0.042 0.043 0.046 0.042	105% 108% 115% 105%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D. : MS17H1F1 : LAB CONTROL SAMPLE Sample I.D.

: SOIL Matrix Date Sampled : N/A

Analyst : @mB Supervisor : @ Date Released : 09/22/93

Date Extracted: 09/17/93 Date Analyzed: 09/17/93 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	94	75%	48-113
SURROGATE			79%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309217 Date Received : 09/17/93 Project ID : 1649.16

Purchase Order: N/A
Department: PREP
Sub-Department: PREP

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309217- 1	SN24-5.0	SOIL	09/17/93	5520EF
9309217- 2	SW25-15	SOIL	09/17/93	5520EF
9309217- 3	SW26-4.0	SOIL	09/17/93	5520EF
9309217- 4	SW27-13	SOIL	09/17/93	5520EF
9309217- 5	SS28-13	SOIL	09/17/93	5520EF
9309217- 6	SS29-4.0	SOIL	09/17/93	5520EF
9309217- 7	SE30-4.5	SOIL	09/17/93	5520EF

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309217
Date Received : 09/17/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

# QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cathy Mittenberge 9/21/93 epartment Supervisor Date Chemist 8/20/8:

PREP/PREP- PAGE 2

# ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16 Matrix Matrix : SOIL
Date sampled : 09/17/93
Date extracted: 09/17/93
Date analyzed : 09/20/93 Anametrix I.D. : 9309217 Analyst : Bu Supervisor : Em

Date released: 09/20/93

	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309217-01	SN24-5.0	30	220
9309217-02	SW25-15	30	9,700
9309217-03	SW26-4.0	30	1,000
9309217-04	SW27-13	30	190
9309217-05	SS28-13	30	270
9309217-06	SS29-4.0	30	2,400
9309217-07	SE30-4.5	30	43
BS17H1W9	METHOD BLANK	30	ND

- Not detected above the reporting limit for the method.
- Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

# LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D. : SOIL Matrix : N/A Date sampled Date extracted: 09/17/93

Date analyzed: 09/20/93

Anametrix I.D.: MS17H1W9 Analyst: W Analyst cm Supervisor Date Released : 09/20/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	230	77%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

PROJECT NUMBER	<u></u>	tal & Drive surse Drive 192 • Fax	PROJE	CT NA	ME									ype o	of An	alys	is				_		
Send Report Att  Jehife Sample Number	γ <u>/</u>  -	of: Beat			19	port	193 1			Number of Cntnrs	(	/pe of ainers	tPH998	TP/+diesal	TPH O'I	BIEC	TRPH					Condition of Samples	Initial
SN24-5.0	9	17/93		(		<u>خ</u> ى;				į	βr. T	uss ibes	X	×	κ	k	×					7	
SW25-15								····		ı			7	X	x	ス	k						
SW26-40	<u> </u>				_								K	×	と	ኦ	بح						
JU27-13										l			۲	X	٢	٨	ኦ		<u> </u>				
5528-13										1			\   	k	x	ኦ	۴						
3529-4.0							-					,	۲	×	۲	ኦ	x	<u> </u>		 			
SE 30-43	<del> </del>		<u> </u>		······································	1					1	<i>)</i> ——	<	x	K	k	۶	<u> </u>	-				
								···						<u> </u>				-	-				
								<u></u>	•					-					-				
<del></del>							-							-	-				-				
	-		······································			<u> </u>	-			_				<del> </del>		<u> </u>			-				
A A A COM		ature)	917	932	W 1	0	mi	gnature		   	Rema	orks: C	14	Ho	ur	<u> </u>	<u> </u>	7					
let houshed by	<u> </u>	2Z		<u> </u>	<del></del>		y: (S:		í	e/Time									-, ±	5,,,6	0r12	uilla	<u>.</u>



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309196
Date Received : 09/16/93
Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309196- 1	B23-14
9309196- 2	B24-14.5
9309196- 3	B25-16

This report consists of 14 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director 09-21-93 Date

**EP** 22 103



#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309196 Date Received : 09/16/93 Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309196- 1	B23-14	SOIL	09/16/93	TPHd
9309196- 2	B24-14.5	SOIL	09/16/93	TPHd
9309196- 1	B23-14	SOIL	09/16/93	ТРНЭВТЕХ
9309196- 2	B24-14.5	SOIL	09/16/93	TPHgBTEX

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309196 Date Received: 09/16/93

Project ID : 1649.16

Purchase Order: N/A

Department : GC

Sub-Department: TPH

## QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

GC/TPH- PAGE 2

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309196 Matrix : SOIL

Date Sampled: 09/16/93

Project Number: 1649.16
Date Released: 09/17/93

	Reporting Limit	Sample I.D.# B23-14		Sample I.D.# BS1601E2	I.D.#	
COMPOUNDS	(mg/Kg)	-01	-02	BLANK	BLANK	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Reco		ND ND 0.015 0.046 11	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	
Instrument I.I Date Analyzed RLMF	o <b>.</b>	HP21 09/17/93 2.5	HP4 09/17/93 1	HP4 09/16/93 1	HP21 09/17/93 1	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charleson Burch 9.20.93
Analyst Date

Supervisor

Date

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309196
Matrix : SOIL
Date Sampled : 09/16/93

Project Number: 1649.16
Date Released: 09/17/93
Instrument I.D.: HP19

Date Extracted: 09/16/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate *Rec
9309196-01	B23-14	09/17/93	50	150	91%
9309196-02	B24-14.5	09/16/93	10	ND	888
BS16H1F1	METHOD BLANK	09/16/93	10	ИД	32%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles Buch 9.20.93 Analyst Date

Chaul Balmer 9/20/5.
Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309196 Matrix : SOIL
Date Sampled : 09/16/93

Project Number: 1649.16
Date Released: 09/17/93 Instrument I.D.: HP19

Date Extracted: 09/16/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309196-01	B23-14	09/17/93	50	220	91%
9309196-02	B24-14.5	09/16/93	10	ND	88%
BS16H1F1	METHOD BLANK	09/16/93	10	ND	32%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

In Buch 9.20.43

Bulman

## TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 B24-14.5

Anametrix I.D.: 09196-02

Matrix : SOIL
Date Sampled : 09/16/93
Date Extracted: 09/16/93
Date Analyzed : 09/16/93

: CMB

Analyst Supervisor : 03

Date Released: 09/20/93 Instrument I.D.: HP19

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC % MS (mg/Kg)	REC MS	REC MD (mg/Kg)	REC MD	RPD	% REC LIMITS
DIESEL	125	0	88	70%	95	76%	8%	32-143
SURROGATE				93%		91%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL Date Sampled : N/A

Date Analyzed: 09/16/93

Anametrix I.D. : MS1601E3

Analyst : Cimb

Supervisor : 05
Date Released : 09/20/93
Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.040 0.040 0.040 0.040	0.036 0.044 0.044 0.043	90% 110% 110% 108%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL

Date Sampled : N/A
Date Analyzed : 09/17/93

Anametrix I.D.: MS1701E3

Analyst : Omb

Supervisor : 45
Date Released : 09/20/93

Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	•
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.040 0.040 0.040 0.040	0.038 0.039 0.039 0.041	95% 98% 98% 102% 105%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D. : MS16H1F1

Matrix : SOIL Date Sampled : N/A

Analyst : Omb Supervisor : Omb Date Released : 09/20/93 Date Extracted: 09/16/93

Date Analyzed: 09/16/93 Instrument I.D.: HP19

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	85	68%	48-113
SURROGATE			95%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

# REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309196
Date Received : 09/16/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP

Sub-Department: PREP

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309196- 1	B23-14	SOIL	09/16/93	5520EF
9309196- 2	B24-14.5	SOIL	09/16/93	5520EF

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309196 Date Received : 09/16/93 Project ID : 1649.16

Purchase Order: N/A Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

#### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309196-01	B23-14	30	730
9309196-02	B24-14.5	30	73
BS16H1W9	METHOD BLANK	30	ND

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309196-02

Sample I.D. : 1649.16, B24-14.5MS, MD
Matrix : SOIL
Date sampled : 09/16/93
Date extracted : 09/16/93 En. Analyst : Supervisor : Date Released : 09/17/93

Date analyzed : 09/17/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	73	320	82%	330	86%	5%	48-114%	- <b></b>

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: MS16H1W9 : LAB CONTROL SAMPLE Sample I.D.

Analyst : TW Supervisor : TW : SOIL Matrix Date sampled : N/A Date Released : 09/17/93

Date extracted: 09/16/93 Date analyzed: 09/17/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	290	97%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

	Project No.	: /6	49,1	6		Field	Log	book	No.:			[	Date:	9/	16/93	Serial	No.:	11150	)
ľ	Project Nam	ne:	Beac	h S treat	,	Projec	t Lo	cation	า:	Oak	lan	d						11136	
-	Sampler (Sig	gnature)	: Qu	MPLES	rlya			_/	(5)		NAL			/_	/ & /	Samp	olers:	VEM	
ŀ	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF CON- TAINERS	SAMPLE TYPE	_	AL ST		35/2	My 2	XX.	A.	YOU	2/51/			ARKS	<u> </u>
Ú	B23-14	9/1493	1		1ATNERS	Soil		K	×	X	X	X		ير		4-4	6/1	CTA	7
9	B24-14,5	9/16/93	1 7		1	1,		X	X	×	X	X		$\chi$		- ( /)		[ [ ] ]	
3	B25-16	9/16/93	1		1	<							X			D			_
		11/7														Mesu	[15]	to Je	net er
																Beat	fy_		
																	<i></i>		
																	<u> </u>		
								_									<u></u>		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
								_		<u> </u>					<u></u>				
-								-		ļ									
ŀ		<u> </u>								ļ <u>.</u>									
}		_																	
-				<del>-</del>	<del> </del>					ļ							<del></del>		
ļ	DEL INQUI CUED			1-		LDAFE F		TIME	1.	RECEIVE	D 04	<del></del>					<del></del>	DATE	
	RELINQUISHED (Signature)	$-\Delta V_1$	Ellin	Madien		91169	3	850	(	(Signat	ure,	ann	MX	8. L	ms	304)	9	DATE /	TIME /000
	RELINQUISHED (Signature)	tones	ns l	Janus	7	DATE 9/16/	22	TIME	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	RECEIVE (Signat	D BY:	Pol	din	No	June			DATE 9-16-93	TIME 1052
Ī	RELINQUISHED	BY:	Ja	Carres Constant	<del></del>	DATE		TIME	F	RECEIVE Signat	ED BY:		40()()					DATE	TIME
ł	(Signature) METHOD OF SHI					DATE		TIME		AB CON		:			<u>,</u>			<del></del> .	<u> </u>
$\dashv$	Comple Cal	loot		I EVANCE EDIC														-Marin-	
	Sample Col	rector:		LEVINE-FRIC 1900 Powell		12th Flo	or		'	Analy	ucal	Labe		· •					
j				Emeryville, (	Ca 9460		1							AI	lame	etrix	<u>.</u>		
L				(415) 652-4	500 _									111	_				



## **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95151 Tel: 408-432-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9310134 Date Received : 10/12/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9310134- 1	SW38-5
9310134- 2	SW39-10
9310134- 3	SW40-5
9310134- 4	SW41-10
9310134- 5	SW42-5
9310134- 6	SW43-10

This report consists of 14 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D. Laboratory Director <u>/\_\_\_\_</u>

10/18/93

ر. درين ال



### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9310134 Date Received : 10/12/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9310134- 1	SW38-5	SOIL	10/12/93	TPHd
9310134- 2	SW39-10	SOIL	10/12/93	TPHd
9310134- 3	SW40-5	SOIL	10/12/93	TPHd
9310134- 4	SW41-10	SOIL	10/12/93	TPHd
9310134- 5	SW42-5	SOIL	10/12/93	TPHd
9310134- 6	SW43-10	SOIL	10/12/93	TPHd
9310134- 1	SW38-5	SOIL	10/12/93	TPHgBTEX
9310134- 2	SW39-10	SOIL	10/12/93	TPHgBTEX
9310134- 3	SW40-5	SOIL	10/12/93	TPHgBTEX
9310134- 4	SW41-10	SOIL	10/12/93	TPHgBTEX
9310134- 5	SW42-5	SOIL	10/12/93	TPHgBTEX
9310134- 6	SW43-10	SOIL	10/12/93	TPHgBTEX

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9310134

Date Received: 10/12/93
Project ID: 1649.16
Purchase Order: N/A
Department: GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Chemist Davison 10

GC/TPH- PAGE 2

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9310134 Matrix : SOIL Date Sampled: 10/12/93

Project Number: 1649.16 Date Released: 10/15/93

	Reporting Limit	Sample I.D.# SW38-5	Sample I.D.# SW39-10	Sample I.D.# SW40-5	Sample I.D.# SW41-10	Sample 1.D.# SW42-5
COMPOUNDS	(mg/Kg)	-01	-02	-03	~04	-05
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline		ND 0.007 0.010 0.017 ND	ND ND ND 0.036 0.51	ND 0.011 0.012 0.025 1.4	ND ND 0.044 0.11 7.6	ND ND 3.5 14 270
<pre>% Surrogate Rec Instrument I. Date Analyzed RLMF</pre>	D	105% HP12 10/12/13	118% HP12 10/12/13	100% HP12 10/12/13	110% HP12 10/13/13 2.5	117% HP12 10/12/13 100

ND - Not detected at or above the practical quantitation limit for the

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

gaie Danison 10/15/93 Not Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9310134 Matrix : SOIL Project Number: 1649.16
Date Released: 10/15/93

Date Sampled : 10/12/93

COMPOUNDS         (mg/Kg)         -06         BLANK         BLANK           Benzene         0.005         ND         ND         ND           Toluene         0.005         ND         ND         ND           Ethylbenzene         0.005         1.7         ND         ND           Total Xylenes         0.005         5.6         ND         ND		Reporting Limit	Sample I.D.# SW43-10	Sample I.D.# BO1201E2	••	
Toluene 0.005 ND ND ND Ethylbenzene 0.005 1.7 ND ND Total Xylenes 0.005 5.6 ND ND	COMPOUNDS	(mg/Kg)	-06	BLANK	BLANK	 
TPH as Gasoline 0.5 100 ND ND  % Surrogate Recovery 105% 88% 99% Instrument I.D. HP12 HP12 HP12 Date Analyzed 10/12/93 10/12/93 10/13/93 RLMF 100 1 1	Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Reco	0.005 0.005 0.005 0.5	ND 1.7 5.6 100 105% HP12 10/12/93	ND ND ND ND ND 88% HP12	ND ND ND ND 99% HP12	

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Regge Jawson 10/15/93 Analyst Date

Cheryl Balmer 10/15/43 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Project Number: 1649.21 Date Released: 10/15/93 Instrument I.D.: HP9 Anametrix W.O.: 9310134 Matrix : SOIL

Date Sampled: 10/12/93 Date Extracted: 10/12/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9310134-01	SW38-5	10/12/93	10	ND	93%
9310134-02	SW39-10	10/13/93	10	ND	98%
9310134-03	SW40-5	10/13/93	50	160	103%
9310134-04	SW41-10	10/13/93	100	290	97%
9310134-05	SW42-5	10/13/93	100	980	114%
9310134-06	SW43-10	10/13/93	100	710	105%
BO12H1F1	METHOD BLANK	10/12/93	10	ND	88%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

agle Dawson 10

RESULTS - TPH - PAGE 5

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9310134 : SOIL Matrix

Project Number: 1649.21 Date Released: 10/15/93 Instrument I.D.: HP9

Date Sampled: 10/12/93
Date Extracted: 10/12/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9310134-01	SW38-5	10/12/93	10	12	93%
9310134-01	SW39-10	10/13/93	10	12	98%
9310134-03	SW40-5	10/13/93	50	340	103%
9310134-04	SW41-10	10/13/93	100	460	97%
9310134-05	SW42-5	10/13/93	100	1600	114%
9310134-06	SW43-10	10/13/93	100	1400	105%
BO12H1F1	METHOD BLANK	10/12/93	10	ND	888

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Prague Dawson 10/15/ Analyst Bate

10/15/93

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MO1201E3

Matrix : SOIL Analyst : RD

Date Sampled : N/A
Date Analyzed : 10/13/93

Supervisor :  $\varnothing$ Date Released : 10/15/93

Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES SURROGATE	0.020 0.020 0.020 0.020	0.022 0.025 0.027 0.027	110% 125% 135% 135%	52-133 57-136 56-139 56-141	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 10/13/93

Anametrix I.D. : MO1301E3

Analyst Supervisor

: RD

Date Released: 10/15/93

Instrument	ID	:	HP12	

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.022 0.022 0.025 0.023	110% 110% 125% 115%	52-133 57-136 56-139 56-141	
SURROGATE			95%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

## TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MO12H1F1

Matrix : SOIL Date Sampled : N/A

Analyst : RO Supervisor : Co

Date Extracted: 10/12/93 Date Analyzed: 10/12/93

Date Released: 10/15/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	106	85%	48-113
SURROGATE			96%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9310134 Date Received : 10/12/93 Project ID : 1649.16

Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9310134- 1	SW38-5	SOIL	10/12/93	5520EF
9310134- 2	SW39-10	SOIL	10/12/93	5520EF
9310134- 3	SW40-5	SOIL	10/12/93	5520EF
9310134- 4	SW41-10	SOIL	10/12/93	5520EF
9310134- 5	SW42-5	SOIL	10/12/93	5520EF
9310134- 6	SW43-10	SOIL	10/12/93	5520EF

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9310134
Date Received : 10/12/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP

Sub-Department: PREP

QA/QC SUMMARY :

-Due to the heterogeneity of sample SW39-10, the percent recovery of the matrix spike and relative percent difference of the matrix spike and matrix spike duplicate are outside of quality control limits.

Athy Multiphege 10/18/93
Department Supervisor Date

Chemist Date

PREP/PREP- PAGE 2

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

### ANAMETRIX LABORATORIES (408) 432-8192

Project # : Matrix : ate sampled :	SOIL	Anametrix I.D. Analyst Supervisor	:	HE CM
ate sampled :		Date released	:	10/13/93
Date analyzed :	10/13/93			

  Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9310134-01	SW38-5	30	650
9310134-02	SW39-10	30	280
9310134-03	SW40-5	30	1,100
9310134-04	SW41-10	30	790
9310134-05	SW42-5	30	5,000
9310134-06	SW43-10	30	1,300
B012H1W9	METHOD BLANK	30	ND

ND TRPH

- Not detected above the reporting limit for the method.
- Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9310134-02 Analyst: HE : 1649.16, SW39-10MS, MD Sample I.D. : SOIL Matrix Analyst

: 10/12/93 Supervisor Date sampled Date extracted: 10/12/93 Date Released

Date analyzed : 10/13/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS
Motor Oil	300	280	680	133%	520	80%	50%	48~114%

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE <u>S</u>ample I.D.

: SOIL

ate sampled : N/A

Date extracted: 10/12/93 Date analyzed: 10/13/93

latrix

Anametrix I.D.: MO12H1W9

: HE

Supervisor Supervisor : CAN Date Released : 10/13/93

SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
300	290	97%	71-119%
	AMT. (mg/Kg)	AMT. LCS (mg/Kg) (mg/Kg)	AMT. LCS LCS (mg/Kg)

<sup>\*</sup> Quality control established by Anametrix Laboratories.

RRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.	: \64	9.16	laddle/actors/P :		Field	-					I	Date:	10-1	2-93	Serial	No.:	11180	·
_		rba Bue	na-Beach S	1.	Projec	t Lo	catio	): D	akla	d, C4	í							
Sampler (Sig		:	and M MPLES	· Kop			/		A	NAL	YSES		_/_			plers		
		SA	MPLES				/gr			WI TU		/20 E/		25t/		4 m	<u> </u>	
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE	/	St. Kr.	<b>%</b>	A Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Residence Resi	, S. / S.	YSES	1979EV	<u>*/</u>	2/_		REM	MARKS	
SW38-5	10/12	1		The	Sul									-SAme	DAYT	AT		
Swa39-10	)			1									_	<u>- スァ</u>	AL	TAT		
5w46-5													-	- SAME	DAY	TAT		
561-11					. ]				17.				_	- 20	97 I	AT		
) SW42-5													_	> SAn	PAY	TAR	<u> </u>	
SW43-10	1			1	1		1	V	P	T	4			-2 PA				
1		/																
			-m															
						l					<u> </u>							
										<u> </u>								- <del></del>
									1					FAX				
			<u>-</u>			İ					<u> </u>			Resul	to to .	Jenifo	er Beatly	
RELINQUISHED	BY:	, 0	1:		DATE	10 1	IME 200	T	RECEIV	ED BY	Ben	1001	1	1	14	$\sim$	DATE 10/12/53 DATE	TIME
(Signature RELINQUISHED	BY-7	www I	n- lafer		10/12 DATE 10/12 DATE	127			RECEIV	ED BY	Ca C	ny		Carry	- Jan		DATE	TIME
(Signature	80B	my\$	Compos		10/12	F3	104. TME	5	(Signa	ture)	<u>رمر</u>	ny	, Né	Hun			10-12-43 DATE	TIME
RELINQUISHED (Signature		/	0		DATE		ı ME.		(Signa		•						JATE .	1175
METHOD OF SH		COURI	FA		DATE	7	TIME		LAB CO	MMENT	S:							
Sample Co	llector:		LEVINE-FRIG 1900 Powel Emeryville, 10 ( <del>415</del> ) 652-	l Street, Ca 9460	8	loor				name			_	e, (A				86/COC/A



## Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9308360
Date Received : 08/24/93
Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9308360- 1 9308360- 2 9308360- 3 9308360- 4 9308360- 5	FS1-1.5 FS2-1.5 FS3-1.5 FS4-1.5 FS5-1.5
	1

This report consists of 15 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.
Laboratory Director

Date

MR 3 0 1993

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308360 Date Received: 08/24/93

Project ID : 1649.16
Purchase Order: N/A
Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9308360- 1	FS1-1.5	SOIL	08/24/93	TPHd
9308360- 2	FS2-1.5	SOIL	08/24/93	TPHd
9308360- 3	FS3-1.5	SOIL	08/24/93	TPHd
9308360- 4	FS4-1.5	SOIL	08/24/93	TPHd
9308360- 5	FS5-1.5	SOIL	08/24/93	TPHd
9308360- 1	FS1-1.5	SOIL	08/24/93	TPHgBTEX
9308360- 2	FS2-1.5	SOIL	08/24/93	TPHgBTEX
9308360- 3	FS3-1.5	SOIL	08/24/93	ТРНЗВТЕХ
9308360- 4	FS4-1.5	SOIL	08/24/93	TPHgBTEX
9308360- 5	FS5-1.5	SOIL	08/24/93	TPHgBTEX

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308360 Date Received: 08/24/93

Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

8/26/93 Date

Leuce Shor 8/26/93 Chemist Date

GC/TPH- PAGE 2

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9308360 Matrix : SOIL Date Sampled : 08/24/93 Project Number: 1649.16
Date Released: 08/25/93

	Reporting Limit	Sample I.D.# FS1-1.5	Sample I.D.# FS2-1.5	Sample I.D.# FS3-1.5	Sample I.D.# FS4-1.5	Sample I.D.# FS5-1.5
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	-05
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND	ND ND ND ND	ND ND ND ND ND	ND ND ND ND	ND ND ND ND
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		93% HP4 08/25/93	95% HP4 08/25/93	116% HP12 08/25/93	103% HP12 08/25/93	99% HP12 08/25/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Shor 8/26/93 Analyst Date Cheurl Bremer 8/26/33 Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9308360 Matrix : SOIL Project Number: 1649.16 Date Released: 08/25/93

Date Sampled : N/A

	Reporting Limit	Sample I.D.# BG2501E2	Sample I.D.# BG2501E2	 	
COMPOUNDS	(mg/Kg)	BLANK	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I. Date Analyzed RLMF	D.	ND ND ND ND 103% HP12 08/25/93	ND ND ND ND ND 103% HP4 08/25/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Stor 8/26/93 Analyst Date Chengl Balmer 8/06/13 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308360

Project Number: 1649.16 Date Released: 08/26/93 Instrument I.D.: HP9

Matrix : SOIL
Date Sampled : 08/24/93

Date Extracted: 08/24/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308360-01 9308360-02 9308360-03 9308360-04 9308360-05 BG24H1F1	FS1-1.5 FS2-1.5 FS3-1.5 FS4-1.5 FS5-1.5 METHOD BLANK	08/24/93 08/24/93 08/24/93 08/25/93 08/25/93 08/24/93	10 10 10 10 10	ND ND ND ND ND	92% 92% 88% 91% 94% 90%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

gue Davison 8

RESULTS - TPH - PAGE 5

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9308360
Matrix : SOIL
Date Sampled : 08/24/93
Date Extracted: 08/24/93

Project Number: 1649.16
Date Released: 08/26/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308360-01 9308360-02 9308360-03 9308360-04 9308360-05 BG24H1F1	FS1-1.5 FS2-1.5 FS3-1.5 FS4-1.5 FS5-1.5 METHOD BLANK	08/24/93 08/24/93 08/24/93 08/25/93 08/25/93 08/24/93	10 10 10 10 10 10	ND ND ND ND ND	92% 92% 88% 91% 94% 90%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as motor oil is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Regale Dawson 8/26/93
Analyst Date

Supervisor Bulmer 8/26/13
Date

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Matrix : SOIL

Date Sampled : N/A
Date Analyzed : 08/25/93

Anametrix I.D.: MG2501E3

Analyst : IS

Supervisor : 04
Date Released : 08/26/93

Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.015 0.018 0.020 0.021	75% 90% 100% 105%	52-133 57-136 56-139 56-141	
P-BFB			103%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D. : MG2501E3

Matrix : SOIL Analyst Date Sampled : N/A Supervisor

: 108/26/93 Date Analyzed: 08/25/93 Date Released

Instrument ID : HP4

COMPOUND	SPIKE AMT LCS (mg/Kg) (mg/Kg)		%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.016 0.020 0.021 0.020	80% 100% 105% 100%	52-133 57-136 56-139 56-141	
P-BFB			89%	53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

: 1649.16 FS3-1.5 Sample I.D.

Anametrix I.D.: 08360-03

Matrix : SOIL Analyst

: IS

Supervisor : 08/26/93
Date Released : 08/26/93

Date Sampled: 08/24/93 Date Extracted: 08/24/93 Date Analyzed: 08/25/93

Instrument I.D.: HP9

Jace	Anaryzeu	•	00/23/93	THE CT AMONG	 

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC 8 MS (mg/Kg)	REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
DIESEL	125	0	120	96%	127	102%	6%	32-143
SURROGATE				888		96%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Anametrix I.D.: MG24H1F1

Matrix : SOIL Analyst : ZS Supervisor : ZS Date Sampled : N/A

Date Released: 08/26/93 Instrument I.D.: HP9 Date Extracted: 08/24/93 Date Analyzed: 08/24/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	105	84%	48-113
SURROGATE			84%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9308360
Date Received : 08/24/93
Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department : PREP

Sub-Department: PREP

### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9308360- 1	FS1-1.5	SOIL	08/24/93	5520EF
9308360- 2	FS2~1.5	SOIL	08/24/93	5520EF
9308360- 3	FS3-1.5	SOIL	08/24/93	5520EF
9308360- 4	FS4-1.5	SOIL	08/24/93	5520EF
9308360- 5	FS5-1.5	SOIL	08/24/93	5520EF

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9308360 Date Received: 08/24/93

Project ID : 1649.16

Purchase Order: N/A Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Chemist

Date

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Project # : 1649.16
Matrix : SOIL
Date sampled : 08/24/93
Date extracted: 08/24/93
Date analyzed : 08/25/93

Anametrix I.D.: 9308360 Analyst : 7 Supervisor : 08/25/93

    Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9308360-01	FS1-1.5	30	60
9308360-02	FS2-1.5	30	47
9308360-03	FS3-1.5	30	77
9308360-04	FS4-1.5	30	57
9308360-05	FS5-1.5	30	40
BG24H1W9	METHOD BLANK	30	ND

D - Not detected above the reporting limit for the method.
 RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Cample I.D. : 1649.16, FS3-1.5MS, MD strix : SOIL bate sampled : 08/24/93
Date extracted : 08/24/93
Tate analyzed : 08/25/93

Anametrix I.D.: 9308360-03

Analyst : HE Supervisor : CW

Date Released : 08/25/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
otor Oil	300	77	337	87%	317	80%	88	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MG24H1W9

Matrix

: SOIL

Analyst : HE

Date sampled : N/A

cm Supervisor

Date extracted: 08/24/93

Date analyzed : 08/25/93

Date Released: 08/25/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	287	96%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

ſ	Project	t No	:: //2	·	Field Logbook No.:					Date: 8/24/93 Serial No.:									
ŀ	Project		_ 12	1 [ [	$\varphi$		ļ					. 7		11101					1
				MITA	Warehou	15l	Proje	- LC	ocatio	n: [	akl	and	<i>!</i>						
ļ	Sample	r (Si	gnature)						/	/	A	NAL	YSES		_/		Samı	plers:	
ŀ			T	<u> </u>	AMPLES	Two or	Γ				/_	18 3	$\times$	/ /	407	257/		WEM	
	SAMPLE		DATE	TIME	LAB SAMPLE NO.	NO. OF CON- TAINERS	SAMPLE TYPE				XO M	326	51/1		<u> </u>	~/		REMARKS	
	FSI-	1,5	8/24/9	3		1	501	X		と	X	X			<u>Y</u>		)4- L	four TA	T.
2	<u>F52-</u>	1.5	{1			1		X	X	た	×	<u>x</u>			x			),(	
6	F53-	15	11			1		1	メ	た	X	k			x		Resu	elts to Ja	wifer
4	F54-	15	((			l l		بر	<b>&gt;</b>	بح	x	太			ኦ			Beatty	
	F\$5-	(15	1			_	V	人	X	×	X	K			x			<del>~~</del>	
4			1																
																		· · · · · · · · · · · · · · · · · · ·	
																			<del></del>
																			·
																		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
						Ţ													
							-									<u> </u>			
											1				_				
											<del> </del>						<del></del>		
											<u> </u>						<del></del>		
Ī			$\wedge$									<del>                                     </del>	<del> </del>			·			
Ī	RELINQUI	SHED	BY:		(1)		DA <b>7</b> E	T	IME .	R	ECEIVE	D BY			77	10		DATE /	TIME
}	(Signa RELINQUI:		RV:	1 Klick	m / Nacly		DATE Y	93	/Z:.00		Signat ECEIVE		an	my .	£,_,	inig	De)	DATE /93 DATE	TIME 1200
Ĺ	(Signa	ture)	Ten	ry S.	Cassison	2-2	DATE 5/24/5		1243	5- (	Signat	cure) (		in R	e Cr	nsi		DATE S-24-97	TIME 12:45
1	RELINQUI: (Signa	SHED ture)	BY:		0		DATE	T	1 ME		ECEIVE Signat							DATE	TIME
1	METHOD O						DATE	T	IME	-	AB CON		:						<u> </u>
ŀ	Sample	Col	lector:		LEVINE-FRIC	vr				<del>-   -</del> ,	\ meli:	ا = مثاب							
	Jampie	COI	ICCLUI .		1900 Powell		12th Flo	oor			naiy	ucal		rator		L			
					Emeryville, (	Da 9460							1	mar	N Y	ILX			
Ţ	L	<del></del>	(10)		(415) 652-4	<del></del>		_			``		<del></del>		·				
٥	hipping	1	(White)	Lab	Copy (Green)	File	Copy ('	(ellow	1)	210	d Copy	(Pink	()					FORM	86/COC/ARF

#### APPENDIX C

FIELD PROCEDURES FOR SOIL AERATION, WELL ABANDONMENT, AND EXCAVATION DEWATERING, BACKFILLING, AND COMPACTION

## FIELD PROCEDURES FOR SOIL AERATION, WELL ABANDONMENT, AND EXCAVATION DEWATERING, BACKFILLING, AND COMPACTION

#### SOIL AERATION

Gasoline-affected soil was aerated on-site in accordance with Bay Area Air Quality Management District (BAAQMD) guidelines. Portions of the gasoline-affected soil stockpile were spread into a 1-foot thick layer each day until all of the soil had been exposed to the air. The aeration pad measured approximately 265 feet by 175 feet. To facilitate the aeration process, Trumpp Bros tilled the soil three times a week using a rototiller. Soil was then periodically screened using a PID. When PID readings indicate sufficiently low concentrations of VOCs, the aerated soils will be sampled to determine if remediation goals have been achieved.

#### WELL ABANDONMENT

Before initiating field work, a well destruction permit was obtained from the Alameda County Zone 7 Water Agency. All well destruction activities were conducted under the supervision of a Levine Fricke geologist. Well LF-12 was destroyed by excavating the well materials (polyvinyl chloride [PVC] casing, sand pack, bentonite and cement grout) using a CASE 980B excavator. Abandonment of the steel-cased former water supply well was completed by filling the steel casing with a cement slurry through a tremie pipe from the bottom of the well to approximately 2 feet bgs. After the slurry had hardened, the steel casing was cut at approximately 8 to 10 feet bgs with the excavator bucket.

#### **EXCAVATION DEWATERING**

Ground water was encountered in the excavation at a depth of approximately 10 feet bgs. To enable the excavation of saturated zone petroleum-affected soil, the excavation was dewatered periodically. A small pit or hole was excavated at the center of the excavation to serve as a sump for a centrifugal and/or diaphragm pump. Ground water was then pumped into temporary water storage tanks at the Site (Appendix D).

#### BACKFILLING AND COMPACTION

The completed excavation was backfilled during October 1993. The excavation was backfilled with imported recycled drain rock from the excavation floor to approximately 13 feet bgs. After a nonwoven geotextile was placed over the drain rock, onsite soil fill was placed from 13 feet bgs to surrounding grade.

A representative sample of the fill material was submitted to Testing Engineers Inc. Laboratory in Martinez, California, for laboratory compaction testing in accordance with ASTM Test Method D-1557-78A. Results of the laboratory compaction test indicated that the maximum density was 126.7 pounds per cubic foot with an optimum moisture of 9.4 percent. The backfill material was ripped with a trackloader and moisture conditioned with a water truck. The backfill was then transported to the excavation by a scraper and compacted using a sheep-foot compactor (Cat 825). Fill was placed in loose lifts not exceeding 8 inches and tested to meet 90 percent minimum relative compaction beneath 5 feet bgs and to meet 95 percent minimum relative compaction in the upper 5 feet. Density testing was performed by a Levine-Fricke field engineer after a lift of fill was placed and compacted. lift of fill soil was benched into the existing excavation side walls, which had been generally sloped at a 0.25-1 horizontal to 1 vertical. Field density test results are presented in Table 5 of the Text.

#### APPENDIX D

LABORATORY CERTIFICATES FOR GROUND-WATER SAMPLES



# **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309144
Date Received : 09/13/93

Project ID : 1649.16
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309144- 1	BTANK-WR
9309144- 2	SS158.OR
9309144- 3	SE167.O
9309144- 4	SE1710.O
9309144- 5	SE188.O

This report consists of 17 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.
Laboratory Director

Date

9/16/93

SEP 2 0 1993



#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received : 09/13/93 Project ID : 1649.16

Purchase Order: N/A Department : GC Sub-Department: TPH

#### SAMPLE INFORMATION:

IL 09/13/93 IL 09/13/93 IL 09/13/93 IL 09/13/93	TPHd TPHd
IL 09/13/93	3 TPHd
IL 09/13/93	3 TPHd
TER 09/13/93	3 ТРНЭВТЕХ
IL 09/13/93	3 TPHgBTEX
IL 09/13/93	з ТРНдВТЕХ
IL 09/13/93	3 TPHgBTEX
TT 09/13/9	3 TPHGBTEX
	IL 09/13/9:

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received: 09/13/93 Project ID : 1649.16

Purchase Order: N/A Department : GC

Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

eigl Bremen Department Supervisor

GC/TPH- PAGE 2

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144
Matrix : WATER

Date Sampled: 09/13/93

Project Number: 1649.16
Date Released: 09/15/93

	Reporting Limit	Sample I.D.# BTANK-WR		 	مان جان مان الله مان الله الله الله الله الله الله الله ال
COMPOUNDS	(ug/L)	-01	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.5 0.5 0.5 0.5 50	ND ND ND ND ND	ND ND ND ND		
<pre>% Surrogate Reco Instrument I.l Date Analyzed RLMF</pre>	overy D.	97% HP4 09/14/93 1	97% HP4 09/14/93 1		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Date

ChylBalmen 4/15/43 Supervisor Date

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144
Matrix : SOIL
Date Sampled : 09/13/93

Project Number: 1649.16
Date Released: 09/15/93

	Reporting Limit	Sample I.D.# SS158.0R	Sample I.D.# SE167.0	Sample I.D.# SE1710.0	Sample I.D.# SE188.0	Sample I.D.# BS1401E2
COMPOUNDS	(mg/Kg)	-02	-03	-04	-05 	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rece Instrument I. Date Analyzed RLMF		ND ND ND ND ND 78% HP4 09/14/93	ND ND ND ND ND 74% HP4 09/14/93	ND ND ND ND ND 101% HP21 09/14/93	ND ND ND ND ND 81% HP21 09/14/93	ND ND ND ND ND 97% HP4 09/14/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst - Danien 9/15/93

Supervisor Date

RESULTS - TPH - PAGE 4

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309144 Matrix : SOIL Project Number: 1649.16
Date Released: 09/15/93

Date Sampled : N/A

Sample Reporting I.D.# BS1401E2 Limit BLANK ND 0.005 Benzene 0.005 ND Toluene Ethylbenzene 0.005 Total Xylenes 0.005 TPH as Gasoline 0.5 101% HP21 % Surrogate Recovery Instrument I.D. 09/14/93 Date Analyzed 1 RLMF

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Recigio Pavison 9/15/93
Analyst Date

Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309144

Project Number: 1649.16 Date Released: 09/15/93

Matrix : SOIL Date Sampled : 09/13/93

Instrument I.D.: HP19

Date Extracted: 09/13/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309144-02	SS158.0R	09/14/93	10	ND	80%
9309144-03	SE167.0	09/13/93	10	ND	82%
9309144-04	SE1710.0	09/13/93	10	ND	85%
9309144-05	SE188.0	09/13/93	10	ND	85%
BS13H2F1	METHOD BLANK	09/13/93	10	ND	84%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

> All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Regali Danson 9/15/93 Analyst Date

9/11/53 Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309144 : SOIL Matrix

Project Number: 1649.16 Date Released: 09/15/93 Instrument I.D.: HP19

Date Sampled: 09/13/93

Date Extracted: 09/13/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309144-02	SS158.0R	09/14/93	10	ND	80%
9309144-03	SE167.0	09/13/93	10	ND	82%
9309144-04	SE1710.0	09/13/93	10	ND	85%
9309144-05	SE188.0	09/13/93	10	ND	85%
BS13H2F1	METHOD BLANK	09/13/93	10	ND	84%
· · · · · · · · · · · · · · · · · · ·		•			

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30~130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

gale Danison 9/15/15

#### TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 SE167.0
Matrix : SOIL
Date Sampled : 09/13/93
Date Analyzed : 09/14/93

Anametrix I.D.: 09144-03

Analyst : ky
Supervisor : 26
Date Released : 09/15/93

Instrument I.D.: HP4

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS- (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS	_
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.020 0.020 0.020 0.020	0.000 0.000 0.000 0.000	0.017 0.020 0.019 0.018	85% 100% 95% 90%	0.017 0.020 0.019 0.018	85% 100% 95% 90%	0% 0% 0% 0%	45-139 51-138 48-146 50-139	
p-BFB				72%		69%		53-147	7

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 09144-05

Sample I.D. : 1649.16 SE188.0 Matrix : SOIL Date Sampled : 09/13/93 Analyst : 00 Supervisor : 05 Date Released : 09/15/93

Date Extracted: 09/13/93 Instrument I.D.: HP19 Date Analyzed: 09/13/93

SPIKE SAMPLE REC % REC REC RPD % REC MS MD MD LIMITS CONC MS AMT (mg/Kg) (mg/Kg) (mg/Kg) (mg/Kg) 83 66% 80 64% -4% 32-143 0 125 DIESEL 84% 79% 30-130 SURROGATE

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D. : MS1401E1 Analyst

Matrix : SOIL Date Sampled : N/A : RD Supervisor Date Released : 09/15/93 Instrument ID : HP4 Date Analyzed: 09/14/93

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES P-BFB	0.020 0.020 0.020 0.020	0.018 0.022 0.022 0.020	90% 110% 110% 100% 95%	52-133 57-136 56-139 56-141 53-147	

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : SOIL

: N/A Date Sampled

Date Analyzed: 09/14/93

Anametrix I.D.: MS1401E3

Analyst : 80

Supervisor Date Released : com

: 09/15/93

Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC ' LIMITS
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.019 0.019 0.019 0.020	95% 95% 95% 100%	52-133 57-136 56-139 56-141
P-BFB			108%	53-147

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: MS13H2F1

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL Analyst : PV Supervisor : 05 Date Released : 09/15/93 Date Sampled : N/A

Date Extracted: 09/13/93

Instrument I.D.: HP19 Date Analyzed: 09/13/93

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	86	69%	48-113
SURROGATE			87%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received : 09/13/93

Project ID : 1649.16
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309144- 2	S\$158.0R	SOIL	09/13/93	5520EF
9309144- 3	SE167.0	SOIL	09/13/93	5520EF
9309144- 4	SE1710.0	SOIL	09/13/93	5520EF
9309144- 5	SE188.0	SOIL	09/13/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309144 Date Received : 09/13/93 Project ID : 1649.16 Purchase Order: N/A

Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Chemist

91.5193

Date

PREP/PREP- PAGE 2

## ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

    Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309144-02	SS158.0R	30	73
9309144-03	SE167.0	.   30	210
9309144-04	SE1710.0	30	63
9309144-05	SE188.0	30	210
BS13H1W9	METHOD BLANK	30	ND

ND TRPH Not detected above the reporting limit for the method.Total Recoverable Petroleum Hydrocarbons are determined by

Standard Method 5520EF, 18th edition.

Services (Cal-DHS) approved methods.

All testing procedures follow California Department of Health

#### MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Anametrix I.D.: 9309144-02

Sample I.D. : 1649.16, SS158.0RMS, MD
Matrix : SOIL
Date sampled : 09/13/93
Date extracted : 09/13/93 Analyst : EK Supervisor : Crv Date Released: 09/15/93

Date analyzed : 09/14/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	%REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	73	370	99%	350	92%	 7%՝	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MS13H1W9

Matrix : SOIL Date sampled : N/A

Analyst : CK · cm

Date extracted: 09/13/93

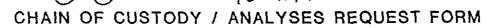
Supervisor Date Released : 09/14/93

Date analyzed : 09/14/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	*REC LIMITS
Motor Oil	300	300	100%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.



	Project No.	: /	Ý49.	16		Field	Logi	oook	۱o.:			]	Date:	9/1	3/93	Serial No	°·· 1102	
	Project Nam	ne:	Beau	Just.		Projec	t Lo	cation	):	() ü	Kla	ad		<del>-   -   -   -   -   -   -   -   -   -  </del>				
f	Sampler (Sig	nature)	: Piril	Jun Diese	liker					Α	NÁL'	/SES				Sample	ers:	
			/ S/	AMPLES				-/3	N SH	/				101	/15x/		ers: WEA	1
	SAMPLE NO.	DATE	TIME	LAB SAMPLE	NO. OF CON - TAINERS	SAMPLE TYPE		the Ki		No A	40 X	KO (F		**/	<u>~</u> /	R	REMARKS	
	BTANK-WR	9/13/93	8:00		3	150		X	Х					X		4-11-	TA	
9	55/5-8,0R	1				Soil	<u></u>	<u>                                     </u>	<u> </u>	X	太	X		\tau_{\tau}		~ / / / OC	۲ / / ۱ / ۱ / ۱ / ۱ / ۱ / ۱ / ۱ / ۱ / ۱	
3)	SE/6-7,0				1			\	文	X	上	上		ケ		esults	to Jen	Fer
5	SE17-10.0				1			<u>\pi</u>	$\sim$	X	4	٢		大		Beath	<del>/</del>	
	SE18- 80	Ψ			(	V		X	X	メ	入	X		X	/		<u></u>	
																	·	
Í												<b></b>	-					
- [																<u></u>		
							ļ			ļ							·····	·- <u></u>
															<i></i>			
							<u> </u>	<u> </u>										
											<u> </u>							
												<u> </u>						
							<u> </u>				<u> </u>							
			1- An		<u> </u>		<u> </u>											<u> </u>
	RELINQUISHED (Signature)	BY:	/ the	Myster		9113/9		MEOC	' } '	RECEIVE (Signat	ED BY≀ ture)×	Son	mu	1.	Cane	1000	DATE 9/13/93	TIME //OD
i	RELINQUISHED ( (Signaturę)		1111	Boxes		DAJE 9/13/	; 2	PIME 1200	7	RECEIVE (Signat	D BY:	10200	Bur	· ]	),(	·	DATE /93	TIME 12:00
	RELINQUISHED		ngs,	. Carry 2 2 2		DAT€	<del>-</del>	TIME	1 1	RECEIVI (Signat	D BY:	7	<del>~ ~ ~</del>	<u>~</u>	<u> </u>	<u> </u>	DATE	TIME
	(Signature) METHOD OF SHI	PMENT:			<del></del>	DATE		TIME		AB CO								<u> </u>
								<u>.</u>				·					<del></del>	
	Sample Col	lector:		LEVINE-FRICI 1900 Powell S Emeryville, C (415) 652-450	Street, 12 <sup>.</sup> a 94608	th Floor				Analy	tical	Lab		-	ne tri	X		
	Shipping Copy	(White)	Lab	Copy (Green)	File	e Copy (	Yello	w)	Fiel	d Copy	(Pin	k)					FORM NO.	86/COC/ARF



### **Inchcape Testing Services Anametrix Laboratories**

1961 Concourse Drive Suite E San Jose, CA 95151 Tel: 408-452-8192 Fax: 408-452-8198

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309001 Date Received: 09/01/93 Project ID : 1649.16

Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9309001- 1	STANKB1
9309001- 2	NSTANKB2
9309001- 3	NTANKB3
9309001- 4	BTANK-W

This report consists of 38 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametriak.

Sarah Schoen, Ph.D.

Laboratory Director



#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: VOA

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	8010
9309001- 2	NSTANKB2	SOIL	08/31/93	8010
9309001- 3	NTANKB3	SOIL	08/31/93	8010

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16 Purchase Order: N/A

Department : GC Sub-Department: VOA

#### QA/QC SUMMARY :

- Recovery of 1,1-Dichloroethane in the 9-1-93 laboratory control spike is outside of Anametrix control limits for EPA Method 8010.

aux Wakida

#### ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408) 432-8192

mject ID : 1649.16
ample ID : STANKB1
atrix : SOIL Anametrix ID : 9309001-01 : 1 Analyst

atrix : SOIL

te Sampled : 8/31/93
te Analyzed : 9/7/93
nstrument ID : AD15 Supervisor -7M1

Dilution Factor : 1.0 Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	טן
74-87-3	Chloromethane	-[ 1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	וטן
74-83-9	Bromomethane	.50		U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50		טן
76-13-1	Trichlorotrifluoroethane	.50	ND	ן ט
75-35-4	1,1-Dichloroethene	.50		שן
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ИD	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	ប្រ
0061-01-5	cis-1,3-Dichloropropene	.50	ND	U
L0061-02-6	trans-1,3-Dichloropropene	.50	ИD	ū
79-00-5	1,1,2-Trichloroethane		ND ,	រ័ក
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane		ND	ប
541-73-1	1,3-Dichlorobenzene	[] 1.0	l иD	In
106-46-7	1,4-Dichlorobenzene	1.0	ND	ប
95-50-1	1,2-Dichlorobenzene	1.0	ND	la
		_	·	-1

#### ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

roject ID : 1649.16 ample ID : NSTANKB2

atrix : SOIL

ate Sampled : 8/31/93 ate Analyzed : 9/ 1/93 nstrument ID : AD15 Anametrix ID : 9309001-02

Analyst : 7% Supervisor : 7%

Dilution Factor: 1.0

Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8 74-87-3 75-01-4 74-83-9 75-00-3 75-69-4 76-13-1 75-35-4 75-09-2 156-60-5 75-34-3 156-59-2 67-66-3 71-55-6 56-23-5 107-06-2 79-01-6 78-87-5 75-27-4 110-75-8 10061-01-5 10061-02-6 79-00-5 127-18-4 124-48-1 108-90-7 75-25-2	Dichlorodifluoromethane Chloromethane Vinyl chloride Bromomethane Chloroethane Trichlorofluoromethane Trichlorotrifluoroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethane cis-1,2-Dichloroethene Chloroform 1,1,1-Trichloroethane Carbon tetrachloride 1,2-Dichloroethane Trichloroethene 1,2-Dichloropropane Bromodichloromethane 2-Chloroethylvinylether cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene Dibromochloromethane Chlorobenzene Bromoform			Q
79-34-5 541-73-1 106-46-7 95-50-1	1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	.50 1.0 1.0 1.0	ND ND ND ND	U   U   U   U

#### ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

roject\_ID Anametrix ID : 9309001-03 : 1649.16 Analyst : rly

mple ID : NTANKB3 二丁哨 Supervisor : SOIL trix

ate Sampled : 8/31/93 ate Analyzed : 9/ 1/93 strument ID : AD15 Dilution Factor: 1.0

Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	ט
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	ָט <u>ו</u>
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	Ū
76-13-1	Trichlorotrifluoroethane	.50	ND	ָט וֹ
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	שׁוֹ
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1.1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	ľu
107-06-2	1,2-Dichloroethane	.50	ND	ļu
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	ן ט
110-75-8	2-Chloroethylvinylether	1.0	ND	įυ
0061-01-5	cis-1,3-Dichloropropene	.50	ND	U
0061-02-6	trans-1,3-Dichloropropene	.50	ND ·	[n]
79-00-5	1,1,2-Trichloroethane	.50	ND	ĺū
127-18-4	Tetrachloroethene	.50	ND	jū
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	Ū
79-34-5	1,1,2,2-Tetrachloroethane	.50		ប្រ
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
		1 1.0	ND	

#### ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

: 1649.1 : BLK901 roject ID ample ID atrix ate Sampled ate Analyzed

nstrument ID

: SOIL : 0/ 0/ 0 : 9/ 1/93 : AD15

: 15B0901H01 Anametrix ID : W Analyst Supervisor

Dilution Factor:
Conc. Units: ug/Kg 1.0

				<del>,</del>
CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane .	.50	ND	Ü
75-00-3		.50	ND	U
75-69-4	Chloroethane Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	Įΰ
75-09-2	Methylene chloride	1.0	ИD	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	บ
75-34-3	1 1-Dichloroothane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	ַט
67-66-3	Chloroform	.50	ND	lu
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	Ū
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	Ū
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U U
79-00-5	1,1,2-Trichloroethane	.50	ND	ប
127-18-4	Tetrachloroethene	.50	ND	
124-48-1	Dibromochloromethane	.50	ND	ĮŪ
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	Į U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	ប្រ
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	ĮŪ

#### ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408) 432-8192

Anametrix ID : 15B0907H01 ample ID : 1649.1 ample ID : BLK907 atrix : SOIL Analyst : \*\*D
Supervisor : TM

atrix : SOIL
te Sampled : 0/ 0/ 0
te Analyzed : 9/ 7/93
nstrument ID : AD15

Dilution Factor:
Conc. Units: ug/Kg 1.0

		<del></del>		
CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	įυ∣
75-01-4	Vinyl chloride	.50	ND	Įυ
74-83-9	Bromomethane	.50	ИD	ប
75-00-3	Chloroethane	.50	ND	ប
75-69-4	Trichlorofluoromethane	.50	ИD	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ИD	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67 <b>-</b> 66-3	Chloroform	.50	ND	ប្រ
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87 <b>-</b> 5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	ĺΩ
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ИD	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	ប
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ИD	ប
95 <b>-</b> 50-1	1,2-Dichlorobenzene	1.0	ND	In
		i		ii

### SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16 Matrix : SOLID Anametrix ID: 9309001 Analyst: "7 Supervisor: TM

	SAMPLE ID	SU1	SU2	SU3
1	BLK901	109		
21	NSTANKB2	48		
3	NTANKB3	40		
4	BLK907	127		
5	STANKB1	83		ii
6				
7				
8				
9				
10				
11				
12				l l
13		ļ	ļ	
14				
15	·			
16				
17				
18				!
19				\\
20	<del></del>			
21		ļ ———	·	·
22				
23		ļ	]	
24 25			¦	[
	· — — — — — — — — — — — — — — — — — — —	<del>-</del>	]	]
26 27		}	ļ	\ ———-{
28		} <del></del>	]	<del></del>
		¦	ļ	\!
29	<del></del>	<u> </u>	}	
30	l	l	l	lf

QC LIMITS
SU1 = Chlorofluorobenzene (33-134)

\* Values outside of Anametrix QC limits

#### LABORATORY CONTROL SAMPLE EPA METHOD 601/8010 ANAMETRIX, INC. (408) 432-8192

Project/Case : LABORATORY CONTROL SAMPLE

Anametrix I.D.: W0090193

Analyst : 75 Supervisor : TM

Matrix : WATER
SDG/Batch : N/A
Date analyzed : 09/01/93

	-	
instrument	I.D.:	AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113 1,1-DICHLOROETHENE trans-1,2-DICHLOROETHENE 1,1-DICHLOROETHANE cis-1,2-DICHLOROETHENE 1,1,1-TRICHLOROETHANE TRICHLOROETHENE TETRACHLOROETHENE CHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE	10 10 10 10 10 10 10 10 10 10	11.7 11.9 11.9 13.4 12.9 13.1 13.0 12.6 12.5 13.1	1178 1198 1198 1348 1298 1348 1318 1308 1268 1258 1318 1418	34 - 128 63 - 133 55 - 145 49 - 121 66 - 168 72 - 143 63 - 147 60 - 133 70 - 148 49 - 139 70 - 133 69 - 140

<sup>\*</sup> Limits based on data generated by Anametrix, Inc., August, 1992.

#### LABORATORY CONTROL SAMPLE EPA METHOD 601/8010 ANAMETRIX, INC. (408) 432-8192

: LABORATORY CONTROL SAMPLE Project/Case

Anametrix I.D.: W0090793

: WATER Matrix : N/A

SDG/Batch Date analyzed : 09/07/93 Analyst : 75 Supervisor : 77 Instrument I.D.: AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	*RECOVERY LIMITS
FREON 113 1,1-DICHLOROETHENE trans-1,2-DICHLOROETHENE 1,1-DICHLOROETHANE cis-1,2-DICHLOROETHENE 1,1,1-TRICHLOROETHANE TRICHLOROETHENE TETRACHLOROETHENE CHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE	10 10 10 10 10 10 10 10 10 10	9.3 11.7 10.7 12.1 13.0 12.3 12.3 12.1 12.5 10.0 12.2 14.0	93% 117% 107% 121% 130% 123% 123% 121% 124% 100% 122% 140%	34 - 128 63 - 133 55 - 145 49 - 121 66 - 168 72 - 143 63 - 147 60 - 133 70 - 148 49 - 139 70 - 133 69 - 140

<sup>\*</sup> Limits based on data generated by Anametrix, Inc., August, 1992.

### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY LEVINE-FRICKE 1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608 Workorder # : 9309001
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A
Department : GC
Sub-Department: TPH

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	TPHd
9309001- 2	NSTANKB2	SOIL	08/31/93	ТРНd
9309001- 3	NTANKB3	SOIL	08/31/93	трна
9309001- 4	BTANK-W	WATER	09/01/93	трна
9309001- 1	STANKB1	SOIL	08/31/93	трндвтех
9309001- 2	NSTANKB2	SOIL	08/31/93	трндвтех
9309001- 3	NTANKB3	SOIL	08/31/93	TPHgBTEX
9309001- 4	BTANK-W	WATER	09/01/93	TPHGBTEX

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR ...

EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received: 09/01/93
Project ID: 1649.16
Purchase Order: N/A
Department: GC

Sub-Department: TPH

#### QA/QC SUMMARY :

- The concentrations reported as gasoline for samples STANKB1, NSTANKB2 and BTANK-W are primarily due to the presence of a heavier petroleum product of hydrocarbon range C9-C14, possibly diesel fuel.

Department Supervisor

ua Shor 9/7/93

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309001 Matrix : SOIL

Project Number: 1649.16 Date Released : 09/07/93

Date Sampled: 08/31/93

	Reporting Limit	Sample I.D.# STANKB1	Sample I.D.# NSTANKB2	Sample I.D.# NTANKB3	Sample I.D.# BS0102E2	Sample I.D.# BS0201E2
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND 0.033	ND ND ND 0.16	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		102% HP21 09/02/93	101% HP21 09/02/93 10	101% HP21 09/02/93	117% HP21 09/01/93	122% HP21 09/02/93

ND - Not detected at or above the practical quantitation limit for the method.

TPHq - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

una Shor 9/7,

# ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9309001 Matrix : WATER Date Sampled : 09/01/93 Project Number: 1649.16
Date Released: 09/07/93

	Reporting Limit	Sample I.D.# BTANK-W	Sample I.D.# BS0201E2		
COMPOUNDS	(ug/L)	-04	BLANK	 	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rece Instrument I.I Date Analyzed RLMF		ND ND ND 90 97% HP4 09/02/93	ND ND ND ND ND 106% HP4 09/02/93		

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Sher 9/7/43 Analyst Date

Cherry Balmer 9/7/53 Supervisor Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001

Project Number: 1649.16
Date Released: 09/07/93

Matrix : SOIL
Date Sampled : 08/31/93
Date Extracted: 09/01/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	%Rec
9309001-01	STANKB1	09/02/93	10	ND	109%
9309001-02	NSTANKB2	09/02/93	200	330	60%
9309001-03	NTANKB3	09/02/93	10	ND	112%
BS01H1F1	METHOD BLANK	09/02/93	10	ND	112%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

<u>lucia Stan 9/7/43</u> Analyst Date

Jl Bulmer Date

#### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001 Matrix : SOIL
Date Sampled : 08/31/93 Date Extracted: 09/01/93 Project Number: 1649.16
Date Released: 09/07/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309001-01	STANKB1	09/02/93	10	ND	109%
9309001-02	NSTANKB2	09/02/93	200	540	60%
9309001-03	NTANKB3	09/02/93	10	ND	112%
BS01H1F1	METHOD BLANK	09/02/93	10	ND	112%

Note: Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg. The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Luca Shar 9/7/93

## ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001
Matrix : WATER
Date Sampled : 09/01/93

Date Extracted: 09/01/93

Project Number: 1649.16
Date Released: 09/07/93

Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9309001-04	BTANK-W	09/01/93	50	970	818
BS0111F1	METHOD BLANK	09/01/93	50	ND	948

Note: Reporting limit is obtained by multiplying the dilution factor times 500 ug/L.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C12-C22 are determined by following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst Davison 9/10/93
Date

Cheul Belman 9/10/93 Supervisor Date

### ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9309001 Matrix : WATER Date Sampled : 09/01/93 Project Number: 1649.16
Date Released: 09/07/93
Instrument I.D.: HP9

Date Extracted: 09/01/93

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9309001-04	BTANK-W	09/01/93	50	890	81%
BS0111F1	METHOD BLANK	09/01/93	50	ND	94%

Note: Reporting limit is obtained by multiplying the dilution factor times 500 ug/L.

The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C22-C36 are determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggle Dawson 9/10/93
Analyst Date

Chuyl Balman 9/10/13
Supervisor Date

#### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : SOIL

Anametrix I.D.: MS0102E1

Analyst : 15 Supervisor : 05 Date Released : 09/07/93 Instrument I.D.: HP21

Date Sampled : N/A
Date Analyzed : 09/02/93

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.43	86%	58-130
p-BFB			100%	53-147

<sup>\*</sup> Quality control established by Anametrix, Inc.

### TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3510 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : WATER Date Sampled : N/A

Date Analyzed: 09/02/93

Anametrix I.D.: MS0202E1

: IS Analyst

Supervisor : 07
Date Released : 09/07/93
Instrument I.D.: HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS REC (mg/Kg)	% REC LCS	LCSD REC (mg/Kg)	% REC LCSD	RPD ,	% REC LIMITS
GASOLINE	500	430	86%	420	84%	-2%	58 <del>-</del> 130
SURROGATE			102%	•	105%		53-147

<sup>\*</sup>Quality control established by Anametrix, Inc.

# TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.16 NTANKB3 Anametrix I.D. : 09001-03

Matrix : SOIL Analyst : IS Date Sampled : 08/31/93 Supervisor : 4

Date Extracted: 09/01/93 Date Released: 09/07/93

Date Analyzed: 09/02/93 Instrument I.D.: HP9

сомроиир	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	REC MS	REC MD (mg/Kg)	REC MD	RPD	% REC LIMITS
DIESEL	125	0	101	81%	92	74%	-9%	32-143
SURROGATE				130%	•	125%		30-130

<sup>\*</sup> Quality control limit established by Anametrix, Inc.

### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3550 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D. : MS01H1F1

Matrix : SOIL Analyst :  $\mathcal{I}^{\mathcal{S}}$ 

Date Sampled : N/A

Supervisor : 05
Date Released : 09/07/93

Date Extracted: 09/01/93

Date Analyzed: 09/01/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE			124%	30-130

<sup>\*</sup>Limits established by Anametrix, Inc.

#### TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 3510 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Matrix : WATER Date Sampled : N/A

Date Extracted: 09/01/93 Date Analyzed: 09/01/93

Anametrix I.D.: MS0111F1

Analyst : Is Supervisor : cs

Supervisor : 68
Date Released : 09/07/93

Instrument I.D.: HP9

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	880	70%	940	75%	7%	47-130
SURROGATE		. — — — — — —	53%		57%		30-130

<sup>\*</sup>Quality control established by Anametrix, Inc.

## REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR

EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93

Project ID : 1649.16
Purchase Order: N/A.
Department : PREP
Sub-Department: PREP

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 4	BTANK-W	WATER	09/01/93	5520BF
9309001- 1	STANKB1	SOIL	08/31/93	5520EF
9309001- 2	NSTANKB2	SOIL	08/31/93	5520EF
9309001- 3	NTANKB3	SOIL	08/31/93	5520EF

#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received: 09/01/93

Project ID : 1649.16

Purchase Order: N/A Department : PREP Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Department Supervisor

Chemist

Date

PREP/PREP- PAGE 2

# ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORY (408) 432-8192

Project I.D.: 1649.16 Anametrix I.D.: 9309001
Matrix: WATER Analyst: HE
Date sampled: 09/01/93 Supervisor: C/\(\times\)
Date extracted: 09/01/93 Date analyzed: 09/02/93

  Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9309001-04	BTANK-W	5	ND
BS0111W4	METHOD BLANK	5	ND

ND - Not detected above the reporting limit for the method.
TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

### ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

#### ANAMETRIX LABORATORIES (408) 432-8192

	Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
	9309001-01	STANKB1	30	190
ľ	9309001-02	NSTANKB2	30	2,200
-	9309001-03	NTANKB3	30	ND
	BS01H1W9	METHOD BLANK	30	ND [

D - Not detected above the reporting limit for the method.
 RPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

# MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : 1649.16, NTANKB3MS, MD Anametrix I.D. : 9309001-03

Matrix : SOIL Analyst : HC
Date sampled : 08/31/93 Supervisor : C/V
Date extracted : 09/01/93 Date Released : 09/03/93

Date analyzed: 09/02/93

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	MS AMT (mg/Kg)	*REC MS	MD AMT (mg/Kg)	%REC MD	%RPD	% REC LIMITS	
Motor Oil	300	27	300	918	280	84%	88	48-114%	

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

#### LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE

ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

atrix : WATER ate sampled : N/A atrix

Date extracted: 09/01/93 Date analyzed: 09/02/93 Anametrix I.D.: MS0111W4

Analyst : HE Supervisor : CM

Date Released: 09/03/93

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD .	%REC LIMITS
otor Oil	50	41	82%	41.	82%	08	44-128%
# Ouglitu go	ntrol limita	ogtablic	shod by	Mamotriv	Laboratories		

\* Quality control limits established by Anametrix Laboratories.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS AS OIL AND GREASE ANAMETRIX LABORATORIES (408) 432-8192

: LAB CONTROL SAMPLE Sample I.D.

Anametrix I.D.: MS01H1W9

: SOIL Matrix

Analyst

:

Date sampled : N/A

Supervisor

Date extracted: 09/01/93

Date Released: 09/03/93

Date analyzed: 09/02/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	300	100%	71-119%

<sup>\*</sup> Quality control established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF.

#### ANAMETRIX REPORT DESCRIPTION **INORGANICS**

#### Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

EPA Method 6010/7000/9000 series - "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition,

November 1986. EPA Method 100, 200, 300 series - "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd

Edition, 1983.

Toxicity Characteristic Leaching Procedure (EPA Method 1311) - 40 CFR, Part 268, Appendix 1, June 1990. <u>Vaste Extraction Test</u> - Results are reported in mg/L of extract according to procedures of CCR litle 22, Section 66261, Appendix II.

Organic Lead - CCR Title 22, Section 66261, Appendix XI.

Standard Method 2340B - "Standard Methods for the Examination of Water and Wastewater," APHA, AWMA, WEF, 18th Edition, 1992.

#### Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits.

#### Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. |This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

#### Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

#### Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 85-115%.

#### Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I Sample was analyzed at the stated dilution due to spectral interferences.
- U Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.
- L Reporting limit was increased to compensate for background absorbances or matrix interferences.

#### Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP). C - Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D Reported results are dissolved, not total, metals.

#### Reporting Conventions

Analytical values reported are gross values, i.e., not corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise. Unless noted, all samples were prepared according to procedures in the EPA Contract Laboratory Program Statement of Work, ILMO2.1, 1990.

#### REPORT SUMMARY ANAMETRIX, INC. (408) 432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001 Date Received : 09/01/93 Project ID : 1649.16

Purchase Order: N/A Department : METALS Sub-Department: METALS

#### SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309001- 1	STANKB1	SOIL	08/31/93	6010
9309001- 2	NSTANKB2	SOIL	08/31/93	6010
9309001- 3	NTANKB3	SOIL	08/31/93	6010

#### REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY

LEVINE-FRICKE

1900 POWELL STREET 12TH FLOOR EMERYVILLE, CA 94608

Workorder # : 9309001
Date Received : 09/01/93
Project ID : 1649.16
Purchase Order: N/A

Department : METALS Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Department Supervisor

Date

INORGANICS - PAGE 2

#### INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-01 Client I.D.: STANKB1 Project I.D.: 1649.16 Reporting Unit: mg/Kg Matrix: SOIL

: 08/31/93 : MK Date Sampled Analyst

Supervisor : MN Date Released : 09/08/93 Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0 1.0	1 1 1 1	0.49 24.3 48.0 4.4 32.8	

#### INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-02 Client I.D.: NSTANKB2 Project I.D.: 1649.16 Reporting Unit: mg/Kg Watrix: SOIL

Date Sampled : 08/31/93 Analyst : MK

Analyst : MK Supervisor : MN Date Released : 09/08/93 Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0	1 1 1 1 1	ND 21.2 34.5 4.8 38.8	

#### INORGANIC ANALYSIS DATA SHEET ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9309001-03 Client I.D.: NTANKB3 Project I.D.: 1649.16 Reporting Unit: mg/Kg Matrix: SOIL

: 08/31/93 : MK : M : 09/08/93 Date Sampled Analyst

Supervisor Date Released

Instrument I.D. : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORT LIMIT	DIL. FACTOR	RESULT	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0	1 1 1 1	ND 24.6 36.3 4.5 35.4	

#### METHOD BLANK REPORT ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.# : 9309001 Method Blank I.D.: MB0903SA

roject I.D. : 1649.16 Latrix : SOIL

Reporting Unit : mg/Kg

.MK Analyst : MK Supervisor : MK Date Released : 09/08/93 Instrument I.D. : ICP1

WALYTE-METHOD	DATE PREPARED	DATE ANALYZED	REPORTING LIMIT	RESULT	Q
	09/03/93 09/03/93 09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	0.25 0.50 2.0 2.0 1.0	ND ND ND ND ND	
_					

DMMENT:

## LABORATORY CONTROL SAMPLE REPORT ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.# : 9309001 Spike I.D. Project I.D. Matrix : LCS903SA

: 1649.16 : SOIL

Reporting Unit : mg/Kg Analyst : MK Supervisor : MN Date Released : 09/08/93 Instrument I.D : ICP1

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	SPIKE AMT.	METHOD SPIKE	% REC.	Q
Cadmium-6010 Chromium-6010 Nickel-6010 Lead-6010 Zinc-6010	09/03/93 09/03/93 09/03/93	09/08/93 09/08/93 09/08/93 09/08/93 09/08/93	2.5 10.0 25.0 25.0 25.0	2.5 11.2 29.7 27.2 26.7	100 112 119 109 107	