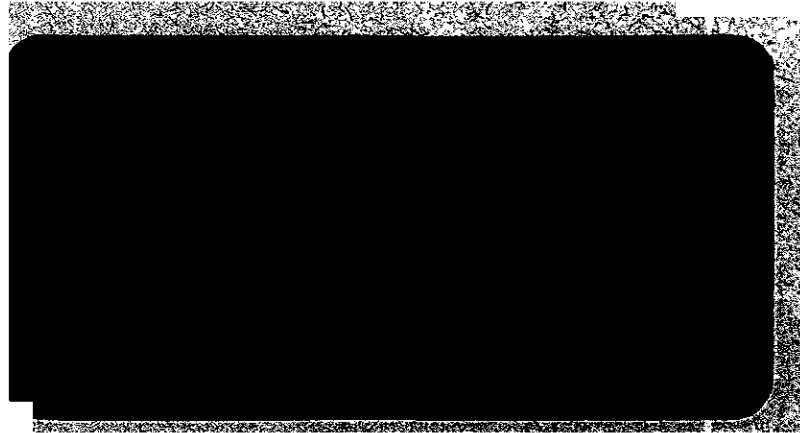
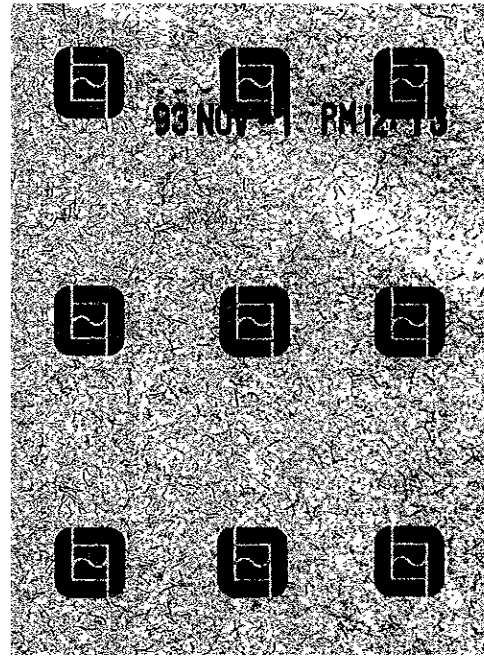
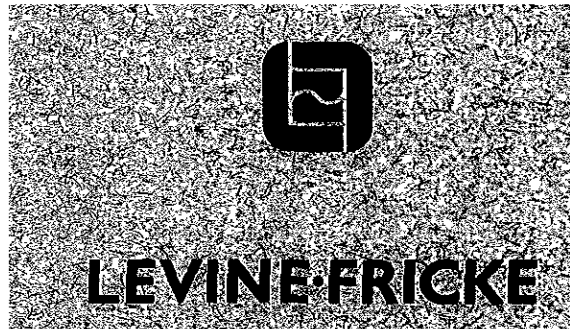


BEACH STREET
AREA
571011



10/20/93





**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



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
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

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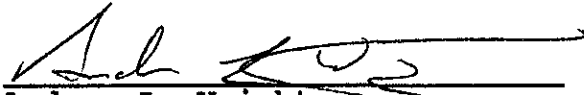
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CERTIFICATION

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_d (620 ppm), and toluene (0.068 ppm). No TPH as diesel (TPHd) or benzene, ethylbenzene, or xylenes were detected.

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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 the 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 to 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 a 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 concentrations 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 monitoring 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.

TABLE 1
 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* 10/14

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 Anamatrix 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	TPHd	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	<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	190	<0.005	0.34	0.39	3.2
SW2-7.5	01-Sep-93	7.5		<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	(1)	75	220	120	18	<0.005	<0.005	<0.005	<0.005
SW8-10.5	02-Sep-93	10.5	(1)	510	3000	1000	300	<0.005	<0.005	<0.005	0.85
SW11-8	10-Sep-93	8.0	(1)	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
SS15-8.0	10-Sep-93	8.0	(1)	100	2500	190	0.39	<0.005	<0.005	<0.005	0.39
SW25-15	17-Sep-93	15.0	(1)	1700	9700	2200	420	<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-Oct-93	5.0		160	1100	340	1.4	<0.005	0.011	0.012	3.5
SW42-5	12-Oct-93	5.0		980	5000	1600	270	<0.50	<0.50	3.5	14

Data entered by NEK/11,12,18 Oct 93 Data proofed by WEM/11/12

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.
- (2) 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 ID	Date	Depth	Notes	TPHd	Oil & Grease	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes
NTANK B3-11.5	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	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B18-15.0	10-Sep-93	15.0		<10	67	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B16-12	10-Sep-93	12.0		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B22-14	13-Sep-93	14.0		<10	230	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B21-13	13-Sep-93	13.0		<10	220	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B24-14.5	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
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
SS-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	90	13	0.6	<0.005	<0.005	0.008	0.03
SE22-5.0	16-Sep-93	5.0		<10	160	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE21-6.5	16-Sep-93	6.5		<10	87	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE23-7.5	16-Sep-93	7.5		<10	120	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SN24-5.0	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		<10	77	11	<0.5	<0.005	<0.005	<0.005	0.013
SS36-6.0	23-Sep-93	6.0		<10	150	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW38-5	12-Oct-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-Oct-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)	710	1300	1400	700	<0.5	<0.5	1.7	5.6
SW-40-5R	18-Oct-93	5.0	(1,2,3)	710	4100	1300	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

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 ✓
 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
FS1-1.5	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	77	<10	<0.5	<0.005	<0.005	<0.005	<0.005
FS4-1.5	24-Aug-93	1.5	<10	57	<10	<0.5	<0.005	<0.005	<0.005	<0.005
FS5-1.5	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 10/19/93

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.

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-Oct-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-Oct-93	7	Excavation	3.5	117.1	10.9	92	95	
	8	Excavation	5.0	120.5	12.2	95	90	
	9	Excavation	4.5	117.7	12.8	93	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-Oct-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-Oct-93	18	West Wall 1	5.0	112.5	11.5	89	90	
	19	West Wall 1	5.0	121.5	11.5	96	90	
	20	West Wall 1	5.0	114.7	13.0	91	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-Oct-93	23	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	100	95	
	26	Excavation	1.0	122.6	11.3	97	95	
	27	Excavation	0.0	116.5	11.8	92	95	
	28	Excavation	0.0	116.3	12.5	92	95	
	29	Excavation	0.0	121.2	9.5	96	95	retest of #27
	30	Excavation	0.0	124.3	10.1	98	95	
	31	Excavation	0.0	116.1	10.6	92	95	retest of #28
	18-Oct-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	
34		West Wall 2	2.0	120.0	11.6	95	95	retest of #33
19-Oct-93	35	Excavation	0.0	123.3	11.1	97	95	retest of #31
	36	West Wall 2	0.0	114.9	12.7	91	95	
	37	West Wall 2	0.0	123.1	11.0	97	95	retest of #36

NOTES:

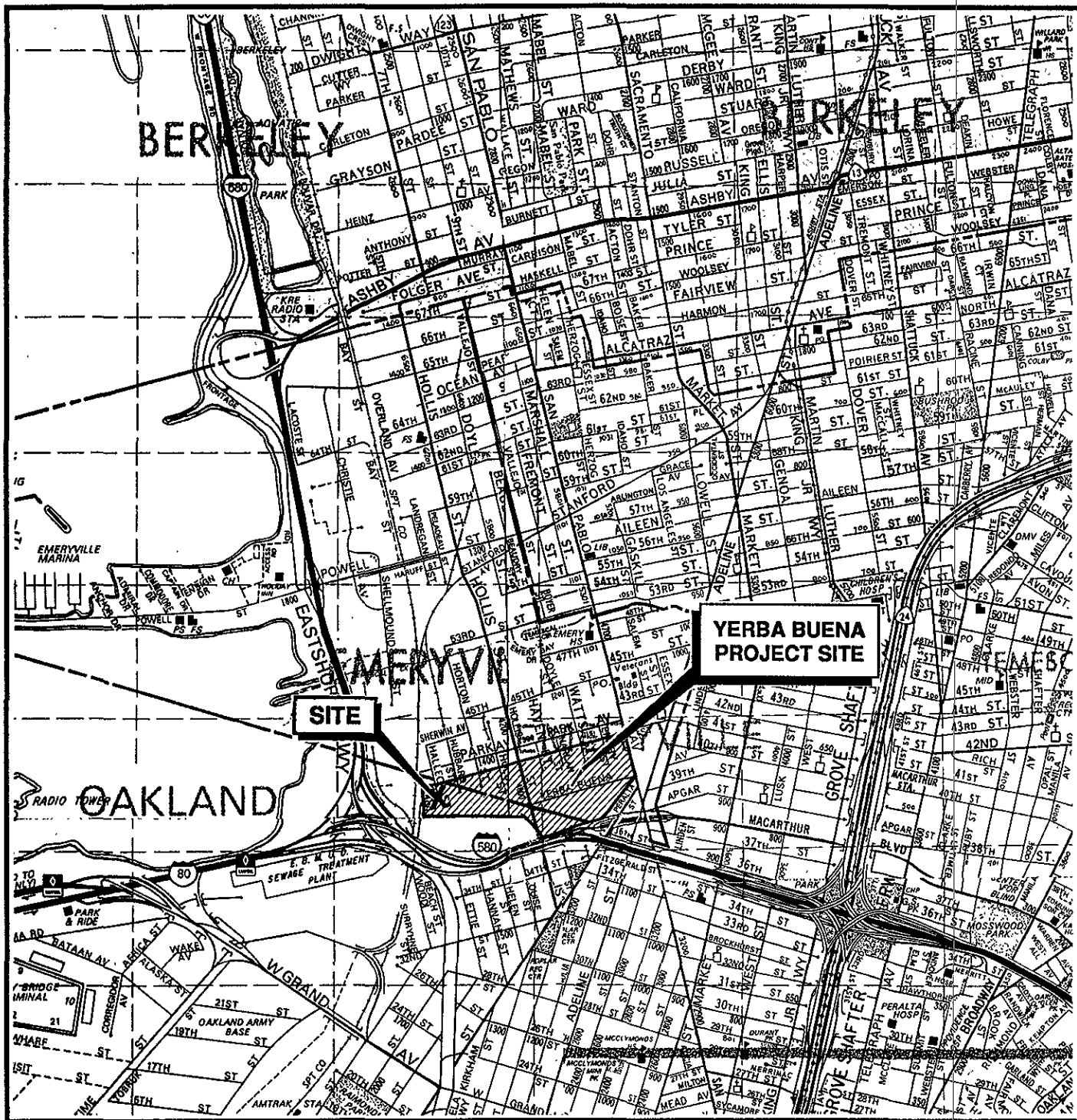
Test locations were chosen at random.

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 D1557-78: 126.7 pcf and optimum moisture content: 9.4%).

Data input by MEK/19 Oct 93



MAP SOURCE:
 Thomas Bros. Map
 Alameda and Contra Costa Counties
 1992 EDITION

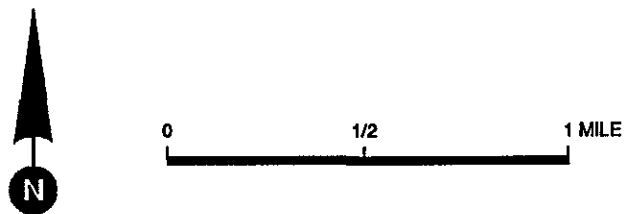


Figure 1: SITE LOCATION MAP

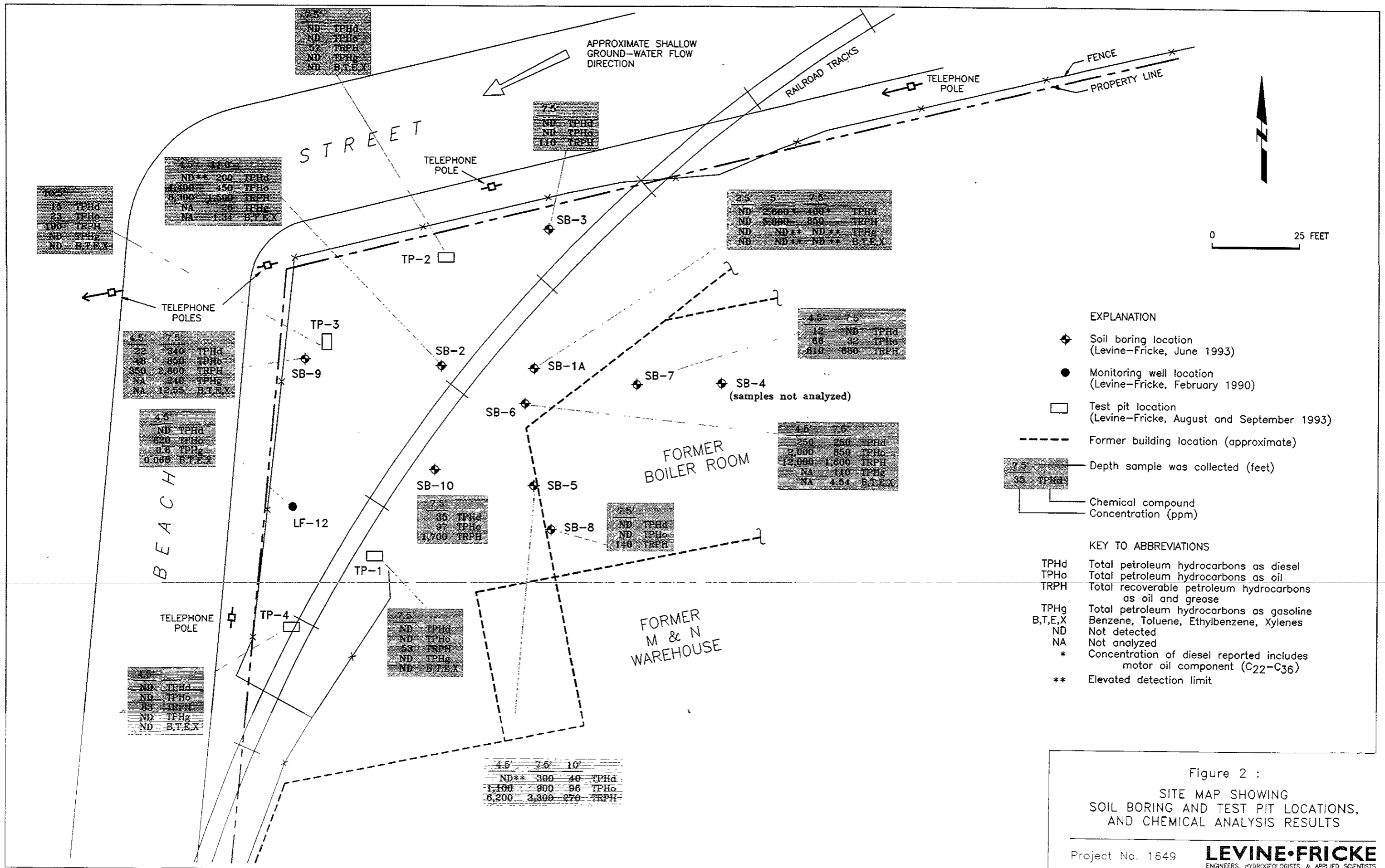
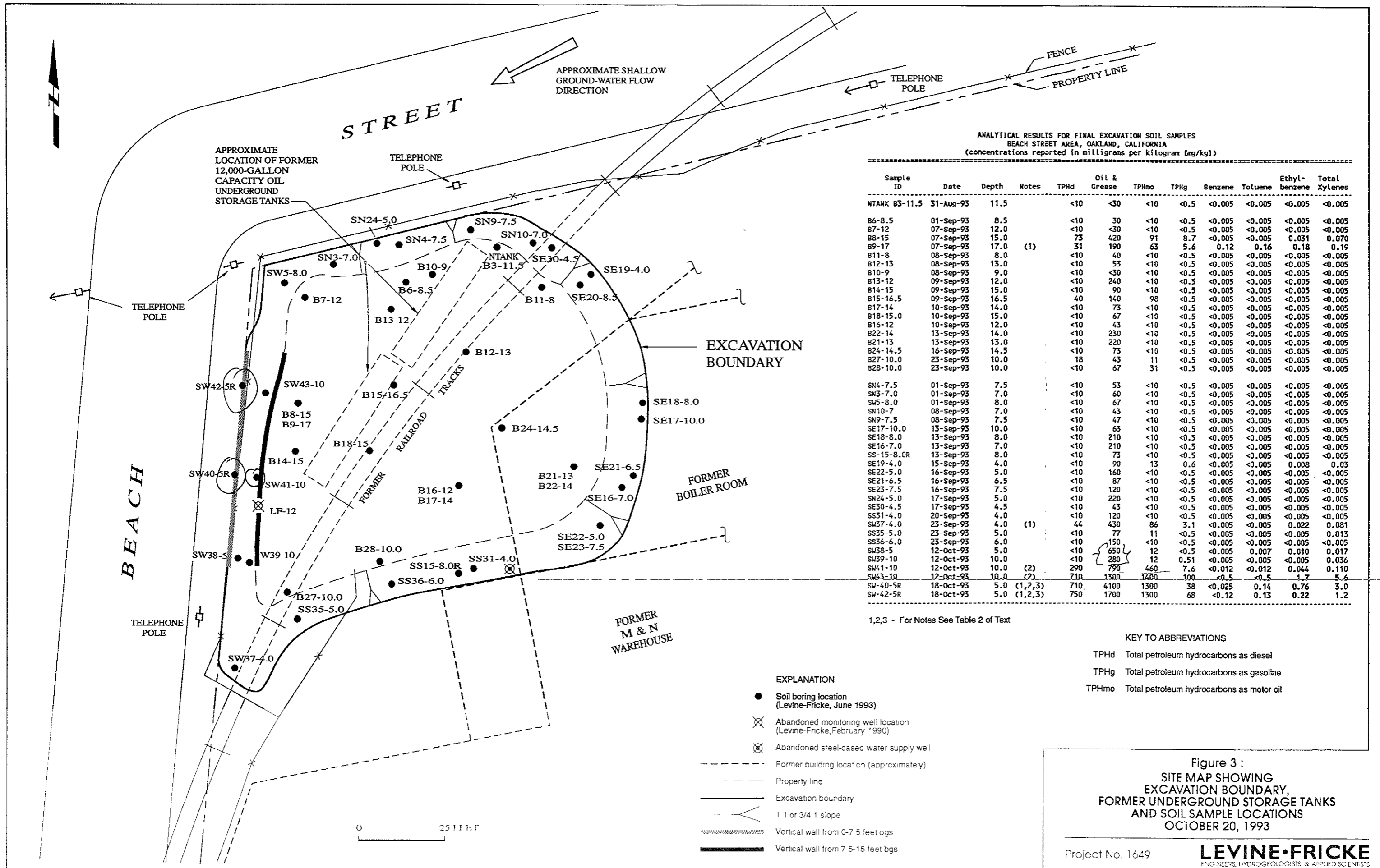


Figure 2 :
SITE MAP SHOWING
SOIL BORING AND TEST PIT LOCATIONS,
AND CHEMICAL ANALYSIS RESULTS



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

Sample ID	Date	Depth	Notes	TPHd	Oil & Grease	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
NTANK B3-11.5	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	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B18-15.0	10-Sep-93	15.0		<10	67	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B16-12	10-Sep-93	12.0		<10	43	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B22-14	13-Sep-93	14.0		<10	230	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B21-13	13-Sep-93	13.0		<10	220	<10	<0.5	<0.005	<0.005	<0.005	<0.005
B24-14.5	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
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
SN5-8.0	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
SS-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	90	13	0.6	<0.005	<0.005	0.008	0.03
SE22-5.0	16-Sep-93	5.0		<10	160	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE21-6.5	16-Sep-93	6.5		<10	87	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SE23-7.5	16-Sep-93	7.5		<10	120	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SN24-5.0	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		<10	77	11	<0.5	<0.005	<0.005	<0.005	0.013
SS36-6.0	23-Sep-93	6.0		<10	150	<10	<0.5	<0.005	<0.005	<0.005	<0.005
SW38-5	12-Oct-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-Oct-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)	710	1300	1400	100	<0.5	<0.5	1.7	5.6
SW-40-5R	18-Oct-93	5.0	(1,2,3)	710	4100	1300	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

1,2,3 - For Notes See Table 2 of Text

KEY TO ABBREVIATIONS

- TPHd Total petroleum hydrocarbons as diesel
- TPHg Total petroleum hydrocarbons as gasoline
- TPHmo Total petroleum hydrocarbons as motor oil

EXPLANATION

- Soil boring location (Levine-Fricke, June 1993)
- ⊗ Abandoned monitoring well location (Levine-Fricke, February 1990)
- ⊗ Abandoned steel-cased water supply well
- - - Former building location (approximately)
- - - Property line
- Excavation boundary
- / - 1:1 or 3/4:1 slope
- ▨ Vertical wall from 0-7.5 feet ogs
- ▩ Vertical wall from 7.5-15 feet bgs

Figure 3:
 SITE MAP SHOWING
 EXCAVATION BOUNDARY,
 FORMER UNDERGROUND STORAGE TANKS
 AND SOIL SAMPLE LOCATIONS
 OCTOBER 20, 1993

Project No. 1649

LEVINE-FRICKE
 ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

APPENDIX A

**HAZARDOUS WASTE MANIFESTS
AND CERTIFICATE OF TANK DISPOSAL**

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA1D98135857469100111		Manifest Document No. 101		2. Page 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address Catellus Development Corporation 201 Mission St. San Francisco, Ca. 94105						State Manifest Document Number 93290011							
4. Generator's Phone (415) 974-4500						B. State Generator's ID							
5. Transporter 1 Company Name EVERGREEN ENVIRONMENTAL SERVICES				6. US EPA ID Number CA1D980695761		C. State Transporter's ID 402380		D. Transporter's Phone 800-872-1261					
7. Transporter 2 Company Name						E. State Transporter's ID							
8. US EPA ID Number						F. Transporter's Phone							
9. Designated Facility Name and Site Address EPA TEST LAB, INC. 2010 J Street Novato, CA 94960						10. US EPA ID Number CA1D980887418		G. State Facility's ID CA1D980887418					
10. US EPA ID Number						H. Facility's Phone 510-795-4400							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol			
						No. Type				Waste Number			
a. USED OILS - RCRA HAZARDOUS WASTE, COMBUSTIBLE LIQUID, NA 270						0 0 1 T T				21			
b. NON-RCRA HAZARDOUS WASTE LIQUID						0 0 1 T T		001615		191			
c.													
d.													
15. Special Handling Instructions and Additional Information Wear Rubber Gloves 24 hour emergency response 510-795-4400 Emergency contact-Kirk Hayward DOT Guides #27						K. Handling Codes for Wastes Listed Above							
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 classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws. 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 to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future 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 best waste management method that is available to me and that I can afford.													
Printed/Typed Name MICHAEL STOLL				Signature Michael Stoll for Catellus Dev Corp.		Month 01		Day 27		Year 93			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Jason Dixon				Signature <i>Jason Dixon</i>		Month 01		Day 27		Year 93			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name MICKI				Signature		Month		Day		Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name				Signature				Month		Day		Year	

DO NOT WRITE BELOW THIS LINE.

93290011
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-9602. WITHIN CALIFORNIA, CALL 1-800-952-7550

GENERATOR

TRANSPORTER

FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CAID983585746** Manifest Document No. **314191**

2. Page 1
 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Cate Hill Development Corporation
201 MISSION Street, San Francisco, CA 94105

4. Generator's Phone **(415) 974-4500**

5. Transporter 1 Company Name
EVERGREEN ENVIRONMENTAL SERVICES

6. US EPA ID Number
CAID980895761

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Evergreen LUL, INC.
600 Smith Avenue
Newark, CA 94560

10. US EPA ID Number
CAID980887418

A. State Manifest Document Number
93294191

B. State Generator ID

C. State Transporter ID

D. Transporter's Facility ID
000972509

E. State Transporter ID

F. Transporter's Facility ID

G. State Facility ID
000972509

H. Facility's Phone
(415) 400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

a.	12. Containers		13. Total Quantity	14. Unit Wt/Vol
	No.	Type		
X UNIDENTIFIED NON-RCRA HAZARDOUS WASTE, COMBUSTIBLE LIQUID, NA 1270	0	0	1	G
b. NON-RCRA HAZARDOUS WASTE LIQUID	0	0	1	G
c.				
d.				

Waste Number	State	EPA Code

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

Handling Code for Waste Listed Above

15. Special Handling Instructions and Additional Information
Wear Rubber Gloves 24 hour emergency response 510-795-4400 Emergency contact-Kirk Hayward DOT Guides #27
Job Site: Beach Street Emeryville

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 classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

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 to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future 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 best waste management method that is available to me and that I can afford.

Printed/Typed Name **William Madison** Signature **William Madison** Month **7** Day **1** Year **93**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name Signature Month Day Year

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CAD98358574682585		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.													
3. Generator's Name and Mailing Address Catellier Development Corporation 201 Mission Street, San Francisco, CA 94102				A. State Manifest Document Number 92202280		B. State Generator's ID															
4. Generator's Phone (415) 771-4700				C. State Transporter's ID 403137		D. Transporter's Phone (510) 788-2111															
5. Transporter 1 Company Name TRIDENT TRUCK LINE, INC.		6. US EPA ID Number CAD982484370		E. State Transporter's ID		F. Transporter's Phone															
7. Transporter 2 Company Name				8. US EPA ID Number		G. State Facility's ID 04009400045		H. Facility's Phone (510) 232-1393													
9. Designated Facility Name and Site Address ERICKSON, INC. 255 PARR BVVD. RICHMOND, CA 94801				10. US EPA ID Number CAD009466392																	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol											
						a. WASTE EMPTY TANK NON-RCRA HAZARDOUS WASTE SOLID						No.		Type		Waste Name					
												001		T P		2000		P		NON	
b.																					
						c.															
d.																					
15. Special Handling Instructions and Additional Information KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24 HR. CONTACT NAME: Truman brother AND PHONE: 415 777-4801 Job Name: Beach Street Erecty 4th.						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 classified, pocked, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.															
Printed/Typed Name William A. ...				Signature <i>William A. ...</i>				Month Day Year 08 31 93													
17. Transporter 1 Acknowledgement of Receipt of Materials						18. Transporter 2 Acknowledgement of Receipt of Materials															
Printed/Typed Name FLOYD AVILA				Signature <i>Floyd Avila</i>				Month Day Year 08 31 93													
Printed/Typed Name				Signature				Month Day Year													
19. Discrepancy Indication Space																					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.																					
Printed/Typed Name				Signature				Month Day Year													

DO NOT WRITE BELOW THIS LINE.

70

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-552-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CAD98358574682585		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.											
3. Generator's Name and Mailing Address Catellus Development Corporation 201 Mission Street, San Francisco, CA 94108				9220228 76 601 0043 6304															
4. Generator's Phone (415) 974-4500																			
5. Transporter 1 Company Name TRIDENT TRUCK LINE, INC.		6. US EPA ID Number CAD982484370																	
7. Transporter 2 Company Name		8. US EPA ID Number																	
9. Designated Facility Name and Site Address ERICKSON, INC. 255 PARR BLVD. RICHMOND, CA 94801				10. US EPA ID Number CAD009466392															
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol									
						a. WASTE EMPTY TANK NON-RCRA HAZARDOUS WASTE SOLID						No.		Type					
												001		T P		12000		P	
b.																			
						c.													
d.																			
15. Special Handling Instructions and Additional Information KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24 HR. CONTACT NAME: Trump Brothers AND PHONE: 408 779-4801 Job Name: Beach Street Emery site																			
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 classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws. 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 to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future 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 best waste management method that is available to me and that I can afford.																			
Printed/Typed Name William Madison				Signature <i>William Madison</i> Agent of Catellus				Month 08		Day 31		Year 1993							
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name FLOYD AVILA				Signature <i>Floyd Avila</i>				Month 08		Day 31		Year 1993							
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature				Month		Day		Year							
19. Discrepancy Indication Space																			
20. Facility Owner or Operator Certification of receipt of hazardous material covered by this manifest except as noted in Item 19. Printed/Typed Name KAREN RUFFIN				Signature <i>Karen Ruffin</i>				Month 09		Day 01		Year 1993							

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR
 TRANSPORTER
 FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CIAD 9 8 3 5 8 5 7 4 6 8 2 5 8 5

Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

Catellus Development Corporation
 201 Mission Street, San Francisco, CA 94105

4. Generator's Phone (415) 974-4500

5. Transporter 1 Company Name

6. US EPA ID Number

TRIDENT TRUCK LINE, INC.

CA D 9 8 2 4 8 4 3 7 0

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

ERICKSON, INC.
 255 PARR BLVD.

RICHMOND, CA 94801

10. US EPA ID Number

CA D 0 0 9 4 6 6 3 9 2

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

a. EMPTY TANK NON-RCRA HAZARDOUS WASTE SOLID

12. Containers		13. Total Quantity	14. Unit Wt/Vol
No.	Type		
001	T P	112000	P

15. Special Handling Instructions and Additional Information

KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24 HR. CONTACT NAME: Trumpf Brothers AND PHONE: 408 779-4801 Job Site: Beach St, Emeryville

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 classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

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 to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future 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 best waste management method that is available to me and that I can afford.

Printed/Typed Name: William Madison Signature: William Madison Agent for Catellus Month: 08 Day: 31 Year: 91

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: Ron DeLuca Signature: Ron DeLuca Month: 08 Day: 31 Year: 91

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name: DAVID SATO Signature: DAVID SATO Month: 08 Day: 31 Year: 91

DO NOT WRITE BELOW THIS LINE.

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 17378

CUSTOMER TRUMPP BROS
JOB NO. 82585

FOR: Erickson, Inc. TANK NO. 11997

LOCATION: Richmond DATE: 09/03/93 TIME: 11:38:10

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT OIL

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 12000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS
WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration than permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

K. S. [Signature] REPRESENTATIVE TITLE *[Signature]* INSPECTOR

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE
CERTIFIED SERVICES COMPANY
255 Parr Boulevard • Richmond, California 94801

NO. 17379

CUSTOMER
TRUMPP BROS
JOB NO
82585

FOR: Erickson, Inc. TANK NO. 11996

LOCATION: Richmond DATE: 09/03/93 TIME: 14:06:19

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT OIL

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 12000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS
WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

[Signature]
REPRESENTATIVE

TITLE

[Signature]
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

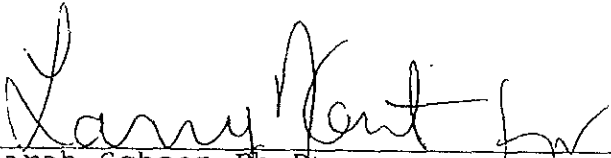
The following samples were received at Anametrix, Inc. for analysis :

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

8-27-93
 Date

AUG 30 1993

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

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

SAMPLE INFORMATION:

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

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

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.

Cheryl Balmer 8/25/93
Department supervisor Date

Peggie Dawson 8/25/93
Chemist Date

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

Anamatrix 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
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND
% Surrogate Recovery		96%	110%	96%
Instrument I.D.		HP12	HP12	HP12
Date Analyzed		08/23/93	08/23/93	08/23/93
RLMF		1	1	1

- 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.

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

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

Peggie Davison 8/25/93
Analyst Date

Cheyl Balmer 8/25/93
Supervisor Date

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

Anamatrix W.O.: 9308324
 Matrix : SOIL
 Date Sampled : 08/20/93
 Date Extracted: 08/23/93

Project Number : 1649.16
 Date Released : 08/25/93
 Instrument I.D.: HP9

Anamatrix 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 GCFID following sample extraction by EPA Method 3510.

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

Reggie Dawson 8/26/93
 Analyst Date

Cheryl Balmer 8/26/93
 Supervisor Date

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

Anametrix W.O.: 9308324
Matrix : SOIL
Date Sampled : 08/20/93
Date Extracted: 08/23/93

Project Number : 1649.16
Date Released : 08/25/93
Instrument I.D.: HP9

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.

Reggie Dawson 8/26/93
Analyst Date

Cheryl Bulmer 8/26/93
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
 Date Sampled : N/A
 Date Analyzed : 08/23/93

Anamatrix I.D. : MG2301E1
 Analyst : *ED*
 Supervisor : *CS*
 Date Released : 08/24/93
 Instrument ID : HP12

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

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : 08321-03
 Analyst : RD
 Supervisor : CA
 Date Released : 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

* Quality control limit established by Anamatrix, Inc.

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

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

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

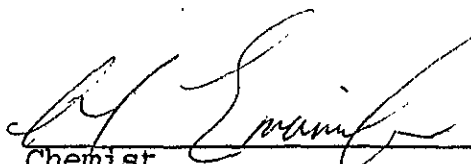
MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

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.

 8/24/93
Department Supervisor Date

 08/24/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9308324
Matrix : SOIL Analyst : *[Signature]*
Date sampled : 08/20/93 Supervisor : *[Signature]*
Date extracted: 08/23/93 Date released : 08/24/93
Date analyzed : 08/24/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9308324-01	TP1-7.5	30	53
9308324-02	TP2-7.5	30	57
BG23H1W9	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, TP2-7.5MS, MD Anametrix I.D. : 9308324-02
Matrix : SOIL Analyst : *EK*
Date sampled : 08/20/93 Supervisor : *Ch*
Date extracted : 08/23/93 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	88%	5%	48-114%

* Quality control limits established by Anametrix Laboratories.

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

9308324 (2) 8/20/93

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16	Field Logbook No.:	Date: 8/20/93	Serial No.: 9910
Project Name: M+N	Project Location: Oakland		

Sampler (Signature): *Arleen Gradson* ANALYSES
 Samplers: WEM

SAMPLES

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES					HOLD	RUSH	REMARKS
						TP15-TP16	TP17-TP18	TP19-TP20	TP21-TP22	TP23-TP24			
① TP1-7.5	8/20/93	-		1	Soil	x	x	x	x	x		x	48-Hour TAT Results to Jeff Jennifer Beatty
② TP2-7.5	8/20/93	-		1	Soil	x	x	x	x	x		x	

RELINQUISHED BY: (Signature) <i>Arleen Gradson</i>	DATE 8/20/93	TIME 13:20	RECEIVED BY: (Signature) <i>Denny L. Conroy</i>	DATE 8/20/93	TIME 13:20
RELINQUISHED BY: (Signature) <i>Denny L. Conroy</i>	DATE 8/20/93	TIME 16:20	RECEIVED BY: (Signature) <i>Josephine DeCarli</i>	DATE 8/20/93	TIME 16:20
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE
 1900 Powell Street, 12th Floor
 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory:
Ana metrix



Inchcape Testing Services

Anamatrix 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

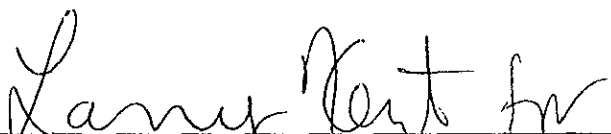
The following samples were received at Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.


 Sarah Schoen, Ph.D.
 Laboratory Director

9-3-93
 Date

SEP - 7 1993

COPY

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

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

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

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.

Cheryl Beckman 9/2/93
Department Supervisor Date

Deena Shor 9/2/93
Chemist Date

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

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

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

Reporting Limit	Sample I.D.#	Sample I.D.#
	TP3-10.5	BG3101E2
COMPOUNDS (mg/Kg)	-01	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 Recovery	98%	104%
Instrument I.D.	HP12	HP12
Date Analyzed	08/31/93	08/30/93
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.

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

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

Jocua Sher 9/2/93
Analyst Date

Cheryl Balma 9/2/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
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	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.

Deena Shar 9/2/93
Analyst Date

Cheryl Beckman 9/2/93
Supervisor 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.

Lucia Sher 9/2/93
Analyst Date

Cheryl Balmer 9/2/93
Supervisor Date

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

Sample I.D. : 1649.16 TP3-10.5
 Matrix : SOIL
 Date Sampled : 08/26/93
 Date Analyzed : 08/31/93

Anamatrix I.D. : 08419-01
 Analyst : *IS*
 Supervisor : *CB*
 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	% REC LIMITS
BENZENE	0.040	0.000	0.038	95%	0.037	93%	-3%	45-139
TOLUENE	0.040	0.000	0.039	98%	0.038	95%	-3%	51-138
ETHYLBENZENE	0.040	0.000	0.040	100%	0.040	100%	0%	48-146
TOTAL XYLENES	0.040	0.000	0.038	95%	0.039	98%	3%	50-139
p-BFB				93%		86%		53-147

* Quality control limit established by Anamatrix, 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 : 08/31/93

Anamatrix I.D. : MG3001E3
 Analyst : JS
 Supervisor : CS
 Date Released : 09/01/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.018	90%	52-133
TOLUENE	0.020	0.019	95%	57-136
ETHYLBENZENE	0.020	0.020	100%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			97%	53-147

* Quality control limit established by Anamatrix, 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: 08/27/93
 Date Analyzed : 08/27/93

Anamatrix I.D. : MG27H1F1
 Analyst : IS
 Supervisor : *cb*
 Date Released : 09/01/93
 Instrument I.D.: HP23

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

*Limits established by Anamatrix, Inc.

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

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

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

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.

Christie Mellin 9/3/93
Department Supervisor Date

H. E. ... 09/03/93
Chemist Date

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

Project # : 1649.16	Anamatrix I.D. : 9308419
Matrix : SOIL	Analyst : <i>AE</i>
Date sampled : 08/26/93	Supervisor : <i>CM</i>
Date extracted: 08/30/93	Date released : 09/01/93
Date analyzed : 08/31/93	

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9308419-01	TP3-10.5	30	190
BG30H1W9	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, TP3-10.5MS, MD Anamatrix I.D. : 9308419-01
Matrix : SOIL Analyst : *KE*
Date sampled : 08/26/93 Supervisor : *CP*
Date extracted : 08/30/93 Date Released : 09/01/93
Date 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
Motor Oil	300	190	380	63%	450	87%	32%	48-114%

* Quality control limits established by Anamatrix 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	: <i>LE</i>
Date sampled	: N/A	Supervisor	: <i>cm</i>
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%

* Quality control established by Anametrix Laboratories.

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

5151

9308419

(2)

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <u>1649.16</u>	Field Logbook No.:	Date: <u>8/26/93</u>	Serial No.: <u>11118</u>
Project Name: <u>M+N Warehouse</u>	Project Location: <u>Oakland</u>		

Sampler (Signature) <u>Phillip Madrin</u>	ANALYSES	Samplers: <u>WEAN</u>
---	----------	-----------------------

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES					HOLD	RUSH	REMARKS
						TPH	TPH	TPH	TPH	BTEX			
① <u>TP 3-10.5</u>	<u>8/26/93</u>	<u>10:30</u>		<u>1</u>	<u>Soil</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>4-Day TAT</u> <u>Results to Jennifer Bratty</u>

RELINQUISHED BY: <u>Phillip Madrin</u> (Signature)	DATE: <u>8/26/93</u>	TIME: <u>10:45</u>	RECEIVED BY: <u>Benny L. Casijosa</u> (Signature)	DATE: <u>8/26/93</u>	TIME: <u>10:45</u>
RELINQUISHED BY: <u>Benny L. Casijosa</u> (Signature)	DATE: <u>8/26/93</u>	TIME: <u>14:05</u>	RECEIVED BY: <u>[Signature]</u> (Signature)	DATE: <u>8/26/93</u>	TIME: <u>14:05</u>
RELINQUISHED BY: _____ (Signature)	DATE: _____	TIME: _____	RECEIVED BY: _____ (Signature)	DATE: _____	TIME: _____
METHOD OF SHIPMENT: _____	DATE: _____	TIME: _____	LAB COMMENTS: _____		

Sample Collector: <u>LEVINE-FRICKE</u> 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <u>Anametric</u>
--	--



Inchcape Testing Services

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

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

09-27-93
 Date

SEP 28 1993

COPY

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

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	TPH _g BTEX

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

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.

Cheryl Balmer 9/23/93
Department Supervisor Date

Reggie Dawson 9/23/93
Chemist Date

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

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

Project Number : 1649.16
Date Released : 09/23/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# TP4-4.5	Sample I.D.# BS2201E2
		-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 Gasoline	0.5	ND	ND
% Surrogate Recovery		96%	108%
Instrument I.D.		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.

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

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

Reggie Davison 9/23/93
Analyst Date

Cheryl Balmer 9/23/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
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 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.

Peggie Davison 9/23/93
 Analyst Date

Cheryl Baumer 9/23/93
 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 GCFID following sample extraction by EPA Method 3510.

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

Peggie Davison 9/23/93
 Analyst Date

Cheryl Balman 9/23/93
 Supervisor Date

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

Sample I.D. : 1649.16 TP4-4.5
 Matrix : SOIL
 Date Sampled : 09/21/93
 Date Extracted: 09/21/93
 Date Analyzed : 09/21/93

Anamatrix I.D. : 09268-01
 Analyst : RD
 Supervisor : CB
 Date Released : 09/23/93
 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	98	78%	105	84%	7%	32-143
SURROGATE				81%		81%		30-130

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MS2201E1
 Analyst : RD
 Supervisor : *JS*
 Date Released : 09/23/93
 Instrument ID : HP4

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

* Quality control limit established by Anamatrix, 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: 09/21/93
 Date Analyzed : 09/21/93

Anamatrix I.D. : MS21H1F1
 Analyst : RD
 Supervisor : *JS*
 Date Released : 09/23/93
 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

*Limits established by Anamatrix, Inc.

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

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

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

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.

Cathy Mulenberg 9/22/93
Department Supervisor Date

M. E. Emery 9/22/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309268
Matrix : SOIL Analyst : HE
Date sampled : 09/21/93 Supervisor : CM
Date extracted: 09/21/93 Date released : 09/22/93
Date analyzed : 09/22/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309268-01	TP4-4.5	30	83
BS21H1W9	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, TP4-4.5MS, MD Anamatrix I.D. : 9309268-01
Matrix : SOIL Analyst : *HE*
Date sampled : 09/21/93 Supervisor : *cm*
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	89%	3%	48-114%

* Quality control limits established by Anamatrix 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	Anamatrix I.D.	: MS21H1W9
Matrix	: SOIL	Analyst	: <i>AE</i>
Date sampled	: N/A	Supervisor	: <i>CM</i>
Date extracted	: 09/21/93	Date Released	: 09/22/93
Date analyzed	: 09/22/93		

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

* Quality control established by Anamatrix Laboratories.

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

17.4
M

9309268 (2)

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1699.16	Field Logbook No.:	Date: 9/21/93	Serial No.: 11165
Project Name: Beach Street	Project Location: Oakland		

Sampler (Signature) *William G. Madrin* ANALYSES Samplers: WEM

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES							HOLD	RUSH	REMARKS
						EPA 601	TPH	TPH _{total}	TPH _{oil}	BTEX	TRPH				
① TP4-4.5	9/21/93			1	Soil	X	X	X	X	X		X		24-Hour TAT	
② SW34-6.5	↓			1	Soil							X			
B25															
③ B26-8	9/21/93			1	Soil							X		Results to Jennifer Beathy	

RELINQUISHED BY: <i>William G. Madrin</i>	DATE: 9/21/93	TIME: 4:10	RECEIVED BY: <i>James S. Conroy</i>	DATE: 9/21/93	TIME: 16:10
RELINQUISHED BY: <i>James S. Conroy</i>	DATE: 9/21/93	TIME: 17:26	RECEIVED BY: <i>Kim B...</i>	DATE: 9/21/93	TIME: 17:26
RELINQUISHED BY: (Signature)	DATE:	TIME:	RECEIVED BY: (Signature)	DATE:	TIME:
METHOD OF SHIPMENT:	DATE:	TIME:	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <i>Anamatrix</i>
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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 # : 9306257
 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
9306257- 1	SB-2-4.5
9306257- 2	SB-2-7.5
9306257- 3	SB-2-9.0
9306257- 4	SB2-11.0
9306257- 5	SB2-16.0
9306257- 6	SB2-19.5
9306257- 7	SB-2-24
9306257- 8	SB-3-7.5
9306257- 9	SB3-10.0
9306257-10	SB3-13.5
9306257-11	SB-4-7.5
9306257-12	SB4-10.0
9306257-13	SB4-13.0
9306257-14	SB-5-4.5
9306257-15	SB-5-7.5
9306257-16	SB5-10.0

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.

COPY

Sarah Schoen, Ph.D.
 Laboratory Director

07-06-93
 Date

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

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

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

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.

Charles Paulson 7/6/93
Department Supervisor Date

Charles Burch 7.6.93
Chemist Date

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

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

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# SB2-11.0	Sample I.D.# BU2401E3
Benzene	0.005	ND	ND
Toluene	0.005	0.25	ND
Ethylbenzene	0.005	0.23	ND
Total Xylenes	0.005	0.86	ND
TPH as Gasoline	0.5	26	ND
% Surrogate Recovery		81%	77%
Instrument I.D.		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.

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

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

Charles M. Burch 7.2.93
Analyst Date

Cheryl Bullman 7/2/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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	ND
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
9306257-16	SB5-10.0	06/30/93	10	40
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 GC/FID following sample extraction by EPA Method 3550.

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

Charles M Burch 7.6.93
Analyst Date

Cheryl Baseman 7/6/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Charles M Burch 7-6-93
 Analyst Date

Cheryl Balmer 7/6/93
 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
 Date Sampled : N/A
 Date Analyzed : 06/24/93

Anamatrix I.D. : MU2401E1
 Analyst : *Cmb*
 Supervisor : *cs*
 Date Released : 06/29/93
 Instrument I.D.: HP4

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

* Quality control established by Anamatrix, 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

Anamatrix I.D. : MU21H1F1
 Analyst : *Cmb*
 Supervisor : *st*
 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

*Limits established by Anamatrix, Inc.

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

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:

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

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

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.

Cathy Miller 6/25/93
Department Supervisor Date

M. Podchitkov 06.28.93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9306257
Matrix : SOIL Analyst : M.P.
Date sampled : 06/17/93 Supervisor : *Ch*
Date extracted: 06/21/93 Date released : 06/25/93
Date analyzed : 06/22/93

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

ND - 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

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MU21H1W9
Matrix	: SOIL	Analyst	: <i>M.P</i>
Date sampled	: N/A	Supervisor	: <i>Om</i>
Date extracted	: 06/21/93	Date Released	: 06/25/93
Date analyzed	: 06/22/93		

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

* Quality control established by Anametrix Laboratories.

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

9306257

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

72

Project No.: 1649.16 Field Logbook No.: Date: 6/18/93 Serial No.: 11649
 Project Name: Yerba Buena - M+N Interchange Project Location: Emeryville

Sampler (Signature): *William Macklin* ANALYSES Samplers: WEM

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES							HOLD	RUSH	REMARKS
						EPA 801	EPA 824	TEH 147	EPA 3510	DISSOLV	TRP	STEX			
1 SB-2-4.5	6/17/93			1	Soil		X	X				X	X	TPH+TRPH results	
2 SB-2-7.5												X		Please reportages	
3 SB-2-9.0												X			
4 SB-2-11.0							X	X	X					"C ₁₂ -C ₂₂ diesel	
5 SB-2-16.0												X		C ₂₂ -C ₃₆ motor oil	
6 SB-2-19.5												X			
7 SB-2-24												X			
8 SB-3-7.5							X	X						Standard TAT	
9 SB-3-10.0												X			
10 SB-3-13.5												X			
11 SB-4-7.5												X			
12 SB-4-10.0												X			
13 SB-4-13.0												X			
14 SB-5-4.5							X	X							
15 SB-5-7.5							X	X							
16 SB-5-10.0							X	X							

RELINQUISHED BY: <i>William Macklin</i>	DATE: 6/18/93	TIME: 4:00	RECEIVED BY: <i>John NCM 132</i>	DATE: 06/18/93	TIME: 4:05
RELINQUISHED BY: <i>John NCM 132</i>	DATE: 06/18/93	TIME: 5:10	RECEIVED BY: <i>Josephine DePaul</i>	DATE: 6/18/93	TIME: 17:10
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME

METHOD OF SHIPMENT: DATE: TIME: LAB COMMENTS:

Sample Collector: LEVINE-FRICKE
 1900 Powell Street, 12th Floor
 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory:
Anne Marie



Inchcape Testing Services

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

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


ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

COPY



 Sarah Schoen, Ph.D.
 Laboratory Director

07-06-93

 Date

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

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	TPHd
9306258- 3	SB-6-7.5	SOIL	06/17/93	TPHd
9306258- 7	SB-7-4.5	SOIL	06/17/93	TPHd
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	TPHd
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	TPH _g BTEX
9306258-13	SB9-10.5	SOIL	06/17/93	TPH _g BTEX

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

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.

Charles Baerner
Department Supervisor

7/15/93
Date

Charles Baerner 7.6.93
Chemist Date

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

Anamatrix W.O.: 9306258
 Matrix : SOIL
 Date Sampled : 06/17/93

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

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#
(mg/Kg)	SB-6-7.5	SB9-10.5	BU3001E3
COMPOUNDS	-03	-13	BLANK
Benzene	0.005	ND	0.35
Toluene	0.005	0.94	2.0
Ethylbenzene	0.005	0.80	2.0
Total Xylenes	0.005	2.8	8.2
TPH as Gasoline	0.5	110	240
% Surrogate Recovery	73%	99%	80%
Instrument I.D.	HP4	HP4	HP4
Date Analyzed	06/30/93	06/30/93	06/30/93
RLMF	25	50	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as C4-C12 is determined by GC/FID 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.

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

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

Charles M. Burch 7.6.93
 Analyst Date

Cheryl Baumer 7/6/93
 Supervisor Date

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

Anamatrix W.O.: 9306258
 Matrix : SOIL
 Date Sampled : 06/17/93
 Date Extracted: 06/21/93

Project Number : 1649.16
 Date Released : 07/02/93
 Instrument I.D.: HP9

Anamatrix 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 GC/FID following sample extraction by EPA Method 3550.

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

Charles M. Burch 7.6.93
 Analyst Date

Charles Beckman 7/6/93
 Supervisor Date

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

Anamatrix W.O.: 9306258
Matrix : SOIL
Date Sampled : 06/17/93
Date Extracted: 06/21/93

Project Number : 1649.16
Date Released : 07/02/93
Instrument I.D.: HP9

Anamatrix 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	2000
9306258-03	SB-6-7.5	07/01/93	200	850
9306258-07	SB-7-4.5	07/01/93	10	66
9306258-08	SB-7-7.5	06/30/93	10	32
9306258-10	SB-8-7.5	06/30/93	10	ND
9306258-12	SB-9-7.5	06/30/93	10	48
9306258-13	SB9-10.5	07/01/93	200	850
9306258-15	SB10-7.5	07/01/93	10	97
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 GC/FID following sample extraction by EPA Method 3550.

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

Charles M. Burch 7.6.93
Analyst Date

Cheryl Brainer 7/6/93
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
 Date Sampled : N/A
 Date Analyzed : 06/30/93

Anamatrix I.D. : MU3001E1
 Analyst : *CMB*
 Supervisor : *CS*
 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

* Quality control established by Anamatrix, 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*
 Supervisor : *az*
 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

*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 # : 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

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

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.

C. J. Miller 6/27/93
Department Supervisor Date

M. Schlitrov 06.28.93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9306258
 Matrix : SOIL Analyst :
 Date sampled : 06/17/93 Supervisor : *MJP*
 Date extracted: 06/21/93 Date released : 06/25/93
 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

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

Sample I.D.	: LAB CONTROL SAMPLE	Anamatrix I.D.	: MU21H1W9
Matrix	: SOIL	Analyst	: <i>MCP</i>
Date sampled	: N/A	Supervisor	: <i>Ch</i>
Date extracted	: 06/21/93	Date Released	: 06/25/93
Date analyzed	: 06/22/93		

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

Quality control established by Anamatrix Laboratories.

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

72

"g.p.c on truck"

Project No.: 164916	Field Logbook No.:	Date: 6/18/93	Serial No.: 11650
Project Name: Yerby Drive - M+N	Project Location: Emeryville		

Sampler (Signature): William Frick	ANALYSES	Samplers: WEM
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SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS	
						EPA 601	EPA 624	TPH	TPH 2510	TPH 2510	TPH 2510				TPH 2510
1 SB-5-13.5	6/17/93			1	Soil								X		
2 SB-6-4.5							X	X							Please report TPHel + TRPH results 95
3 SB-6-7.5							X	X	X						"
4 SB-6-10.0													X		C12-C22 diesel
6 SB-6-13.5													X		C22-C36 Motor oil
6 SB-6-15.0													X		
7 SB-7-4.5							X	X							
8 SB-7-7.5							X	X							
9 SB-7-10.0													X		
10 SB-8-7.5							X	X							STANDARD TAT
11 SB-8-10.0													X		
12 SB-9-7.5							X	X							
13 SB-9-10.5							X	X	X						
14 SB-9-13													X		
15 SB-10-7.5							X	X							
16 SB-10-10															

RELINQUISHED BY: (Signature) William Frick	DATE: 6/18/93	TIME: 4:00	RECEIVED BY: (Signature) [Signature] - NCM 132	DATE: 6/18/93	TIME: 4:05
RELINQUISHED BY: (Signature) [Signature] - NCM 132	DATE: 6/18/93	TIME: 5:10	RECEIVED BY: (Signature) Josephine DeCarli	DATE: 6/18/93	TIME: 17:10
RELINQUISHED BY: (Signature)	DATE:	TIME:	RECEIVED BY: (Signature)	DATE:	TIME:
METHOD OF SHIPMENT:	DATE:	TIME:	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: Aerometric
---	--------------------------------------



Inchcape Testing Services

Anamatrix 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 Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

SEP 13 1993

09-10-93
 Date

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
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.

Tajhi Memarzadeh 9/10/93
Department Supervisor Date

Janice Wabida 9/10/93
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16
 Sample ID : STANKB1
 Matrix : SOIL
 Date Sampled : 8/31/93
 Date Analyzed : 9/7/93
 Instrument ID : AD15

Anamatrix ID : 9309001-01
 Analyst : *TS*
 Supervisor : *TM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16
 Sample ID : NSTANKB2
 Matrix : SOIL
 Date Sampled : 8/31/93
 Date Analyzed : 9/ 1/93
 Instrument ID : AD15

Anametrix ID : 9309001-02
 Analyst : *ZS*
 Supervisor : *TM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	4.4	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	ND	U
79-01-6	Trichloroethene	.50	4.9	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16
 Sample ID : NTANKB3
 Matrix : SOIL
 Date Sampled : 8/31/93
 Date Analyzed : 9/1/93
 Instrument ID : AD15

Anamatrix ID : 9309001-03
 Analyst : *TM*
 Supervisor : *TM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.1
 Sample ID : BLK901
 Matrix : SOIL
 Date Sampled : 0/ 0/ 0
 Date Analyzed : 9/ 1/93
 Instrument ID : AD15

Anamatrix ID : 15B0901H01
 Analyst : *3*
 Supervisor : *TM*
 Dilution Factor : 1.0
 Conc. Units : ug/Kg

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

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.1
 Sample ID : BLK907
 Matrix : SOIL
 Date Sampled : 0/ 0/ 0
 Date Analyzed : 9/ 7/93
 Instrument ID : AD15

Anamatrix ID : 15B0907H01
 Analyst : *TM*
 Supervisor : *TM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 1649.16
 Matrix : SOLID

Anamatrix ID : 9309001
 Analyst : *TM*
 Supervisor : TM

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

QC LIMITS

SU1 = Chlorofluorobenzene (33-134)

* Values outside of Anamatrix QC limits

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

Project/Case : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : N/A
 Date analyzed : 09/01/93

Anamatrix I.D. : W0090193
 Analyst : *TR*
 Supervisor : *TR*
 Instrument I.D.: AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	11.7	117%	34 - 128
1,1-DICHLOROETHENE	10	11.9	119%	63 - 133
trans-1,2-DICHLOROETHENE	10	11.9	119%	55 - 145
1,1-DICHLOROETHANE	10	13.4	134%	49 - 121
cis-1,2-DICHLOROETHENE	10	12.9	129%	66 - 168
1,1,1-TRICHLOROETHANE	10	13.4	134%	72 - 143
TRICHLOROETHENE	10	13.1	131%	63 - 147
TETRACHLOROETHENE	10	13.0	130%	60 - 133
CHLOROBENZENE	10	12.6	126%	70 - 148
1,3-DICHLOROBENZENE	10	12.5	125%	49 - 139
1,4-DICHLOROBENZENE	10	13.1	131%	70 - 133
1,2-DICHLOROBENZENE	10	14.1	141%	69 - 140

* Limits based on data generated by Anamatrix, Inc., August, 1992.

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

Project/Case : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : N/A
 Date analyzed : 09/07/93

Anamatrix I.D. : W0090793
 Analyst : *ZZ*
 Supervisor : *TM*
 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 - 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
1,4-DICHLOROBENZENE	10	12.2	122%	70 - 133
1,2-DICHLOROBENZENE	10	14.0	140%	69 - 140

* Limits based on data generated by Anamatrix, 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.

Cheryl Balmer 9/7/93
Department Supervisor Date

Luna Sher 9/7/93
Chemist Date

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

Anamatrix W.O.: 9309001
Matrix : SOIL
Date Sampled : 08/31/93

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

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

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

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

Lucea Sher 9/7/93
Analyst Date

Cheryl Baerman 9/7/93
Supervisor Date

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

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

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

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BTANK-W	Sample I.D.# BS0201E2
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
TPH as Gasoline	50	90	ND
% Surrogate Recovery		97%	106%
Instrument I.D.		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 GC/FID 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.

Anamatrix 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 9/7/93
Analyst Date

Cheryl Balmer 9/7/93
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
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	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.

Lucia Shor 9/7/93
Analyst Date

Cheryl Bealman 9/7/93
Supervisor 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.

Lucea Shar 9/7/93
Analyst Date

Cheryl Bulmer 9/7/93
Supervisor 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.

Reggie Dawson 9/10/93
Analyst Date

Cheryl Belman 9/10/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Peggie Dawson 9/10/93
 Analyst Date

Cheyl Balmer 9/10/93
 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
 Date Sampled : N/A
 Date Analyzed : 09/02/93

Anamatrix I.D. : MS0102E1
 Analyst : JS
 Supervisor : CS
 Date Released : 09/07/93
 Instrument I.D.: HP21

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

* Quality control established by Anamatrix, 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

Anamatrix I.D. : MS0202E1
 Analyst : IS
 Supervisor : *on*
 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%	58-130
SURROGATE			102%		105%		53-147

*Quality control established by Anamatrix, Inc.

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

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

Anamatrix I.D. : 09001-03
 Analyst : IS
 Supervisor : G
 Date Released : 09/07/93
 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	101	81%	92	74%	-9%	32-143
SURROGATE				130%		125%		30-130

* Quality control limit established by Anamatrix, 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: 09/01/93
 Date Analyzed : 09/01/93

Anametrix I.D. : MS01H1F1
 Analyst : IS
 Supervisor : CS
 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

*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

Anamatrix I.D. : MS0111F1
 Analyst : IS
 Supervisor : CB
 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%	47-13
SURROGATE			53%		57%		30-13

*Quality control established by Anamatrix, 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.

Cathy Meltenberg 9/3/93
Department Supervisor Date

M. L. L. 09/03/93
Chemist Date

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

Project I.D. : 1649.16
Matrix : WATER
Date sampled : 09/01/93
Date extracted: 09/01/93
Date analyzed : 09/02/93

Anamatrix I.D. : 9309001
Analyst : *HIE*
Supervisor : *CM*
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

Anamatrix I.D. : 9309001
Analyst : *HE*
Supervisor : *CM*
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 Anamatrix I.D. : 9309001-03
Matrix : SOIL Analyst : *HE*
Date sampled : 08/31/93 Supervisor : *cm*
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%	8%	48-114%

* Quality control limits established by Anamatrix 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 : WATER
Date sampled : N/A
Date extracted : 09/01/93
Date analyzed : 09/02/93

Anamatrix 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
Motor Oil	50	41	82%	41	82%	0%	44-128%

* Quality control limits established by Anamatrix Laboratories.

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

Sample I.D. :	LAB CONTROL SAMPLE	Anamatrix I.D. :	MS01H1W9
Matrix :	SOIL	Analyst :	HE
Date sampled :	N/A	Supervisor :	CM
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%

* Quality control established by Anamatrix 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.
- 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, AWWA, 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. Anamatrix 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. Anamatrix 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. Anamatrix control limit for PDSR is 85-115%.

Qualifiers (Q)

Anamatrix 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 Anamatrix 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, 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
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Wannu Kanna 9/9/93
Department Supervisor Date

Mona Kamel 9/9/93
Chemist Date

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

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

Date Sampled : 08/31/93
 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	09/03/93	09/08/93	0.25	1	0.49	
Chromium-6010	09/03/93	09/08/93	0.50	1	24.3	
Nickel-6010	09/03/93	09/08/93	2.0	1	48.0	
Lead-6010	09/03/93	09/08/93	2.0	1	4.4	
Zinc-6010	09/03/93	09/08/93	1.0	1	32.8	

COMMENT:

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
 Matrix : SOIL

Date Sampled : 08/31/93
 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	09/03/93	09/08/93	0.25	1	ND	
Chromium-6010	09/03/93	09/08/93	0.50	1	21.2	
Nickel-6010	09/03/93	09/08/93	2.0	1	34.5	
Lead-6010	09/03/93	09/08/93	2.0	1	4.8	
Zinc-6010	09/03/93	09/08/93	1.0	1	38.8	

COMMENT:

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

Anamatrix 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 : MJ
 Date Released : 09/08/93
 Instrument I.D. : ICP1

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

COMMENT:

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

Anamatrix W.O.# : 9309001
 Method Blank I.D.: MB0903SA
 Project I.D. : 1649.16
 Matrix : SOIL
 Reporting Unit : mg/Kg

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

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

COMMENT:

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

Anamatrix W.O.# : 9309001
Spike I.D. : LCS903SA
Project I.D. : 1649.16
Matrix : 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	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:



Inchcape Testing Services

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

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

ANAMATRIX ID	CLIENT SAMPLE ID
9309144- 1	BTANK-WR
9309144- 2	SS158.0R
9309144- 3	SE167.0
9309144- 4	SE1710.0
9309144- 5	SE188.0

This report consists of 17 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen for
 Sarah Schoen, Ph.D.
 Laboratory Director

Date 9/16/93

SEP 20 1993

COPY

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:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309144- 2	SS158.0R	SOIL	09/13/93	TPHd
9309144- 3	SE167.0	SOIL	09/13/93	TPHd
9309144- 4	SE1710.0	SOIL	09/13/93	TPHd
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
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Baeman 9/15/93
Department Supervisor Date

Pepper Dawson 9/15/93
Chemist Date

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

Anamatrix W.O.: 9309144
Matrix : WATER
Date Sampled : 09/13/93

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

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BTANK-WR -01	Sample I.D.# BS1401E2 BLANK
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
TPH as Gasoline	50	ND	ND
% Surrogate Recovery		97%	97%
Instrument I.D.		HP4	HP4
Date Analyzed		09/14/93	09/14/93
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 GC/FID 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).

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

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

Reggie Dawson 9/15/93
Analyst Date

Cheryl Balman 9/15/93
Supervisor Date

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

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

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

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#
	SS158.0R	SE167.0	SE1710.0	SE188.0	BS1401E2
COMPOUNDS (mg/Kg)	-02	-03	-04	-05	BLANK
Benzene	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND
% Surrogate Recovery	78%	74%	101%	81%	97%
Instrument I.D.	HP4	HP4	HP21	HP21	HP4
Date Analyzed	09/14/93	09/14/93	09/14/93	09/14/93	09/14/93
RLMF	1	1	1	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 (Dilution).

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

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

Reggie Dawson 9/15/93
Analyst Date

Cheryl B. ... 9/15/93
Supervisor Date

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

Anamatrix W.O.: 9309144
Matrix : SOIL
Date Sampled : N/A

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BS1401E2 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 Recovery		101%
Instrument I.D.		HP21
Date Analyzed		09/14/93
RLMF		1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GC/FID 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).

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

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

Reggie Dawson 9/15/93
Analyst Date

Cheryl Baerman 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
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.

Reggie Dawson 9/15/93
 Analyst Date

Cheyl Balma 9/15/93
 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
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
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.

Reggie Dawson 9/15/93
Analyst Date

Cheryl Balmer 9/15/93
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
 Matrix : SOIL
 Date Sampled : 09/13/93
 Date Analyzed : 09/14/93

Anamatrix I.D. : 09144-03
 Analyst : *KD*
 Supervisor : *CB*
 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	0.020	0.000	0.017	85%	0.017	85%	0%	45-139
TOLUENE	0.020	0.000	0.020	100%	0.020	100%	0%	51-138
ETHYLBENZENE	0.020	0.000	0.019	95%	0.019	95%	0%	48-146
TOTAL XYLENES	0.020	0.000	0.018	90%	0.018	90%	0%	50-139
p-BFB				72%		69%		53-147

* Quality control limit established by Anamatrix, Inc.

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

Sample I.D. : 1649.16 SE188.0
 Matrix : SOIL
 Date Sampled : 09/13/93
 Date Extracted: 09/13/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : 09144-05
 Analyst : RD
 Supervisor :
 Date Released : 09/15/93
 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	83	66%	80	64%	-4%	32-143
SURROGATE				84%		79%		30-130

* Quality control limit established by Anamatrix, 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 : 09/14/93

Anamatrix I.D. : MS1401E1
 Analyst : RD
 Supervisor : ∞
 Date Released : 09/15/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.018	90%	52-133
TOLUENE	0.020	0.022	110%	57-136
ETHYLBENZENE	0.020	0.022	110%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			95%	53-147

* Quality control limit established by Anamatrix, 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 : 09/14/93

Anamatrix I.D. : MS1401E3
 Analyst : RD
 Supervisor : *CS*
 Date Released : 09/15/93
 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.019	95%	52-133
TOLUENE	0.020	0.019	95%	57-136
ETHYLBENZENE	0.020	0.019	95%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			108%	53-147

* Quality control limit established by Anamatrix, 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: 09/13/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : MS13H2F1
 Analyst : RD
 Supervisor : JJ
 Date Released : 09/15/93
 Instrument I.D.: HP19

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

*Limits established by Anamatrix, 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	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.

Cathy Miltonberger 9/15/93
Department Supervisor Date

[Signature] 9/15/93
Chemist Date

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

Project # : 1649.16	Anametrix I.D. : 9309144
Matrix : SOIL	Analyst : <i>EK</i>
Date sampled : 09/13/93	Supervisor : <i>CM</i>
Date extracted: 09/13/93	Date released : 09/16/93
Date analyzed : 09/14/93	

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 - 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, SS158.0RMS, MD Anamatrix I.D. : 9309144-02
Matrix : SOIL Analyst : EK
Date sampled : 09/13/93 Supervisor : cm
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%	7%	48-114%

* Quality control limits established by Anamatrix 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	Anamatrix I.D.	: MS13H1W9
Matrix	: SOIL	Analyst	: EK
Date sampled	: N/A	Supervisor	: <i>cm</i>
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 Anamatrix Laboratories.

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

(18) (2)

9309144 12142

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16 Field Logbook No.: _____ Date: 9/13/93 Serial No.: 11025

Project Name: Beach St. Project Location: Barkland

Sampler (Signature): William Dredman ANALYSES Samplers: WEM

- ①
- ②
- ③
- ④
- ⑤

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES							REMARKS	
						EPA 601	TEPH	BTEX	TPHd	TPH0	TRPH	HOLD		RUSH
① BTANK-WR	9/13/93	8:00		3	H ₂ O	X	X						X	24-Hour TAT Results to Jennifer Beatty
② SS/5-8.0R	↓	-		1	Soil	X	X	X	X	X			X	
③ SE/6-7.0	↓	-		1	↓	X	X	X	X	X			X	
④ SE/7-10.0	↓	-		1	↓	X	X	X	X	X			X	
⑤ SE/16-8.0	↓	-		1	↓	X	X	X	X	X			X	

RELINQUISHED BY: (Signature) <u>William Dredman</u>	DATE <u>9/13/93</u>	TIME <u>11:00</u>	RECEIVED BY: (Signature) <u>Dennis L. Conroy</u>	DATE <u>9/13/93</u>	TIME <u>11:00</u>
RELINQUISHED BY: (Signature) <u>Dennis L. Conroy</u>	DATE <u>9/13/93</u>	TIME <u>12:00</u>	RECEIVED BY: (Signature) <u>Josephine DeCarli</u>	DATE <u>9/13/93</u>	TIME <u>12:00</u>
RELINQUISHED BY: (Signature) _____	DATE _____	TIME _____	RECEIVED BY: (Signature) _____	DATE _____	TIME _____

METHOD OF SHIPMENT: _____ DATE: _____ TIME: _____ LAB COMMENTS: _____

Sample Collector: LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: Anamatrix



Inchcape Testing Services

Anamatrix 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 Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

09-17-93

Date

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LEVINE-FRICKE

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:

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	TPHgBTEX

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.

Cheryl Bealmer 9/10/93
Department Supervisor Date

Kamel G. Kamel 9/16/93
Chemist Date

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

Anamatrix W.O.: 9309132
Matrix : SOIL
Date Sampled : 09/10/93

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

	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	0.005	ND	ND	ND	ND	ND
Toluene	0.005	0.013	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND	ND
Total Xylenes	0.005	0.034	ND	ND	ND	0.39
TPH as Gasoline	0.5	16	ND	ND	ND	31
% Surrogate Recovery		108%	107%	93%	91%	107%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		09/13/93	09/13/93	09/13/93	09/13/93	09/13/93
RLMF		2.5	1	1	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.

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

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

Peggie Dawson 9/15/93
Analyst Date

Cheryl Balman 9/14/93
Supervisor Date

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

Anamatrix 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
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	0.031
Total Xylenes	0.005	ND	ND	ND	0.070
TPH as Gasoline	0.5	ND	ND	ND	8.7
% Surrogate Recovery	105%	109%	109%	108%	107%
Instrument I.D.	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.

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

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

Peggie Dawson 9/15/93
Analyst Date

Cheryl Balmer 9/15/93
Supervisor Date

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

Anamatrix W.O.: 9309132
Matrix : SOIL
Date Sampled : N/A

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BS1301E2 BLANK	Sample I.D.# BS1301E2 BLANK
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
TPH as Gasoline	0.5	ND	ND
% Surrogate Recovery		111%	98%
Instrument I.D.		HP4	HP21
Date Analyzed		09/13/93	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 GC/FID 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.

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

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

Reggie Davison 9/15/93
Analyst Date

Cheryl Bolmer 9/14/93
Supervisor Date

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

Anamatrix W.O.: 9309132
Matrix : SOIL
Date Sampled : 09/10/93
Date Extracted: 09/10/93

Project Number : 1649.16
Date Released : 09/14/93
Instrument I.D.: HP19

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309132-01	SW11-8	09/11/93	50	200	84%
9309132-02	SW12-12	09/10/93	10	ND	72%
9309132-03	SS13-7.0	09/10/93	10	ND	74%
9309132-04	SS14-12	09/10/93	10	ND	64%
9309132-05	SS15-8.0	09/11/93	50	100	73%
9309132-06	B16-12	09/11/93	10	ND	72%
9309132-07	B17-14	09/11/93	10	ND	71%
9309132-08	B18-15.0	09/11/93	10	ND	70%
9309132-09	B19-13.0	09/11/93	10	ND	71%
9309132-10	B8-15	09/11/93	50	73	70%
BS10H1F1	METHOD BLANK	09/10/93	10	ND	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 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 9/15/93
Analyst Date

Cheyl Balmer 9/14/93
Supervisor Date

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
Date Extracted: 09/10/93

Project Number : 1649.16
Date Released : 09/14/93
Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309132-01	SW11-8	09/11/93	50	190	84%
9309132-02	SW12-12	09/10/93	10	ND	72%
9309132-03	SS13-7.0	09/10/93	10	ND	74%
9309132-04	SS14-12	09/10/93	10	ND	64%
9309132-05	SS15-8.0	09/11/93	50	190	73%
9309132-06	B16-12	09/11/93	10	ND	72%
9309132-07	B17-14	09/11/93	10	ND	71%
9309132-08	B18-15.0	09/11/93	10	ND	70%
9309132-09	B19-13.0	09/11/93	10	ND	71%
9309132-10	B8-15	09/11/93	50	91	70%
BS10H1F1	METHOD BLANK	09/10/93	10	ND	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.

Peggie Dawson 9/15/93
Analyst Date

Cheryl Beckman 9/14/93
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

Anamatrix I.D. : 09132-09
 Analyst : RT
 Supervisor : CB
 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

* Limits established by Anamatrix, 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
 Matrix : SOIL
 Date Sampled : 09/10/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : 09132-03
 Analyst : RD
 Supervisor : *as*
 Date Released : 09/14/93
 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	0.040	0.000	0.034	85%	0.034	85%	0%	45-139
TOLUENE	0.040	0.000	0.040	100%	0.039	98%	-3%	51-138
ETHYLBENZENE	0.040	0.000	0.037	93%	0.039	98%	5%	48-146
TOTAL XYLENES	0.040	0.000	0.037	93%	0.037	93%	0%	50-139
p-BFB				80%		86%		53-147

* Quality control limit established by Anamatrix, 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
 Date Analyzed : 09/11/93

Anamatrix I.D. : 09132-10
 Analyst : RD
 Supervisor : *CH*
 Date Released : 09/14/93
 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	625	164	980	131%	1400	198%	35%	32-143
SURROGATE				73%		76%		30-130

* Quality control limit established by Anamatrix, 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 : 09/13/93

Anamatrix I.D. : MS1301E1
 Analyst : RD
 Supervisor : *CS*
 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
p-BFB			101%	53-147

* Quality control established by Anamatrix, 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 : 09/13/93

Anamatrix I.D. : MS1301E3
 Analyst : RD
 Supervisor :
 Date Released : 09/14/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC. LIMITS
BENZENE	0.020	0.017	85%	52-133
TOLUENE	0.020	0.021	105%	57-136
ETHYLBENZENE	0.020	0.019	95%	56-139
TOTAL-XYLENES	0.020	0.019	95%	56-141
P-BFB			93%	53-147

* Quality control limit established by Anamatrix, 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: 09/10/93
 Date Analyzed : 09/10/93

Anamatrix I.D. : MS10H1F1
 Analyst : *RD*
 Supervisor : *dy*
 Date Released : 09/14/93
 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

*Limits established by Anamatrix, 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

Workorder # : 9309132
Date Received : 09/10/93
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 Mittenberg 9/14/93
Department Supervisor Date

[Signature] 9/13/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309132
 Matrix : SOIL Analyst : EK
 Date sampled : 09/10/93 Supervisor : CW
 Date extracted: 09/10/93 Date released : 09/13/93
 Date analyzed : 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

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, B8-15MS, MD
Matrix : SOIL
Date sampled : 09/10/93
Date extracted : 09/10/93
Date analyzed : 09/13/93

Anamatrix I.D. : 9309132-10
Analyst : EK
Supervisor : *cm*
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%

* Quality control limits established by Anamatrix 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

Sample I.D.	: LAB CONTROL SAMPLE	Anamatrix I.D.	: MS10H1W9
Matrix	: SOIL	Analyst	: <i>EK</i>
Date sampled	: N/A	Supervisor	: <i>cm</i>
Date extracted	: 09/10/93	Date Released	: 09/13/93
Date analyzed	: 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 Anamatrix Laboratories.

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

5/10/93

1001102

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649/16 Field Logbook No.: _____ Date: 9/10/93 Serial No.: 11145
 Project Name: Beach Street Project Location: Oakland

Sampler (Signature): William Madison ANALYSES
 Samplers: WEMA

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES					HOLD	RUSH	REMARKS
						EPA 601	TRPH	BTEX	TPH	TPH OUT			
① SW11-8	9/10/93			1	Soil	X	X	X	X	X	X	24-Hour TAT Results to Jennifer Beatty	
② SW12-12				1		X	X	X	X	X	X		
③ SS13-7.0				1		X	X	X	X	X	X		
④ SS14-12				1		X	X	X	X	X	X		
⑤ SS15-8.0				1		X	X	X	X	X	X		
⑥ B16-12				1		X	X	X	X	X	X		
⑦ B17-14				1		X	X	X	X	X	X		
⑧ B18-15.0				1		X	X	X	X	X	X		
⑨ B19-13.0				1		X	X	X	X	X	X		

RELINQUISHED BY: <u>William Madison</u> (Signature)	DATE: <u>9/10/93</u>	TIME: <u>2:30</u>	RECEIVED BY: <u>Benny S. Carrizosa</u> (Signature)	DATE: <u>9/10/93</u>	TIME: <u>1:50</u>
RELINQUISHED BY: <u>Benny S. Carrizosa</u> (Signature)	DATE: <u>9/10/93</u>	TIME: <u>1:50</u>	RECEIVED BY: <u>W. J. [Signature]</u> (Signature)	DATE: <u>9/10/93</u>	TIME: <u>15:50</u>
RELINQUISHED BY: _____ (Signature)	DATE: _____	TIME: _____	RECEIVED BY: _____ (Signature)	DATE: _____	TIME: _____
METHOD OF SHIPMENT: _____	DATE: _____	TIME: _____	LAB COMMENTS: _____		

Sample Collector: **LEVINE-FRICKE**
 1900 Powell Street, 12th Floor
 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory:
Anamatrix



Inchcape Testing Services

Anamatrix 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 Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen

Sarah Schoen, Ph.D.
Laboratory Director

09/13/93

Date

SEP 15 1993

COPY

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.

Charles Belman 9/10/93
Department Supervisor Date

C. F. 10 Sept 93
Chemist Date

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

Anamatrix W.O.: 9309071
Matrix : SOIL
Date Sampled : 09/07/93

Project Number : 1649.16
Date Released : 09/10/93

Reporting Limit	Sample I.D.# B7-12	Sample I.D.# B9-17	Sample I.D.# BS0802E2
COMPOUNDS (mg/Kg)	-01	-03	BLANK
Benzene	0.005	ND	0.12
Toluene	0.005	ND	0.16
Ethylbenzene	0.005	ND	0.18
Total Xylenes	0.005	ND	0.19
TPH as Gasoline	0.5	ND	5.6
% Surrogate Recovery	97%	101%	104%
Instrument I.D.	HP4	HP4	HP4
Date Analyzed	09/08/93	09/08/93	09/08/93
RLMF	1	2.5	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as C4-C12 are determined by GC/FID 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.

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

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

C. J. Fu 10 Sept 93
Analyst Date

Cheryl Balmer 9/10/93
Supervisor Date

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

Anamatrix W.O.: 9309071
Matrix : SOIL
Date Sampled : 09/07/93
Date Extracted: 09/07/93

Project Number : 1649.16
Date Released : 09/10/93
Instrument I.D.: HP9

Anamatrix 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	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.

C. Fan 10 Sept 93
Analyst Date

Cheryl Bealmer 9/10/93
Supervisor Date

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

Anametrix W.O.: 9309071
Matrix : SOIL
Date Sampled : 09/07/93
Date Extracted: 09/07/93

Project Number : 1649.16
Date Released : 09/10/93
Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9309071-01	B7-12	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.

C. Fer 10 Sept 93
Analyst Date

Cheryl Beelman 9/10/93
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	Anamatrix I.D. : 09071-01
Matrix : SOIL	Analyst : <i>CF</i>
Date Sampled : 09/07/93	Supervisor : <i>CD</i>
Date Extracted: 09/07/93	Date Released : 09/10/93
Date Analyzed : 09/08/93	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	79	63%	82	66%	4%	32-143
SURROGATE				76%		78%		30-130

* Quality control limit established by Anamatrix, 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 : 09/08/93

Anamatrix I.D. : MS0801E3
 Analyst : *GF*
 Supervisor : *CS*
 Date Released : 09/10/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.013	65%	52-133
TOLUENE	0.020	0.017	85%	57-136
ETHYLBENZENE	0.020	0.018	90%	56-139
TOTAL-XYLENES	0.020	0.018	90%	56-141
P-BFB			95%	53-147

* Quality control limit established by Anamatrix, 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: 09/07/93
 Date Analyzed : 09/07/93

Anamatrix I.D. : MS07H1F1
 Analyst : CF
 Supervisor : OS
 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 Anamatrix, 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.

Christy Wellenberg 9/8/93
Department Supervisor Date

M. Emanuel 9/8/93
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 : 09/07/93
Date extracted: 09/07/93
Date analyzed : 09/08/93

Anamatrix I.D. : 9309071
Analyst : *ME*
Supervisor : *CM*
Date released : 09/08/93

Workorder #	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	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, B7-12MS, MD Anamatrix I.D. : 9309071-01
Matrix : SOIL Analyst : *AE*
Date sampled : 09/07/93 Supervisor : *CM*
Date extracted : 09/07/93 Date Released : 09/08/93
Date 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%	4%	48-114%

* Quality control limits established by Anamatrix Laboratories.

RPD - 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	Anamatrix I.D.	: MS07H1W9
Matrix	: SOIL	Analyst	: <i>EG</i>
Date sampled	: N/A	Supervisor	: <i>CM</i>
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%

* Quality control established by Anamatrix Laboratories.

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



Inchcape Testing Services

Anamatrix 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 # : 9309244
 Date Received : 09/20/93
 Project ID : 1649.16
 Purchase Order: N/A

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

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

Sarah Schoen, Ph.D.
 Laboratory Director

09-24-93
 Date

COPY

RECEIVED
 SEP 27
 LEVINE-FRICKE

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	TPHd
9309244- 3	SS33-4.0	SOIL	09/20/93	TPHd
9309244- 1	SS31-4.0	SOIL	09/20/93	TPHgBTEX
9309244- 2	SS32-4.0	SOIL	09/20/93	TPHgBTEX
9309244- 3	SS33-4.0	SOIL	09/20/93	TPHgBTEX

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.

Cheryl Balmer 9/21/93
Department Supervisor Date

Peggie Dawson 9/22/93
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
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

Reporting Limit	Sample I.D.# SS31-4.0	Sample I.D.# SS32-4.0	Sample I.D.# SS33-4.0	Sample I.D.# BS2101E2
COMPOUNDS (mg/Kg)	-01	-02	-03	BLANK
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND
TPH as Gasoline	0.5	ND	5.2	ND
% Surrogate Recovery	85%	120%	85%	103%
Instrument I.D.	HP8	HP8	HP8	HP8
Date Analyzed	09/21/93	09/21/93	09/21/93	09/21/93
RLMF	1	2.5	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 GC/FID 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 Dawson 9/22/93
Analyst Date

Cheryl Balmer 9/21/93
Supervisor Date

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

Anamatrix W.O.: 9309244
Matrix : SOIL
Date Sampled : 09/20/93
Date Extracted: 09/20/93

Project Number : 1649.16
Date Released : 09/21/93
Instrument I.D.: HP19

Anamatrix 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.

Reggie Dawson 9/22/93
Analyst Date

Cheryl Balmer 9/21/93
Supervisor Date

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

Anamatrix W.O.: 9309244
 Matrix : SOIL
 Date Sampled : 09/20/93
 Date Extracted: 09/20/93

Project Number : 1649.16
 Date Released : 09/21/93
 Instrument I.D.: HP19

Anamatrix 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 GCFID 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 Date

Cheryl Bealman 9/21/93
 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
 Matrix : SOIL
 Date Sampled : 09/20/93
 Date Analyzed : 09/21/93

Anamatrix I.D. : 09244-03
 Analyst : RD
 Supervisor : CB
 Date Released : 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	0.040	0.000	0.032	80%	0.036	90%	12%	45-139
TOLUENE	0.040	0.000	0.035	88%	0.038	95%	8%	51-138
ETHYLBENZENE	0.040	0.000	0.037	93%	0.040	100%	8%	48-146
TOTAL XYLENES	0.040	0.000	0.038	95%	0.041	102%	8%	50-139
p-BFB				98%		91%		53-147

* Quality control limit established by Anamatrix, 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
 Date Sampled : 09/20/93
 Date Extracted: 09/20/93
 Date Analyzed : 09/20/93

Anamatrix I.D. : 09244-01
 Analyst : RD
 Supervisor : JB
 Date Released : 09/21/93
 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	78	62%	108	86%	32%	32-143
SURROGATE				55%		84%		30-130

* Quality control limit established by Anamatrix, 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 : 09/21/93

Anamatrix I.D. : MS2101E3
 Analyst : RJ
 Supervisor :
 Date Released : 09/21/93
 Instrument ID : HP8

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.032	80%	52-133
TOLUENE	0.040	0.035	88%	57-136
ETHYLBENZENE	0.040	0.037	93%	56-139
TOTAL-XYLENES	0.040	0.038	95%	56-141
P-BFB			107%	53-147

* Quality control limit established by Anamatrix, 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: 09/20/93
 Date Analyzed : 09/20/93

Anamatrix I.D. : MS20H2F1
 Analyst : RD
 Supervisor : CS
 Date Released : 09/21/93
 Instrument I.D.: HP19

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	109	87%	48-113
SURROGATE			87%	30-130

*Limits established by Anamatrix, 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.

Cathy Mittenberger 9/20/93
Department Supervisor Date

R.H.R. Wolf 9/20/93
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 : 09/20/93
Date extracted: 09/20/93
Date analyzed : 09/21/93

Anamatrix I.D. : 9309244
Analyst : *ZW*
Supervisor : *Chu*
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 Anamatrix I.D. : 9309244-01
Matrix : SOIL Analyst : *DM*
Date sampled : 09/20/93 Supervisor : *DM*
Date extracted : 09/20/93 Date Released : 09/22/93
Date analyzed : 09/21/93

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 Anamatrix 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
Date extracted : 09/20/93
Date analyzed : 09/21/93

Anamatrix I.D. : MS20H1W9
Analyst : *JM*
Supervisor : *Sm*
Date Released : 09/22/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	280	93%	71-119%

* Quality control established by Anamatrix Laboratories.

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

1389244 (2) #40

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16	Field Logbook No.:	Date: 9/20/93	Serial No.: 11163
Project Name: Beach Street	Project Location: Oakland		

Sampler (Signature): *William Madison* ANALYSES
 Hold Rush
 Samplers: *WEM*

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES							HOLD	RUSH	REMARKS
						EPA 601	TPH	TPH _{diethyl}	TPH _{total}	BTEX	TRPH				
① 5531-4.0	9/20/93			1	soil	x	x	x	x	x		x		24-HOUR TAT Results to Jennifer Beatty	
② 5532-4.0	↓			1	↓	x	x	x	x	x		y			
③ 5533-4.0	↓			1	↓	x	x	x	x	x		f			

RELINQUISHED BY: <i>William Madison</i>	DATE: 9/20/93	TIME: 10:00	RECEIVED BY: <i>Benny L. Amador</i>	DATE: 9/20/93	TIME: 10:00
RELINQUISHED BY: <i>Benny L. Amador</i>	DATE: 9/20/93	TIME: 11:02	RECEIVED BY: <i>Corrin Roberts</i>	DATE: 9-20-93	TIME: 11:00
RELINQUISHED BY: _____	DATE: _____	TIME: _____	RECEIVED BY: _____	DATE: _____	TIME: _____
METHOD OF SHIPMENT:	DATE:	TIME:	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <i>Anamatrix</i>
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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 # : 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

COPY

RECEIVED

SEP 16

LEVINE-FRICKE

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

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	TPHd
9309111- 2	B14-15	SOIL	09/09/93	TPHd
9309111- 3	B15-16.5	SOIL	09/09/93	TPHd
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

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

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

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Balmer 9/13/93
Department Supervisor Date

Charles Burch 9.13.93
Chemist Date

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

Anamatrix W.O.: 9309111
Matrix : SOIL
Date Sampled : 09/09/93

Project Number : 1649.16
Date Released : 09/13/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# B13-12	Sample I.D.# B14-15	Sample I.D.# B15-16.5	Sample I.D.# SAMPLE6C	Sample I.D.# BS1001E2
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	0.21	ND
Ethylbenzene	0.005	ND	ND	ND	0.13	ND
Total Xylenes	0.005	ND	ND	ND	2.4	ND
TPH as Gasoline	0.5	ND	ND	ND	84	ND
% Surrogate Recovery		93%	92%	93%	92%	96%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		09/10/93	09/10/93	09/10/93	09/10/93	09/10/93
RLMF		1	1	1	25	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.

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

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

Charles M. Burch 9.13.93
Analyst Date

Cheryl Balmer 9/13/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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	80%
9309111-03	B15-16.5	09/10/93	10	40	85%
BS09H1F1	METHOD BLANK	09/10/93	10	ND	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 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 M. Smith 9.13.93
Analyst Date

Charles M. Smith 9/13/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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	80%
9309111-03	B15-16.5	09/10/93	10	98	85%
BS09H1F1	METHOD BLANK	09/10/93	10	ND	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.

Charles M. Burch 9.13.93
 Analyst Date

Cheryl Balester 9/13/93
 Supervisor Date

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

Sample I.D. : 1649.16 B14-15
 Matrix : SOIL
 Date Sampled : 09/09/93
 Date Extracted: 09/09/93
 Date Analyzed : 09/10/93

Anamatrix I.D. : 09111-02
 Analyst : *CJB*
 Supervisor : *[Signature]*
 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

* Quality control limit established by Anamatrix, 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 : 09/10/93

Anamatrix I.D. : MS1001E3
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/13/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.020	100%	52-133
TOLUENE	0.020	0.023	115%	57-136
ETHYLBENZENE	0.020	0.022	110%	56-139
TOTAL-XYLENES	0.020	0.021	105%	56-141
P-BFB			90%	53-147

* Quality control limit established by Anamatrix, 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: 09/09/93
 Date Analyzed : 09/10/93

Anamatrix I.D. : MS09H1F1
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/13/93
 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	92	74%	48-113
SURROGATE			85%	30-130

*Limits established by Anamatrix, Inc.

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

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

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

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

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cathy Meltonberg 9/10/93
Department Supervisor Date

[Signature] 9/10/93
Chemist Date

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

Project # : 1649.16 Anametrix I.D. : 9309111
Matrix : SOIL Analyst : EK
Date sampled : 09/09/93 Supervisor : *Ch*
Date extracted: 09/09/93 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

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, B14-15MS, MD
Matrix : SOIL
Date sampled : 09/09/93
Date extracted : 09/09/93
Date analyzed : 09/10/93

Anamatrix I.D. : 9309111-02
Analyst : EK
Supervisor : *cm*
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
Motor Oil	300	90	420	110%	400	103%	7%	48-114%

* Quality control limits established by Anamatrix 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	Anamatrix I.D.	: MS09H1W9
Matrix	: SOIL	Analyst	: EK
Date sampled	: N/A	Supervisor	: <i>cm</i>
Date extracted	: 09/09/93	Date Released	: 09/10/93
Date analyzed	: 09/10/93		

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

* Quality control established by Anamatrix Laboratories.

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

17:55
11/1/93

9309111 (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: Oakland		

Sampler (Signature): *William Madson* ANALYSES
 Holders: *WEM*

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS
						PER-604	TRP-604	BTX	TPHd	TRPH	TPH2d			
① B13-12	9/9/93			1	Soil	X	X	X	X	X		X	24-Hour Results to Jennifer Beatty	
② B14-15	↓			1	↓	X	X	X	X	X		X		
③ B15-16.5	↓			1	↓	X	X	X	X	X		X		
④ Sample -GC	↓			1	↓	X	X					X		

RELINQUISHED BY: <i>William Madson</i>	DATE: 9/9/93	TIME: 1610	RECEIVED BY: <i>Bonny L. Carrigan</i>	DATE: 9/9/93	TIME: 1610
RELINQUISHED BY: <i>Bonny L. Carrigan</i>	DATE: 9/9/93	TIME: 1712	RECEIVED BY: <i>William Madson</i>	DATE: 9/9/93	TIME: 1712
RELINQUISHED BY: _____	DATE: _____	TIME: _____	RECEIVED BY: _____	DATE: _____	TIME: _____
METHOD OF SHIPMENT:	DATE:	TIME:	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <i>Anamatrix</i>
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Inchcape Testing Services

Anamatrix 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 Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

09-10-93
 Date

SEP 13 1993

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

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

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

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.

Cheryl Bremer 4/10/93
Department Supervisor Date

Ci Fer 10 Sept. 93
Chemist Date

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

Anamatrix W.O.: 9309039
Matrix : SOIL
Date Sampled : 09/02/93

Project Number : 1649.16
Date Released : 09/08/93

Reporting Limit	Sample I.D.# SW6-7.5	Sample I.D.# SW7-10.5	Sample I.D.# SW8-10.5	Sample I.D.# BS0301E2
COMPOUNDS (mg/Kg)	-01	-02	-03	BLANK
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND
Total Xylenes	0.005	0.27	ND	0.85
TPH as Gasoline	0.5	73	18	300
% Surrogate Recovery	103%	106%	102%	117%
Instrument I.D.	HP4	HP4	HP4	HP4
Date Analyzed	09/03/93	09/03/93	09/03/93	09/03/93
RLMF	10	2.5	50	1

- 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.

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

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

Peggy Dawson 9/9/93
Analyst Date

Cheryl Baerman 9/9/93
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 GCFID following sample extraction by EPA Method 3510.

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

Reggie Dawson 9/9/93
Analyst Date

Cheryl Beckman 9/9/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Reggie Dawson 9/9/93
Analyst Date

Cheryl Balmer 9/14/93
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
 Date Sampled : N/A
 Date Analyzed : 09/03/93

Anamatrix I.D. : MS0301E3
 Analyst : ED
 Supervisor : *W*
 Date Released : 09/09/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.019	95%	52-133
TOLUENE	0.020	0.023	115%	57-136
ETHYLBENZENE	0.020	0.024	120%	56-139
TOTAL-XYLENES	0.020	0.023	115%	56-141
P-BFB			93%	53-147

* Quality control limit established by Anamatrix, 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: 09/03/93
 Date Analyzed : 09/04/93

Anametrix I.D. : MS03H1F1
 Analyst : AD
 Supervisor :
 Date Released : 09/09/93
 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

*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 # : 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

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

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.

Cathy Mittenberger 9/6/93
Department Supervisor Date

SPovshnikov 09.07.93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309039
Matrix : SOIL Analyst : *M.P*
Date sampled : 09/02/93 Supervisor : *CM*
Date extracted: 09/02/93 Date released : 09/03/93
Date analyzed : 09/03/93

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

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, SW7-10.5MS, MD Anamatrix I.D. : 9309039-02
Matrix : SOIL Analyst : *M.P.*
Date sampled : 09/02/93 Supervisor : *CM*
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%

* Quality control limits established by Anamatrix Laboratories.

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16			Field Logbook No.:			Date: 9/2/93			Serial No.: 11502					
Project Name: Beach Street			Project Location: Oakland						Samplers: WEM					
Sampler (Signature): <i>Gilbert Rodan</i>			ANALYSES											
SAMPLES						EPA 601	EPA 621	TRPH	TRPH/2000	BTEX	TPH/01	HOLD	RUSH	REMARKS
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE									
① SW6-7.5	9/2/93	1		1	Soil	X	X	X	X	X		X		48-Hour TAT Results to Jennifer Beatty
② SW7-10.5	↓	1		1	↓	X	X	X	X	X		X		
③ SW8-10.5	↓	1		1	↓	X	X	X	X	X		X		
RELINQUISHED BY: <i>Gilbert Rodan</i>			DATE: 9/2/93	TIME: 4:05	RECEIVED BY: <i>Paul Bellusmini</i>			DATE: 9-2-93	TIME: 4:05					
RELINQUISHED BY: <i>Paul Bellusmini</i>			DATE: 9-2-93	TIME: 5:20	RECEIVED BY: <i>Wen Bjorn</i>			DATE: 9/2/93	TIME: 17:30					
RELINQUISHED BY: (Signature)			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME					
METHOD OF SHIPMENT:			DATE	TIME	LAB COMMENTS:									
Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500					Analytical Laboratory: <i>Ana metrix</i>									



Inchcape Testing Services

Anamatrix 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 # : 9309016
 Date Received : 09/01/93
 Project ID : 1649.16
 Purchase Order: N/A

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

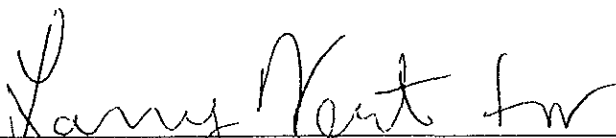
ANAMATRIX ID	CLIENT SAMPLE ID
9309016- 1	SW1-6
9309016- 2	SW2-7.5
9309016- 3	SN3-7.0
9309016- 4	SN4-7.5
9309016- 5	SW5-8.0
9309016- 6	B4-9.0
9309016- 7	B5-8.5
9309016- 8	B6-8.5

SEP - 9 1993

This report consists of 15 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

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


 Sarah Schoen, Ph.D.
 Laboratory Director

9-8-93
 Date

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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 : GC
Sub-Department: TPH

SAMPLE INFORMATION:

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	TPHgBTEX
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	TPHgBTEX

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 : 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.

Cheryl Balmer 9/7/93
Department Supervisor Date

Lucia Sher 9/7/93
Chemist Date

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

Anamatrix W.O.: 9309016
Matrix : SOIL
Date Sampled : 09/01/93

Project Number : 1649.16
Date Released : 09/03/93

COMPOUNDS	Reporting Limit (mg/Kg)	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
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	0.34	ND	ND	ND	ND
Ethylbenzene	0.005	0.39	ND	ND	ND	ND
Total Xylenes	0.005	3.2	ND	ND	ND	ND
TPH as Gasoline	0.5	190	ND	ND	ND	ND
% Surrogate Recovery		104%	93%	87%	101%	95%
Instrument I.D.		HP21	HP4	HP4	HP4	HP21
Date Analyzed		09/02/93	09/02/93	09/02/93	09/02/93	09/02/93
RLMF		25	1	1	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.

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

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

Charlton Burch 9.8.93
Analyst Date

Charlton Burch 9/8/93
Supervisor Date

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

Anamatrix W.O.: 9309016
Matrix : SOIL
Date Sampled : 09/01/93

Project Number : 1649.16
Date Released : 09/03/93

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	0.005	ND	ND	ND	ND
Toluene	0.005	0.062	ND	ND	ND
Ethylbenzene	0.005	0.056	ND	ND	ND
Total Xylenes	0.005	0.63	ND	ND	ND
TPH as Gasoline	0.5	35	ND	ND	ND
% Surrogate Recovery	111%	105%	101%	122%	106%
Instrument I.D.	HP21	HP4	HP21	HP21	HP4
Date Analyzed	09/02/93	09/02/93	09/02/93	09/02/93	09/02/93
RLMF	5	1	1	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 GC/FID 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.

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

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

Luina Storr 9/7/93
Analyst Date

Cheryl Balman 9/7/93
Supervisor Date

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

Anamatrix W.O.: 9309016
 Matrix : SOIL
 Date Sampled : 09/01/93
 Date Extracted: 09/01/93

Project Number : 1649.16
 Date Released : 09/03/93
 Instrument I.D.: HP9

Anamatrix 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 GC/FID 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

Cheryl Balmer 9/7/93
 Supervisor Date

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

Anamatrix W.O.: 9309016
Matrix : SOIL
Date Sampled : 09/01/93
Date Extracted: 09/01/93

Project Number : 1649.16
Date Released : 09/03/93
Instrument I.D.: HP9

Anamatrix 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%
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%
BS01H1F1	METHOD BLANK	09/02/93	10	ND	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 GC/FID 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

Cheryl Balmer 9/7/93
Supervisor Date

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
 Matrix : SOIL
 Date Sampled : 09/01/93
 Date Analyzed : 09/02/93

Anamatrix I.D. : 09016-08
 Analyst : IS
 Supervisor : CS
 Date Released : 09/07/93
 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	% REC LIMITS
BENZENE	0.040	0.000	0.031	78%	0.030	75%	-3%	45-139
TOLUENE	0.040	0.000	0.034	85%	0.034	85%	0%	51-138
ETHYLBENZENE	0.040	0.000	0.036	90%	0.035	88%	-3%	48-146
TOTAL XYLENES	0.040	0.000	0.039	98%	0.038	95%	-3%	50-139
p-BFB				103%		107%		53-147

* Quality control limit established by Anamatrix, 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

Anamatrix 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 MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE	0.040	0.000	0.030	75%	0.032	80%	6%	45-139
TOLUENE	0.040	0.000	0.037	93%	0.038	95%	3%	51-138
ETHYLBENZENE	0.040	0.000	0.037	93%	0.039	98%	5%	48-146
TOTAL XYLENES	0.040	0.000	0.036	90%	0.037	93%	3%	50-139
p-BFB				92%		86%		53-147

* Quality control limit established by Anamatrix, 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 : 09/02/93

Anamatrix I.D. : MS0201E3
 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	0.020	0.013	65%	52-133
TOLUENE	0.020	0.015	75%	57-136
ETHYLBENZENE	0.020	0.015	75%	56-139
TOTAL-XYLENES	0.020	0.017	85%	56-141
P-BFB			108%	53-147

* Quality control limit established by Anamatrix, 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 : 09/02/93

Anamatrix I.D. : MS0201E3
 Analyst : IS
 Supervisor : CB
 Date Released : 09/07/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.016	80%	52-133
TOLUENE	0.020	0.020	100%	57-136
ETHYLBENZENE	0.020	0.020	100%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			103%	53-147

* Quality control limit established by Anamatrix, 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: 09/01/93
 Date Analyzed : 09/01/93

Anamatrix I.D. : MS01H1F1
 Analyst : IS
 Supervisor : CS
 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

*Limits established by Anamatrix, 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.

Cathy Millenberg 9/6/93
Department Supervisor Date

SPo Shtikov 09.07.93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309016
 Matrix : SOIL Analyst : *MIP*
 Date sampled : 09/01/93 Supervisor : *CM*
 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 - 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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/01/93
Date analyzed : 09/02/93

Anamatrix I.D. : MS01H1W9
Analyst : M.P.
Supervisor : *cm*
Date Released : 09/03/93

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

* Quality control established by Anamatrix Laboratories.

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

11:51 AM
9309016 (2)
CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649/16 Field Logbook No.: _____ Date: 9/1/93 Serial No.: 11123
 Project Name: Beach Street Project Location: Oakland

Sampler (Signature): William Maslow ANALYSES
 Samplers: WEEM

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS
						EPA 601	TPH _{total}	TPH _{oil}	BTEX	TRPH	TPH _{oil}			
① SW1-6	9/1/93			1	Soil	X	X	X	X	X		X	24-Hour TAT The B4-B6 samples are most important samples to be completed in 24-Hours. Sample Results to Jennifer Beatty	
② SW2-7.5				1		X	X	X	X	X		X		
③ SW3-7.0				1		X	X	X	X	X		X		
④ SW4-7.5				1		X	X	X	X	X		X		
⑤ SW5-8.0				1		X	X	X	X	X		X		
⑥ B4-9.0				1		X	X	X	X	X		X		
⑦ B5-8.5				1		X	X	X	X	X		X		
⑧ B6-8.5				1		X	X	X	X	X		X		

RELINQUISHED BY: (Signature) <u>William Maslow</u>	DATE <u>9/1/93</u> TIME <u>4:20</u>	RECEIVED BY: (Signature) <u>Paul Belkomin</u>	DATE <u>9-1-93</u> TIME <u>4:20</u>
RELINQUISHED BY: (Signature) <u>J. Belkomin</u>	DATE <u>9-1-93</u> TIME <u>5:30</u>	RECEIVED BY: (Signature) <u>[Signature]</u>	DATE <u>9/1/93</u> TIME <u>12:30</u>
RELINQUISHED BY: (Signature) _____	DATE _____ TIME _____	RECEIVED BY: (Signature) _____	DATE _____ TIME _____
METHOD OF SHIPMENT: _____	DATE _____ TIME _____	LAB COMMENTS: _____	

Sample Collector: LEVINE-FRICKE
 1900 Powell Street, 12th Floor
 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory:
Ana me trik



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8102
 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.

Sarah Schoen
 Sarah Schoen, Ph.D.
 Laboratory Director

09/13/93
 Date

SEP 15 1993

COPY

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	TPHd
9309075- 4	B11-8	SOIL	09/08/93	TPHd
9309075- 1	SN9-7.5	SOIL	09/08/93	TPHgBTEX
9309075- 2	SN10-7	SOIL	09/08/93	TPHgBTEX
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.

Cheryl Balman 9/10/93
Department Supervisor Date

Lina Shor 9/10/93
Chemist Date

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

Anametrix W.O.: 9309075
Matrix : SOIL
Date Sampled : 09/08/93

Project Number : 1649.16
Date Released : 09/10/93

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	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND
% Surrogate Recovery	101%	97%	104%	105%	100%
Instrument I.D.	HP4	HP4	HP21	HP21	HP4
Date Analyzed	09/09/93	09/09/93	09/09/93	09/09/93	09/09/93
RLMF	1	1	1	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 GC/FID 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.

Deena Shor 9/10/93
Analyst Date

Cheryl Balmer 9/10/93
Supervisor Date

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

Anamatrix W.O.: 9309075
Matrix : SOIL
Date Sampled : N/A

Project Number : 1649.16
Date Released : 09/10/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BS0901E2 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 Recovery		104%
Instrument I.D.		HP21
Date Analyzed		09/09/93
RLMF		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.

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

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

Luna Shor 9/10/93
Analyst Date

Charvil Balmer 9/10/93
Supervisor Date

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

Anametrix W.O.: 9309075
Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Project Number : 1649.16
Date Released : 09/10/93
Instrument I.D.: HP9

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.

Laura Shos 9/10/93
Analyst Date

Cheryl Belmer 9/10/93
Supervisor Date

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

Anametrix W.O.: 9309075
Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Project Number : 1649.16
Date Released : 09/10/93
Instrument I.D.: HP9

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 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.

Luna Sher 9/10/93
Analyst Date

Charles Balmer 9/10/93
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	Anamatrix I.D. : 09075-04
Matrix : SOIL	Analyst : <i>IS</i>
Date Sampled : 09/08/93	Supervisor : <i>CS</i>
Date Analyzed : 09/09/93	Date Released : 09/10/93
	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	0.74	74%	0.80	80%	8%	48-149
P-BFB				96%		96%		53-147

* Limits established by Anamatrix, 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

Anamatrix I.D. : MS0901E1
 Analyst : IS
 Supervisor : *CS*
 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
p-BFB			103%	53-147

* Quality control established by Anamatrix, 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 : 09/09/893

Anamatrix I.D. : MS0901E1
 Analyst : ~~TS~~
 Supervisor : ~~CS~~
 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

* Quality control established by Anamatrix, 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
 Matrix : SOIL
 Date Sampled : 09/08/93
 Date Extracted: 09/08/93
 Date Analyzed : 09/09/93

Anamatrix I.D. : 09075-03
 Analyst : Is
 Supervisor : *CB*
 Date Released : 09/10/93
 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	98	78%	95	76%	-3%	32-143
SURROGATE				89%		82%		30-130

* Quality control limit established by Anamatrix, 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: 09/08/93
 Date Analyzed : 09/08/93

Anamatrix I.D. : MS08H1F1
 Analyst : TS
 Supervisor : CS
 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 Anamatrix, 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.

Cathy Miltenberger 9/10/93
Department Supervisor Date

Leifas Wu 9/10/93
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 : 09/08/93
 Date extracted: 09/08/93
 Date analyzed : 09/09/93

Anamatrix I.D. : 9309075
 Analyst :
 Supervisor : *cm*
 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 - 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, B10-9MS, MD
Matrix : SOIL
Date sampled : 09/08/93
Date extracted : 09/08/93
Date analyzed : 09/09/93

Anamatrix I.D. : 9309075-03
Analyst :
Supervisor : *chw*
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
Motor Oil	300	23	290	89%	290	89%	0%	48-114%

* Quality control limits established by Anamatrix Laboratories.

RPD - 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.	: MS08H1W9
Matrix	: SOIL	Analyst	: <i>[Signature]</i>
Date sampled	: N/A	Supervisor	: <i>[Signature]</i>
Date extracted	: 09/08/93	Date Released	: 09/10/93
Date analyzed	: 09/09/93		

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

* Quality control established by Anametrix Laboratories.

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



Inchcape Testing Services

Anamatrix 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 # : 9309090
 Date Received : 09/08/93
 Project ID : 1649.16
 Purchase Order: N/A

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen for

Sarah Schoen, Ph.D.
 Laboratory Director

09/14/93

Date

SEP 15 1993

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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	TPHgBTEX

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.

Cheryl Balmer 9/13/93
Department Supervisor Date

Charles Burch 9.13.93
Chemist Date

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

Anamatrix W.O.: 9309090
Matrix : SOIL
Date Sampled : 09/08/93

Project Number : 1649.16
Date Released : 09/13/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# B12-13	Sample I.D.# BS0901E2
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
TPH as Gasoline	0.5	ND	ND
% Surrogate Recovery		101%	100%
Instrument I.D.		HP4	HP4
Date Analyzed		09/09/93	09/09/93
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 GC/FID 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.

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

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

Charlene Burch 9-13-93
Analyst Date

Cheryl Balmer 9/13/93
Supervisor Date

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

Anamatrix W.O.: 9309090
Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Project Number : 1649.16
Date Released : 09/13/93
Instrument I.D.: HP9

Anamatrix 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.

Charlton Birch 9.13.93
Analyst Date

Cheryl Bealman 9/13/93
Supervisor Date

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

Anamatrix W.O.: 9309090
Matrix : SOIL
Date Sampled : 09/08/93
Date Extracted: 09/08/93

Project Number : 1649.16
Date Released : 09/13/93
Instrument I.D.: HP9

Anamatrix 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.

Charles Burch 9-13-93
Analyst Date

Charles Burch 9/13/93
Supervisor 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
 Matrix : SOIL
 Date Sampled : 09/08/93
 Date Analyzed : 09/09/93

Anamatrix I.D. : 09090-01
 Analyst : *CMB*
 Supervisor : *CS*
 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

* Limits established by Anamatrix, 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

Anamatrix I.D. : MS0901E1
 Analyst : *CB*
 Supervisor : *CS*
 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

* Quality control established by Anamatrix, 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: 09/08/93
 Date Analyzed : 09/08/93

Anamatrix I.D. : MS08H1F1
 Analyst : *CMB*
 Supervisor : *os*
 Date Released : 09/13/93
 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	102	82%	48-113
SURROGATE			80%	30-130

*Limits established by Anamatrix, 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.

Cathy Mitterberg 9/10/93
Department Supervisor Date

Levi Tang Yu 9/10/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309090
Matrix : SOIL Analyst :
Date sampled : 09/08/93 Supervisor : *cm*
Date extracted: 09/08/93 Date released : 09/10/93
Date analyzed : 09/09/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309090-01	B12-13	30	53
BS08H1W9	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.

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 : 09/08/93
Date analyzed : 09/09/93

Anamatrix I.D. : MS08H1W9
Analyst :
Supervisor : *cm YL*
Date Released : 09/10/93

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

* Quality control established by Anamatrix Laboratories.

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



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 # : 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

09-28-93

Date

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RECEIVED
 SE 29
 LEVINE-FRICKE

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	TPHd
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.

Cheryl Balmer 9/25/93
Department Supervisor Date

CR Patel 09/27/93
Chemist Date

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

Anamatrix W.O.: 9309296
Matrix : SOIL
Date Sampled : 09/23/93

Project Number : 1649.16
Date Released : 09/25/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# B27-10.0	Sample I.D.# BS2401E2
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
TPH as Gasoline	0.5	ND	ND
% Surrogate Recovery		115%	101%
Instrument I.D.		HP4	HP4
Date Analyzed		09/24/93	09/24/93
RLMF		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 GC/FID 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.

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

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

ORP.cj
Analyst

09127193
Date

Cheryl Balman
Supervisor

9/25/93
Date

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

Anamatrix 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

Anamatrix 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.

Anamatrix control limits for recovery of surrogate C25 are 30-130%.

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

[Signature]

Analyst

09/27/93

Date

[Signature]

Supervisor

9/27/93

Date

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.

Dr. Z. M. Kuter 09/27/93
 Analyst Date

Charles Balsman 9/27/93
 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
 Date Sampled : N/A
 Date Analyzed : 09/24/93

Anamatrix I.D. : MS2401E3
 Analyst : *APL*
 Supervisor : *ms*
 Date Released : 09/25/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.042	105%	52-133
TOLUENE	0.040	0.044	110%	57-136
ETHYLBENZENE	0.040	0.045	113%	56-139
TOTAL XYLENES	0.040	0.045	113%	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
 Matrix : SOIL
 Date Sampled : N/A
 Date Extracted: 09/23/93
 Date Analyzed : 09/23/93

Anamatrix I.D. : MS23H1F1
 Analyst : ~~APP~~
 Supervisor : ~~CS~~
 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

*Limits established by Anamatrix, 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	CLIENT SAMPLE ID	MATRIX	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.

Pathy Milton-Lenge 9/24/93
Department Supervisor Date

J. Enamifer 9/24/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309296
Matrix : SOIL Analyst : *AE*
Date sampled : 09/23/93 Supervisor : *CM*
Date extracted: 09/23/93 Date released : 09/24/93
Date analyzed : 09/24/93

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 Anamatrix I.D. : 9309296-01
Matrix : SOIL Analyst : *HE*
Date sampled : 09/23/93 Supervisor : *CM*
Date extracted : 09/23/93 Date Released : 09/24/93
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 LIMITS
Motor Oil	300	43	310	89%	300	86%	3%	48-114%

* Quality control limits established by Anamatrix Laboratories.

RPD - 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 : 09/23/93
Date analyzed : 09/24/93

Anamatrix I.D. : MS23H1W9
Analyst : *AE*
Supervisor : *CM*
Date Released : 09/24/93

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

* Quality control established by Anamatrix Laboratories.

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

4509296
11.20
CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1049.16	Field Logbook No.:	Date: 9/23/93	Serial No.: 11192
Project Name: Beach St	Project Location: Oakland		

Sampler (Signature): *Walter Rodini* ANALYSES
 Sampers: *WEM*

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS
						EPA 601	TRPA	TRPA	TRPA	TRPA	B/E/C			
① B27400	9/23/93	—		1	SOH	X	X	X	X	X	X			24-hour TAT Results to Jennifer Beatty

RELINQUISHED BY: <i>Walter Rodini</i>	DATE: 9/23/93	TIME: 10:00	RECEIVED BY: <i>Tommy S. Carigosa</i>	DATE: 9/23/93	TIME: 10:00
RELINQUISHED BY: <i>Tommy S. Carigosa</i>	DATE: 9/23/93	TIME: 11:10	RECEIVED BY: <i>Carin Holman</i>	DATE: 9-23-93	TIME: 11:10
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <i>Anamatrix</i>
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Inchcape Testing Services

Anamatrix 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

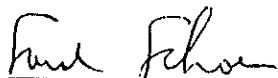
The following samples were received at Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.


 Sarah Schoen, Ph.D.
 Laboratory Director

9-27-93
 Date

SEP 28 1993

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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

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	TPHgBTEX

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.

Cheryl Baalman
Department Supervisor

9/25/93
Date

(R. Patel)
Chemist

09/27/93
Date

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

Anamatrix W.O.: 9309309
Matrix : SOIL
Date Sampled : 09/23/93

Project Number : 1649.16
Date Released : 09/25/93

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#
(mg/Kg)	B28-10.0	SS35-5.0	SS36-6.0	SW37-4.0	BS2401E2
COMPOUNDS	-01	-02	-03	-04	BLANK
Benzene	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	0.022	ND
Total Xylenes	0.005	ND	0.013	ND	0.081
TPH as Gasoline	0.5	ND	ND	ND	3.1
% Surrogate Recovery	107%	95%	79%	79%	101%
Instrument I.D.	HP4	HP4	HP4	HP4	HP4
Date Analyzed	09/24/93	09/24/93	09/24/93	09/24/93	09/24/93
RLMF	1	1	1	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.

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

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

CR Patel 09/27/93
Analyst Date

Cheryl Bealmer 9/25/93
Supervisor Date

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

Anamatrix W.O.: 9309309
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

Anamatrix 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.

Anamatrix control limits for recovery of surrogate C25 are 30-130%.

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

Reggie Davison 9/27/93
Analyst Date

Cheryl Beckman 9/27/93
Supervisor Date

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

Anamatrix W.O.: 9309309
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

Anamatrix 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	09/24/93	10	86	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 C22-C36 is determined by GCFID following sample extraction by EPA Method 3550.

Anamatrix control limits for recovery of surrogate C25 are 30-130%.

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

Peggie Davison 9/27/93
Analyst Date

Cheryl Baseman 9/27/93
Supervisor Date

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 : SOIL
 Date Sampled : 09/23/93
 Date Analyzed : 09/24/93

Anametrix I.D. : 09309-03MS
 Analyst : *APF*
 Supervisor : *CB*
 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	% REC LIMITS
BENZENE	0.040	0.000	0.038	95%	0.048	120%	23%	45-139
TOLUENE	0.040	0.000	0.037	93%	0.045	113%	20%	51-138
ETHYLBENZENE	0.040	0.000	0.036	90%	0.043	108%	18%	48-146
TOTAL XYLENES	0.040	0.000	0.033	83%	0.040	100%	19%	50-139
p-BFB				78%		72%		53-147

* 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 : 09/24/93

Anamatrix I.D. : MS2401E3
 Analyst : *ARC*
 Supervisor : *CB*
 Date Released : 09/25/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.042	105%	52-133
TOLUENE	0.040	0.044	110%	57-136
ETHYLBENZENE	0.040	0.045	113%	56-139
TOTAL XYLENES	0.040	0.045	113%	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
 Matrix : SOIL
 Date Sampled : N/A
 Date Extracted: 09/23/93
 Date Analyzed : 09/23/93

Anamatrix I.D. : MS23H1F1
 Analyst : ARE
 Supervisor : CS
 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

*Limits established by Anamatrix, 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 Meltmoe 9/24/93
Department Supervisor Date

K. E. Mumford 9/24/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309309
Matrix : SOIL Analyst : *HE*
Date sampled : 09/23/93 Supervisor : *Ch*
Date extracted: 09/23/93 Date released : 09/24/93
Date analyzed : 09/24/93

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 - 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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/23/93
Date analyzed : 09/24/93

Anamatrix I.D. : MS23H1W9
Analyst :
Supervisor : *HE*
Date Released : 09/24/93

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

* Quality control established by Anamatrix Laboratories.

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



PROJECT NUMBER		PROJECT NAME				Number of Cntrns	Type of Containers	Type of Analysis					Condition of Samples	Initial
16191/6		Beach St.						TP/Agas TP/Hexose TP/PAH BTEX TRPA						
Send Report Attention of:		Report Due		Verbal Due		Sample Number	Date	Time	Comp	Matrix	Station Location			
Jennifer Beatty		9/24/93		/ /										
①	B28-10.0	9/23/93			Soil	1								
②	SS35-5.0				↓	1							} for William Madson 9/24/93	
③	SS36-6.0				↓	1								
④	SN37-4.0				↓	1								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks: 24-Hour TAT						
[Signature]		9/23/93 3:35		[Signature]		9-23-93 1535								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time								
[Signature]		9/23/93		[Signature]				COMPANY: LEUMER-FRICKE						
Relinquished by: (Signature)		Date/Time		Received by Lab:		Date/Time		ADDRESS: 1900 Powell St. Emeryville. 94608						
[Signature]		9/23/93		[Signature]		9/23/93 16:55		PHONE: 510/572-4520 FAX:						



Inchcape Testing Services

Anamatrix 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 # : 9309205
 Date Received : 09/16/93
 Project ID : 1649.16
 Purchase Order: N/A

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

09-20-93

Date

SEP 22 1993

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

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	SOIL	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

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

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.

Cheryl Balmer 9/20/93
Department Supervisor Date

Charles M. Burch 9.20.93
Chemist Date

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

Anamatrix W.O.: 9309205
Matrix : SOIL
Date Sampled : 09/16/93

Project Number : 1649.16
Date Released : 09/20/93

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	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND
% Surrogate Recovery	90%	72%	91%	99%	105%
Instrument I.D.	HP21	HP4	HP21	HP4	HP21
Date Analyzed	09/17/93	09/17/93	09/17/93	09/16/93	09/17/93
RLMF	1	1	1	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.

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

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

Charles Burch 9.20.93
Analyst Date

Cheyl Balmer 9/20/93
Supervisor Date

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

Anamatrix W.O.: 9309205
 Matrix : SOIL
 Date Sampled : 09/16/93
 Date Extracted: 09/16/93

Project Number : 1649.16
 Date Released : 09/20/93
 Instrument I.D.: HP19

Anamatrix 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.

Charles M. Burch 9/20/93
 Analyst Date

Cheryl Baerman 9/20/93
 Supervisor Date

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

Anamatrix W.O.: 9309205
 Matrix : SOIL
 Date Sampled : 09/16/93
 Date Extracted: 09/16/93

Project Number : 1649.16
 Date Released : 09/20/93
 Instrument I.D.: HP19

Anamatrix 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 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.

Charles Burch 9.20.93
 Analyst Date

Charles Baumer 9/20/93
 Supervisor Date

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

Sample I.D. : 1649.16 SE21-6.5
 Matrix : SOIL
 Date Sampled : 09/16/93
 Date Analyzed : 09/17/93

Anamatrix I.D. : 09205-01
 Analyst : *OMB*
 Supervisor : *CS*
 Date Released : 09/20/93
 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	% REC LIMITS
BENZENE	0.040	0.000	0.043	108%	0.042	105%	-2%	45-139
TOLUENE	0.040	0.000	0.044	110%	0.041	102%	-7%	51-138
ETHYLBENZENE	0.040	0.000	0.044	110%	0.040	100%	-10%	48-146
TOTAL XYLENES	0.040	0.000	0.044	110%	0.041	102%	-7%	50-139
p-BFB				92%		81%		53-147

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MS1701E3
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/20/93
 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.038	95%	52-133
TOLUENE	0.040	0.039	98%	57-136
ETHYLBENZENE	0.040	0.039	98%	56-139
TOTAL-XYLENES	0.040	0.041	102%	56-141
P-BFB			105%	53-147

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MS1601E3
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/20/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.036	90%	52-133
TOLUENE	0.040	0.044	110%	57-136
ETHYLBENZENE	0.040	0.044	110%	56-139
TOTAL-XYLENES	0.040	0.043	108%	56-141
P-BFB			96%	53-147

* Quality control limit established by Anamatrix, 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: 09/16/93
 Date Analyzed : 09/16/93

Anamatrix I.D. : MS16H1F1
 Analyst : *Cmb*
 Supervisor : *CS*
 Date Released : 09/20/93
 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

*Limits established by Anamatrix, Inc.

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

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

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

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.

Cathy Miltner 9/20/93
Department Supervisor Date

H. E. Smith 9/20/93
Chemist Date

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

Project # : 1649.16	Anamatrix I.D. : 9309205
Matrix : SOIL	Analyst : <i>HE</i>
Date sampled : 09/16/93	Supervisor : <i>CP</i>
Date extracted: 09/16/93	Date released : 09/17/93
Date analyzed : 09/17/93	

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

ND - Not detected above the reporting limit for the method.
 RP - 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	Anamatrix I.D.	: MS16H1W9
Matrix	: SOIL	Analyst	: <i>HC</i>
Date sampled	: N/A	Supervisor	: <i>On</i>
Date extracted	: 09/16/93	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%

* Quality control established by Anamatrix Laboratories.

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16 Field Logbook No.: Date: 9/16/93 Serial No.: 11151
 Project Name: Beach St. Project Location: Oakland

Sampler (Signature): *Chellie Wilkerson* ANALYSES Samplers: WEM

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES							HOLD	RUSH	REMARKS
						EPA 601	THAL	BTEX	TPHd	TPHO	TRPH				
① SE21-6.5	9/16/93	1		1	soil	x	x	x	x	x		x		24-Hour TAT Results to Jennifer Beatty	
② SE22-5.0	↓	1		1	↓	x	x	x	x	x		x			
③ SE23-7.5	↓	1		1	↓	x	x	x	x	x		x			

RELINQUISHED BY: <i>Chellie Wilkerson</i>	DATE: 9/16/93	TIME: 3:40	RECEIVED BY: <i>Bonny A. Canyon</i>	DATE: 9/16/93	TIME: 1540
RELINQUISHED BY: <i>Bonny A. Canyon</i>	DATE: 9/16/93	TIME: 1652	RECEIVED BY: <i>Wendy</i>	DATE: 9/16/93	TIME: 1652
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE
 1900 Powell Street, 12th Floor
 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory:
Anacnetrix



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 # : 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 *for*
 Sarah Schoen, Ph.D.
 Laboratory Director

09/25/93
 Date

SEP 22 1993

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

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

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

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.

Charles Burch 9/17/93
Department Supervisor Date

Charles Burch 9/17/93
Chemist Date

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

Anamatrix W.O.: 9309179
Matrix : SOIL
Date Sampled : 09/15/93

Project Number : 1649.16
Date Released : 09/17/93

Reporting Limit	Sample I.D.#	Sample I.D.#
	SE19-4.0	BS1502E2
COMPOUNDS (mg/Kg)	-01	BLANK
Benzene	0.005	ND
Toluene	0.005	ND
Ethylbenzene	0.005	0.008
Total Xylenes	0.005	0.030
TPH as Gasoline	0.5	0.6
% Surrogate Recovery	75%	92%
Instrument I.D.	HP4	HP4
Date Analyzed	09/15/93	09/15/93
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 GC/FID 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.

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

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

Charles M. Burch 9.17.93
Analyst Date

Carol Bauman 9.17.93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Charlton Burch 9-17-93
Analyst Date

Cheryl Beckman 9/17/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Charles Burch 9/17/93
 Analyst Date

Cheryl Beckman 9/17/93
 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
 Date Sampled : N/A
 Date Analyzed : 09/15/93

Anamatrix I.D. : MS1502E1
 Analyst : *CSB*
 Supervisor : *CS*
 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

* Quality control established by Anamatrix, 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: 09/15/93
 Date Analyzed : 09/15/93

Anamatrix I.D. : MS15H1F1
 Analyst : *ems*
 Supervisor : *cs*
 Date Released : 09/17/93
 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	93	74%	48-113
SURROGATE			82%	30-130

*Limits established by Anamatrix, Inc.

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

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	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309179- 1	SE19-4.0	SOIL	09/15/93	5520EF

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

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.

William Timmerman 09.17.93
Department Supervisor Date

RH R LIL 09/17/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309179
Matrix : SOIL Analyst : *ZW*
Date sampled : 09/15/93 Supervisor : *CP*
Date extracted: 09/15/93 Date released : 09/17/93
Date analyzed : 09/16/93

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9309179-01	SE19-4.0	30	90
BS15H1W9	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, SE19-4.0MS, MD Anametrix I.D. : 9309179-01
Matrix : SOIL Analyst : *DL*
Date sampled : 09/15/93 Supervisor : *DL*
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
Motor Oil	300	90	440	117%	410	107%	9%	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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/15/93
Date analyzed : 09/16/93

Anamatrix I.D. : MS15H1W9
Analyst : *[Signature]*
Supervisor : *[Signature]*
Date Released : 09/17/93

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

* Quality control established by Anamatrix Laboratories.

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <i>1649.16</i>	Field Logbook No.:	Date: <i>9/15/93</i>	Serial No.: <i>11149</i>
Project Name: <i>Beach Street</i>	Project Location: <i>Oakland</i>		

Sampler (Signature): <i>William Modem</i>						ANALYSES						Samplers: <i>WEM</i>			
SAMPLES						EPA 801	TRP43	BTEX	THM	TPH	TRP4	HOLD	RUSH	REMARKS	
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE										
<i>① SE19-4.0</i>	<i>9/15/93</i>	<i>1</i>		<i>1</i>	<i>Soil</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>X</i>	<i>24-Hour TAT</i>		
<i>② SE20-8.5</i>	<i>↓</i>	<i>1</i>		<i>1</i>	<i>↓</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>Results to Jennifer Beatty</i>		
													<i>for William Modem 9/15/93 CVR</i>		

RELINQUISHED BY: (Signature) <i>William Modem</i>	DATE <i>9/15/93</i>	TIME <i>3:55</i>	RECEIVED BY: (Signature) <i>Benny S. Canyon</i>	DATE <i>9/16/93</i>	TIME <i>15:55</i>
RELINQUISHED BY: (Signature) <i>Benny S. Canyon</i>	DATE <i>9/15/93</i>	TIME <i>17:05</i>	RECEIVED BY: (Signature) <i>Don [Signature]</i>	DATE <i>9/15/93</i>	TIME <i>17:05</i>
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <i>Ana metrix</i>
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Inchcape Testing Services

Anamatrix 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 Anamatrix, Inc. for analysis :

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen for
 Sarah Schoen, Ph.D.
 Laboratory Director

09/16/93
 Date

SEP 17 1993

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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 : 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

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 : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Balmer
Department Supervisor

9/15/93
Date

Lena Shor 9/15/93
Chemist Date

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

Anamatrix 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
COMPOUNDS (mg/Kg)	-01	-02	BLANK
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
TPH as Gasoline	0.5	ND	ND
% Surrogate Recovery	112%	110%	101%
Instrument I.D.	HP21	HP21	HP21
Date Analyzed	09/14/93	09/14/93	09/14/93
RLMF	1	1	1

- 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.

Anamatrix 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 9/15/93
Analyst Date

Charles Balmer 9/15/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Lucas Sher 9/15/93
Analyst Date

Cheryl Balmer 9/15/93
Supervisor Date

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	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 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 9/15/93
Analyst Date

Cheryl Balmer 9/15/93
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

Anamatrix I.D. : 09154-01
 Analyst : IS
 Supervisor : CB
 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	% REC LIMITS
BENZENE	0.040	0.000	0.035	88%	0.035	88%	0%	45-139
TOLUENE	0.040	0.000	0.037	93%	0.036	90%	-3%	51-138
ETHYLBENZENE	0.040	0.000	0.036	90%	0.036	90%	0%	48-146
TOTAL XYLENES	0.040	0.000	0.038	95%	0.038	95%	0%	50-139
p-BFB				106%		109%		53-147

* Quality control limit established by Anamatrix, 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 : 09/14/93

Anamatrix I.D. : MS1401E3
 Analyst : IS
 Supervisor : CS
 Date Released : 09/15/93
 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC. LIMITS
BENZENE	0.020	0.019	95%	52-133
TOLUENE	0.020	0.019	95%	57-136
ETHYLBENZENE	0.020	0.019	95%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			108%	53-147

* Quality control limit established by Anamatrix, 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: 09/13/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : MS13H2F1
 Analyst : IS
 Supervisor : UA
 Date Released : 09/15/93
 Instrument I.D.: HP19

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

*Limits established by Anamatrix, 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
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 Mittenberger 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	Anamatrix I.D. : 9309154
Matrix : SOIL	Analyst : <i>EK</i>
Date sampled : 09/13/93	Supervisor : <i>cm</i>
Date extracted: 09/13/93	Date released : 09/15/93
Date analyzed : 09/14/93	

Workorder #	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 - 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.



Inchcape Testing Services

Anamatrix 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 # : 9309217
 Date Received : 09/17/93
 Project ID : 1649.16
 Purchase Order: N/A

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen
 Sarah Schoen, Ph.D.
 Laboratory Director

09/23/93
 Date

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 LEVINE-FRICKE

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

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	TPHd
9309217- 5	SS28-13	SOIL	09/17/93	TPHd
9309217- 6	SS29-4.0	SOIL	09/17/93	TPHd
9309217- 7	SE30-4.5	SOIL	09/17/93	TPHd
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.

Cheryl Beelman 9/22/93
Department Supervisor Date

Charles M Burch 9.22.93
Chemist Date

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

Anamatrix W.O.: 9309217
Matrix : SOIL
Date Sampled : 09/17/93

Project Number : 1649.16
Date Released : 09/22/93

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#
(mg/Kg)	SN24-5.0	SW25-15	SW26-4.0	SW27-13	SS28-13
COMPOUNDS	-01	-02	-03	-04	-05
Benzene	0.005	ND	ND	0.080	ND
Toluene	0.005	ND	ND	0.12	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	0.28	ND
TPH as Gasoline	0.5	ND	420	23	ND
% Surrogate Recovery	99%	107%	97%	106%	115%
Instrument I.D.	HP12	HP12	HP12	HP4	HP4
Date Analyzed	09/20/93	09/20/93	09/20/93	09/20/93	09/20/93
RLMF	1	250	10	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 GC/FID 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.

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

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

Charles Burch 9.22.93
Analyst Date

Cheryl Balmer 9/22/93
Supervisor Date

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

Anamatrix W.O.: 9309217
Matrix : SOIL
Date Sampled : 09/17/93

Project Number : 1649.16
Date Released : 09/22/93

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#
	SS29-4.0	SE30-4.5	BS2001E2	BS2001E2
COMPOUNDS (mg/Kg)	-06	-07	BLANK	BLANK
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND
% Surrogate Recovery	104%	85%	97%	94%
Instrument I.D.	HP4	HP4	HP4	HP12
Date Analyzed	09/20/93	09/20/93	09/20/93	09/20/93
RLMF	1	1	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.

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

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

Charles Burch 9-22-93
Analyst Date

Cheryl Bulmer 9/22/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
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	1700	106%
9309217-03	SW26-4.0	09/18/93	50	58	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	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.

Charles M. Burch 9.22.93
Analyst Date

Cheyl Bulmer 9/22/93
Supervisor 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.

Charles M. Burch 9-22-93
Analyst Date

Cheryl Baclmer 9/22/93
Supervisor Date

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

Sample I.D. : 1649.16 SW27-13
 Matrix : SOIL
 Date Sampled : 09/17/93
 Date Analyzed : 09/20/93

Anamatrix I.D. : 09217-04
 Analyst : *CMB*
 Supervisor : *CS*
 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	% REC LIMITS
BENZENE	0.040	0.000	0.037	93%	0.041	102%	10%	45-139
TOLUENE	0.040	0.000	0.043	108%	0.043	108%	0%	51-138
ETHYLBENZENE	0.040	0.000	0.043	108%	0.043	108%	0%	48-146
TOTAL XYLENES	0.040	0.000	0.043	108%	0.045	113%	5%	50-139
p-BFB				103%		100%		53-147

* Quality control limit established by Anamatrix, 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
 Matrix : SOIL
 Date Sampled : 09/17/93
 Date Analyzed : 09/20/93

Anamatrix I.D. : 09217-01
 Analyst : *CMB*
 Supervisor : *CS*
 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	0.040	0.000	0.045	113%	0.040	100%	-12%	45-139
TOLUENE	0.040	0.000	0.043	108%	0.038	95%	-12%	51-138
ETHYLBENZENE	0.040	0.000	0.046	115%	0.038	95%	-19%	48-146
TOTAL XYLENES	0.040	0.000	0.041	102%	0.037	93%	-10%	50-139
p-BFB				70%		83%		53-147

* Quality control limit established by Anamatrix, 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
 Matrix : SOIL
 Date Sampled : 09/17/93
 Date Extracted: 09/17/93
 Date Analyzed : 09/18/93

Anamatrix I.D. : 09217-07
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/22/93
 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	104	83%	96	77%	-8%	32-143
SURROGATE				80%		79%		30-130

* Quality control limit established by Anamatrix, 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 : 09/20/93

Anamatrix I.D. : MS2001E3
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/22/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.037	93%	52-133
TOLUENE	0.040	0.045	113%	57-136
ETHYLBENZENE	0.040	0.044	110%	56-139
TOTAL-XYLENES	0.040	0.044	110%	56-141
P-BFB			110%	53-147

* Quality control limit established by Anamatrix, 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 : 09/20/93

Anamatrix I.D. : MS2001E3
 Analyst : *CMB*
 Supervisor : *CZ*
 Date Released : 09/22/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.042	105%	52-133
TOLUENE	0.040	0.043	108%	57-136
ETHYLBENZENE	0.040	0.046	115%	56-139
TOTAL-XYLENES	0.040	0.042	105%	56-141
P-BFB			101%	53-147

* Quality control limit established by Anamatrix, 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: 09/17/93
 Date Analyzed : 09/17/93

Anamatrix I.D. : MS17H1F1
 Analyst : *CMB*
 Supervisor : *S*
 Date Released : 09/22/93
 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

*Limits established by Anamatrix, 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 Mittenberg 9/21/93
Department Supervisor Date

H. Emanuel 8/20/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9309217
Matrix : SOIL Analyst :
Date sampled : 09/17/93 Supervisor : *[Signature]*
Date extracted: 09/17/93 Date released : 09/20/93
Date analyzed : 09/20/93

Workorder #	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

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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date sampled : N/A
Date extracted : 09/17/93
Date analyzed : 09/20/93

Anamatrix I.D. : MS17H1W9
Analyst : *SW*
Supervisor : *cm*
Date Released : 09/20/93

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
Motor Oil	300	230	77%	71-119%

* Quality control established by Anamatrix Laboratories.

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



PROJECT NUMBER		PROJECT NAME				Number of Cntrns	Type of Containers	Type of Analysis					Condition of Samples	Initial
1649.16		Beach St.						TPHggs TPHdiesel TPHoil BTEX TRPH						
Send Report Attention of:			Report Due	Verbal Due		Sample Number	Date	Time	Comp	Matrix	Station Location			
Jennifer Beatty			9/20/93	/ /										
①	SN24-5.0	9/17/93			soil	1								
②	SW25-15					1								
③	SW26-4.0					1								
④	SW27-13					1								
⑤	SS28-13					1								
⑥	SS29-4.0					1								
⑦	SE30-4.5					1								

Relinquished by: (Signature) *[Signature]* Date/Time 9/17/93 2:00
 Received by: (Signature) *[Signature]* Date/Time 9/17/93 2:00

Relinquished by: (Signature) *[Signature]* Date/Time 9/17/93 2:00
 Received by: (Signature) *[Signature]* Date/Time

Relinquished by: (Signature) *[Signature]* Date/Time
 Received by Lab: *[Signature]* Date/Time 9/17/93 15:05

Remarks: 24-Hour TAT

COMPANY: Levine Fricke
 ADDRESS: 1900 Powell St. Emeryville
 PHONE: 510 510652-4500 FAX:



Inchcape Testing Services

Anamatrix 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 # : 9309196
 Date Received : 09/16/93
 Project ID : 1649.16
 Purchase Order: N/A

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

ANAMATRIX 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 Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen

Sarah Schoen, Ph.D.
 Laboratory Director

09-21-93
 Date

SEP 22 1993

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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	TPHgBTEX
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.

Cheryl Balmer 9/20/93
Department Supervisor Date

Charles Bunch 9.20.93
Chemist Date

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

Anamatrix 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.# B24-14.5	Sample I.D.# BS1601E2	Sample I.D.# BS1701E2
COMPOUNDS (mg/Kg)	-01	-02	BLANK	BLANK
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	0.015	ND	ND
Total Xylenes	0.005	0.046	ND	ND
TPH as Gasoline	0.5	11	ND	ND
% Surrogate Recovery	107%	108%	99%	105%
Instrument I.D.	HP21	HP4	HP4	HP21
Date Analyzed	09/17/93	09/17/93	09/16/93	09/17/93
RLMF	2.5	1	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 GC/FID 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.

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

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

Charles M. Burch 9.20.93
Analyst Date

Cheryl Balmer 9/20/93
Supervisor Date

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

Anamatrix W.O.: 9309196
Matrix : SOIL
Date Sampled : 09/16/93
Date Extracted: 09/16/93

Project Number : 1649.16
Date Released : 09/17/93
Instrument I.D.: HP19

Anamatrix 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	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 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 Burch 9.20.93
Analyst Date

Cheryl Palmer 9/20/93
Supervisor Date

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

Anamatrix W.O.: 9309196
Matrix : SOIL
Date Sampled : 09/16/93
Date Extracted: 09/16/93

Project Number : 1649.16
Date Released : 09/17/93
Instrument I.D.: HP19

Anamatrix 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.

Charles Burch 9.20.93
Analyst Date

Cheryl Balman 9/20/93
Supervisor Date

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

Sample I.D. : 1649.16 B24-14.5
 Matrix : SOIL
 Date Sampled : 09/16/93
 Date Extracted: 09/16/93
 Date Analyzed : 09/16/93

Anamatrix I.D. : 09196-02
 Analyst : *CMB*
 Supervisor : *US*
 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

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MS1601E3
 Analyst : *CMB*
 Supervisor : *CS*
 Date Released : 09/20/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.036	90%	52-133
TOLUENE	0.040	0.044	110%	57-136
ETHYLBENZENE	0.040	0.044	110%	56-139
TOTAL-XYLENES	0.040	0.043	108%	56-141
P-BFB			96%	53-147

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MS1701E3
 Analyst : CMB
 Supervisor : *CS*
 Date Released : 09/20/93
 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.040	0.038	95%	52-133
TOLUENE	0.040	0.039	98%	57-136
ETHYLBENZENE	0.040	0.039	98%	56-139
TOTAL-XYLENES	0.040	0.041	102%	56-141
P-BFB			105%	53-147

* Quality control limit established by Anamatrix, 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: 09/16/93
 Date Analyzed : 09/16/93

Anamatrix I.D. : MS16H1F1
 Analyst : *omb*
 Supervisor : *cb*
 Date Released : 09/20/93
 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

*Limits established by Anamatrix, 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.

W. H. Meeber, 9/17/93
Department/Supervisor Date

R. H. B. L. L. 9/17/93
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 : 09/16/93
 Date extracted: 09/16/93
 Date analyzed : 09/17/93

Anamatrix I.D. : 9309196
 Analyst : *BW*
 Supervisor : *cm*
 Date released : 09/17/93

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

Sample I.D. : 1649.16, B24-14.5MS, MD Anametrix I.D. : 9309196-02
Matrix : SOIL Analyst : *JD*
Date sampled : 09/16/93 Supervisor : *CM*
Date extracted : 09/16/93 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%

* 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.	: MS16H1W9
Matrix	: SOIL	Analyst	: <i>FW</i>
Date sampled	: N/A	Supervisor	: <i>en</i>
Date extracted	: 09/16/93	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%

* 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.: <u>1649.16</u>	Field Logbook No.:	Date: <u>9/16/93</u>	Serial No.: <u>11150</u>
Project Name: <u>Beach Street</u>	Project Location: <u>Oakland</u>		

SAMPLES						ANALYSES							SAMPLERS:	REMARKS
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 801	TRP/2010	BTEX	TRP/4	TRP/10	TRP/PH	HOLD	RUSH	
① B23-14	9/16/93	/		1	Soil	X	X	X	X	X		X		24-Hour TAT
② B24-14.5	9/16/93	/		1	↓	X	X	X	X	X		X		
③ B25-16	9/16/93			1							X			

RELINQUISHED BY: (Signature) <u>William Madson</u>	DATE: <u>9/16/93</u>	TIME: <u>10:00</u>	RECEIVED BY: (Signature) <u>Sammy S. Canizales</u>	DATE: <u>9/16/93</u>	TIME: <u>10:00</u>
RELINQUISHED BY: (Signature) <u>Sammy S. Canizales</u>	DATE: <u>9/16/93</u>	TIME: <u>1:05Z</u>	RECEIVED BY: (Signature) <u>Calvin Robinson</u>	DATE: <u>9-16-93</u>	TIME: <u>1:05Z</u>
RELINQUISHED BY: (Signature) _____	DATE: _____	TIME: _____	RECEIVED BY: (Signature) _____	DATE: _____	TIME: _____
METHOD OF SHIPMENT: _____	DATE: _____	TIME: _____	LAB COMMENTS: _____		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <u>Anametrix</u>
--	--



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 # : 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

Sarah Schoen, Ph.D.
Laboratory Director

10/18/93

Date

COPY

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.

Cheryl Balmer 10/15/93
Department Supervisor Date

Peggie Dawson 10/15/93
Chemist Date

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

Anamatrix 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 I.D.# SW42-5
COMPOUNDS (mg/Kg)	-01	-02	-03	-04	-05
Benzene	0.005	ND	ND	ND	ND
Toluene	0.005	0.007	ND	0.011	ND
Ethylbenzene	0.005	0.010	ND	0.012	0.044
Total Xylenes	0.005	0.017	0.036	0.025	0.11
TPH as Gasoline	0.5	ND	0.51	1.4	7.6
% Surrogate Recovery	105%	118%	100%	110%	117%
Instrument I.D.	HP12	HP12	HP12	HP12	HP12
Date Analyzed	10/12/13	10/12/13	10/12/13	10/13/13	10/12/13
RLMF	1	1	1	2.5	100

- 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.

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

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

Reggie Dawson 10/15/93
Analyst Date

Cheryl Balmer 10/15/93
Supervisor Date

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

Anamatrix W.O.: 9310134
Matrix : SOIL
Date Sampled : 10/12/93

Project Number : 1649.16
Date Released : 10/15/93

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#
	SW43-10	BO1201E2	BO1301E3
COMPOUNDS (mg/Kg)	-06	BLANK	BLANK
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	1.7	ND
Total Xylenes	0.005	5.6	ND
TPH as Gasoline	0.5	100	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

- 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.

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

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

Reggie Dawson 10/15/93
Analyst Date

Cheryl Balmer 10/15/93
Supervisor Date

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

Anamatrix W.O.: 9310134
Matrix : SOIL
Date Sampled : 10/12/93
Date Extracted: 10/12/93

Project Number : 1649.21
Date Released : 10/15/93
Instrument I.D.: HP9

Anamatrix 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.

Reggie Dawson 10/15/93
Analyst Date

Cheryl Balmer 10/15/93
Supervisor Date

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

Anamatrix W.O.: 9310134
 Matrix : SOIL
 Date Sampled : 10/12/93
 Date Extracted: 10/12/93

Project Number : 1649.21
 Date Released : 10/15/93
 Instrument I.D.: HP9

Anamatrix 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%
9310134-02	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	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 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.

Peggie Dawson 10/15/93
 Analyst Date

Charles Balmer 10/15/93
 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
 Date Sampled : N/A
 Date Analyzed : 10/13/93

Anamatrix I.D. : MO1201E3
 Analyst : RD
 Supervisor : CS
 Date Released : 10/15/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.022	110%	52-133
TOLUENE	0.020	0.025	125%	57-136
ETHYLBENZENE	0.020	0.027	135%	56-139
TOTAL-XYLENES	0.020	0.027	135%	56-141
SURROGATE			112%	53-147

* Quality control limit established by Anamatrix, 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

Anamatrix I.D. : MO1301E3
 Analyst : RD
 Supervisor : *CS*
 Date Released : 10/15/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.022	110%	52-133
TOLUENE	0.020	0.022	110%	57-136
ETHYLBENZENE	0.020	0.025	125%	56-139
TOTAL-XYLENES	0.020	0.023	115%	56-141
SURROGATE			95%	53-147

* Quality control limit established by Anamatrix, 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: 10/12/93
 Date Analyzed : 10/12/93

Anamatrix I.D. : MO12H1F1
 Analyst : RD
 Supervisor : CS
 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

*Limits established by Anamatrix, 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
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.

Cathy Miltner 10/18/93
Department Supervisor Date

J. Jennifer 10/18/93
Chemist Date

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

Project # : 1649.16 Anamatrix I.D. : 9310134
Matrix : SOIL Analyst : HE
Date sampled : 10/12/93 Supervisor : CW
Date extracted: 10/12/93 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
BO12H1W9	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, SW39-10MS, MD Anamatrix I.D. : 9310134-02
Matrix : SOIL Analyst : HE
Date sampled : 10/12/93 Supervisor : CW
Date extracted : 10/12/93 Date Released : 10/13/93
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%

* Quality control limits established by Anamatrix 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	Anamatrix I.D.	: MO12H1W9
Matrix	: SOIL	Analyst	: HE
Date sampled	: N/A	Supervisor	: <i>CW</i>
Date extracted	: 10/12/93	Date Released	: 10/13/93
Date analyzed	: 10/13/93		

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

* Quality control established by Anamatrix Laboratories.

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



Inchcape Testing Services

Anamatrix 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

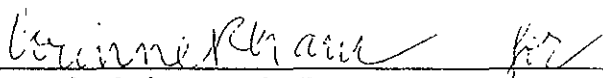
The following samples were received at Anamatrix, Inc. for analysis :

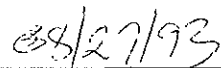
ANAMATRIX ID	CLIENT SAMPLE ID
9308360- 1	FS1-1.5
9308360- 2	FS2-1.5
9308360- 3	FS3-1.5
9308360- 4	FS4-1.5
9308360- 5	FS5-1.5

This report consists of 15 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.


 Sarah Schoen, Ph.D.
 Laboratory Director


 Date

AUG 30 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	TPHgBTEX
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.

Cheryl Balmer 8/26/93
Department Supervisor Date

Jenna Shor 8/26/93
Chemist Date

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

Anamatrix 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	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND
% Surrogate Recovery	93%	95%	116%	103%	99%
Instrument I.D.	HP4	HP4	HP12	HP12	HP12
Date Analyzed	08/25/93	08/25/93	08/25/93	08/25/93	08/25/93
RLMF	1	1	1	1	1

- 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.

Anamatrix 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

Cheryl Baumer 8/26/93
Supervisor Date

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

Anamatrix W.O.: 9308360
Matrix : SOIL
Date Sampled : N/A

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BG2501E2 BLANK	Sample I.D.# BG2501E2 BLANK
Benzene	0.005	ND	ND
Toluene	0.005	ND	ND
Ethylbenzene	0.005	ND	ND
Total Xylenes	0.005	ND	ND
TPH as Gasoline	0.5	ND	ND
% Surrogate Recovery		103%	103%
Instrument I.D.		HP12	HP4
Date Analyzed		08/25/93	08/25/93
RLMF		1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GC/FID 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.

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

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

Deena Shor 8/26/93
Analyst Date

Cheryl Balmer 8/26/93
Supervisor Date

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

Anamatrix 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

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9308360-01	FS1-1.5	08/24/93	10	ND	92%
9308360-02	FS2-1.5	08/24/93	10	ND	92%
9308360-03	FS3-1.5	08/24/93	10	ND	88%
9308360-04	FS4-1.5	08/25/93	10	ND	91%
9308360-05	FS5-1.5	08/25/93	10	ND	94%
BG24H1F1	METHOD BLANK	08/24/93	10	ND	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.

Reggie Dawson 8/26/93
 Analyst Date

Cheryl Balmer 8/26/93
 Supervisor Date

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	FS1-1.5	08/24/93	10	ND	92%
9308360-02	FS2-1.5	08/24/93	10	ND	92%
9308360-03	FS3-1.5	08/24/93	10	ND	88%
9308360-04	FS4-1.5	08/25/93	10	ND	91%
9308360-05	FS5-1.5	08/25/93	10	ND	94%
BG24H1F1	METHOD BLANK	08/24/93	10	ND	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.

Reggie Dawson 8/26/93
Analyst Date

Charles Balmer 8/26/93
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
 Date Sampled : N/A
 Date Analyzed : 08/25/93

Anamatrix I.D. : MG2501E3
 Analyst : IS
 Supervisor : *JS*
 Date Released : 08/26/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.015	75%	52-133
TOLUENE	0.020	0.018	90%	57-136
ETHYLBENZENE	0.020	0.020	100%	56-139
TOTAL-XYLENES	0.020	0.021	105%	56-141
P-BFB			103%	53-147

* Quality control limit established by Anamatrix, 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 : 08/25/93

Anamatrix I.D. : MG2501E3
 Analyst : JS
 Supervisor : MS
 Date Released : 08/26/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.016	80%	52-133
TOLUENE	0.020	0.020	100%	57-136
ETHYLBENZENE	0.020	0.021	105%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			89%	53-147

* Quality control limit established by Anamatrix, Inc.

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

Sample I.D. : 1649.16 FS3-1.5
 Matrix : SOIL
 Date Sampled : 08/24/93
 Date Extracted: 08/24/93
 Date Analyzed : 08/25/93

Anamatrix I.D. : 08360-03
 Analyst : IS
 Supervisor : *CS*
 Date Released : 08/26/93
 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	120	96%	127	102%	6%	32-143
SURROGATE				88%		96%		30-130

* Quality control limit established by Anamatrix, 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: 08/24/93
 Date Analyzed : 08/24/93

Anamatrix I.D. : MG24H1F1
 Analyst : JS
 Supervisor : CS
 Date Released : 08/26/93
 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS
DIESEL	125	105	84%	48-113
SURROGATE			84%	30-130

*Limits established by Anamatrix, 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

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

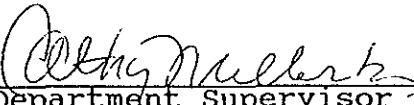
REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192


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

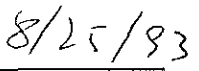
QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.


Department Supervisor


Date


Chemist


Date

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

Project # : 1649.16	Anametrix I.D. : 9308360
Matrix : SOIL	Analyst : <i>HE</i>
Date sampled : 08/24/93	Supervisor : <i>CM</i>
Date extracted: 08/24/93	Date released : 08/25/93
Date analyzed : 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

- ND - 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, FS3-1.5MS, MD Anamatrix I.D. : 9308360-03
Matrix : SOIL Analyst : *HE*
Date sampled : 08/24/93 Supervisor : *Chr*
Date extracted : 08/24/93 Date Released : 08/25/93
Date analyzed : 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
Motor Oil	300	77	337	87%	317	80%	8%	48-114%

* Quality control limits established by Anamatrix Laboratories.

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <u>1649.16</u>	Field Logbook No.:	Date: <u>8/24/93</u>	Serial No.: <u>11101</u>
Project Name: <u>M+N Warehouse</u>	Project Location: <u>Oakland</u>		

SAMPLER (Signature):					ANALYSES					SAMPLERS:		REMARKS		
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPH89	TPH81	TPH0	SM-3200	TPH	BTEX		HOLD	RUSH
① FS1-1.5	8/24/93			1	Soil	X	X	X	X	X		X		24-Hour TAT Results to Jennifer Beatty
② FS2-1.5	"			1	↓	X	X	X	X	X		X		
③ FS3-1.5	"			1		X	X	X	X	X		X		
④ FS4-1.5	"			1	↓	X	X	X	X	X		X		
⑤ FS5-1.5	"			1	↓	X	X	X	X	X		X		

RELINQUISHED BY: (Signature) <u>William Maden</u>	DATE <u>8/24/93</u>	TIME <u>12:00</u>	RECEIVED BY: (Signature) <u>Tommy S. Carrizosa</u>	DATE <u>8/24/93</u>	TIME <u>12:00</u>
RELINQUISHED BY: (Signature) <u>Tommy S. Carrizosa</u>	DATE <u>8/24/93</u>	TIME <u>12:45</u>	RECEIVED BY: (Signature) <u>Calvin Robinson</u>	DATE <u>8-24-93</u>	TIME <u>12:45</u>
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: <u>Anamatrix</u>
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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. Each 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

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

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

ANAMATRIX ID	CLIENT SAMPLE ID
9309144- 1	BTANK-WR
9309144- 2	SS158.0R
9309144- 3	SE167.0
9309144- 4	SE1710.0
9309144- 5	SE188.0

This report consists of 17 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
Laboratory Director

Date 9/16/93

SEP 20 1993

COPY

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:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9309144- 2	SS158.0R	SOIL	09/13/93	TPHd
9309144- 3	SE167.0	SOIL	09/13/93	TPHd
9309144- 4	SE1710.0	SOIL	09/13/93	TPHd
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
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Christa Baeman 9/15/93
Department Supervisor Date

Pepper Dawson 9/15/93
Chemist Date

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

Anamatrix W.O.: 9309144
Matrix : WATER
Date Sampled : 09/13/93

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

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BTANK-WR	Sample I.D.# BS1401E2
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
TPH as Gasoline	50	ND	ND
% Surrogate Recovery		97%	97%
Instrument I.D.		HP4	HP4
Date Analyzed		09/14/93	09/14/93
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 (Dilution).

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

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

Reggie Jamison 9/15/93
Analyst Date

Cheryl Balman 9/15/93
Supervisor Date

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

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

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# SS158.0R	Sample I.D.# SE167.0	Sample I.D.# SE1710.0	Sample I.D.# SE188.0	Sample I.D.# BS1401E2
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND	ND
% Surrogate Recovery		78%	74%	101%	81%	97%
Instrument I.D.		HP4	HP4	HP21	HP21	HP4
Date Analyzed		09/14/93	09/14/93	09/14/93	09/14/93	09/14/93
RLMF		1	1	1	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 (Dilution).

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

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

Roggie Dawson 9/15/93
Analyst Date

Charles B. ... 9/15/93
Supervisor Date

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

Anamatrix W.O.: 9309144
Matrix : SOIL
Date Sampled : N/A

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BS1401E2 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 Recovery		101%
Instrument I.D.		HP21
Date Analyzed		09/14/93
RLMF		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).

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

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

Reggie Davison 9/15/93
Analyst Date

Cheryl Baerner 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
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.

Reggie Dawson 9/15/93
Analyst Date

Cheyl Balman 9/15/93
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
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
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.

Reggie Dawson 9/15/93
Analyst Date

Cheryl Balmer 9/15/93
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
 Matrix : SOIL
 Date Sampled : 09/13/93
 Date Analyzed : 09/14/93

Anamatrix I.D. : 09144-03
 Analyst : *KY*
 Supervisor : *LS*
 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	0.020	0.000	0.017	85%	0.017	85%	0%	45-139
TOLUENE	0.020	0.000	0.020	100%	0.020	100%	0%	51-138
ETHYLBENZENE	0.020	0.000	0.019	95%	0.019	95%	0%	48-146
TOTAL XYLENES	0.020	0.000	0.018	90%	0.018	90%	0%	50-139
p-BFB				72%		69%		53-147

* Quality control limit established by Anamatrix, Inc.

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

Sample I.D. : 1649.16 SE188.0
 Matrix : SOIL
 Date Sampled : 09/13/93
 Date Extracted: 09/13/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : 09144-05
 Analyst : RD
 Supervisor : OS
 Date Released : 09/15/93
 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	83	66%	80	64%	-4%	32-143
SURROGATE				84%		79%		30-130

* Quality control limit established by Anamatrix, 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 : 09/14/93

Anamatrix I.D. : MS1401E1
 Analyst : RD
 Supervisor :
 Date Released : 09/15/93
 Instrument ID : HP4

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.018	90%	52-133
TOLUENE	0.020	0.022	110%	57-136
ETHYLBENZENE	0.020	0.022	110%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			95%	53-147

* Quality control limit established by Anamatrix, 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 : 09/14/93

Anamatrix I.D. : MS1401E3
 Analyst : RD
 Supervisor : *CS*
 Date Released : 09/15/93
 Instrument ID : HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.019	95%	52-133
TOLUENE	0.020	0.019	95%	57-136
ETHYLBENZENE	0.020	0.019	95%	56-139
TOTAL-XYLENES	0.020	0.020	100%	56-141
P-BFB			108%	53-147

* Quality control limit established by Anamatrix, 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: 09/13/93
 Date Analyzed : 09/13/93

Anamatrix I.D. : MS13H2F1
 Analyst : RD
 Supervisor : CS
 Date Released : 09/15/93
 Instrument I.D.: HP19

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

*Limits established by Anamatrix, 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	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.

Cathy Miltonbeign 9/15/93
Department Supervisor Date

[Signature] 9/15/93
Chemist Date

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

Project # : 1649.16	Anamatrix I.D. : 9309144
Matrix : SOIL	Analyst : <i>EK</i>
Date sampled : 09/13/93	Supervisor : <i>CM</i>
Date extracted: 09/13/93	Date released : 09/16/93
Date analyzed : 09/14/93	

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 - 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, SS158.0RMS, MD Anamatrix I.D. : 9309144-02
Matrix : SOIL Analyst : EK
Date sampled : 09/13/93 Supervisor : *cm*
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%	7%	48-114%

* Quality control limits established by Anamatrix 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
 Date extracted : 09/13/93
 Date analyzed : 09/14/93

Anamatrix I.D. : MS13H1W9
 Analyst : EK
 Supervisor : CM
 Date Released : 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 Anamatrix Laboratories.

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

18000 1509111 12¹⁵

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.16	Field Logbook No.:	Date: 9/13/93	Serial No.: 11025
Project Name: Beach St.	Project Location: Oakland		

Sampler (Signature): *Griffin Madison* ANALYSES
 Hold: RUSH
 Samplers: WEM

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS
						EPA 601	TPHE	EPA 604	BTEX	TPHE	TPHO			
① BTANK-WR	9/13/93	8:00		3	H ₂ O	X	X					X		24-Hour TAT Results to Jennifer Beatty
② SS/5-8.0R	↓	-		1	Soil	X	X	X	X	X		X		
③ SE/6-7.0	↓	-		1	↓	X	X	X	X	X		X		
④ SE/7-10.0	↓	-		1	↓	X	X	X	X	X		X		
⑤ SE/16-8.0	↓	-		1	↓	X	X	X	X	X		X		

RELINQUISHED BY: <i>Griffin Madison</i>	DATE: 9/13/93	TIME: 11:00	RECEIVED BY: <i>Benny S. Caruso</i>	DATE: 9/13/93	TIME: 11:00
RELINQUISHED BY: <i>Benny S. Caruso</i>	DATE: 9/13/93	TIME: 12:00	RECEIVED BY: <i>Josephine DeCarli</i>	DATE: 9/13/93	TIME: 12:00
RELINQUISHED BY: _____	DATE: _____	TIME: _____	RECEIVED BY: _____	DATE: _____	TIME: _____
METHOD OF SHIPMENT: _____	DATE: _____	TIME: _____	LAB COMMENTS: _____		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: Anametric
---	-------------------------------------



Inchcape Testing Services

Anametrix Laboratories

JJB

1801 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 Anametrix.

Sarah Schoen

Sarah Schoen, Ph.D.
 Laboratory Director

SEP 13 1993

09-10-93

Date

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
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.

Jayhi Memarzadeh 9/10/93
Department Supervisor Date

Janice Wabida 9/10/93
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Subject ID : 1649.16
 Sample ID : STANKB1
 Matrix : SOIL
 Date Sampled : 8/31/93
 Date Analyzed : 9/ 7/93
 Instrument ID : AD15

Anamatrix ID : 9309001-01
 Analyst : *ZS*
 Supervisor : *JM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
0061-01-5	cis-1,3-Dichloropropene	.50	ND	U
0061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16
 Sample ID : NSTANKB2
 Matrix : SOIL
 Date Sampled : 8/31/93
 Date Analyzed : 9/ 1/93
 Instrument ID : AD15

Anamatrix ID : 9309001-02
 Analyst :
 Supervisor : TM
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	4.4	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	ND	U
79-01-6	Trichloroethene	.50	4.9	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : 1649.16
Sample ID : NTANKB3
Matrix : SOIL
Date Sampled : 8/31/93
Date Analyzed : 9/ 1/93
Instrument ID : AD15

Anamatrix ID : 9309001-03
Analyst : *ry*
Supervisor : *JM*
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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 1649.1
 Sample ID : BLK901
 Matrix : SOIL
 Date Sampled : 0/ 0/ 0
 Date Analyzed : 9/ 1/93
 Instrument ID : AD15

Anamatrix ID : 15B0901H01
 Analyst : *U*
 Supervisor : *TM*
 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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Subject ID : 1649.1
Sample ID : BLK907
Matrix : SOIL
Date Sampled : 0/ 0/ 0
Date Analyzed : 9/ 7/93
Instrument ID : AD15

Anamatrix ID : 15B0907H01
Analyst : ~~TM~~
Supervisor : TM
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	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
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	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	ND	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	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
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	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	.50	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 1649.16
 Matrix : SOLID

Anamatrix ID : 9309001
 Analyst : *TM*
 Supervisor : *TM*

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

QC LIMITS

SU1 = Chlorofluorobenzene (33-134)

* Values outside of Anamatrix QC limits

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

Project/Case : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : N/A
 Date analyzed : 09/01/93

Anamatrix I.D. : WO090193
 Analyst : *ZK*
 Supervisor : *TM*
 Instrument I.D. : AD15

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	11.7	117%	34 - 128
1,1-DICHLOROETHENE	10	11.9	119%	63 - 133
trans-1,2-DICHLOROETHENE	10	11.9	119%	55 - 145
1,1-DICHLOROETHANE	10	13.4	134%	49 - 121
cis-1,2-DICHLOROETHENE	10	12.9	129%	66 - 168
1,1,1-TRICHLOROETHANE	10	13.4	134%	72 - 143
TRICHLOROETHENE	10	13.1	131%	63 - 147
TETRACHLOROETHENE	10	13.0	130%	60 - 133
CHLOROBENZENE	10	12.6	126%	70 - 148
1,3-DICHLOROBENZENE	10	12.5	125%	49 - 139
1,4-DICHLOROBENZENE	10	13.1	131%	70 - 133
1,2-DICHLOROBENZENE	10	14.1	141%	69 - 140

* Limits based on data generated by Anamatrix, Inc., August, 1992.

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

Project/Case : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : N/A
 Date analyzed : 09/07/93

Anamatrix I.D. : WO090793
 Analyst : *ZS*
 Supervisor : *TM*
 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 - 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
1,4-DICHLOROBENZENE	10	12.2	122%	70 - 133
1,2-DICHLOROBENZENE	10	14.0	140%	69 - 140

* Limits based on data generated by Anamatrix, 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	TPH _g BTEX
9309001- 2	NSTANKB2	SOIL	08/31/93	TPH _g BTEX
9309001- 3	NTANKB3	SOIL	08/31/93	TPH _g BTEX
9309001- 4	BTANK-W	WATER	09/01/93	TPH _g BTEX

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.

Cheryl Balmer 9/7/93
Department Supervisor Date

Lucia Sher 9/7/93
Chemist Date

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

Anamatrix 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	0.005	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND
Total Xylenes	0.005	0.033	0.16	ND	ND
TPH as Gasoline	0.5	3.0	31	ND	ND
% Surrogate Recovery	102%	101%	101%	117%	122%
Instrument I.D.	HP21	HP21	HP21	HP21	HP21
Date Analyzed	09/02/93	09/02/93	09/02/93	09/01/93	09/02/93
RLMF	1	10	1	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 GC/FID 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.

Anamatrix 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

Cheryl Balmer 9/7/93
Supervisor Date

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

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

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

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BTANK-W	Sample I.D.# BS0201E2
Benzene	0.5	ND	ND
Toluene	0.5	ND	ND
Ethylbenzene	0.5	ND	ND
Total Xylenes	0.5	ND	ND
TPH as Gasoline	50	90	ND
% Surrogate Recovery		97%	106%
Instrument I.D.		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.

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

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

Laura Sher 9/7/93
Analyst Date

Cheryl Balmer 9/7/93
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
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	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.

Lucia Shor 9/7/93
Analyst Date

Cheryl Beulman 9/7/93
Supervisor Date

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

Anamatrix 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

Anamatrix 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.

Lucia Shar 9/7/93
Analyst Date

Cheryl Balman 9/7/93
Supervisor 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.

Peggie Dawson 9/10/93
Analyst Date

Cheryl 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
 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	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.

Peggie Dawson 9/10/93
 Analyst Date

Cheryl Balmer 9/10/93
 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
 Date Sampled : N/A
 Date Analyzed : 09/02/93

Anamatrix I.D. : MS0102E1
 Analyst : JS
 Supervisor : CS
 Date Released : 09/07/93
 Instrument I.D.: HP21

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

* Quality control established by Anamatrix, 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

Anamatrix I.D. : MS0202E1
 Analyst : IS
 Supervisor : *CS*
 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%	58-130
SURROGATE			102%		105%		53-147

*Quality control established by Anamatrix, Inc.

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

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

Anamatrix I.D. : 09001-03
 Analyst : IS
 Supervisor : G
 Date Released : 09/07/93
 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	101	81%	92	74%	-9%	32-143
SURROGATE				130%		125%		30-130

* Quality control limit established by Anamatrix, 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: 09/01/93
 Date Analyzed : 09/01/93

Anamatrix I.D. : MS01H1F1
 Analyst : IS
 Supervisor : CS
 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

*Limits established by Anamatrix, 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

Anamatrix I.D. : MS0111F1
 Analyst : IS
 Supervisor : *CS*
 Date Released : 09/07/93
 Instrument I.D.: HP9

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCS D REC (ug/L)	% REC LCS D	RPD	% REC LIMITS
DIESEL	1250	880	70%	940	75%	7%	47-130
SURROGATE			53%		57%		30-130

*Quality control established by Anamatrix, 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.

Nathy Millerberg, 9/3/93
Department Supervisor Date

M. L. L. 09/03/93
Chemist Date

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

Project I.D. : 1649.16
 Matrix : WATER
 Date sampled : 09/01/93
 Date extracted: 09/01/93
 Date analyzed : 09/02/93

Anamatrix 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 Anamatrix I.D. : 9309001
Matrix : SOIL Analyst : *HE*
Date sampled : 08/31/93 Supervisor : *CM*
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)
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.
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 Anamatrix I.D. : 9309001-03
Matrix : SOIL Analyst : *HE*
Date sampled : 08/31/93 Supervisor : *CM*
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%	8%	48-114%

* Quality control limits established by Anamatrix 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
Date extracted : 09/01/93
Date analyzed : 09/02/93

Anamatrix I.D. : MS01H1W9
Analyst : HE
Supervisor : CM
Date Released : 09/03/93

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

* Quality control established by Anamatrix 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.
- 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, AWWA, 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. Anamatrix 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. Anamatrix 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. Anamatrix control limit for PDSR is 85-115%.

Qualifiers (Q)

Anamatrix 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 Anamatrix 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, 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
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Wannyan 9/9/93
Department Supervisor Date

Mona Kamel 9/9/93
Chemist Date

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

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

Date Sampled : 08/31/93
 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	09/03/93	09/08/93	0.25	1	0.49	
Chromium-6010	09/03/93	09/08/93	0.50	1	24.3	
Nickel-6010	09/03/93	09/08/93	2.0	1	48.0	
Lead-6010	09/03/93	09/08/93	2.0	1	4.4	
Zinc-6010	09/03/93	09/08/93	1.0	1	32.8	

COMMENT:

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

Anamatrix I.D.: 9309001-02
 Client I.D. : NSTANKB2
 Project I.D. : 1649.16
 Reporting Unit: mg/Kg
 Matrix : SOIL

Date Sampled : 08/31/93
 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	09/03/93	09/08/93	0.25	1	ND	
Chromium-6010	09/03/93	09/08/93	0.50	1	21.2	
Nickel-6010	09/03/93	09/08/93	2.0	1	34.5	
Lead-6010	09/03/93	09/08/93	2.0	1	4.8	
Zinc-6010	09/03/93	09/08/93	1.0	1	38.8	

COMMENT:

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

Anamatrix 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 : MW
 Date Released : 09/08/93
 Instrument I.D. : ICP1

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

COMMENT:

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

Anamatrix W.O.# : 9309001
 Method Blank I.D.: MB0903SA
 Project I.D. : 1649.16
 Matrix : SOIL
 Reporting Unit : mg/Kg

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

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

COMMENT:

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

Anamatrix W.O.# : 9309001
Spike I.D. : LCS903SA
Project I.D. : 1649.16
Matrix : 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	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: